G-EPIC
Gender Empowerment through Politics in Classrooms

Inequalities in political interest and political efficacy.

A systematic literature review

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Commission. Neither the European Union nor the granting authority can be held responsible for them.

Funded by the European Union

Document Control Sheet

Project Title	Gender Empowerment Through Politics in the Classroom
Deliverable	D2.1
Work Package	WP 2
WP Leader	Justus-Liebig-University Giessen (JLU), Universidad Carlos III de Madrid (UC3M)
Number of pages	140
Delivery date	06/30/2023
Dissemination level	Public Use
Main author(s)	Philipp Kleer, Irene Arahal, Gema García-Albacete, Simone Abendschön, Lidia Núñez, David Sánchez
Contributors	-

Copyright

Acknowledgements

G-EPIC is a project that has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement n^{o} 101095000. Please see https://g-epic.eu for more information.

The partners in the project are Vrije Universiteit Brussel (VUB), Universidad Carlos III de Madrid (UC3M), Danish School of Education (DPU, Aarhus Universitet), Justus-Liebig-University Giessen (JLU), University of Roehampton (RU), Charles University Prague (CU), and Gender five plus (G5+). The content of this document is the result of the work developed by the partners in the context of the project.

Disclaimer

Contents

List of Figures

List of Tables

1 Introduction

G-EPIC aims to tackle the challenge of gendered political inequality from an intersectional perspective. As a first step in understanding the origins of gendered inequalities in political behaviour, one of WP2's goals is to update previous knowledge on the antecedents of various inequalities in political involvement. As a first task, G-EPIC proposed to conduct a systematic literature review on the origins of inequalities in political involvement and political efficacy. In this review, we aim to identify research results from the last 30 years on the relation of gender[1], ethnic background, and social status/class (and their interactions) on political involvement and political self-efficacy. In the form of a research question: To what extent do gender, age, ethnic background, and social status/class (or their interactions) relate to inequalities (different levels of) in political interest and political efficacy?

We opted to examine political efficacy broadly and thus include the different dimensions of political efficacy. As discussed below, internal political efficacy refers to a person's perception of her abilities to understand and participate in the political process. Understanding the origins of the gender gap in internal political efficacy is one of the overarching goals of G-EPIC. A second dimension is the so-called external political efficacy, the perception that the authorities and the political system will respond to a person's participation or demands. External political efficacy correlates highly with trust in institutions and the political system (Craig et al., 1990). Only when a citizen believes that she can understand politics and that her involvement can make a difference will she have enough motivation to participate in politics. For that reason, political efficacy is a good predictor of electoral turnout (Campbell et al., 1960), involvement in protest actions (S. H. Barnes et al., 1979) and participation in other forms of action (Parry et al., 1992).

As a main indicator of political involvement, we concentrate on political interest for various reasons. First, political interest is a basic and essential attitude for active citizenship, or as Prior (2010, p. 747) put it: political interest is 'typically the most powerful predictor of political behaviours that make democracy work'. Even early on, Lane (1959, p. 144) indicated political interest as central for linking political attitudes to socio-

[1] For simplicity's sake, in this report we refer to gender with its social and cultural meaning. We also often refer to men and women as referred to in many of the studies reviewed. We do this to provide conceptual clarity but acknowledge that there are limitations to the way we use these terms.

structural factors and expressed it as a 'law of mediating interest'. As demonstrated repeatedly since the 1960s, politically interested citizens expose themselves to political stimuli more often and engage more with the political system than less interested persons (Milbrath, 1965, p. 44; Verba et al., 1995, pp. 356–363). Without an interest in politics, young people and adults, men and women, or people from different origins are unlikely to participate in politics. When it comes to young people, it is well known that they are less interested in politics than adults (Blais et al., 2004; Sloam, 2007), but still, interest in politics is necessary for political participation among the former and later groups. The main difference between young people and adults is that it predicts different behaviours. As political interest increases, so does the probability of participating in institutional politics (political parties and elections) among adults, while among young people, increases the probability of engaging in non-institutional or protest activities (García-Albacete, 2014).

A second argument for the fundamental importance of interest in politics is that it develops at a very early age (Neundorf et al., 2013; Prior, 2010). Although the possibility of learning throughout a family life span cannot be ruled out, the chances of its development decrease significantly at a certain age. Furthermore, although early levels of political interest seem to be developed through political socialisation in the family, the school has also been shown to promote political interest and even to provide space to compensate for unequal levels of political engagement across students (Garcìa-Albacete, 2013; Hoskins & Janmaat, 2019; Neundorf et al., 2016). The third and final argument refers to the convenience of exploring attitudes, rather than political behaviours, among children and adolescents. Political participation requires resources such as money, time, or civic skills (Verba et al., 1995) that young citizens may still need to develop. Furthermore, they are not eligible to vote until a certain age, which leaves them out of institutional politics. For these reasons, a basic orientation that develops early in life and predicts political behaviour in adulthood is thus the best option to measure political engagement.

Inequalities in political interest and political self-efficacy are pervasive. Gender gaps in favour of men have systematically been identified since the 1960s (S. H. Barnes et al., 1979; Campbell et al., 1960) and persist despite advances in equality in other areas and the incorporation of women into the labour market or political life. Furthermore, the gaps can be observed across countries (Fraile & Gomez, 2017; Fraile & Sánchez-Vítores, 2020; Oser et al., 2023). Recent work has looked at children to understand the puzzling stability of gender gaps, pointing out gendered political socialisation at an early age as the source – and stabiliser – of gender inequality in citizens' relationship to the political world (Bos et al., 2022). Regarding other sources of interest inequalities here, education and socio-economic status are positively related to political interest and political efficacy (Campbell et al., 1960). At the same time, research on ethnicity

or origin has not reached a widespread conclusion. When it comes to the intersectionality of the different potential sources of inequality, and to identifying the origins of inequalities, to our knowledge, no recent studies cover many cases. A first approach to previous studies shows that evidence is scattered over different time points, across countries and also subfields of knowledge (psychology, education, political science and sociology).

We examine inequalities based on gender, age, social class, and ethnicity/origin in political interest and political efficacy using a systematic review of 66 and 64 studies, respectively. First, we provide the methodological details on the review procedures to identify studies, the inclusion/exclusion decision rules (see section 2.1) and the characteristics of the final sample (see section 2.2). Second, we present the results separately for political interest (see section 3) and political efficacy (see section 4). Within these sections, we discuss the conceptualisations and measurements used in the identified studies (see section 3.1 section 4.1). Based on the conceptualisations and measurement, we build three groups in each variable and discuss the effects separately by the groups for political interest (see section 3.2) and political efficacy (see section 4.2). Third, we summarise the findings separately on political interest (see section 3.3) and political efficacy (see section 3.3) before we present some general conclusions based on the findings of the systematic literature review (see section 5).

2 Methods & Data

In order to find influential factors for nurturing political interest and political efficacy, we conducted a systematic literature review on both orientations as dependent variables in the last 30 years. Providing this systematic approach, we aim to identify common factors that influence political interest and political efficacy positively or negatively.

Against the background and objective of the G-EPIC project, special attention will be given to the influential role of gender and intersections with socio-economic/structural factors such as education and income. Furthermore, this systematic literature review will draw our attention to possible new empirical pathways that studies still need to assess.

Two major academic platforms (Web of Science and Scopus) serve as the databases for this systematic literature review. We restricted the search in these databases to our research question and the influence of socio-structural factors and their interplay (intersectional approach). The selection of keywords mirrors our research interest in political interest and political efficacy as dependent variables and their relations with demographic and socio-economic characteristics. Therefore, we restricted the search to empirical studies in which political interest and/or political efficacy are the dependent variable(s). We also included studies that use convenience compared to random samples to potentially gain knowledge about underlying mechanisms in sub-groups. Since the research framework of the G-EPIC project focuses on addressing unequal political socialisation and empowering young people's political socialisation and education by address, the literature review excludes research on genetic explanations for the gender gap, and it is limited to studies that investigate factors that can be addressed during socialisation.

Systematic literature reviews are often distinguished from a meta-analysis in that the first elaborates conclusions from a more qualitative perspective. In contrast, meta-analysis provides a statistical analysis of each study's coefficients (or other quantities of interest) Boulianne (forthcoming). As discussed below, the studies identified in this review use various conceptualisations, measurements and effects modelling of our variables of interest that do not allow for quantitative meta-analyses on coefficients. Therefore, we will follow general systematic literature review guidelines and qualitatively compare the uncovered effects.

2.1 Search strategy

We used two academic databases (Web of Science and Scopus) for the systematic literature search and extracted results on two days (March 16th, 2023, and May 22nd, 2023). Although we acknowledge that these two databases lean toward publications from the Western hemisphere and publications in English (Harzing & van der Wal, 2008), they nonetheless include a potentially wide variety of research worldwide.

Regarding influential factors on political interest and efficacy, we created keyword lists that inherited possible influential factors (Table 1). We combined dependent variables and socio-structural factors by the logical operator 'and'. Within these categories, we used the logical operator 'or'. Table 2 shows the complete search strings.

Table 1: List of Keywords

Dependent variable (OR within)	socio-structural factors (OR within)	Web of Science	Scopus
political interest	gender, sex, male, female, boy*, girl*, women, woman, man, men, ethnicity, ethnic*, migration, migrant*, race, social strata, social class, intersectiona*	title, abstract, topic, author's keyword	title, abstract, keywords
political efficacy, internal political efficacy, political internal efficacy, external political efficacy, political external, efficacy, political self-efficacy	gender, sex, male, female, boy*, girl*, women, woman, man, men, ethnicity, ethnic*, migration, migrant*, race, social strata, social class, intersectiona*	title, abstract, topic, author's keyword	title, abstract, keywords

All entries were filtered and processed between March 16th, 2023, and May 30th, 2023. We used a smaller sample to address intercoder reliability before beginning the main filtering process. We randomly drew 40 entries, and three coders decided on exclusion based on inclusion and exclusion criteria. Table 3 shows the intercoder-reliability between all three coders and each pair of coders. Overall, we achieved high intercoder-reliability amongst all three coders and between pairs of coders. Nonetheless, we discussed differences in inclusion and exclusion amongst all coders and reassured meanings of inclusion and exclusion criteria. All randomly chosen 40 entries were re-filtered during the main process.

Table 2: List of search strings

DV	Platform	Search string
political interest	Web of Science	(((TI/TS/AB/AK=(”political interest”))) AND ((TI/TS/AB/AK=(”gender” OR “sex” OR “male” OR “female” OR “boy*” OR “girl*” OR “women” OR “woman” OR “man” OR “men” OR ”ethnicity” OR “ethnic*” OR ”migration” OR “migrant*” OR ”race” OR ”social strata” OR ”social class” OR ”intersectiona*”)))) AND PY=(1994-2023)
	Scopus	(TITLE-ABS-KEY(”political interest”) AND TITLE-ABS-KEY(”sex” OR ”gender” OR ”women” OR ”men” OR ”man” OR ”woman” OR ”female” or ”male” OR ”girl*” OR ”boy*” OR ”ethnicity” OR ”ethnic” OR ”migration” OR ”migrant” OR ”race” OR ”social strata” OR ”social class” OR ”intersectiona*”) AND PUBYEAR > 1993)
political efficacy	Web of Science	(((TI/TS/AB/AK=(”political efficacy” OR ”internal political efficacy” OR ”political internal efficacy”OR ”political self-efficacy”))) AND ((TI/TS/AB/AK=(”gender” OR “sex” OR “male” OR “female” OR “boy*” OR “girl*” OR “women” OR “woman” OR “man” OR “men” OR ”ethnicity” OR “ethnic*” OR ”migration” OR “migrant*” OR ”race” OR ”social strata” OR ”social class” OR ”intersectiona*”)))) AND PY=(1994-2023)
	Scopus	(TITLE-ABS-KEY(”political efficacy” OR ”internal political efficacy” OR ”political internal efficacy” OR ”political self-efficacy”) AND TITLE-ABS-KEY(”sex” OR ”gender” OR ”women” OR ”men” OR ”man” OR ”woman” OR ”female” OR ”male” OR ”girl*” OR ”boy*” OR ”ethnicity” OR ”ethnic” OR ”migration” OR ”migrant” OR ”race” OR ”social strata” OR ”social class” OR ”intersectiona*”) AND PUBYEAR > 1993)

We filtered entries in three sequential steps: First, during data manipulation, we excluded double entries (between both databases), abstract-only papers, and non-English papers. At the end of this first step, our dataset of studies included 684 entries for political interest and 445 entries for political efficacy that we filtered consecutively.

Table 3: Reliability tests

C1, C2, C3 (Fleiss Kappa)	0.75
C1 to C2 (Cohen’s Kappa)	0.82
C1 to C3 (Cohen’s Kappa)	0.60
C2 to C3 (Cohen’s Kappa)	0.80

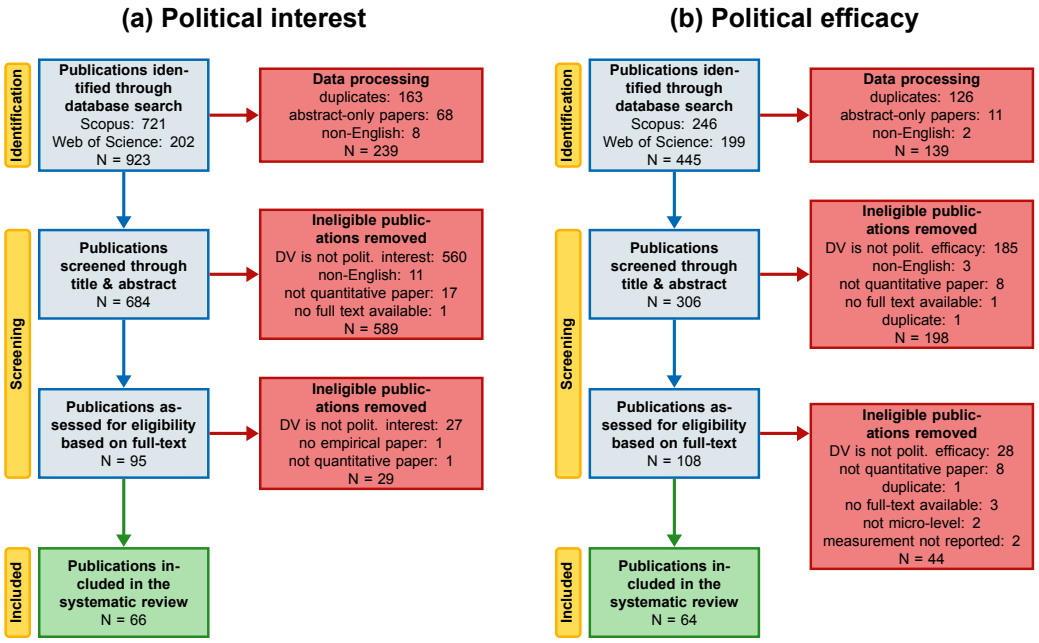
Note: C: Coder.

Second, while scanning the title and abstract, we filtered entries where the dependent variable was not political interest or political efficacy. In addition, we filtered all entries that were not empirical or not inherited a quantitative analysis. We also excluded systematic reviews and entries where full text was not available. At this step’s end, we still had 95 eligible papers to be regarded in the literature review for political interest and 108 for political efficacy.

Third, we accessed full texts and filtered them for the same reasons. With all of our exclusion and inclusion criteria, we ended up with 66 entries for political interest and 64 for political efficacy, which will be discussed in the following sections. Figure 1 outlines

our study selection process using PRISMA (Moher et al., 2009).

Figure 1: Prisma diagrams of search strategy



2.2 Study profile

In this section, we describe the characteristics of the studies used in our analysis regarding countries, time, and conceptualisations of the attitudes of interest. Geographically, an analysis of the sample shows that research on political interest and efficacy and their determinants is especially predominant in Western public opinion research. Table 4 provides the information. Most data used in the studies on political interest were based on single countries (77%). Of these single-country studies, 57% used a European country, and an additional 27% were based on samples in North America. Only a few single-country studies were based in Asia (10%), South America (4%), or Africa (2%). 23% of the studies used multiple countries in their analyses. However, a vast majority of multi-country studies used only data from European countries (73%). The remaining studies used data of several countries sampled at least from two or more continents (27%).

Table 4: Countries in studies – Political interest

	Origin of data	within[a]	overall[b]
single country studies	Europe	57%	44%
	North America	27%	21%
	Asia	10%	8%
	South America	4%	3%
	Africa	2%	2%
	total	100%	77%
comparative studies	Europe	73%	17%
	≥ 2 continents	27%	6%
	total	100%	23%

Note: [a]: Percentages within each category (single country studies and comparative studies) are shown. [b]: Total percentages of both categories together are shown.

Similarly, most political efficacy studies restricted their analysis to one country (see Table 5). 63% of the studies used samples from one country in North America. An additional 18% only used European countries, and 13% used Asian countries. Only a few studies utilised samples from South America (2%) or Oceania (4%). Only 15% of the studies analysed political efficacy across countries. 89% of these studies analysed European countries, and 11% included countries from more than one continent.

Table 5: Countries in studies – Political efficacy

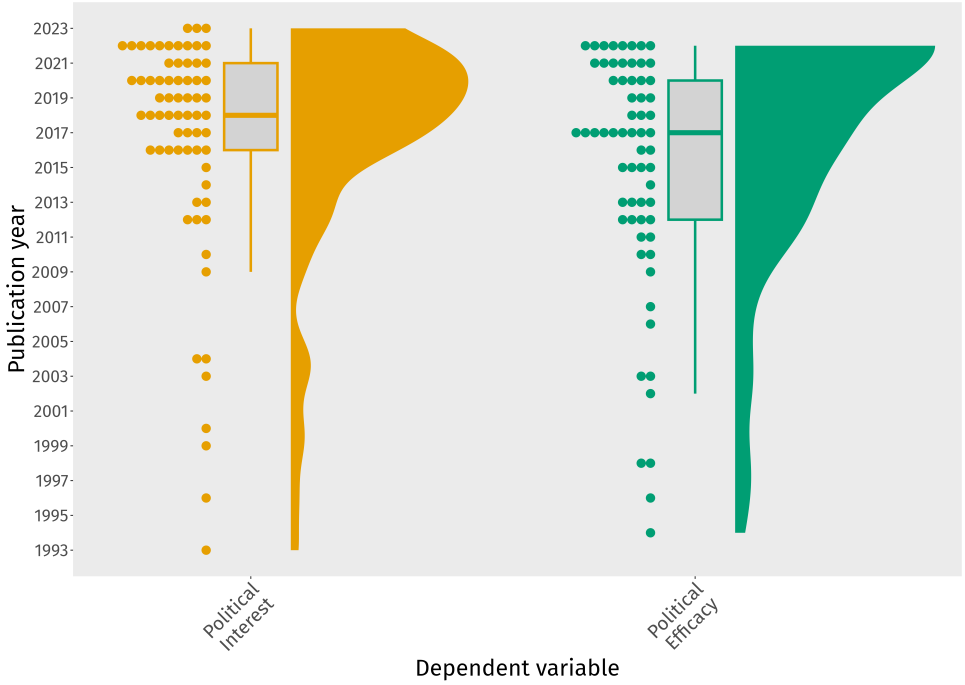
	Origin of data	within[a]	overall[b]
single country studies	Europe	18%	15%
	North America	63%	54%
	Asia	13%	11%
	South America	2%	2%
	Oceania	4%	3%
	total	100%	86%
comparative studies	Europe	89%	13%
	≥ 2 continents	11%	2%
	total	100%	15%

Note: [a]: Percentages within each category (single country studies and comparative studies) are shown. [b]: Total percentages of both categories together are shown.

A glance at the publication dates shows that most studies in our sample were published in the last ten years (see Figure 2), which signals the increasing importance of exploring inequalities in political engagement among the academic community. Only a few studies were published before 2010 (12%) for political interest. Most studies on political interest were published between 2016 and 2021 (values between 25% and 75%-quartile of the distribution). Recently, research interest increased in political interest, so nearly 40% of the articles analysing political interest were published within the last three years (2020-2023). Similarly, the last 10-15 years have seen a steady

increase in publications on political efficacy. Before 2010, only 20% of the studies were released, while most were published between 2012 and 2020 (values between 25% and 75%-quartile of the distribution). Finally, about 30% of the studies were issued in the last three years.

Figure 2: Publication years per dependent variable



Finally, the articles in the sample include various concepts and measurements of the dependent variables, political interest and political efficacy. The use of various concepts and measurements is rather interesting and one of the reasons why meta-analyses across the studies would not work. We come back to this issue in section 3.1 and section 4.1, respectively. Since there are no conceptualisations, methods, measurements or models of the dependent variables, we are not conducting a meta-analysis. Instead, we approach the selected studies by vote counting, as outlined by Geys (2006) or recently by Cancela and Geys (2016) and Smets and van Ham (2013). With vote-counting, we count frequencies of effects' direction and significance. Therefore, we grouped the effects into five categories:

1. positive and significant ($p \leq 0.05$)
2. positive and insignificant ($p > 0.05$)
3. mixed results through models (in significance or direction)
4. negative and insignificant ($p > 0.05$)
5. negative and significant ($p \leq 0.05$)

In the following sections, we discuss the results of the studies on political interest (section 3) and political efficacy (section 4). In light of the detected and described different/heterogeneous concepts and measurements used, we will start with discussions and presentations of concepts and measurements before focusing on influential factors.

3 Findings: Political Interest

In this section, we discuss and present the literature regarding inequalities in political interest. However, most studies included different measurements for socio-structural effects (like gender, age, or social class), and only a few studies statistically tested for dependencies between the socio-structural effects towards political interest under review in this literature review (five studies). However, we will address these intersectional empirical approaches in the following sections.

In the first section, we will discuss examples of different political interest conceptualisations and measurements before discussing the identified studies in the following sections.

3.1 Conceptualisations & Measurements

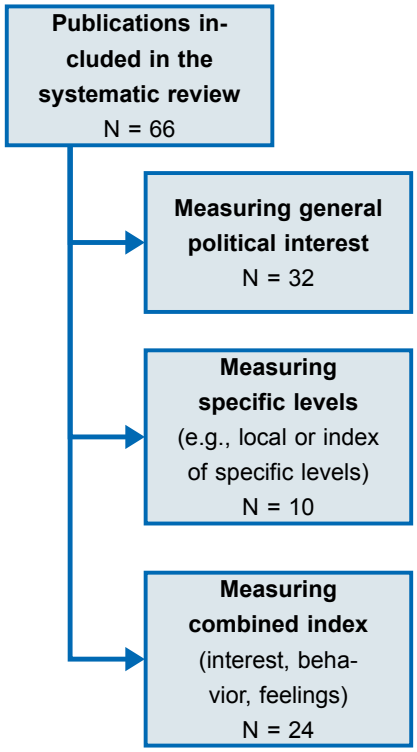
Even early studies in public opinion research highlighted the mediating effect of political interest in linking political attitudes to socio-structural indicators (Lane, 1959, p. 144). Van Deth (1990) showed that political interest can be distinguished from political involvement and motivation. Political involvement represents the motivational link of attitudes and behaviour, but political interest measures citizens' curiosity aroused by politics (van Deth, 1990, p. 278). Theoretically, political interest is not directly attached to motivation or searching for direct individual advantages (van Deth, 1990, p. 278). However, research has replicated that more interested citizens participate more (Verba et al., 1995, pp. 356–363; Milbrath, 1965, p. 44). In addition, Lupia and Philpot (2005, p. 1122) point out that political interest signifies a citizen's willingness to prioritise paying attention to political phenomena over other subjects. Therefore, political interest is often measured by subjective indication of political interest. More generally, this curiosity can be seen as encompassing orientation toward politics in general (van Deth et al., 2011; Abendschön & Tausendpfund, 2017).

In the identified studies in this literature review, references were made to the abovementioned conceptualisations; however, measurements differ across the studies. This heterogeneous approach to political interest in the examined literature affected our presentation and discussion of results. We decided to break down the discussion into three sections along the different measurements of the dependent variable of political

interest.

First, we merged all studies that measured a general political interest, as most cross-national surveys (e.g., ESS, ISSP) include it. Nearly half of the studies fall into this category (see Figure 3). Second, we merged studies that measured political interest on different levels (e.g., local, regional, national, or general). Only ten studies did so; some studies only measured specific levels, some ran separate models for each level, and some built indices over different levels. Third, we merged all studies that built a political interest index as a dependent variable, including a measure of political interest based on the above conceptualisations. Twenty-four studies combined political interest with items about affection or feeling towards politics, media consumption, discussion activity, political activities or even mixed categories.

Figure 3: Classification of studies using political interest



Amongst the first group, measurements were very close to each other, as can be seen in examples in Table 7. Across the larger social surveys used in the identified studies, the items were measured in a comparable way and on similar scales. For example, in the European Social Survey (e.g. used by Fraile & Gomez, 2017 or Quaranta & Dotti Sani, 2018), respondents were asked, 'How interested would you say you are in politics – are you…' and answers were measured on a four-point scale from 'very interested', 'quite interested', 'hardly interested' to 'not at all interested'. A similar question and scale were used in the World Values/European Value survey ('How interested would you say you are in politics?', answers on 'very interested', 'somewhat interested', 'not very interested', and 'not at all interested') or the ISSP ('How interested would you

say you are personally in politics?'; 'very interested', 'fairly interested', 'somewhat interested', 'not very interested', 'very interested') — even studies using their own samples comparably constructed their items. Mayer and Schmidt (2004) asked respondents, 'How would you rate your interest in politics?' and respondents could answer on a scale from 'very interested', 'interested', 'not really interested', to 'uninterested'. In another example, Miklikowska et al. (2022) asked respondents, 'How would you rate your interest in politics?' on a five-point scale from 'very interested' to 'totally uninterested'. Table A1 in the appendix presents a full table of all studies using general political interest.

Table 6: Examples of political interest measuring general interest

Source	Item text	Item response	Used in study …
ESS	How interested would you say you are in politics - are you …	1 very interesting 2 quite interested 3 hardly interested 4 not at all interested	Cicognani et al. (2012) Fraile and Gomez (2017) Ojeda et al. (2023) Quaranta and Dotti Sani (2018) Reher (2020) Superti (2023) Turnbull-Dugarte and Townsley (2020)
WVS/EVS	How interested would you say you are in politics?	1 very interested 2 somewhat interested 3 not very interested 4 not at all interested	Fernández et al. (2021) van Deth (2000)
ISSP	How interested would you say you are personally in politics?	1 very interested 2 fairly interested 3 somewhat interested[a] 4 not very interested 5 Not at all interested	Easterbrook et al. (2016) Le and Nguyen (2021)
none	How would you rate your interest in politics?	very interested interested not really interested uninterested	Mayer and Schmidt (2004)
none	How interested are you in politics?	1 very interested … 5 totally uninterested	Miklikowska et al. (2022)

Note: [a] not used in all waves.

As pointed out by several articles (also in this literature review, see, e.g. Coffé (2013) or Ferrín et al. (2020), differences in the gender gap in political interest vary depending

on the item formulation or the level of political interest asked. Around ten studies used in this literature review measured specific items on a single or different level (e.g., local, state, federal, EU, or general) of political interest to further analyse differences in political interest. Some of these studies combined these measurements of different levels into an index of political interest.

Measuring different levels is strongly related to the general items used in larger-scale surveys. In most cases, the general item on political interest is extended to a specific geographical level (e.g., state or local) or to specific policy fields or topics (see Table 7). For example, Coffé (2013) split the measurement into four different levels asking respondents, 'How interested in … 1) politics, 2) local issues, 3) national issues, and 4) international issues?' and respondents answered each item on a scale from 'very interested', 'fairly interested', 'not very interested', to 'not at all interested'. In another example, Sánchez-Vítores (2019) asked respondents – besides general political interest – similarly about their interest on different levels: 'People's interest sometimes varies across different areas of politics. How interested are you personally in each of the following areas? 1) local politics and 2) national politics' (answers on a four-point scale from 'very interested', 'fairly interested', 'not very interested' to 'not at all interested'). In both studies, each item was analysed separately. On the contrary, Zamora and Guerrero-Solé (2018) also asked respondents on different levels ('1 How interested are you in politics?', '2 How interested are you in the events that occur in the city?', '3 How interested are you in the events that occur in the region?', '4 How interested are you in the reality of the country', '5 How interested are you in the events that occur in the world') but built an index over all items.

Using policy fields in the items of political interest, Tormos and Verge (2022) asked respondents to indicate their level of interest in politics on a scale from 0 'no interest at all' to 10 'a lot of interest' on three items: 1) the quality of social services or gender inequalities [order of items rotated] (Female-oriented issues), 2) governmental and parliamentary activities or the quality of social services [order of items rotated] (Both female- and male-oriented issues), 3) governmental and parliamentary activity or electoral competition [order of items rotated (Male-oriented issues). They used this different measurement to compare results to a general item of political interest. Table A2 in the Appendix shows a full list of the studies' measurements in this section.

Table 7: Examples of political interest measuring different levels

Item text	Item response	Used in study …
How interested in … 1 politics 2 local issues 3 national issues 4 international issues	1 very interested 2 fairly interested 3 not very interested 4 not at all interested	Coffé (2013)
1 In general, how interested in politics are you? People's interest sometimes varies across different areas of politics. How interested are you personally in each of the following areas? 2 local politics 3 national politics	very interested fairly interested not very interested not at all interested	Sánchez-Vítores (2019)
1 How interested are you in politics? 2 How interested are you in the events that occur in the city? 3 How interested are you in the events that occur in the region? 4 How interested are you in the reality of the country 5 How interested are you in the events that occur in the world	1 not interested at all … 4 absolutely interested	Zamora and Guerrero-Solé (2018)
Please indicate your level of interest in politics on a scale from 0 to 10, where 0 means 'no interest at all' and 10 means 'a lot of interest.' By politics we refer to a variety of issues such as … 1 the quality of social services or gender inequalities [order of items rotated]. (Female-oriented issues) 2 governmental and parliamentary activity or the quality of social services [order of items rotated]. (Both female- and male-oriented issues) 3 governmental and parliamentary activity or electoral competition [order of items rotated (Male-oriented issues)	0 no interest at all … 10 a lot of interest	Tormos and Verge (2022)

In addition to the studies that used different levels of political interest, 24 studies used combined indices. Some studies combined political and societal interest; others used a combination of political interest and behaviour (e.g., discussions, media, or news) or feelings about politics (see Table 8 for examples of this group). For example, Stattin and Korol (2020) asked respondents, 'How interested are you in politics?' and 'How interested are you in what is going on in society?'. Respondents answered from 1 'totally uninterested' to 5 'very interested'. As a result, they captured a combined interest in politics and society which are sometimes not so clearly divided among respondents.

Combining political interest and behaviour, Zeglovits and Zandonella (2013) asked

about general interest ('How interested are you in politics?') and media behaviour ('How often do you follow political news on TV, radio, or the newspaper?'). In the same way, Guidetti et al. (2016) used the combination of a general political interest item and political behaviour by measuring the frequency of political conversations and interest in election results.

Furthermore, some articles used feelings towards politics in the built indices. Bos et al. (2022) asked respondents to indicate agreement on the following five items:

1. 'Politics, government, and history is something I get excited about.'
2. 'I am curious to learn more about politics, government, history, and things going on in the world.'
3. 'I would like to have a job in government or politics in the future.'
4. 'Learning about history and how the government works is boring.'

Using these items, they mixed interest in politics (item 2) with feelings about politics (items 1, 3, and 4). Similarly, Alscher et al. (2022) built an index including an item on general political interest ('Generally speaking I'm interested in politics'). They combined this item with items on feelings ('For me politics is an exciting topic') and behaviour ('If I notice that I am lacking knowledge on a political topic, I seek the necessary information.', 'I often think intensively about a political issue.'). In the same vein, Russo and Stattin (2017) used two items combining general interest ('How interested are you in politics?') and feelings about politics ('People differ in what they feel about politics. What are your feelings?').

Overall, studies varied in the concepts used in indices; however, they address similar combinations. Therefore, we group these studies and discuss them in the same section. A comprehensive list of all studies is presented in Table A3 in the appendix.

Table 8: Examples of political interest using indices

Source	Item text	Item response	Used in study …
Italian National Election Studies	1 general political interest in politics 2 frequency of conversations about politics in the previous week 3 interest in the election results	mean of 3 items	Guidetti et al. (2016)

Continuing on the next page

Continued from previous page

Source	Item text	Item response	Used in study …
Short Scale Measuring Political Interest (Otto & Bacherle, 2011)	1 If I notice that I am lacking knowledge on a political topic, I seek the necessary information. 2 For me politics is an exciting topic. 3 I often think intensively about a political issue. 4 I observe political events with great interest. 5 Generally speaking I'm interested in politics	totally agree agree neither agree nor disagree disagree totally disagree	Alscher et al. (2022)
none	1 How interested are you in politics? 2 How often do you follow political news on TV, radio, or the newspaper?	1 very much 2 fairly 3 little 4 not interested at all 1 daily 2 several times a week 3 once or twice a week 4 less often 5 never	Zeglovits and Zandonella (2013)
none	1 How interested are you in politics? 2 People differ in what they feel about politics. What are your feelings?	1 totally uninterested … 5 very interested 1 loath 2 very boring 3 boring 4 neither fun nor boring 5 fun 6 great fun	Russo and Stattin (2017)
Noyce Enthusiasm for Science scale	1 Politics, government, and history is something I get excited about. 2 I am curious to learn more about politics, government, history, and things going on in the world. 3 I would like to have a job in government or politics in the future. 4 Learning about history and how the government works is boring.	strongly disagree disagree agree strongly agree	Bos et al. (2022)

Continuing on the next page

Continued from previous page

Source	Item text	Item response	Used in study …
none	1 How interested are you in politics? 2 How interested are you in what is going on in society?	1 totally uninterested … 5 very interested	Stattin and Korol (2020)

In the next section, we will present and discuss the findings regarding the impact of our chosen socio-structural factors, gender, age, income and education, on the different measurements of political interest. Hereby, we uncover existing social inequalities regarding political interest

3.2 Inequalities

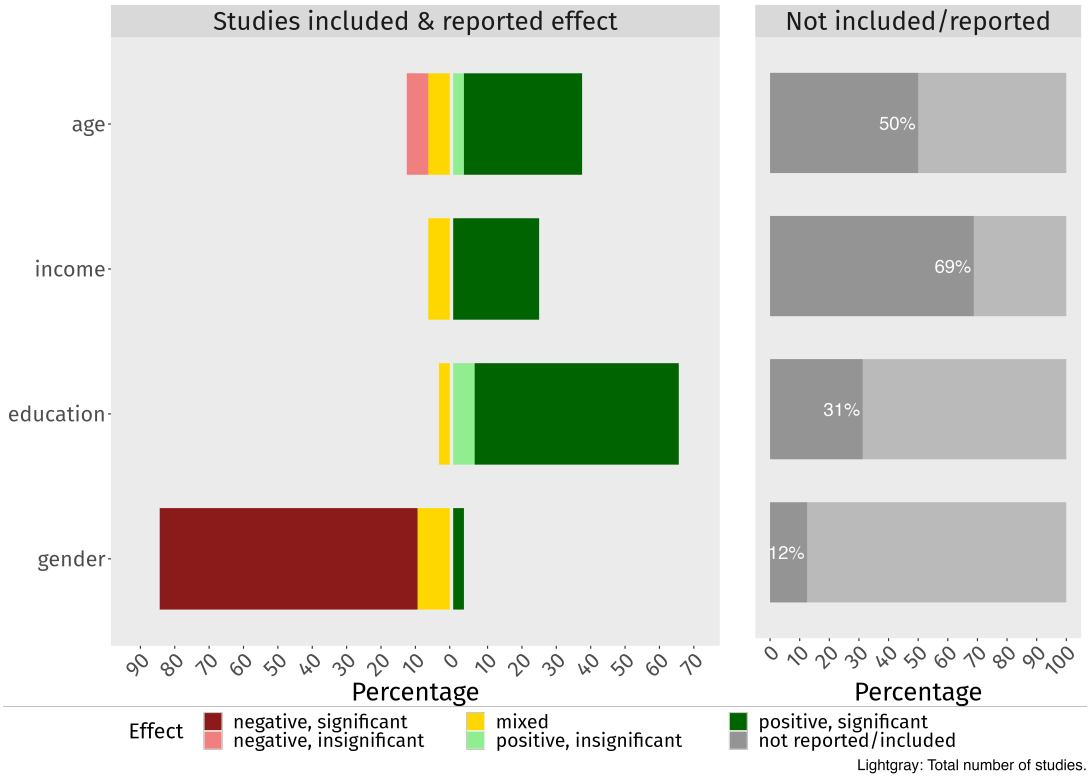
In this section, we discuss the studies identified in three different groups regarding their measurement of political interest: 1) studies that used an item of general political interest (see section 3.2.1), 2) studies that used one or more specific levels of political interest (see section 3.2.2), and 3) studies that built a combined index of political interest and behaviour or feelings towards politics (see section 3.2.3).

3.2.1 General political interest

Of the 66 identified studies, 32 investigated general political interest. This section will indicate the relevant paths of socio-structural factors toward political interest measured on a general political interest item. Table 9 at the end of this section shows the overall features of the studies. Figure 4 summarises the findings regarding our four main effects of interest: gender, education, income, and age. Effects of ethnicity are not included in the chart since variable definition depends on country and context and, therefore, cannot be generally summarised. On the chart on the right, we indicated the percentage of studies missing the respective socio-structural factor. In the left chart, we indicated the percentage of studies showing a negative or positive, significant or insignificant effect or mixed effects throughout their analyses.

a. Gender effects From the 32 studies using a general political interest item, only a single study did not include an effect of gender (see Figure 4). Three additional studies included an effect of gender but did not report the effects in the publications or the available supplementary materials. From the remaining studies, a majority (21) revealed a significant negative effect of the female gender on political interest, showing

Figure 4: Overview studies of general political interest



that women expressed significantly less interest than males. A single study showed a negative effect; however, the effect was insignificant. Four studies used countries as units in their analysis; there was no common pattern across all countries. Furthermore, another study included different survey waves and could not show a consistent effect through all waves from gender toward political interest. Only one study reported a significant positive effect of gender, showing that females expressed higher political interest than males.

Interestingly, the significant negative effect for women was replicated in studies using different samples and methods for the analysis. Most of the studies used representative samples from larger social surveys (such as ESS, EVS, ISSP, or national election/social studies) encompassing whole populations within (Borkowska & Luthra, 2022; Fischer-Neumann, 2014; Fraile & Sánchez-Vítores, 2020; Furnham & Cheng, 2019; Ojeda et al., 2023; Syal, 2012) or across countries (Fernández et al., 2021; Fraile & Gomez, 2017; Quaranta & Dotti Sani, 2018; Superti, 2023; Ojeda et al., 2023). Sasse and Lackner (2020) examined political interest across two regions of Ukraine; however, they replicated a negative effect on women.

From these studies, Quaranta and Dotti Sani (2018) analysed the gender gap throughout different life stages. They defined lifetime cycles by different stages regarding the living situation, age, relationship status, and having children. They showed that women express less interest during all defined life spans than men; nonetheless, the size of

the gender gap differed through the phases. For men, the probability of showing higher levels of political interest rose throughout the phases and achieved its maximum at the latest stage. Although women showed the highest probability of higher levels of political interest at the latest stage, their increase only starts at the stage where they are in a relationship and have children that are at least 14 years old. Therefore, the gender gap is biggest when women are in a relationship and have children between 0 and 13 years old.

In addition, some studies showed a negative effect of the female gender in younger populations, indicating a gender gap already exists among youth and early adulthood. Cicognani et al. (2012) replicated the gender gap amongst Belgian students, and Datzberger and Mat (2019) showed descriptively that the gender gap also exists among Ugandan students. Wolak (2020) examined in a mediation analysis of young adults in the US the origins of the gender gap. They revealed that women also show less self-confidence and that part of the effect of self-confidence on political interest can be explained by being female. In a comprehensive analysis of 28 cohorts from 1975-2003, Wray-Lake et al. (2020) showed a negative effect of gender amongst the transition from youth to adulthood (respondents aged 18-30).

The gender gap could also be replicated in sub-samples of large-scale survey samples. Turnbull-Dugarte and Townsley (2020) showed that the gender gap persists amongst LGB[1] people in Europe, and Reher (2020) presented the gender gap amongst disabled persons in Europe (both based on ESS samples).

Only one study indicating a negative effect of female gender focused on immigrants in a specific country. DeSante and Perry (2016) replicated the gender gap within a representative sample of Latinos in the US, showing female Latinas expressing less interest than male Latinos.

Two studies indicating a negative effect of gender on political interest used an experimental design based on mTurk samples. Mansell et al. (2022) included a non-political competitive task presented to respondents. Respondents were randomly assigned to groups that received a negative cue about their individual or gendered group's poor performance. Contrary to the hypotheses, they could not show that women who presented negative evaluations showed an additional decrease in political interest. However, women still showed lower levels of political interest. Preece (2016) tested to what extent the evaluation of knowledge tasks affects expressed political interest. Although they generally showed that women expressed less interest than males, there was no significant effect of the two treatments (supportive regardless of score or real evaluation).

Only one study found a negative but statistically insignificant effect of female gender on political interest. In this study, van Deth (2000) used data from the WVS and Eurobarometer and explored political involvement and commitment by dichotomising an item

[1] By LGB, Turnbull-Dugarte and Townsley (2020) refers to lesbians, gays, and bisexuals.

of political interest. Although the coefficient leads to the expected direction, the calculated effect of gender remained insignificant.

Five additional studies did not find significant negative effects for all their analysed countries, yet, most articles about most countries reported a negative effect for women. Mayer and Schmidt (2004) found negative effects of female gender on political interest only in three out of four countries used in their analysis of junior high school students (China, Mexico, and the US; not in Japan). In a two-wave panel of Danish citizens, Ohme et al. (2020) partly confirmed the general finding of women expressing less political interest than males when asked in a general way. However, once they included variables of exposure to political interest and a time-lagged variable of political interest at time 1, the effect of gender turned insignificant, showing no differences between men and women. In one of the few studies with non-Western samples, Shockley (2016) examined conditions under which women are interested in politics in Qatar. In their samples of three years (2011, 2012, 2014), only two (2011, 2014) found significant negative effects on women's political interest. Using the Mexico 2006 Panel Study, Duquette-Rury et al. (2018) tested a treatment on relatives in the US regarding respondents' political interests.

Regarding gender effects, there was only a negative effect of the female gender in one of the six regressions on the two treatments and three waves (all in the same direction but insignificant). Ferrín et al. (2020) explored different understandings of what men and women see as political topics and related this to the analysis of general political interest. They ran three regressions on general political interest: first, including the given topics and people mentioning it as a political topic. Second, including the given topics and an indication of respondents marked this topic as their interest. Third, they used the open follow-up question categorised as a predictor for general political interest. In the first model, they showed that a gender gap still exists (with controlling for topics) in a large and significant magnitude, showing female students less interest. In the second regression, the gender gap decreased and turned insignificant, with the direction still being negative. In the third regression, the gender gap is insignificant, but still negative.

Only a single study showed a significant positive effect of female gender on political interest. Hochman and García-Albacete (2019) examined in a cross-country study of four European countries (UK, Germany, Netherlands, and Sweden) how political interest differs among youth with or without immigration background. Interestingly and in contrast to other studies, they revealed that women have a higher probability than males showing political interest.

Although methods and samples differed, the majority of the studies indicated a negative effect of female gender on political interest. Therefore, it is safe to conclude the effect of gender stating that women express less general political interest than males.

b. Education effects Regarding educational effects, nine studies out of the 32 studies did not include educational effects in their analyses, and one study did not report the educational effects in the studies or supplementary materials (see Figure 4). 18 studies revealed a significant positive effect of education on political interest and three additional studies showed positive (though statistically insignificant) effects. These 21 studies indicate that formally higher educated respondents show higher levels of political interest. A single study showed mixed effects of education throughout the models used, indicating that it depends on the model specification/variables if an impact of education can be detected.

Interestingly, the studies showing a clear significant positive effect of education on political interest mostly used larger surveys of the whole population to assess political interest within (Fischer-Neumann, 2014; Fraile & Sánchez-Vítores, 2020; Furnham & Cheng, 2019; Syal, 2012; Ferrín et al., 2020) or across countries (Fernández et al., 2021; Fraile & Gomez, 2017; Ojeda et al., 2023; Quaranta & Dotti Sani, 2018; Superti, 2023; Easterbrook et al., 2016; Le & Nguyen, 2021). In all these studies, a significant positive effect showed that respondents with formal higher education expressed higher political interest than lower-educated respondents. Two studies used special samples of youth and young adults and showed that an educational effect is also visible amongst younger cohorts (Wolak, 2020; Wray-Lake et al., 2020). Wray-Lake et al. (2020) surveyed youth aged 18 to 20 over six years with a biannual survey, and Wolak (2020) used a sample of the Young Adults Panel in the US. Even in these early life stages, educational effects were visible and could explain differences in political interest.

In addition, Turnbull-Dugarte and Townsley (2020) and Reher (2020) focussed on special sub-populations such as LGB and disabled persons. Both replicated the finding from general populations that higher educated respondents show higher levels of political interest amongst these subgroups. By analysing respondents within Ukrainian regions most involved in the Ukrainian-Russian conflict, Sasse and Lackner (2020) also replicated the general finding of higher-educated respondents showing more political interest.

Besides these clear significant positive effects, three studies showed mixed effects. Using samples of the WVS/Eurobarometer, van Deth (2000) showed only insignificant positive effects toward their constructed measurement of being politically involved (based on a measure of political interest). Duquette-Rury et al. (2018) used three waves of the Mexican Panel Study (2006) to explain political interest before, during, and after the election week. Respondents that have relatives (as immigrants) living in the US showed significant positive effects in the third wave but only insignificant positive effects in waves 1 and 2. Respondents with relatives (as immigrants) living in the US and receiving remittances from their relatives showed a significant positive effect in the third wave. However, the educational effect was only positive and significant for

some groups in waves 1 and 2. Shockley (2016) examined conditions under which women are interested in politics in Qatar. Compared to other studies, they found a significant positive impact of education in 2011 and 2014 but only a partially significant and positive effect in 2012. Although these three studies did not report significant effects in all models or educational groups, they show in the same direction as those mentioned above.

As shown in Figure 4 at the beginning of this section, the studies, including education, widely support the notion that education positively impacts political interest. Therefore, evidence from different samples indicates a positive effect of higher formal education on political interest.

c. Income effects Concerning the effects of income, most studies did not investigate such an effect (19) or did not report the effects in the studies or available supplementary materials (3). Eight studies including income as a predictor for political interest indicated a significant positive effect. Two other studies showed only mixed results regarding income's effect on political interest.

These nine studies showing a positive effect of income on political interest include large-scale studies from social surveys such as Quaranta and Dotti Sani (2018, ESS), van Deth (2000, WVS/Eurobarometer) and Syal (or 2012, Indian National Election Study), special populations within large-scale studies such as Turnbull-Dugarte and Townsley (2020, LGB) and Reher (2020, disabled persons), and representative minorities within a country (DeSante & Perry, 2016, US).

In their quota sample of the Qatar population, Shockley (2016) showed a positive effect of income across the three time points of the cross-sectional data; however, the effect was only significant at the first time point. Throughout the three waves of the Mexican Panel Study (2006), Duquette-Rury et al. (2018) showed only mixed, not conclusive, income directions. They compared different income groups; however, the effect alternated being positive or negative by going higher on the income levels. In addition, only a few groups showed significant differences from the lowest income group. Therefore, there was no clear effect of income on political interest.

Most studies did not analyse a potential effect on interest (see Figure 4 at the beginning of the section). Although most of the studies that investigated the role of income showed a positive effect, the role of income in political interest is not as clear as with the other two characteristics discussed before (gender or education).

d. Age effects Regarding the effects of age, half of the studies did not look for (13) or did not report the effects of age in their main analyses or available supplementary materials (3). Nonetheless, eleven studies revealed a significant positive effect: Older respondents showed higher levels of political interest than younger respondents. Three

additional studies showed partially significant positive effects throughout some models or countries. The last two articles showed no consistent pattern of interest across age groups. However, the operationalisation of age and the age span differs largely between the studies (age in years, different age-squared effects, age in cohorts, or self-defined groups).

In the eleven studies pointing out a positive direction of being older, most studies used large-scale survey data of the general population (Fernández et al., 2021; Fraile & Gomez, 2017; Fraile & Sánchez-Vítores, 2020; Superti, 2023; Syal, 2012). Three additional studies showed significant positive effects of age in samples of youth: Ohme et al. (2020) with young Danish citizens (mean age: 18 years), Stattin et al. (2017) with Swedish students (aged 13-15 and 16-18), Wolak (2020) with American young adults. Some of the studies indicating a positive effect of age on political interest used sub-populations to regress on political interest: DeSante and Perry (2016) used a sample of Latinos in the US, Reher (2020) subsetted the ESS to disabled persons, and Turnbull-Dugarte and Townsley (2020) used the ESS to infer about LGB persons in Europe.

From the three studies finding only partial effects of the expected positive direction of age toward political interest, only two used general population samples (Shockley, 2016, Qatar; Borkowska & Luthra, 2022, UK). In a cross-country comparison, Mayer and Schmidt (2004) examined differences across junior high school students from Japan, China, Mexico, and the US. They only reported the positive effects of age on high school students in China. In the other three countries, the direction of age was also positive, but the effects were not statistically significant.

Additionally, two studies could not uncover a clear pattern regarding the relationship between age and political interest in their models. Using the Mexico 2006 Panel Study, Duquette-Rury et al. (2018) showed incoherent effects of age groups. Compared to the youngest group, the effect of the older two groups varied in direction and significance. Similarly, the effects of age in the Spanish representative sample used by Ferrín et al. (2020) also showed no clear pattern regarding different age groups. Compared to the youngest group (18-24), the older four age groups showed no significant effect of age; however, the direction of coefficients varied. The middle groups (25-36, 35-44) showed a negative effect, and the two older groups showed positive effects (45-54, 55-64). In both studies, no conclusive decision on the effect of age can be drawn.

As Figure 4 at the beginning of the section revealed, only half of the studies included age as a potential predictor of political interest. Eleven studies showed a significant positive relationship between being older and being politically interested. However, three articles could only replicate this positive effect in some of their models or for some countries. Further, two studies did not show a clear pattern of the relationship between age and political interest. Therefore, no clear evidence can be drawn for age effects on political interest.

e. Ethnicity effects Only ten out of 32 studies examined the role of ethnicity or race in explaining political interest. Moreover, between these ten articles, the measurement of ethnicity varies greatly. Each study built variables of ethnicity or race referring to country-specific contexts, and effects can not be summarised like age, gender, education, or income. Therefore, we did not summarise the effects of ethnicity in Figure 4 at the beginning of the section.

Two studies focused on samples with people having immigration backgrounds but did not include any further measure in the analyses that addressed ethnicity or geographic origin (DeSante & Perry, 2016, sample of Latinos in the US; Borkowska & Luthra, 2022, sample of immigrants in the UK). In their panel study of Swedish youth aged 13-15 years, Miklikowska et al. (2022) included immigration background as a dichotomous variable but did not report the effects of this dummy.

Seven additional studies included and reported different effects of immigration or race in their analyses of political interest. Two studies used samples from the US and compared effects for minorities compared to the white population. In their three-wave study of youth, Wray-Lake et al. (2020) showed negative effects for Asians and Black people compared to white respondents. Although not statistically significant, the effect for the Latino group also showed a negative direction. Interestingly, and compared to the other literature, Wray-Lake et al. (2020) included an interaction of race and gender. They revealed that non-white women show higher political interest than their non-white male counterparts. However, the effects were only significant for Black respondents. Contrary, Wolak (2020) showed with the Young Adults Panel that African American and Latin youth show higher levels of political interest than white youth. However, the effect was only significant for African American youth.

Four other studies used samples from European countries. Reher (2020) showed in her analysis of European disabled persons that immigration background is negatively connected to political interest (although no statistical significance showed). Fischer-Neumann (2014) showed for a representative German immigrants' sample that Turkish and Immigrants from the former Yugoslavia express higher political interest than immigrants from Southern Europe. Superti (2023) analysed how emigrant enfranchisement influences immigrants' political interest. In their models using the ESS, they included a specific variable indicating if immigrants are Muslims. Testing two models of political interest, they showed insignificant effects of being a Muslim immigrant. The effect was positive in the first model, contrasting having medium to high political interest with having little or no interest. In the second model, contrasting having any interest compared to having no interest at all, the effect was negative. In the only non-Western sample, Syal (2012) showed, with a representative Indian sample, that lower castes are more interested in politics than higher castes, as was expected by prior knowledge about Indian populations. In a study of the youth of four European countries (UK, Germany,

Netherlands, and Sweden), Hochman and García-Albacete (2019) included different ethnicity measures. The first two models included a dummy indicating being a child of immigrants, which positively affected the level of political interest. In their third model, they added measures of ethnic identification and origin of immigration. They showed that youth who indicated a very strong ethnic identification do not differ significantly from youth expressing less or no ethnic identification. However, they revealed that immigration from Africa, the Middle East, or Asia leads to higher political interest than natives or immigrants of Europe, North America, and Oceania origin.

Overall, studies used different country-specific ethnic minorities; therefore, we cannot compare these effects across countries. Given this varying measurement and the heterogeneous evidence, it is impossible to draw general conclusions regarding the effects of ethnicity and race on political interest.

f. Intersectional effects Three studies included intersectional effects between socio-structural variables by adding relevant interactions in their analyses. In a cross-country study of European countries within the ESS, Fraile and Gomez (2017) showed that men (even when growing older) still show higher probabilities of declaring higher political interest (positive interaction of gender and age). Therefore, the gender gap persists throughout the life cycle.

Wolak (2020) examined the origins of the gender gap in political engagement with a sample of young adults in the US. In a mediation analysis, they revealed that women also show less self-confidence. Part of the effect of self-confidence on political interest can be explained by the female gender, having a higher education and being African American. Therefore, self-confidence might help explain gender gaps in political interest.

Wray-Lake et al. (2020) examined the variations of effects of race/ethnicity, parental education and gender on civic development during the transition to adulthood (aged 18-30) with a cross-sequential sample (28 cohorts, 1974-2003). From the interactions, it becomes apparent that Black women and women of other origins positively affect political interest, meaning black women show higher political interest than black male persons. The interaction between the female gender and Latinx is also positive but insignificant.

Table 9: Overview of studies using general political interest

Study	Gender (woman)	Education (higher)	Income (higher)	Age (older)	Ethnicity	Method	Random?	Data type	Experiment	N
Borkowska and Luthra (2022)	–	≈	∉	≈	≈	Regression	yes	panel	no	< 1500
Cicognani et al. (2012)	–	∉	∉	∉	∉	Means' test	no	cross-sectional	no	≥ 1500
Datzberger and Mat (2019)	–	∉	∉	∉	∉	Descriptive statistics	no	cross-sectional	no	< 500
DeSante and Perry (2016)	–	+	+	+	(+)	Multilevel regression	yes	cross-sectional	no	≥ 1500
Duquette-Rury et al. (2018)	≈	≈	≈	≈	∉	Regression	yes	panel	no	≥ 1500
Easterbrook et al. (2016)	ℝ	+	ℝ	ℝ	∉	Multilevel regression	yes	panel	no	≥ 1500
Fernández et al. (2021)	–	+	∉	+	∉	Multilevel regression	yes	cross-sequential	no	≥ 1500
Ferrín et al. (2020)	≈	+	∉	≈	∉	Regression	no	cross-sectional	yes	< 1500
Fischer-Neumann (2014)	–	+	+	∉	+	Regression	yes	cross-sequential	no	≥ 1500
Fraile and Gomez (2017)	–	+	∉	+	∉	Multilevel regression	yes	cross-sectional	no	≥ 1500

Continuing on the next page

Continued from previous page

Study	Gender (woman)	Education (higher)	Income (higher)	Age (older)	Ethnicity	Method	Random?	Data type	Experiment	N
Fraile and Sánchez-Vítores (2020)	−	+	∉	+	∉	Regression	yes	panel	no	≥ 1500
Furnham and Cheng (2019)	−	+	∉	∉	∉	Regression	yes	panel	no	≥ 1500
Hochman and García-Albacete (2019)	+	∉	∉	∉	+	Regression		cross-sectional	no	≥ 1500
Lasorsa (2009)	−	∉	∉	∉	∉	Means' test	no	cross-sectional	no	< 1000
Le and Nguyen (2021)	∄	+	∄	∄	∉	Regression	yes	cross-sequential	no	≥ 1500
Mansell et al. (2022)	−	∉	∉	∉	∉	Regression	no	cross-sectional	yes	< 1500
Mayer and Schmidt (2004)	≈	∉	∉	≈	∉	Regression	no	cross-sectional	no	< 1500
Miklikowska et al. (2022)	∄	∄	∄	∄	∄	SEM	no	panel	yes	≥ 1500
Ohme et al. (2020)	≈	∉	∉	+	∉	Regression	no	panel	no	< 500
Ojeda et al. (2023)	−	+	∉	∉	∉	Regression	yes	cross-sectional	no	> 1500

Continuing on the next page

Continued from previous page

Study	Gender (woman)	Education (higher)	Income (higher)	Age (older)	Ethnicity	Method	Random?	Data type	Experiment	N
Preece (2016)	≈	∉	∉	∉	∉	Regression	no	cross-sectional	no	≥ 1500
Quaranta and Dotti Sani (2018)	−	+	+	∉	∉	Regression	yes	cross-sequential	no	> 1500
Reher (2020)	−	+	+	+	(−)	Multilevel regression	yes	cross-sectional	no	> 1500
Sasse and Lackner (2020)	−	+	+	∉	∉	Regression	no	cross-sectional		< 1500
Shockley (2016)	≈	≈	≈	≈	∉	Regression	no	cross-sectional	no	< 1000
Stattin et al. (2017)	∉	∉	∉	+	∉	Latent Growth Model	no	cross-sectional	no	≥ 1500
Superti (2023)	−	+	∉	+	()	Regression	yes	cross-sequential	no	> 1500
Syal (2012)	−	+	+	+	−	Regression	yes	cross-sectional	no	≥ 1500
Turnbull-Dugarte and Townsley (2020)	−	+	+	+	∉	Regression	yes	cross-sequential	no	≥ 1500
van Deth (2000)	−	+	+	∉	∉	Regression	yes	cross-sectional	no	≥ 1500

Continuing on the next page

Continued from previous page

Study	Gender (woman)	Education (higher)	Income (higher)	Age (older)	Ethnicity	Method	Random?	Data type	Experiment	N
Wolak (2020)	−	+	∉	+	≈	Regression	yes	cross-sectional		≥ 1500
Wray-Lake et al. (2020)	−	+	∉	∉	+	Conditional Growth Model	yes	cross-sequential	no	≥ 1500

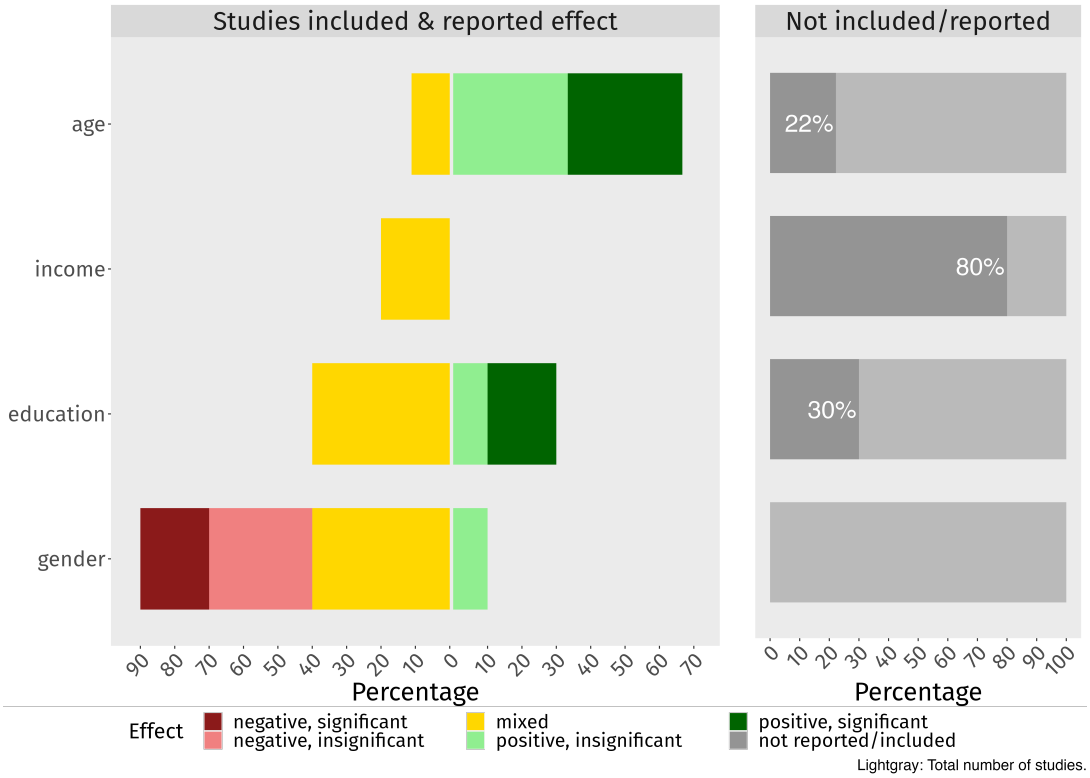
Note: +: significant, positive, (+); insignificant, positive; (): insignificant, no direction reported; (−): insignificant, negative; −: significant, negative; ≈: mixed; ℝ: not reported; ∉: not included.

3.2.2 Different levels of political interest

In contrast to large-scale surveys or national election studies, smaller surveys incorporated more differentiated measurements of political interest. This section discusses studies that included at least one item measuring political interest on a more specific level than general political interest (e.g. Coffé, 2013; Eggert & Giugni, 2010). Furthermore, other studies in this section used an index of political interest comprising different levels of political interest, such as local, regional, federal, or general (Levy et al., 2016, e.g.). Figure 5 summarises these studies' findings regarding the effects of gender, education, income, and age. Compared to the previous section, with general political interest as a dependent variable, the evidence found here does not point in a clear direction. Table 10 at the end of this section shows the overall features of the studies.

Only ten studies in the identified sample used measures on different political interest levels (as single items or indices) in their analyses. Four studies used indices of different levels, five used single items, and one used an experimental design with different items to measure influences on political interest. Most studies used cross-sectional data; only Levy et al. (2016) used a panel study. Three studies (Sánchez-Vítores, 2019; Eggert & Giugni, 2010; Hayes & Bean, 1993) used a randomised sample. Furthermore, two studies used an experimental design (Tormos & Verge, 2022; Levy et al., 2016). Except for three studies (Tormos & Verge, 2022; Uslucan & Sauer, 2020; Hahn, 1996), all studies used regression models in their analyses (linear, logit, probit, or multi-level).

Figure 5: Overview studies of different levels



a. Gender effects Two of the ten studies in this section reported a significant negative effect on the female gender (see Figure 5). Three additional studies reported a negative but insignificant relationship between being a woman and political interest. Furthermore, four studies presented varying effects throughout the tested levels of political interest, and only a single study revealed a positive but insignificant effect for women.

From the studies pointing out a significant negative effect of the female gender, one study used an index. Stadelmann-Steffen and Sulzer (2018) measured political interest on five levels (local, cantonal, national, international, and general) and created an index out of those in their analyses of the political interest of Swiss students, hierarchically ordered in classes and cantons. With data from the CID survey, Sánchez-Vítores (2019) showed in their multilevel models (unit is countries) that women have a smaller probability of being quite or very interested in all three tested items: general, national and local political interest. Interestingly, they could show that the gender gap turns insignificant on the country level for some of the countries but remains in the expected direction of women expressing less political interest than men. The third study showing a significant negative effect for women used two experiments of item construction.

Three studies presented a negative but not significant effect. With Turkish immigrants in Germany, Uslucan and Sauer (2020) descriptively assessed political interest in German and Turkish national politics. It could be shown that female Turkish immig-

rants display lower levels of political interest in both items. Levy et al. (2016) showed in an experimental panel study with non-randomised student samples from three high schools in the US that political interest differs between gender, and women expressed (overall in control and treatment classes) less political interest than men. However, the effect was insignificant, and the sample size was rather small (sample size per school around 150). Similarly, Zamora and Guerrero-Solé (2018) revealed a negative non-significant effect of gender on an index of different levels of political interest; however, the sample was not randomised and included only adult respondents from a specific region in Chile.

Four studies presented mixed results, and all used single items to analyse different levels of political interest. In the earliest publication, Hayes and Bean (1993) showed only a significant negative effect of gender on local political interest in West Germany, which was not present in one of the other analysed countries (Australia, Italy, the UK, and the US). In one of the first studies that assessed gender gaps on different levels of political interest, Coffé (2013) used a sample of adult British persons. Women showed significantly lower political interest on the general, national, and international levels. Contrary to the higher political interest levels, women expressed more political interest on the local level. However, this effect on the local level was not in all models significant. In a study of immigrants within the municipality of Zurich, Eggert and Giugni (2010) showed with a measure of local political interest that the gender gap only exists within Turks (other groups were: Italians and Kosovars).

From these studies, the experimental study of Tormos and Verge (2022) stands out in its methodological approach. In the first experiment, respondents had to answer two items on political interest: the general item and an item on which respondents needed to indicate interest in different topics. Men showed significantly higher interest in the general item regardless of the item's position. Nonetheless, the difference decreased by nearly two-thirds from the general to the topic item. Interestingly, they showed a declining and turning insignificant gender gap in general political interest if the general item is asked after indicating interest in different topics. Asking the topic item first, women showed higher political interest; however, the difference was insignificant. In the second experiment, Tormos and Verge (2022) tested female- and male-oriented items against a mixed item including both – female and male topics. In the combined subsample, male respondents showed higher levels on each tested item (female-, male-oriented, or mixed). However, the effect varies largely across the three items, and the effect was only significant when asked about political interest toward male-oriented topics.

One additional study showed a positive but non-significant effect on the female gender. Hahn (1996) used an index of different levels. However, the sample included only two civic study classes and reached a sample size of 164. Therefore, conclusions from this

study cannot be generalised.

In most studies and analysis cases, women expressed less interest than men. However, the difference varies greatly depending on the item text or order. Furthermore, on some levels (e.g., local or topic-oriented), the gender gap turns insignificant or even changes direction, with women expressing more political interest than men.

b. Education effects Seven studies examined an educational effect on political interest in their analyses. Moreover, three studies did not include education in their analyses (see Figure 5 at the beginning of this section).

Regardless of the measurement in the studies (single levels or combined index of different levels), three studies showed a positive effect of education: Formally higher-educated respondents expressed higher levels of political interest. Zamora and Guerrero-Solé (2018) showed across an adult Chilean sample that respondents with a higher formal education degree show significantly higher levels of political interest. In a comparative study of thirteen European countries, Sánchez-Vítores (2019) compared three educational groups. Overall, Sánchez-Vítores (2019) reported a significant positive effect of education on respondents' political interest showing respondents in higher education groups expressing more political interest. In a study of high school students from three US high schools, Levy et al. (2016) measured education by students' GPA. They showed a positive but non-significant effect on political interest measured as an index of expressed interest in eleven topics.

Four additional studies showed mixed results regarding different measured levels or across countries. The very early study of Hayes and Bean (1993) only showed a positive effect of education in Italy, the UK and the US. In Australia, the effect was positive but not significant; in West Germany, the effect was negative but not significant. Eggert and Giugni (2010) showed in a study of the immigrant population in Zurich that the educational effect was only significant and positive in the Turkish subsample. Within Italians and Kosovars, the effect of higher education on political interest was still positive but insignificant. Coffé (2013) used a study of the adult British population and reported a positive effect of education on the general, national, and international political interest. (Education was measured by age when respondents finished education, and the reference category was respondents with the highest age when finishing education (19 years or older). In their study of Swiss students, Stadelmann-Steffen and Sulzer (2018) reported that students in vocational education training (VET) showed less interest than students in general education.

Overall, the research using differentiated levels of political interest as dependent variables showed some similar evidence to the analyses on general political interest. Higher formal education affects political interest positively. However, in most studies, this effect was not statistically significant or not consistently positive for all different

models or subpopulations used in the studies.

c. Income effects Interestingly, none of the studies directly included a measure of income in their analyses. However, two studies used at least measures of income-related social status and showed mixed results (see Figure 5 at the beginning of this section). In the earliest study, Hayes and Bean (1993) showed that respondents' subjective social placement significantly positively impacts political interest in West Germany. In the four other countries used in this study, the effect was positive but not significant (United States, Australia, and Italy) or even negative but also not significant (United Kingdom). Furthermore, Uslucan and Sauer (2020) descriptively showed amongst Turkish immigrants in Germany that income and social status positively affect expressed interest in German and Turkish national politics. However, it is impossible to conclude more generally on the possible effects of income or social status on political interest measured on different levels.

d. Age effects Only seven of the ten studies in this section included age in their models (see Figure 5 at the beginning). Six studies showed positive effects of older age, but only three reported significant effects. Older respondents (regardless of the age span in the sample) tend to express being more politically interested than younger ones.

From the three studies showing significant positive effects, two studies analysed different levels of political interest independently but showed through all models the positive effects of age on political interest. Coffé (2013) used a sample of British adults, and Sánchez-Vítores (2019) analysed the adult population of thirteen European countries. In the third study, Zamora and Guerrero-Solé (2018) reported a positive age effect on an index of political interest measuring general, local, regional, national, and international interest across adults from one region in Chile.

Three additional studies reported positive but insignificant effects of age in their analyses. In the study of immigrant groups in Zurich (Kosovars, Italians, and Turks), Eggert and Giugni (2010) ran different models for each group and reported positive but not significant effects for age for each immigrant group on local political interest. In a study of Swiss students, Stadelmann-Steffen and Sulzer (2018) reported a positive effect of age on an index of general, international, national cantonal and local political interest, but the effects were not significant. Uslucan and Sauer (2020) only descriptively analysed the political interest and reported positive effects of age (measured by the generation of immigrants) on German and Turkish national political interest amongst Turkish immigrants in Germany.

Only a single study reported mixed effects. The earliest study Hayes and Bean (1993) reported significant positive effects of age on local political interest in Australia,

the United Kingdom, the United States, and Germany, but only insignificant positive effects for Italy. With these few studies exploring the effects of age, we cannot safely conclude regarding the possible effects of age on political interest (when measuring different levels of political interest).

e. Ethnicity effects Out of the ten studies in this section, only one study directly assessed the effects of ethnicity respectively race. Two other studies used special samples of immigrants (Uslucan & Sauer, 2020, Turkish immigrants in Germany; Eggert & Giugni, 2010, Turkish, Kosovarian, and Italians immigrants in Zurich) but did not further assess ethnicity or race in their analyses.

Only one of the studies included a measurement of ethnicity or race. They showed a negative effect of being non-white on political interest. However, the effects were insignificant, and the sample was not randomised. Eggert and Giugni (2010) tested the effects of different immigrant groups and ran single regressions on Turks, Kosovars, and Italians. Interestingly, from the relevant factors in this literature review, only the effect of gender varied in direction throughout the models of the three groups (Turks, Kosovars, and Italians).

Using an experimental panel study of students from three US high schools, Levy et al. (2016) reported a negative effect of being non-White on political interest at two consecutive time points. Nonetheless, the effects were insignificant, and the sample size was only 150 students per school.

f. Intersectional effects Only one study utilised an intersectional approach by using interactions between gender, marital status and care work: In a study of 13 countries, Sánchez-Vítores (2019) explored the gender gap in political interest on different levels using interactions of gender, marital status, and care work. Measuring political interest with three items on the general, national, and local level, throughout the models, women showed a higher probability of being 'not very interested' or 'not at all interested' and a lower probability of being 'quite' or 'very interested' in politics in general, national, or local politics. Interestingly, Sánchez-Vítores (2019) introduced a three-way interaction of gender, marital status and care work in their analysis. The results confirm that even after controlling for the latter two, male respondents are more likely to be politically involved than women. Care does not affect differences in the gap size within the marital status categories. However, it could be shown that persons who have never been married or in a stable union showed the lowest gender gaps across all three levels of political interest compared to respondents who were divorced or widowed.

Table 10: Overview political interest using different levels

Study	Gender (woman)	Education (higher)	Income (higher)	Age (older)	Ethnicity	Method	Random?	Data type	Experiment	N	Index
Coffé (2013)	≈	≈	∉	+	∉	Regression	no	cross-sectional	no	< 1500	no
Eggert and Giugni (2010)	≈	≈	∉	(+)	≈	Regression	yes	cross-sectional	no	< 1500	no
Hahn (1996)	(+)	∉	∉	∉	∉	Means' test	no	cross-sectional	no	< 250	yes
Hayes and Bean (1993)	≈	≈	≈	≈	∉	Regression	yes	cross-sectional	no	< 1500	no
Levy et al. (2016)	(−)	(+)	∉	∉	(−)	Regression	no	panel	yes	< 500	yes
Sánchez-Vítores (2019)	−	+	∉	+	∉	Regression	yes	cross-sectional	no	>1500	no
Stadelmann-Steffen and Sulzer (2018)	−	≈	∉	(+)	∉	Multilevel regression	no	cross-sectional	no	≥ 1500	yes
Tormos and Verge (2022)	≈	∉	∉	∉	∉	Means' test	no	cross-sectional	yes	≥ 1500	no
Uslucan and Sauer (2020)	−	∉	∉	(+)	∉	Descriptive statistics	no	cross-sectional	no	≥ 1500	no
Zamora and Guerrero-Solé (2018)	(−)	+	∉	+	∉	Regression	no	cross-sectional	no	≥ 1500	yes

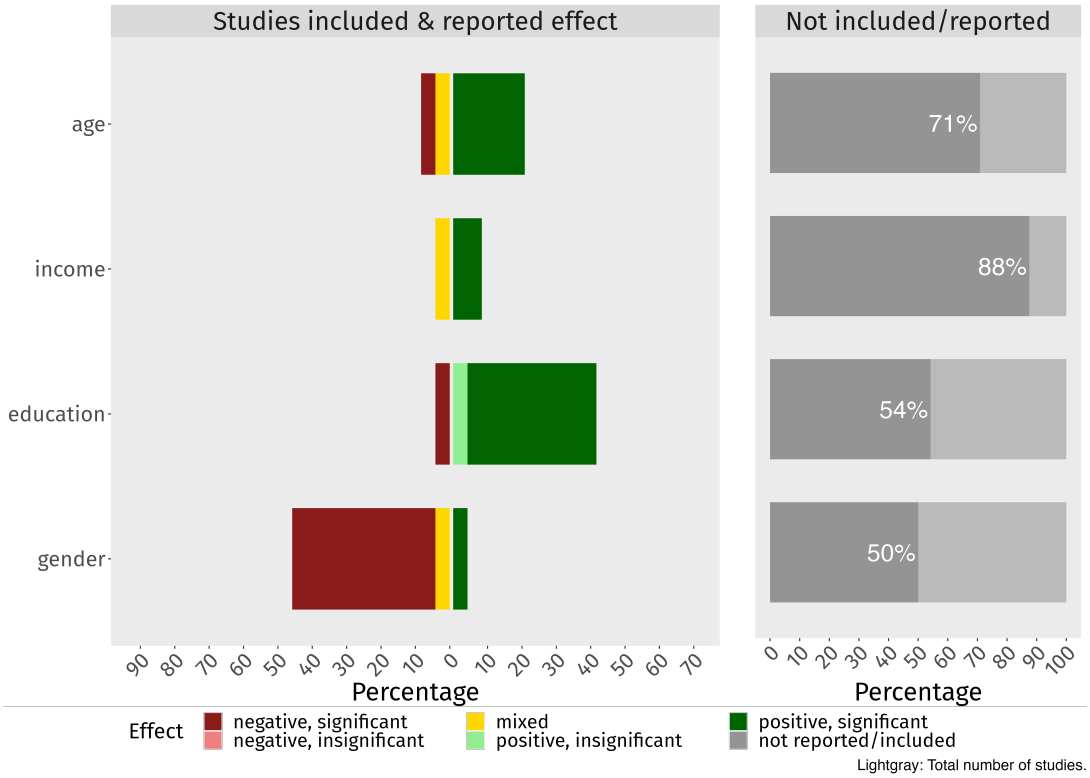
Note: +: significant, positive, (+); insignificant, positive; (): insignificant, no direction reported; (−): insignificant, negative; −: significant, negative; ≈: mixed; *R*: not reported; ∉: not included.

3.2.3 Combined indices with political interest

Besides studies using the well-known item on general political interest and measures of different levels (e.g., local, regional, federal, or international), some studies operationalised political interest with a mixed index. Most of these studies used a common item on asking about interest and combined this with measures of affection or feeling towards politics (see Russo & Stattin, 2017; Wolak, 2022; Oberle et al., 2018), media consumption (see Hoewe & Sherrill, 2019; Piumatti et al., 2018; Zeglovits & Zandonella, 2013), discussion activity (Guidetti et al., 2016), or political activities (see Alozie et al., 2003; Grechyna, 2023) or even mixed categories mentioned above (see Alscher et al., 2022; Takyar, 2019; Wei et al., 2021). Other studies – also included in this section – measured political interest without a standard item on interest but combined different activities or motivations concerning political interest. For example, Bos et al. (2022) used an index of excitement, learning, and a possible future political job. Nonetheless, these studies have in common that they do not only measure political interest with classic items. We decided against further categorisation since none of the studies used similar items.

Figure 6 summarises the studies' results regarding the four effects of interest – gender, education, age, and income. In addition, Table 11 at the end of this section shows the overall features of each study in this section.

Figure 6: Overview studies of indices



a. Gender effects From the 24 studies discussed in this section, eight did not include gender in their analysis, and one additional study did not report gender effects in the study or available supplementary material. Another study only reported that the effect of the female gender is insignificant but did not include the direction of the effect in the study. Moreover, two studies did not directly assess gender effects: Grechyna (2023) ran separate regressions for male and female respondents, and Budiningsih et al. (2021) only analysed female respondents. All of these twelve studies were marked as 'not reported/included' for the effect of gender in Figure 6 above. Ten of the remaining studies reported a significant negative effect on female gender. Another study reported mixed effects, and only one study revealed a significant positive effect for women.

Ten studies revealed a negative effect of female gender on their measured index of political interest, showing women expressing less interest than males. Only one study used a large-scale survey (Eurobarometer, van Deth & Elff, 2004). Van Deth and Elff (2004) dichotomised political interest into showing involvement and apathy; however, they reported consistent effects through the models for women showing a lower probability of involvement and apathy. Two of the ten studies used randomised samples of Italian surveys (Guidetti et al., 2016; Piumatti et al., 2018); however, Piumatti et al. (2018) restricted the analysis to respondents aged 65 or older. Furthermore, six studies reporting a significant negative effect of female gender used samples of children or youth. Bachen et al. (2015) worked with a sample of students from Northern Californian High schools; however, the sample size was below 500 respondents. Bos et al. (2022) also used samples from the US, analysing children from grades 1 to 6 from four locations within the US. In a study of Austrian youth, Zeglovits and Zandonella (2013) used two samples of Austrian youth aged 16 to 17 years old but showed consistently through the samples a negative effect for girls on political interest. In two studies of German school students participating in EU simulation games, Oberle and Leunig (2016) and Oberle et al. (2018) replicated the negative gender effect on political interest. Furthermore, Shala and Grajcevci (2018) analysed Kosovarian students and could replicate the gender gap in a non-Western country, showing female students expressing less political interest. In the same way, Chen and Zhong (1999) showed a gender gap with women expressing less political interest in a sample of citizens of Beijing (China).

With a sample of the 2016 Cooperative Congressional Election Study, Wolak (2022) reported mixed results regarding gender on political interest. Wolak (2022) used four items regarding political interest on which she regressed models with and without mediation: Attention to politics, enjoyment of following politics, enjoying discussing politics, and frequency of political discussion. A gender gap of women expressing less interest could only be shown for attention to politics and enjoying political discussions. Furthermore, she tested a model in which the effect of gender is mediated through

conflict-seeking orientations. As before, a gender gap was significant and negative in attention to politics and enjoying political discussions.

Only a single study reported a significant positive effect of female gender on political interest. With a sample of Kids Voting USA (1994), Alozie et al. (2003) built an index of political orientation and activity of 9 items and showed that female children show higher levels in the built index than male respondents.

Overall, the studies in this section only give limited information on gender's effect on political interest due to their very heterogeneous measurements. Considering the broadly different measurements (see section 3.1), we can not draw safe conclusive results, although, in tendency, a negative effect for women was present in most of the studies.

b. Education effects As with gender effects, half of the studies did not include variables on education (12) or did not report the effect of education in their analyses or available supplementary materials (1). Nine articles revealed a significant positive effect of higher education, and an additional study reported a non-significant positive effect (see Figure 6 at the beginning of this section). Only one study showed a significant negative effect of education.

Three of the studies indicating a significant positive effect used representative national samples. Grechyna (2023) based their analyses on the ESS and showed positive effects of higher education for men and women (separated models). Respondents of both genders who are formally higher educated showed higher levels of political interest. Guidetti et al. (2016) and Piumatti et al. (2018) used representative samples of the Italian population showing the positive effect of formal education on political interest measured as an index of expressed interest and frequency of political discussion. However, Piumatti et al. (2018) constrained the sample to respondents aged 65 or older.

Further five studies used samples of children or youth, all showing a positive and significant effect of education. In two studies of German school students participating in an EU simulation game, Oberle and Leunig (2016) and Oberle et al. (2018) measured education by school type and showed that respondents from formally higher school tracks expressed higher levels of political interest. In the same way, Zeglovits and Zandonella (2013) found that, on average, Austrian youth attending a formally higher school track expressed higher levels of political interest. Stockemer (2012) could also replicate the positive effect of higher educational levels (measured by students' GPA) by analysing a sample of undergraduates from a single university in the US. Similarly, Shala and Grajcevci (2018) showed this positive effect of education amongst Kosovarian university students. Additionally, and throughout the five items tested as political interest, Wolak (2022) consistently reported a significant positive effect of education in a sample of the

US adult population.

Only a single study showed positive effects that were not significant. In the study of Beijing citizens, Chen and Zhong (1999) reported that education has a positive effect, but the effect did not pass significance.

Moreover, only one study reported a negative effect of higher education on political interest (van Deth & Elff, 2004). However, they measured education with respondents' age once they finished full-time education. Compared to respondents who were 16 to 19 years old once they completed their education, respondents aged up to 15 were more politically involved and less apathetic. In contrast, respondents aged 20 years and older once finished their education were less politically involved and more apathetic than those aged 16-19 once completed their education. Compared to the other studies, this study used a measurement for education that combines education and age.

Most studies reported a positive effect of formal education on political interest, although the studies used different measurements of education and political interest. One study revealed a negative effect, but the measurement combined education and age. Therefore, the studies offer only weak evidence of the positive effect of education on political interest.

c. Income effects Most of the studies in this section focused on youth and students and, therefore, did not include any measures of income (21 studies, see Figure 6 at the beginning of this section). Three additional studies used measures of income (at least) in some of their models. Of the three studies, two reported a positive effect of higher income on the measured political interest index, and one study showed mixed effects of income levels on political interest.

Piumatti et al. (2018) showed that even amongst Italians aged 65 or older, respondents with higher income levels express higher political interest. In a non-Western sample, Chen and Zhong (1999) showed that Beijing citizens in higher income classes show more political interest than Beijing citizens in lower income classes.

Grechyna (2023) used the ESS in their analyses and included a measure of respondents' income levels. Across countries and the models of men and women, respondents in higher income classes expressed higher levels of political interest. However, the effects of lower income deciles (compared to the lowest; for men up to the fourth decile, for women up to the fifth decile) turned insignificant once controlled for first children's age in the models.

The studies in this section do not provide robust evidence of income effects on political interest.

d. Age effects Only the minority of studies in this section included age measures (7). Sixteen studies did not include age, and a single study did not report included

effects of age in the study or available supplementary materials (see Figure 6 at the beginning of this section). Five of the studies discussed in this section showed a significant positive effect of (older) age, and one showed a significant negative effect of age. An additional study found mixed effects of age on political interest throughout the different models.

Three of the five studies revealing a significant positive effect of (older) age used large-scale surveys. Grechyna (2023) used samples from European countries (ESS) and additional representative sampnles of British adults. Throughout the separated models for male and female respondents (within the two samples), Grechyna (2023) consistently showed significant positive effects of age on respondents' political interest. In addition, Guidetti et al. (2016) showed the positive effect of being older within a sample of Italian adults and Wolak (2022) within a sample of US adult citizens (2016 Congressional Election Study).

Furthermore, Chen and Zhong (1999) showed that older Beijing citizens expressed more political interest than younger Beijing citizens.

In a study of US school students in grades 5 to 6 and 7 to 9, Alozie et al. (2003) used the school grade as a surrogate for age. As with the other four studies, they revealed a significant positive effect throughout their models using an index of political interest when using grade as a continuous predictor. Furthermore, they revealed a positive effect when controlling for grades in categories (4-6, 7-9, and 10-12) by showing lower grade groups expressing less interest than the highest grade group. In a similar sample but with mixed and differing results, Bos et al. (2022) analysed school students from grades 1 to 6 in four locations in the US. They separated the analysis for boys and girls, and the effect of age was significant and negative only for female students. The effect of age was negative for boys; however, it remained insignificant.

Out of the 24 studies in this section, only van Deth and Elff (2004) reported a significant negative effect of age, showing younger cohorts expressing more political interest than older cohorts.

Since only a few studies explored the effects of age, we cannot safely conclude regarding the possible effects of age on political interest in this section.

e. Ethnicity effects Just four out of the 24 studies included measurements or samples related to ethnicity, race, or immigrant status.

Alscher et al. (2022) included in their analysis of German students in grades 7 to 10 immigration background (yes/no) as a control for political interest; yet, the effect was insignificant.

Analysing school students in the US within grades 5 to 6 and 7 to 9, Alozie et al. (2003) included race (black, Asian American, Hispanic, and native american) in the different analytical steps. The study showed that compared to white persons, all other

ethnic groups expressed lower levels of political interest.

Wolak (2022) also used race in their study (2016 Cooperative Congressional Election Study); nonetheless, the effects of being Afro-American or Latino compared to white respondents led to different directions (but all insignificant) throughout the five tested items of political interest.

Takyar (2019) did not include measures on ethnicity. However, this study's sampling targeted Muslim US citizens. They revealed that media and personal stigma increased political interest among Muslim US citizens within this special population.

Due to the scarcity of studies and consistent evidence, we cannot draw conclusions regarding the potential effects of Ethnic background on political interest (measured with various items).

f. Intersectional effects Out of the 24 studies in this section, two studies included intersectional approaches by including relevant interactions between socio-structural factors within their analyses.

In a study of the Kids Voting USA, Alozie et al. (2003) included an intersectional approach in their analysis by running the finalised models for each race operationalised in the analysis (White, Black, Asian American, Hispanic, and Native American). They built an interaction of the surrogate for age (grade) and gender. Furthermore, they added an interaction of gender and a variable of 'how often their teacher talked in class about voting' to test different perceptions of female and male students. As mentioned above, Alozie et al. (2003) reported that all non-white and male respondents show significantly less interest than white and female respondents — however, a different pattern appeared by comparing the effects across different race models. For white respondents, the effect of gender stays positive and significant after controlling for the interactions of gender and grade and the interaction of gender and frequency of teachers talking about voting. For Asian Americans and Hispanics, the effect of being female stays positive throughout the two models; however, in the latter model, including the interactions, the effect turns insignificant. Once controlled for the grade (a surrogate for age) and teacher, there is no significant effect of being female for Asian Americans and Hispanics.

Interestingly, the effect of being female is positive for Native Americans in both models but only reached a significance level of $p = 0.01$. It appears that the effects of gender are not as relevant in the group of Native Americans as they are for White, Asian Americans, or Hispanics. Surprisingly, amongst Black respondents, the positive and significant effect of being female turns insignificant and negative once adding the interactions of gender and grade, respectively, the frequency of teachers talking about voting.

Grechyna (2023) explored how parenthood affects parents' political engagement by

comparing effects in two models of female and male respondents. Across the different models using the ESS, the effects of age, income, and education did not differ largely between the models of male and female respondents. However, controlling for children living at home and the first child's age, Grechyna (2023) could show that both factors depressed women's political interest significantly but had an insignificant effect on male respondents.

Table 11: Overview political interest indices

Study	Gender (woman)	Education (higher)	Income (higher)	Age (older)	Ethnicity	Method	Random?	Data type	Experiment	N	Index of …
Alozie et al. (2003)	+	∉	∉	+	–	Regression	yes	cross-sectional	no	≥ 1500	interest & activity
Alscher et al. (2022)	∉	∉	∉	∉	()	SEM	no	cross-sectional	no	≥ 1500	motivation, interest, joining events
Bachen et al. (2015)	–	ℝ	∉	∉	∉	Regression	no	cross-sectional	yes	< 500	e.g.'I am interested in political issues'
Bos et al. (2022)	–	∉	∉	≈	∉	Means' test	no	cross-sectional	no	≥ 1500	excitement, learning, future job
Budiningsih et al. (2021)	ℝ	∉	∉	∉	∉	Regression	no	cross-sectional	no	< 250	attention, enjoyment, satisfaction & participation support
Chen and Zhong (1999)	–	(+)	+	+	∉	Regression	yes	cross-sectional	no	< 750	general, national, local affairs & talk frequency
Grechyna (2023)	split sample	∉ / +	∉ / +	≈ / +	∉	Regression	yes	panel	no	≥ 1500	interest, voted, political activities, support party
Guidetti et al. (2016)	–	+	∉	+	∉	SEM	yes	panel	no	≥ 1500	interest & frequency conversations
Hoewe and Sherrill (2019)	∉	∉	∉	∉	∉	SEM	no	cross-sectional	no	< 250	following news & information about government/elections

Continuing on the next page

Continued from previous page

Study	Gender (woman)	Education (higher)	Income (higher)	Age (older)	Ethnicity	Method	Random?	Data type	Experiment	N	Index of …
Landberg et al. (2017)	∉	∉	∉	∉	∉	Means' test	no	cross-sectional	no	≥ 1500	4 items (e.g., How interested are you in politics?)
Oberle and Leunig (2016)	−	+	∉	∉	∉	SEM	no	cross-sectional	yes	≥ 1500	5 items, learning about politics
Oberle et al. (2018)	−	+	∉	∉	∉	SEM	no	cross-sectional	yes	≥ 1500	5 items, learning about politics
Piumatti et al. (2018)	−	+	+	∉	∉	SEM	yes	cross-sectional	no	>1500	interest & talk
Russo and Stattin (2017)	∉	∉	∉	∉	∉	Regression	no	cross-sectional	no	≥ 1500	general interest & feelings about politics
Schmuck et al. (2022)	ℝ	∉	∉	ℝ	∉	SEM	no	panel	no	< 500	2 items (e.g., I am interested in politics)
Šerek et al. (2017)	∉	∉	∉	∉	∉	SEM	yes	panel	no	< 1000	general interest & follow news
Shala and Grajcevci (2018)	−	+	∉	∉	∉	Regression	no	cross-sectional	no	< 500	interest & seeking information
Stattin and Korol (2020)	()	∉	∉	∉	∉	Regression	yes	panel	no	< 1500	political & societal interest
Stockemer (2012)	∉	+	∉	∉	∉	SEM	no	cross-sectional	no	< 750	news consumption & frequency of discussions

Continuing on the next page

Continued from previous page

Study	Gender (woman)	Education (higher)	Income (higher)	Age (older)	Ethnicity	Method	Random?	Data type	Experiment	N	Index of …
Takyar (2019)	∉	∉	∉	∉	≈	Means' test	no	cross-sectional	yes	< 750	discuss politics, following news, important to follow politics
van Deth and Elff (2004)	−	−	∉	−	∉	Multilevel regression	yes	cross-sequential	no	≥ 1500	discussion
Wei et al. (2021)	∉	∉	∉	∉	∉	SEM		cross-sectional	no	≥ 1500	news consumption, discussion with friends & parents
Wolak (2022)	−	+	∉	+	()	Regression	yes	cross-sectional	no	< 1000	attention, enjoyment & frequency discussion
Zeglovits and Zandonella (2013)	−	+	∉	∉	∉	SEM	yes	cross-sectional	no	< 1000	general interest & following news

Note: +: significant, positive, (+) ; insignificant, positive; (): insignificant, no direction reported; (−): insignificant, negative; −: significant, negative; ≈: mixed; ℝ: not reported; ∉: not included.

3.3 Discussion

Most studies examined political interest by asking respondents about respondents' general political interest (see section 3.2.1). Regarding the effects of our socio-structural variables, we can conclude that strong and robust evidence exists for a *gender* effect. Women express lower general political interest levels than men. This gender gap has repeatedly been found in various studies using different analytical approaches. However, most of these studies focussed on Europe and North America, and only a few used samples from other continents. Despite the different samples, the negative effect of being female on political interest remains consistent. These findings are based on studies using randomised samples and various regression models for analysis, with sample sizes generally above 1500.

Similarly, the review of the relevant literature from the last 30 years highlighted that *formal educational* attainment and *income* level also explain political interest measured as general political interest. Respondents with higher education and income tend to express higher levels of political interest. However, compared to the gender variable, fewer studies examined the effects of income. This also applies to the *age* variable. Studies that analyse age's impact on political interest found a positive effect on political interest, even among the studies using samples of youth or students (5 studies; 3 found a significant effect and 2 additional studies a positive but insignificant effect). Older respondents show higher levels of political interest than younger ones, even within subsamples of youth or students. Only ten studies included effects on *ethnicity*, race, or immigrant status with country-specific measures that varied across studies. Studies using samples of the US mostly showed negative effects of non-white categories to white respondents. Studies from Europe showed mixed results between the connection of ethnicity or immigration background on political interest. Due to the varying measurement and heterogeneous evidence, we cannot safely conclude about ethnicity effects on political interest.

Several studies examined the effects on political interest, focusing on various interest levels, such as local, regional, federal, and general (section 3.2.2). The studies used different methodologies, including cross-sectional data, panel studies, randomised samples, and experimental designs. Concerning a *gender* gap in different levels of political interest, six studies found that women express lower political interest than men. However, the effect was not significant across all interest levels. When asked specifically about national or local politics, the gender gap decreases in some studies; sometimes, it even turns insignificant. The only exception from this pattern could be found in two studies regarding local political interest, where women showed more interest than men, although the effect was insignificant.

Three studies found that *formal education* positively affected political interest. Form-

ally higher-educated respondents generally expressed higher levels of political interest (however, only in two studies was the effect significant). Four additional studies presented mixed evidence regarding the educational effect on the different levels used for political interest or across the different samples or models used in the analysis. Only two out of ten studies used *income* or social status (as a surrogate for income), making it difficult to safely conclude income's impact on political interest measured at different levels.

Three out of seven studies found a significant positive effect of *age*, indicating that the older respondents are, the more they tend to be politically interested. Furthermore, three studies found positive but not significant effects (one of these studies focussed on youth). Another single study found mixed results across the different countries examined in the study.

Only a single study directly included *ethnicity* as a factor, and while it showed a negative effect for non-white individuals, the effects were insignificant.

The third analytical approach in the literature, combining different levels of political involvement into an index of political interest, also displays a gender gap, with females exhibiting less interest than males (section 3.2.3). Most of these studies uncovered a negative effect of *gender* on political interest, showing women expressing less interest in politics than men. Nonetheless, some studies presented mixed findings; one showed a positive but insignificant effect of being female. Due to the mixed results and different measurements of political interest in this category, we cannot provide a conclusive result on the gender effect.

Most studies in this category indicated a positive effect of *formally higher education* on political interest, although the measurements of education differed. Having a higher level of formal education positively affects the level of political interest. Only one study found a negative effect, but it combined education with age. As mentioned above, the studies used a variety of measurements, and therefore, a conclusive decision on the effects of education cannot be presented.

The impact of *income* on political interest was not conclusively determined due to the limited inclusion of income as a predictor variable. Most studies (15) used samples of youth or students and, therefore, did not include any measure of income. Of the studies that included income, two showed positive effects, indicating that people with higher income levels show more political interest than people with lower income levels. Another study showed mixed effects of income on political interest depending on the used models. The (scarce) evidence leads to our cautious conclusion that higher education positively affects political interest.

Age was found to positively affect political interest in a few studies (4), with older individuals expressing higher interest levels. Two studies reported mixed effects and a single study showed that younger cohorts displayed more political interest than older

cohorts. The two studies presenting mixed results both used samples of young students in schools.

Only some studies used measurements of *ethnicity*, race, and immigrant status. Amongst these studies, we have mixed evidence, with some presenting no significant effects and one study indicating that compared to white respondents, other racial groups expressed lower political interest.

Figure 7: Overview studies of political interest

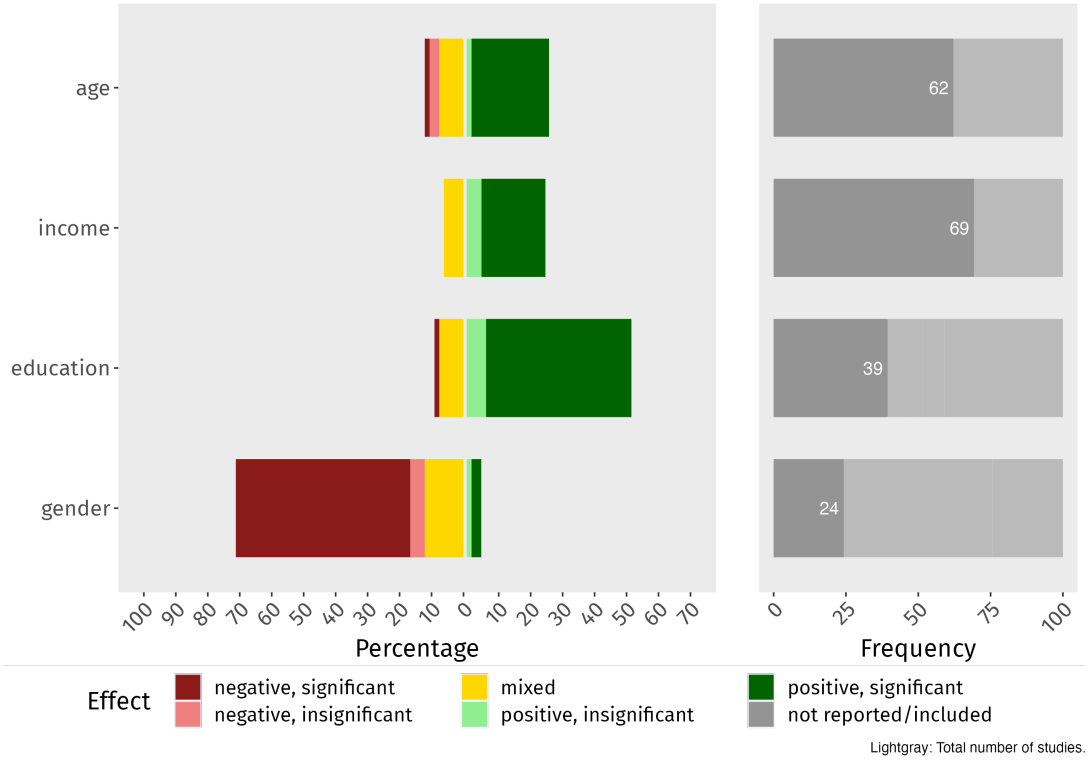


Figure 7 shows the overall summarised results regarding the four key factors explaining political interest – gender, education, income, and age. Overall, across the different measurements of political interest, the comparative analysis of the studies outline that gender, education, and age are influential predictors of political interest. Women tend to show lower levels of political interest whereas more educated and older individuals generally express higher interest levels. However, the effects varied depending on the study design, measurement approaches, and specific populations being examined.

4 Findings: Political Efficacy

We discuss and present the literature on political efficacy in this section. Most studies included varying measurements for socio-structural effects (like gender, age, or social class), but none statistically tested for dependencies between the socio-structural effects towards political efficacy.

First, we will discuss the conceptualisations and measurements of political efficacy before discussing the identified studies in the three following sections.

4.1 Conceptualisations & Measurements

Within political behaviour research, the most frequently used definition for 'sense of political efficacy' is

> 'the feeling that individual political participation does have, or can have, an impact upon the political process, i.e., that it is worthwhile to perform one's civic duties. It is the feeling that political and social change is possible and that the individual citizen can contribute to this change' (Campbell et al., 1954, p. 187).

To measure this sense of efficacy, Campbell et al. (1954) asked respondents for their degree of agreement with five statements:

1. 'I don't think public officials care much what people like me think',
2. 'The way people vote is the main thing that decides how things are run in this country',
3. 'Voting is the only way that people like me can have any say about how the government runs things',
4. 'People like me don't have any say about what the government does',
5. 'Sometimes politics and government seem so complicated that a person like me can't really understand what's going on'.

However, the second was dropped from the final political efficacy scale after some testing.

Adding to this definition, Lane (1959, p. 149) distinguished between internal and external political efficacy. Internal political efficacy refers to the feeling that one can influence the political process, whereas external political efficacy refers to the belief that the political system will be responsive. Two components of political self-efficacy are differentiated here: The subjective perception of a person's capabilities to influence and participate in the political system and the subjective perception regarding the interest or probability that the institutions will react positively (or not) to such potential participation. The distinction has been widely used since then, and scholars often refer to the conceptualisation and measurement discussed by Craig and Maggiotto (1982). As discussed below, the most commonly used conceptualisations for political efficacy use this reference or the American National Election Study and thus understand internal political efficacy as 'individuals' self-perceptions that they are capable of understanding politics and competent enough to participate in political acts such as voting' (Craig & Maggiotto, 1982, p. 86) and external political efficacy as 'expressed beliefs' about political institutions rather than perceptions about one's abilities. The lack of external efficacy indicates the belief that the public cannot influence political outcomes because government leaders and institutions are unresponsive to their needs (Craig & Maggiotto, 1982, p. 86).

In our review, we encounter a large diversity of conceptualisations of political efficacy or self-efficacy. To start with, some papers captured attitudes that do not correspond to political efficacy, as discussed above. Two papers measured a dimension related to ideas of how a good citizen should behave, which in political behaviour is often referred to as 'norms of citizenship' (van Deth, 2007). For instance, Grütter and Buchmann (2021, 2022) measure 'political efficacy beliefs' with three items that relate to how a person considers a good citizen should behave: 'If things should change, one needs to act personally, rather than relying on politics', 'If you disagree with politics, one has to become personally active', and 'Just talking about politics is useless, one also needs to act'. These indicators do not reference either personal capabilities or the responsiveness of the political system and its institutions. These papers were dropped from the review. After a first look at the different definitions and measurements, we decided to systematically review all political efficacy measurements to ensure they matched standard definitions. Diversity in measurement resulted in being even larger.

To be able to compare studies and draw conclusions, two authors revised all measurements and coded which dimensions of political self-efficacy each study was tapping into. Decisions were made first according to previous studies analysing the concept, dimensionality and measurement of internal and external political efficacy, emphasising testing reliability and scalability (Craig & Maggiotto, 1982; Craig et al., 1990; Niemi et al., 1991). A first review by Craig and Maggiotto (1982) questioned the use of items that measure internal and external political efficacy in the same single case due to

their clear theoretical distinction and analysed the correlation among the different items used by electoral studies in the US. To propose a new operationalisation of internal and external efficacy, they ran a pilot study of the American National Election Study (ANES), which included thirty-five efficacy and trust items (Craig et al., 1990). Testing the internal reliability of the items and analysing dimensionality to ensure that scales are measuring unidimensional concepts, the analyses confirmed four previously hypothesised attitudinal dimensions: Internal political efficacy, external political efficacy, incumbent-based trust, and regime-based trust or diffuse support. The items included in the resulting internal and external political efficacy are presented in Table 12.[1]

Table 12: Definitions of political efficacy

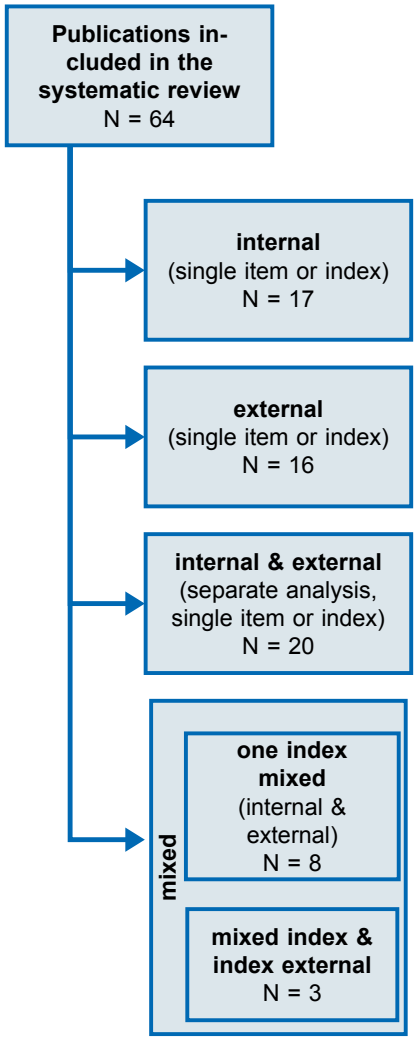
Type	Item definition
Internal	I consider myself well-qualified to participate in politics. (SELFQUAL)
	I feel that I have a pretty good understanding of the important political issues facing our country. (UNDRSTND)
	I feel that I could do as good a job in public office as most other people. (PUBOFF)
	I often don't feel sure of myself when talking with other people about politics and government (NOTSURE)
	I think that I am as well-informed about politics and government as most people. (INFORMED)
	Sometimes politics and government seem so complicated that a person like me can't really understand what's going on. (COMPLEX)
External	There are many legal ways for citizens to successfully influence what the government does. (LEGAL)
	Under our form of government, the people have the final say about how the country is run, no matter who is in office. (FINALSAY)
	If public officials are not interested in hearing what the people think, there is really no way to make them listen. (MAKELSTN)
	People like me don't have any say about what the government does. (NOSAY)

Source: Craig et al. (1990)

After this test, four new questions on internal politics were added to the 1988 US National Election Study. An analysis of the results by Craig and colleagues showed that a four-item scale had high internal consistency, that the items measured a single concept distinct from external efficacy and political trust and that the measurement concept was robust for major subgroups among the US population (Craig et al., 1990; Niemi et al.,

[1] The third and fourth dimensions, incumbent trust and regimen trust are left out as they are not measuring political efficacy.

Figure 8: Classification of studies using political efficacy



1991). Furthermore, the results of an order experiment in the survey showed that responses were unaffected by the presentation mode. The four items are SELFQUAL, UDNDRSTND, PUBOFF, and INFORMED (the full wording is available in Table 12 and highlighted in bold font). The response options were 'agree strongly', 'agree somewhat', 'neither agree nor disagree', 'disagree somewhat' and 'disagree strongly'. Adding to the robustness of this measure of internal political efficacy, later work by Morrell (2003) revised the indicators and provided additional testing. Furthermore, the latest work has started analysing the cross-cultural validity of the scales using multi-group analysis and state-of-the-art methods (Scotto et al., 2021).

After coding all articles and following Craig and colleagues' guidelines, we organised the articles according to three categories depending on the political efficacy concept measured (see Figure 8): Internal political efficacy (36 studies), external political efficacy (38 studies) and general or mixed political efficacy (11 studies).[2] The general or mixed category includes two types of studies. On the one hand, studies include items

[2]Studies analysing two of these categories are included twice in the Figure 8.

or questions of both internal and external political efficacy in one single scale. For example, in the article by High-Pippert and Comer (1998), the authors decide to measure political efficacy (in general) using agreement or disagreement with three statements included in ANES: 'People like me have no say about what the government does', 'Public officials do not care what people like me think', Government and politics are too complicated for people like me to understand. That is to say, they include two items measuring internal political efficacy (`NOCARE` and `UNDERSTAND`, following the labels in Craig et al., 1990) together with, say, which is an item that could be considered to measure both own abilities as it refers to 'people like me' or the responsiveness of the government, but that previous research has repeatedly found to belong statistically to the dimension of external political efficacy (Craig & Maggiotto, 1982; Craig et al., 1990; Niemi et al., 1991). The second type of studies included in the general or mixed categories refers to articles that use items measuring a general sense of political efficacy but do not distinguish between internal and external dimensions. For example, the study by Šerek et al. (2012) used the expressed agreement with six general statements on a four-point response scale that ranged from *completely disagree* to *completely agree*:

1. 'If I don't like what's happening in my surroundings, it pays off to do something.'
2. 'The effort to change something in my surroundings is usually condemned to failure.'
3. 'If something bad happened in my surroundings, I believe I could stop it together with other people.'
4. 'People like me can influence what is happening at the place where they live.'
5. 'The effort to change something at the place where I live is usually a waste of time and resources.'
6. 'People have many opportunities to achieve change in their surroundings successfully.'

The articles falling into each of the three political efficacy categories are summarised in Table 13 and reported fully in the appendix in Table B1.

A striking result from the review is the large number of differentiated measurements used across countries and the limitations it imposes for this exercise. Concluding the state-of-the-art knowledge regarding inequalities in political efficacy requires studies that can be compared and accumulated; variation makes this endeavour difficult. Variation is found in the items included, the response categories, the number of items used

in the scales, and the wording of such items. Contrary to political interest studies, political efficacy is most commonly measured with scales built from various items. Of the 64 studies in the full efficacy sample, 55 use a scale built from various items, while nine use a single item. In some instances, studies include measures of concepts that have a high correlation with, for example, external political efficacy but are conceptually and statistically different (e.g., O'Rourke et al., 2017, uses a scale of trust in institutions as a measurement of external political efficacy). Even studies mentioning the same source for their measurement might change the number of items included or adapt them to the population of interest. For instance, studying young people items related to voting are changed to refer to other forms of participation in which adolescents can participate (e.g. Šerek & Macek, 2010). Diversity is such that we cannot systematise the information; differences are the norm. For that reason, we decided to conclude by conceptual definitions broadly understood and independently of the number, the type or the wording of the items included in scales by each author. This is an important caveat that we recommend keeping in mind when reading the results below: our conclusions are drawn from studies that do not use the same scales to measure the concepts they want to tap into.

Despite using different amounts of items, response categories, or wordings, we identified three efficacy measurement sources used in more than two surveys. The most used reference for measuring political efficacy is the work by Craig and colleagues and/or the ANES surveys. If we group them, despite considering that in some cases, authors refer to measures of political efficacy as 'adapted' or 'inspired' by these sources, 17 different articles refer to them. We include an example of such measures in Table 13, and the proposal from Craig et al. (1990) is included in Table 12 above. A second source of political efficacy measures is the European Social Survey, used in four studies reviewed. Political efficacy measures in the ESS have changed over time (see Saris & Torcal, 2009, as proposal for the European Social Survey). An example of internal and external efficacy as measured in the ESS is included in Table 13. Finally, four articles refer to the ICCS study or the IEA reports regarding their choice of measurement. We included examples of these studies in Table 13 for illustrative purposes. However, we should remember that not all the studies identified identically use these sources, and measures can vary significantly across studies that use the same reference.

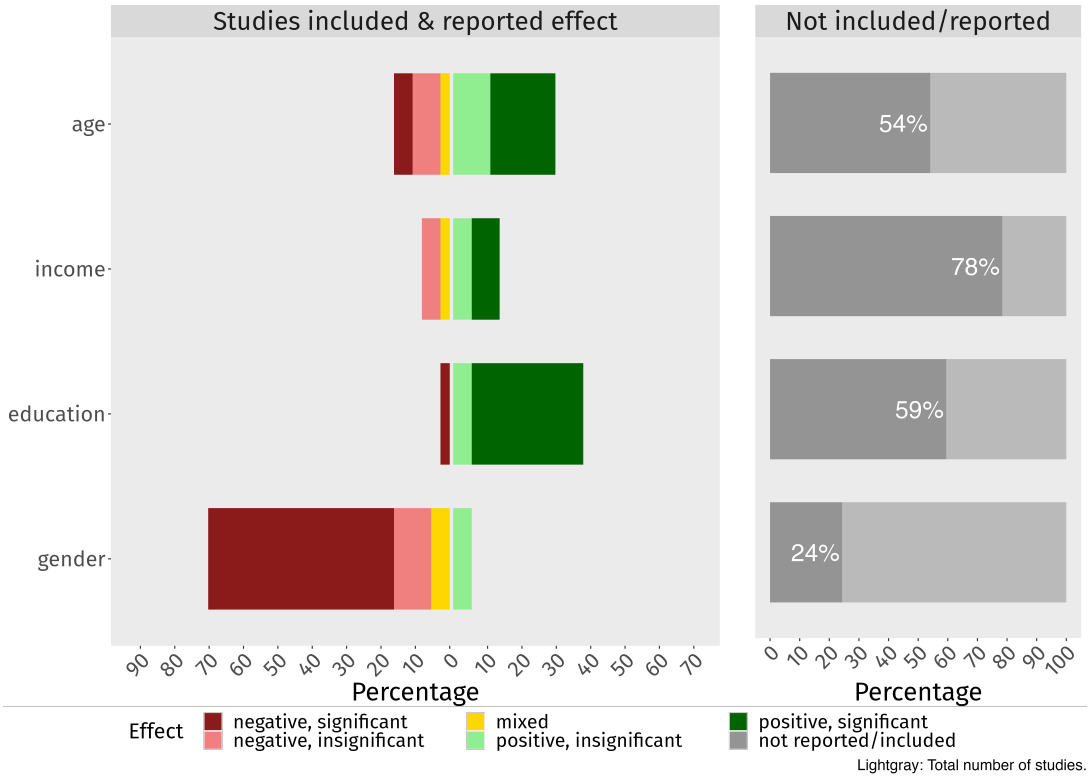
Table 13: Internal and external political efficacy items proposed and evaluated by Craig et al. (1990, p. 304)

Source	Internal political efficacy	External political efficacy	N studies
Craig et al. (1990) / ANES 1988 / Niemi et al. (1991)	e.g., Karv et al. (2022): I consider myself to be well-qualified to participate in politics.	e.g., Karv et al. (2022): People like me don't have any say about what the government does	22
ESS	e.g., Fraile and de Miguel Moyer (2022) How able do you think you are to take an active role in a group involved with political issues? How confident are you in your own ability to participate in politics? 1 not at all able … 5 completely able	e.g., Pesic et al. (2021) How much would you say that the political system in Serbia allows people like you to have an influence on politics? How much would you say the political system in Serbia allows people like you to have a say in what the government does? How much would you say the political system in Serbia ensures that everyone has a fair chance to participate in politics? How much would you say the government in Serbia takes into account the interests of all citizens? How much would you say that decisions in Serbian politics are transparent, meaning that everyone can see how they were made?	4
ICCS	e.g., Barber and Torney-Purta (2009) 1 I know more about politics than most people my age. 2 When political issues or problems are discussed, I usually have something to say. 3 I am able to understand most political issues easily. 4 I am interested in politics. Scale developed by Husfeldt, V., Barber, C., & Torney-Purta, J. (2005).	*not included*	5

4.2 Inequalities

In the following section, we discuss the results of the studies identified by our systematic review of the literature, looking at the effects that the selected socio-structural independent variables (i.e. gender, education, income, age and ethnicity) have on the political efficacy of individuals. As described above, we present results in three sections depending on the dimension(s) of political efficacy used by the authors (see Figure 8). Of the studies that met our inclusion criteria, 37 used a measurement for internal political efficacy (see section 4.2.1), 39 targeted external political efficacy (see

Figure 9: Overview studies using internal political efficacy



section 4.2.2), and 11 used a general or mixed definition of political efficacy (see section 4.2.3).

Unlike the case of political interest, none of the studies included in the section on political efficacy accounted for interaction effects between the different socio-demographic variables, hence the absence of a section dedicated to discussing the intersectionality of the effects.

4.2.1 Internal political efficacy

Of the 64 studies identified, 37 consider internal political efficacy as their dependent variables. In the following section, we will examine these studies to identify the socio-structural factors that influence unequal distributions of internal political efficacy among the population. Specifically, we will focus on how gender, education, income, age, and ethnicity affect individuals' self-perceived ability to meaningfully and impactfully engage in civic actions and participate in political discussions. Figure 9 below summarise the distribution of these factors in the examined studies and their overall effect on internal political efficacy.

a. Gender effects Out of the total 37 studies analysed, the majority (30 papers) reported the impact of gender on internal political efficacy. Among these, 20 studies

found significant negative effects, indicating that being a woman negatively influences the reported levels of internal political efficacy. Five studies did not consider gender as a predictor variable for their models in any way. Moreover, three studies included gender as a variable in the analysis but did not report coefficients.

These negative effects were found in studies using varying sample sizes and research methods. For instance, 13 of these studies were performed on randomised samples of the population with samples sizes ranging from 534 (Kim, 2022) to more than 60000 individuals in those where samples were gathered by third parties such as the ESS (Fraile & de Miguel Moyer, 2022; Marx & Nguyen, 2016) and ICSS (Barber & Torney-Purta, 2009). Six more papers used non-randomised methods of sampling, such as online advertisements (Hu et al., 2023; Strohmeier et al., 2017) or convenience samples collected in schools (Metzger et al., 2020) or colleges (Wen et al., 2013).

Studies examining individuals as young as twelve (Arens & Watermann, 2017) or 13 (Metzger et al., 2020) also reveal negative effects of being a girl over being a boy, suggesting that gender inequalities in internal efficacy already operate for teenagers.

The only study that found negative effects of being a woman using experimental methods was by Pruysers and Blais (2014), who looked at the differences in political knowledge and efficacy when college students were exposed to the stereotype that women are less knowledgeable about politics. The experiment found consistent negative effects of being a woman for both the control and the treatment group.

Out of the eight papers that reported non-significant effects, four of them (AbuAlRub & Abdulnabi, 2020; Anderson, 2010; O'Rourke et al., 2017; Pang, 2018) reported negative directions of the effect of being a woman on internal political efficacy. Interestingly, two of these four papers dealt with convenience samples of nurses in the US (O'Rourke et al., 2017) and in Jordan (AbuAlRub & Abdulnabi, 2020), meaning that their conclusions are not necessarily valid for the whole population outside of the nursing profession in these two countries. A similar issue arises with the non-significant studies of Chan et al. (2012) and Pang (2018), as their analysis was performed on samples of Chinese users of the mobile apps WeChat and Weibo, respectively, instead of on representative samples of the whole Chinese population.

In the case of Lee (2006), three of the four multilevel regression models examining the association between internet use and internal political efficacy in college students showed non-significant and negative effects for women. However, when variables related to internet use habits, such as online news consumption or entertainment purposes, were included in the analysis, the direction of the gender effect changed, despite keeping its non-significance.

Only the studies by Anderson (2010) and Gothreau (2021) reported insignificant effects of being a woman on internal political efficacy through randomised samples of the population from the US. Despite the use of similar sampling techniques, the two

papers obtained opposite signs for the effect of being a woman on the ability to participate in politics effectively: Anderson (2010) found a non-significant negative association between being a woman and internal political efficacy looking at a randomised sample of a large population in Indiana and Gothreau (2021) analyzed a much smaller sample ($N < 250$).

Additionally, one more study in our literature review found no significant effects of gender but did not report coefficients or directions of the effect (Levy, 2013).

Only one of the studies (Hoskins et al., 2016) found a significant positive relationship between being a woman and internal political efficacy in two of the three countries included in the analysis. Their analysis consisted of a non-random sample of schools in Denmark, England and Germany, where they looked at the differences in internal political efficacy and voting intentions between the students (16 to 18) in professional vs general school tracks, finding that being a woman was positively correlated with reporting higher levels of political efficacy in Denmark and Germany but not England.

Lastly, three of them report including gender as a control variable but did not report coefficients or directions for the variable about internal political efficacy.

Overall, we find a consensus in the literature that gender is a relevant variable when explaining the different levels of internal political efficacy, at least considering European and US populations. Most of the studies included in our systematic review found a negative association between being a woman and the self-perceived ability to engage with politics in an effective and impactful way.

b. Education effects Out of the 15 studies that looked at the relationship between education and internal political efficacy, a substantial majority of 12 studies (80%) found significant and positive associations between the two. This finding implies that individuals with higher levels of education report greater self-perceived capabilities to engage in political discussions and participate effectively compared to the lower-educated.

These studies reached this conclusion through different methods, sample characteristics and sample sizes. Findings have been reported in studies conducted in the US (Gothreau, 2021), Europe (Marx & Nguyen, 2016), and Chile (Zamora & Guerrero-Solé, 2018). For studies looking at specific sub-samples of the population, positive effects of education on internal political efficacy have also been reported, such as for family service workers (Andrews, 1998) or nurses (O'Rourke et al., 2017), both in the US.

Positive effects have also been found in samples of young people, such as a panel study conducted in the US (Wolak, 2020) and a panel study with a randomised sample of high school students in the Czech Republic (Machackova & Šerek, 2017). In the latter study, a positive effect on internal political efficacy was observed for students in the academic school track compared to those in the vocational school track, specifically

regarding the effect of political participation (online or offline) on political self-efficacy. Contrary to the authors' hypotheses, no significant relation was found between often participating in political activities and the internal political efficacy of teenagers.

Non-significant positive effects of education were observed in a non-random sample of Chinese users of WeChat (Pang, 2018) and a sample of inhabitants of a city in Indiana, US (Anderson, 2010).

Only one of the studies which met the inclusion criteria (Levy, 2013) reported significant negative effects of education on internal political efficacy when measuring education in terms of GPA. Their analysis was conducted on a non-representative sample of 142 students enrolled in a US Midwestern University. However, there was an insignificant relationship between knowledge-based items measuring internal political efficacy and students' GPAs. This result suggests that the negative impact of GPA was only evident when students were questioned about their self-reported political skills, such as public speaking and constructing reasoned arguments, rather than when they were asked about their perceived ability to understand political facts and theories.

c. Income effects A measure for income, class and/or socio-economic status was included in 15 of the 37 papers with internal political efficacy as a dependent variable. The inclusion of these measures varied across the studies, leading to different approaches to assessing their impact on internal political efficacy. While some of the studies relied on respondents' self-reported household income (e.g., Fraile & de Miguel Moyer, 2022), others relied on specific survey items which look at how worried individuals are about their net income, as commonly asked in the European Social Survey questionnaire (e.g., Marx & Nguyen, 2016). In the case of studies that analysed samples of individuals with no income, such as children or teenagers, socio-economic status was measured in terms of their parental income (e.g., Lay, 2017).

Overall, significant positive effects of income or socio-economic status on internal political efficacy have been reported in six papers. This finding has been observed in samples from European countries (Fraile & de Miguel Moyer, 2022; Marx & Nguyen, 2016). Furthermore, this effect has also been found in samples of young people from various countries, including the US (Lay, 2017; Ro et al., 2019), Ireland (Murphy, 2016), and a study from Denmark, the United Kingdom, and Germany (Hoskins et al., 2016).

Conversely, non-significant coefficients were reported in six studies. Two of these studies showed positive but non-significant effects, as observed in O'Rourke et al. (2017) and Schur et al. (2003) for a convenience sample of nurses and a large-N sample with an over-representation of people with disabilities, respectively. In the meantime, three studies indicated negative but non-significant effects (Anderson, 2010; Pang, 2018; Zamora & Guerrero-Solé, 2018), and only one study (Lee, 2006) reported different directions of the effect throughout the different estimated regression models.

It is important to note that no studies found a significant negative association between belonging to an upper class or having higher income levels and the levels of self-reported internal political efficacy.

d. Age effects When examining internal political efficacy as a dependent variable, the effect of age has been included in 18 of the 37 papers reviewed. Most research indicates a positive effect (11 studies), meaning that as age increases, so does the level of internal political efficacy. Remarkably for the goal of this report of finding the roots of inequalities in political attitudes, it is important to highlight that 17 out of the 37 analysed studies were carried out on youth samples (representative or not). Participants in these studies ranged from a minimum age of twelve (Arens & Watermann, 2017) to a maximum age of 38.

Significant positive effects of age were found in a variety of studies. Among them, there is a positive effect of age in samples that are specifically focused on young people, such as a panel study conducted in the US with a sample of 18 to 38-year-old women (Wolak, 2020), a study including migrants in Turkey, Belgium and Germany (Eckstein et al., 2015) and among university students in the US (Lee, 2006).

In studies that relied on large representative samples of the entire population, a positive effect of age on internal political efficacy was found for both the US (Anderson, 2010) and Europe (Marx & Nguyen, 2016). Furthermore, age was found to positively correlate with internal efficacy among convenience samples of nurses in the US (O'Rourke et al., 2017) and Jordan (AbuAlRub & Abdulnabi, 2020).

A positive but non-significant effect indicates that as age increases, internal political efficacy tends to rise in representative samples from Chile (Zamora & Guerrero-Solé, 2018) and the US (Gothreau, 2021). Specific studies have also reported an effect, such as family service workers in the US (Andrews, 1998) and young individuals from various socio-economic backgrounds in rural and urban contexts in the US (Metzger et al., 2020).

Significant negative age effects were found in two papers: a study focusing on non-random samples of Chinese users of WeChat (Pang, 2018) and a study involving 27 European countries (Fraile & de Miguel Moyer, 2022). In the latter, although the effect of age was statistically significant, the coefficients of the variable on the OLS regression were rounded and presented as −0.00. This finding implies that, despite the negative effect of age on internal political efficacy, the effect of age is at most negligible. Negative but non-significant effects of age were observed in a general-population sample from the US (Schur et al., 2003), among the Swedish-speaking minority in Finland (Karv et al., 2022), and Weibo users in China (Chan et al., 2012).

Non-significant effects of age have also been observed in youth-centred samples, such as for high school students in Ireland (Murphy, 2016) and across seven European

countries (Strohmeier et al., 2017).

e. Ethnicity effects Ethnicity, race and/or migration status as independent variables about internal political efficacy were addressed in 10 out of the 37 studies. Given the variable nature of ethnicity throughout the different geographical contexts, the comparability of results is limited. However, to maintain consistency, we present the findings regarding the effect of belonging to a majoritarian ethnic, linguistic or racial social group versus being a member of a minority.

Among the reviewed studies, only three indicated that belonging to an ethnic minority was associated with increased self-reported abilities in understanding, discussing, or engaging with politics. For instance, Emig et al. (1996) found that black individuals' average internal political efficacy was higher than that reported by white people in the US. For the same country, Wolak (2020) found significant positive effects on the internal political efficacy of young adult Latinas when compared to the same-age cohort of white women. Additionally, Wolak (2020) also identified a positive effect among young adult black women, though not statistically significant. A non-significant but positive effect of being non-white on internal political efficacy was also reported in Schur et al. (2003) for a sample of the US American population, which included an oversample of disabled individuals. Remarkably, all studies reporting positive directions of the effect of belonging to an ethnic minority and internal political efficacy were conducted exclusively in the US.

On the contrary, a negative effect was reported for a large-N sample of individuals from 22 different European countries (Koos, 2013). In this study, the author finds that belonging to an ethnic minority in the country and speaking a minority language are both factors that contribute to decreased internal political efficacy. Similarly another study focusing on female college students in the US, Ro et al. (2019) found that being white is associated with higher levels of internal political efficacy compared to black, Latina, or multiracial women. Furthermore, a study conducted in Pakistan revealed that Muslims exhibit overall higher levels of internal political efficacy compared to the religious minorities of the country, namely Christians, Hindus, and Ahmadiyya (Buzdar & Fatima, 2022).

Although not statistically significant, a negative effect of being non-white was also observed at a general level in the US (Gothreau, 2021) and among a convenience sample of family service workers in the same country (Andrews, 1998). Finally, no significant effects were found among high school students (Levy, 2013) or nurses (O'Rourke et al., 2017), both for non-representative samples from the US.

Table 14: Overview studies using internal political efficacy

Study	Gender (woman)	Education (higher)	Income (higher)	Age (older)	Ethnicity	Method	Random?	N	Data type	Experiment
Koos (2013)	∉	∉	∉	∉	–	ANOVA	yes	≥ 1500	cross-sequential	no
Ro et al. (2019)	∉	+	∉	∉	–	Multilevel regression	yes	≥ 1500	cross-sectional	no
O'Rourke et al. (2017)	(–)	+	(+)	+	()	ANOVA	no	< 750	cross-sectional	no
Levy (2013)	()	–	∉	∉	()	Regression	no	< 250	cross-sectional	no
Andrews (1998)	–	+	∉	(+)	(–)	ANOVA	no	< 750	cross-sectional	no
Wolak (2020)	–	+	∉	+	()	Regression	yes	≥ 1500	cross-sectional	no
Schur et al. (2003)	–	+	(+)	(–)	(+)	Regression	yes	< 1500	cross-sectional	no
Emig et al. (1996)	∉	∉	∉	∉	+	Means' test	yes	< 500	cross-sectional	no
Buzdar and Fatima (2022)	∉	∉	∉	∉	+	LSD post–hoc test	no	< 750	cross-sectional	no
Gothreau (2021)	(+)	+	∉	(+)	+	Regression	yes	< 500	cross-sectional	no

Continuing on the next page

Continued from previous page

Study	Gender (woman)	Education (higher)	Income (higher)	Age (older)	Ethnicity	Method	Random?	N	Data type	Experiment
Hynes et al. (2022)	ℝ	ℝ	ℝ	ℝ	ℝ	Regression	no	< 250	cross-sectional	no
Hoskins et al. (2016)	≈	+	∉	∉	ℝ	SEM	no	< 750	cross-sectional	no
Hu et al. (2023)	−	ℝ	ℝ	ℝ	∉	SEM	no	< 250	cross-sectional	no
Newhagen (1994)	∉	∉	∉	∉	ℝ	−	yes	< 500	cross-sectional	no
Pang (2018)	(−)	(+)	(−)	−	∉	Multilevel regression	no	< 500	cross-sectional	no
Fraile and de Miguel Moyer (2022)	−	∉	+	−	∉	Regression	yes	≥ 1500	cross-sequential	no
Murphy (2016)	−	∉	∉	()	∉	Regression	no	< 1000	cross-sectional	no
Strohmeier et al. (2017)	−	∉	∉	()	∉	Regression	no	≥ 1500	cross-sectional	no
Chan et al. (2012)	(+)	+	∉	(−)	∉	Multilevel regression	no	< 750	cross-sectional	no
Karv et al. (2022)	−	+	∉	(−)	∉	Multilevel regression	yes	≥ 1500	cross-sectional	no

Continuing on the next page

Continued from previous page

Study	Gender (woman)	Education (higher)	Income (higher)	Age (older)	Ethnicity	Method	Random?	N	Data type	Experiment
Metzger et al. (2020)	–	∉	∉	(+)	∉	Correlation	no	≥ 1500	cross-sequential	no
Zamora and Guerrero-Solé (2018)	–	+	∉	(+)	∉	Regression	yes	≥ 1500	cross-sectional	no
Lee (2006)	()	∉	()	+	∉	Multilevel regression	no	< 250	cross-sequential	no
Anderson (2010)	(–)	(+)	(–)	+	∉	Regression	yes	< 1000	cross-sectional	no
Marx and Nguyen (2016)	–	+	+	+	∉	Regression	yes	≥ 1500	cross-sequential	no
AbuAlRub and Abdulnabi (2020)	(–)	∉	∉	+	∉	Bivarate	no	< 500	cross-sectional	no
Eckstein et al. (2015)	–	ℝ	∉	+	∉	Correlation	yes	≥ 1500	cross-sectional	no
Kim (2022)	–	ℝ	ℝ	ℝ	∉	Regression	yes	< 750	panel	no
Lenzi et al. (2015)	ℝ	∉	∉	ℝ	∉	SEM	no	< 250	cross-sectional	no
Lay (2017)	–	∉	+	∉	∉	Regression	yes	≥ 1500	cross-sectional	no
Fernandes-Jesus et al. (2012)	ℝ	∉	∉	∉	∉	Analysis of covariance	no	< 1500	cross-sectional	no

Continuing on the next page

Continued from previous page

Study	Gender (woman)	Education (higher)	Income (higher)	Age (older)	Ethnicity	Method	Random?	N	Data type	Experiment
Wen et al. (2013)	−	∉	∉	∉	∉	Means' test	no	< 500	cross-sectional	no
Barber and Torney-Purta (2009)	−	∉	∉	∉	∉	Multilevel regression	yes	≥ 1500	cross-sectional	no
Grasso and Smith (2022)	−	∉	∉	∉	∉	Bivariate Analysis	yes	≥ 1500	cross-sectional	no
Arens and Watermann (2017)	−	∉	∉	∉	∉	Multiple Indicators	yes	≥ 1500	panel	no
Pruysers and Blais (2014)	−	∉	∉	∉	∉	Means' test	no	< 250	cross-sectional	yes
Machackova and Šerek (2017)	−	+	∉	∉	∉	SEM	yes	< 1500	panel	no

Note: +: significant, positive, (+); insignificant, positive; (): insignificant, no direction reported; (−): insignificant, negative; −: significant, negative; ≈: mixed; ℝ: not reported; ∉: not included.

4.2.2 External political efficacy

After the selection of research papers, a total of 39 papers measuring external political efficacy have been identified. External political efficacy refers to the capacity to influence the actions of government officials or impact the political system. The following section focuses on gender, age, education, income, and ethnicity to understand the factors determining individuals' levels of external political efficacy. These variables vary across the studies, with some being more prevalent, such as gender (74%), education (51%), and age (64%), while others are less common, such as income (28%) and ethnicity (38.4%).

Figure 10: Overview studies using external political efficacy

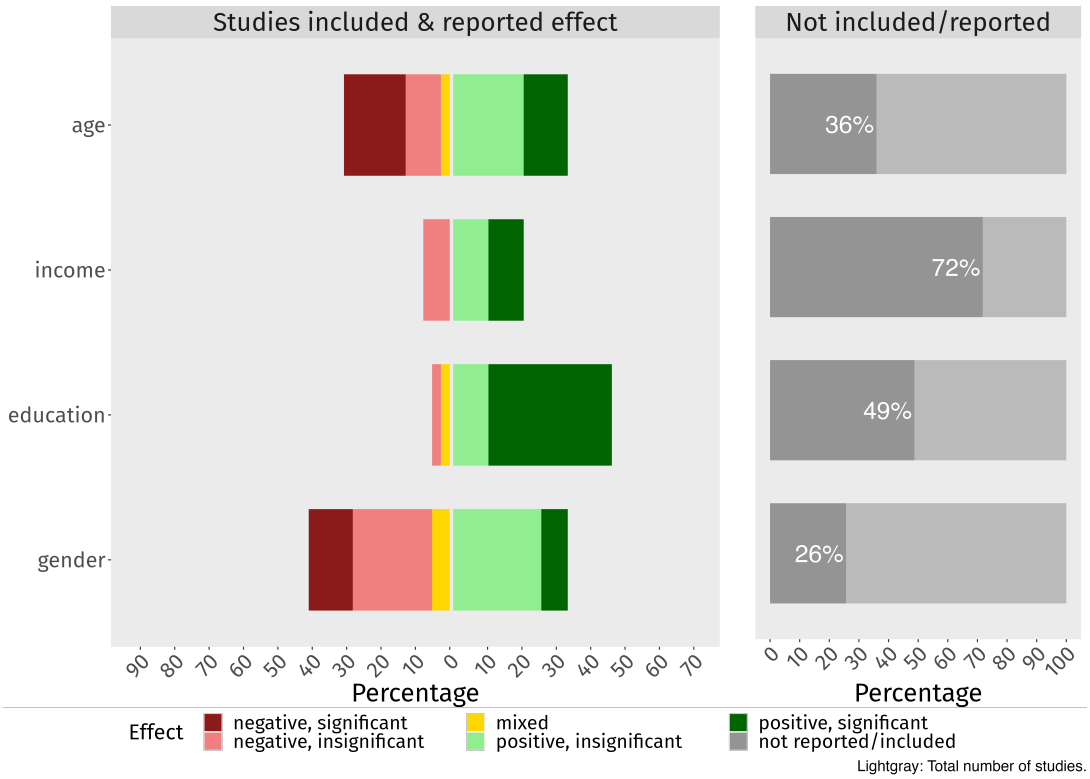


Figure 10 above illustrates how these variables are distributed among the analysed studies and the direction of their effects at a general level.

Focusing on the main variables of our research, we first examine the effects of gender on external political efficacy. Similarly to political interest and internal political efficacy, previous literature extensively reports gender effects, with 28 out of the 39 reviewed papers including gender as an independent variable. However, there is no clear consensus on the direction of the gender variable's effect. Three studies (Grotlüschen et al., 2021; Karv et al., 2022; Metzger et al., 2020) suggest that being a woman has a statistically positive effect on levels of external political efficacy compared to men. It is worth noting that these studies were conducted with convenience samples, making it

challenging to extrapolate their findings to the general population.

a. Gender effects Metzger et al. (2020) study focuses on young people from rural and urban areas with varying socio-economic backgrounds. The results indicate a positive correlation between being a woman and external political efficacy. The other two studies concentrate on migrant minorities in different countries. Karv et al. (2022) identifies a positive effect of gender on external political efficacy within the Swedish-speaking minority in Finland, which is consistent with the findings of Grotlüschen et al. (2021) when examining first-generation migrants in Canada and the US. However, the effect of gender was not significant in Germany, Israel, and Austria.

Positive non-significant effects were found in general samples in the US (Peterson & Palmer, 2017; Wu, 2003) but also in studies on samples of high school students (Levy, 2013), university students (Lee, 2006) and more specifically on political science undergraduates (Centellas & Rosenblatt, 2018). A positive non-significant effect was reported by (Pang, 2018) sampling from university students in China by the WeChat application. Concerning gender, Atkeson and Carrillo (2007) found this impact when looking specifically at the effect of descriptive gender representation in US politics. Finally, in specific studies with sample nurses, this positive non-significant effect was found in the US (O'Rourke et al., 2017) and Jordan (AbuAlRub & Abdulnabi, 2020).

Contrary to the abovementioned findings, six studies indicate a significant negative effect on the relationship between gender and external political efficacy, indicating that being a woman is associated with lower levels of external efficacy. One effect was found in different samples, including young Europeans (Grasso & Smith, 2022; Strohmeier et al., 2017), as well as concrete samples in Serbia (Pesic et al., 2021) and Chile (Zamora & Guerrero-Solé, 2018). Additionally, Marques et al. (2022) identifies a negative effect in research about disinformation in New Zealand. Notably, Billard (2021) innovatively uncovers this negative gender association in a sample of transgender individuals in the US.

In terms of negative non-significant effects, research points to a negative but non-significant effect in the US (Merolla et al., 2012; Williamson & Scicchitano, 2015), in the US with young migrants (Wong et al., 2019) and in New Zealand with the Maori minority (Osborne et al., 2015). This effect was also found when analysing the effect of institutions with female representation in the US (Stauffer, 2021). With representative samples, such effects were found in the US (Anderson, 2010) and Ireland (Kim, 2022). With specific samples, this positive non-significant effect was found when analysing get-out-the-vote campaigns on Danish youth (Ohme et al., 2019). Finally, Chan et al. (2012) found a positive non-significant effect among Weibo users in China.

b. Education effects Education has been considered an independent variable in measuring external political efficacy in 20 of the 39 analysed papers. The majority of studies, a total of 18, demonstrate a positive direction of the effect of education on external efficacy, with 14 yielding significant results and 4 yielding non-significant results. An effect that implies that a higher level of education correlates with higher external political efficacy.

Representative samples from various countries, such as Chile (Zamora & Guerrero-Solé, 2018), Serbia (Pesic et al., 2021), and the US (Anderson, 2010; Wu, 2003), have consistently shown this positive and significant effect. Moreover, research focusing on the presence of women in politics (Atkeson & Carrillo, 2007; Stauffer, 2021) also confirms the positive effect of education on external political efficacy.

A significant body of research has investigated the external political efficacy of minorities, consistently revealing the positive effect of education. For instance, Grotlüschen et al. (2021) found in their study on first-generation migrants in Austria, Canada, Germany, Israel, and the US a positive effect of education, as does research on the Swedish-speaking minority in Finland (Karv et al., 2022). Similarly, positive effects of education on external political efficacy are reported among citizens in the US (Williamson & Scicchitano, 2015) and specifically among African-American citizens (Branton et al., 2021).

Also, education has been positively reported in the context of analysing the mediation of misinformation in New Zealand (Marques et al., 2022), the use of social networks in China (Chan et al., 2012), and samples including people with disabilities in the US (Schur et al., 2003). Furthermore, in exploring the positive effect of education on external political efficacy, although not statistically significant, similar findings have been observed in the US across various samples. Studies have shown this positive but non-significant effect in a general sample (Merolla et al., 2012), also among undocumented youth (Wong et al., 2019), transgender people (Billard, 2021), and even among a sample of US nurses (O'Rourke et al., 2017).

In contrast, negative effects of education on external political efficacy were identified in only two of the 39 analysed studies. A significant negative coefficient was found among a sample of teenagers in the US (Levy, 2013). At the same time, a non-significant effect was observed among a sample of university students using WeChat in China (Pang, 2018).

c. Income effects The reviewed papers demonstrate a similar trend regarding the effects of income level and socio-economic class, although these variables are rarely included in the analyses. Income level appears in 11 of the 39 papers analysed, while socio-economic status (SES) is mentioned in only three.

The direction of the effect is predominantly positive. Income level is reported positive

and significantly associated with external political efficacy in representative samples from the US (Peterson & Palmer, 2017; Wu, 2003), but also among racial minorities (Branton et al., 2021) and transgender individuals (Billard, 2021). However, non-significant positive effects have also been observed. This finding is reported in studies conducted in the US (Williamson & Scicchitano, 2015) and Serbia (Pesic et al., 2021) and in a specific sample of nurses (O'Rourke et al., 2017).

In terms of SES, a significant positive effect has been found, indicating that the higher the class, the higher the external political efficacy. This relationship is observed in studies examining disinformation in New Zealand (Marques et al., 2022) and the general level in the US (Wu, 2003). Positively but not significantly has been reported in a study in Chile (Zamora & Guerrero-Solé, 2018).

No studies report a significant negative effect of income; that is, external political efficacy decreases as income increases. However, non-significant negative effects were found in three studies, generally among US citizens (Anderson, 2010), but also among youth samples like in between university students in the US (Lee, 2006) and China (Pang, 2018). It should be noted that these two studies on youth samples do not include randomised samples. No negative effects, either significant or non-significant, have been found for SES.

d. Age effects The age variable has been a significant consideration when examining external political efficacy, appearing in 25 of the 39 reviewed papers. However, there is no consensus on the direction of its effect, as 14 studies report a positive effect (six significantly and eight non-significantly). In comparison, eleven studies indicate a negative effect (seven significantly and four non-significantly).

Statistically significant positive effects have been reported in general samples from countries such as Serbia (Pesic et al., 2021) or the US (Grotlüschen et al., 2021). As well as in specific samples such as minorities in the US (Branton et al., 2021), transgender people in the US (Billard, 2021) or nurses in Jordan (AbuAlRub & Abdulnabi, 2020). Even in the study of Metzger et al. (2020) focusing on a young sample of students from medium-sized and rural cities, the effect of age on external political efficacy is positive.

Nonetheless, although non-significant, the positive effect of age is also reported in general samples from Chile (Zamora & Guerrero-Solé, 2018) and the US (Anderson, 2010; Peterson & Palmer, 2017; Williamson & Scicchitano, 2015). Specifically in the US, non-significant positive effects of age are reported among minorities (Merolla et al., 2012) and in specific samples such as nurses (O'Rourke et al., 2017). A similar non-significant positive effect is also observed in a young sample of US university students (Lee, 2006).

On the other hand, negative effects of age are significantly reported in studies from

New Zealand (Marques et al., 2022) and the US (Wu, 2003), as well as about female representation in politics in the US (Atkeson & Carrillo, 2007; Stauffer, 2021). A negative effect is also found for the Swedish-speaking minority in Finland (Karv et al., 2022). In studies with young samples, a negative effect of age on external political efficacy is observed in the US (Strohmeier et al., 2017) and China (Pang, 2018).

As for non-significant negative effects, they are seen in young samples in Denmark (Ohme et al., 2019) and the US (Wong et al., 2019). But also in samples of Weibo users in China (Chan et al., 2012) or the Maori minority in New Zealand (Osborne et al., 2015).

e. Ethnicity effects The analysis of ethnicity as a dependent variable of external political efficacy is discussed in 15 of the 39 papers reviewed. There is no consensus on the effects of belonging to a minority ethnicity, as eight studies indicate a positive effect and seven studies indicate a negative effect.

Higher levels of external political efficacy when belonging to a minority were found in the US (Stauffer, 2021; Wong et al., 2019) and New Zealand (Marques et al., 2022). In particular, three studies have found that being black increases levels of external political efficacy compared to the major ethnicity (Emig et al., 1996; Merolla et al., 2012) and other minority ethnicities like Latinos (Williamson & Scicchitano, 2015). Similarly, it was found in Pakistan among Muslims compared to Christians and Ahmadiyya (Buzdar & Fatima, 2022). The same effect of ethnicity increases external political efficacy in a study focusing on transgender individuals in the US (Billard, 2021). Although not significant, a positive association between minority ethnicity and external political efficacy is found in a sample of nurses in the US (O'Rourke et al., 2017).

Regarding significant negative effects, belonging to a minority ethnicity is associated with lower external political efficacy. This finding is observed at a general level in the US among ethnic minorities compared to whites (Atkeson & Carrillo, 2007; Wu, 2003) and specifically among blacks and Latinos compared to whites in the US (Branton et al., 2021). A study focusing on the Maori minority in New Zealand also reveals lower external political efficacy among this group than the white majority (Osborne et al., 2015). As for the negative but non-significant effect, it has only been found in one study with a sample of the US, including people with disabilities, a study where being non-white reported lower external political efficacy (Schur et al., 2003).

It is important to note that these effects may vary across countries, as Grotlüschen et al. (2021) noted. Negative effects were found among the first generation of migrants in Canada but not in the second generation. At the same time, in the US, ethnicity was not significant in the first generation but became positively significant in the second generation. As for the other countries, Austria, Germany and Israel, no significant effects were found across any generation.

Table 15: Overview political efficacy external

Study	Gender (woman)	Education (higher)	Income (higher)	Age (older)	Ethnicity	Method	Random?	N	Data type	Experiment
AbuAlRub and Abdulnabi (2020)	(+)	∉	∉	+	∉	Bivariate analysis	no	< 500	cross-sectional	no
Anderson (2010)	(−)	+	(−)	(+)	∉	Regression	yes	< 1000	cross-sectional	no
Andrews (1998)	∉	∉	∉	∉	∉	Descriptive analysis	no	< 750	cross-sectional	no
Atkeson and Carrillo (2007)	(+)	+	∉	−	−	Regression	yes	≥ 1500	cross-sequential	no
Billard (2021)	−	(+)	+	+	+	SEM	no	≥ 1500	cross-sectional	no
Branton et al. (2021)	∉	+	+	+	−	Regression	yes	≥ 1500	cross-sectional	no
Buzdar and Fatima (2022)	∉	∉	∉	∉	+	LSD Post−hoc	no	< 750	cross-sectional	no
Centellas and Rosenblatt (2018)	(+)	∉	∉	ℝ	∉	Regression	no	< 750	panel	yes
Chan et al. (2012)	(−)	+	∉	(−)	∉	Multilevel regression	no	< 750	cross-sectional	no
Costa and Wallace (2021)	ℝ	ℝ	ℝ	ℝ	ℝ	Regression	yes	≥ 1500	cross-sectional	yes
Emig et al. (1996)	∉	∉	∉	∉	+	Means' test	yes	< 500	cross-sectional	no

Continuing on the next page

Continued from previous page

Study	Gender (woman)	Education (higher)	Income (higher)	Age (older)	Ethnicity	Method	Random?	N	Data type	Experiment
Fernandes-Jesus et al. (2012)	ℝ	∉	∉	∉	∉	MANOVA	no	< 1500	cross-sectional	no
Grasso and Smith (2022)	≈	∉	∉	∉	∉	Bivariate analysis	yes	≥ 1500	cross-sectional	no
Grotlüschen et al. (2021)	≈	+	∉	≈	≈	Regression	yes	≥ 1500	cross-sectional	no
Hu et al. (2023)	ℝ	ℝ	ℝ	ℝ	∉	SEM	no	< 250	cross-sectional	no
Karv et al. (2022)	+	+	∉	−	∉	Regression	yes	≥ 1500	cross-sectional	no
Kim (2022)	(−)	ℝ	ℝ	ℝ	∉	Regression	yes	< 750	panel	no
Kononova et al. (2011)	ℝ	∉	∉	ℝ	ℝ	Regression	no	< 250	cross-sectional	no
Leath and Chavous (2017)	∉	∉	∉	∉	∉	Regression	no	< 500	panel	no
Lee (2006)	(+)	∉	(−)	(+)	∉	Multilevel regression	no	< 250	cross-sequential	no
Levy (2013)	(+)	≈	∉	∉	()	Regression	no	< 250	cross-sectional	no
Marques et al. (2022)	−	+	∉	−	+	Correlation	yes	≥ 1500	panel	no

Continuing on the next page

Continued from previous page

Study	Gender (woman)	Education (higher)	Income (higher)	Age (older)	Ethnicity	Method	Random?	N	Data type	Experiment
Metzger et al. (2020)	+	∉	∉	+	∉	Correlation	no	≥ 1500	cross-sequential	no
Merolla et al. (2012)	(−)	(+)	∉	(+)	≈	Regression	yes	≥ 1500	panel	no
Newhagen (1994)	∉	∉	∉	∉	R	–	yes	< 500	cross-sectional	no
Ohme et al. (2019)	(−)	∉	∉	(−)	∉	Regression	no	< 500	panel	no
O'Rourke et al. (2017)	(+)	(+)	(+)	(+)	(+)	Multivariate statistical analyses???	no	< 750	cross-sectional	no
Osborne et al. (2015)	(−)	∉	∉	(−)	–	Correlations	yes	< 500	cross-sectional	no
Pang (2018)	(+)	(−)	(−)	–	∉	Multilevel regression	no	< 500	cross-sectional	no
Pesic et al. (2021)	–	+	(+)	+	∉	Regression	yes	≥ 1500	cross-sectional	no
Peterson and Palmer (2017)	(+)	+	+	(+)	∉	Regression	yes	≥ 1500	cross-sequential	no
Schur et al. (2003)	(+)	+	(+)	(+)	(−)	Regression	yes	< 1500	cross-sectional	no

Continuing on the next page

Continued from previous page

Study	Gender (woman)	Education (higher)	Income (higher)	Age (older)	Ethnicity	Method	Random?	N	Data type	Experiment
Stauffer (2021)	(−)	+	∉	−	+	Regression	yes	≥ 1500	cross-sequential	no
Strohmeier et al. (2017)	−	∉	∉	−	∉	Regression	no	≥ 1500	cross-sectional	no
Vashdi et al. (2019)	R	R	R	R	R	Multilevel regression	yes	< 750	panel	no
Williamson and Scicchitano (2015)	(−)	+	(+)	(+)	+	Regression	yes	< 750	cross-sectional	no
Wong et al. (2019)	(−)	(+)	∉	(−)	+	Regression	no	< 1500	cross-sequential	no
Wu (2003)	(+)	+	+	−	−	Regression	yes	< 750	panel	no
Zamora and Guerrero-Solé (2018)	−	+	∉	(+)	∉	Regression	yes	≥ 1500	cross-sectional	no

Note: +: significant, positive, (+); insignificant, positive; (): insignificant, no direction reported; (−): insignificant, negative; −: significant, negative; ≈: mixed; R: not reported; ∉: not included.

4.2.3 Mixed political efficacy

The category of mixed political efficacy is outside the dimensions that define political efficacy according to the academic literature (Craig & Maggiotto, 1982; Craig et al., 1990). However, we have proposed this category to encompass all those operationalisations of political efficacy variables that, in constructing their indices, combine questions related to internal and external political efficacy and, therefore, cannot be categorised in either of the two previous dimensions. Studies that incorporate general items that do not allow differentiation between internal and external political efficacy are also included here. Finally, this category also includes variables that, when operationalising political efficacy, show ambiguous wording or mix elements of both categories in the same question, as in the case of 'People like me have no say about what the government does' (e.g., Centellas & Rosenblatt, 2018; High-Pippert & Comer, 1998).

As discussed above, we have not found shared criteria for constructing the political efficacy variable, although many studies base how they have measured their variables on the same studies (Craig & Maggiotto, 1982; Craig et al., 1990). In any case, even among the latter, there is no uniformity in the choice of the items they incorporate into the variable or the measurement scales they use to measure them. In this sense, comparing these variables is not straightforward and should be treated cautiously.

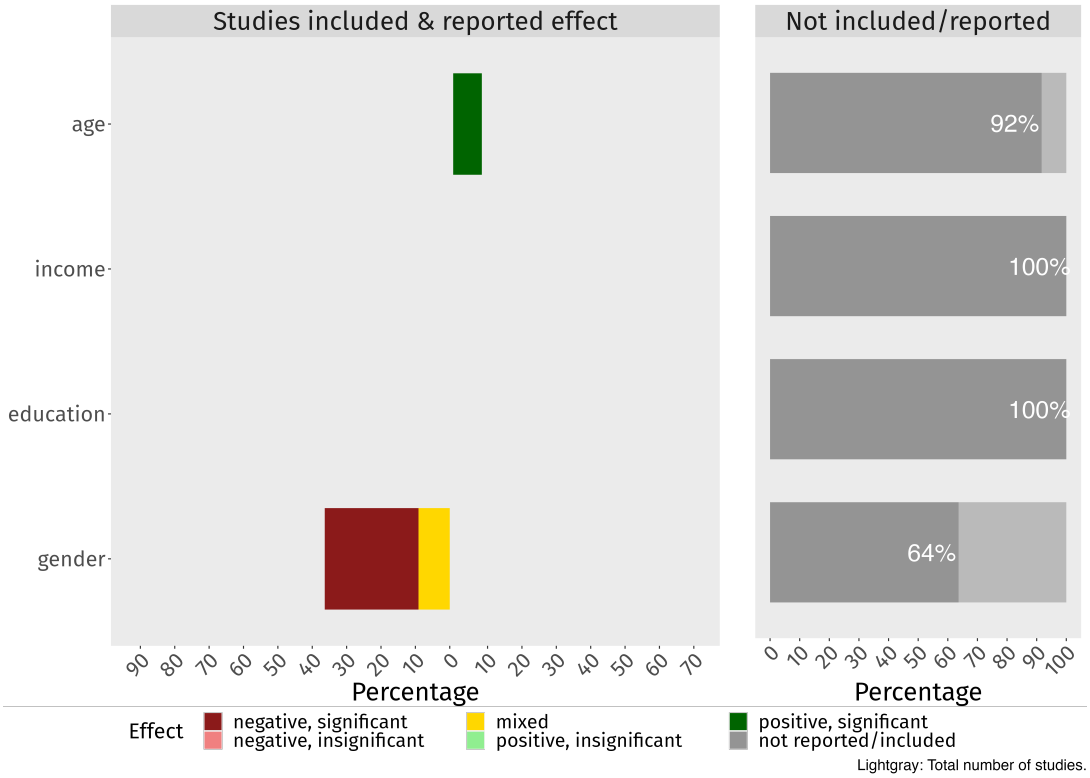
Nine of the eleven studies we have included in this category were conducted in the US. Only one took place in Denmark, and another one in South Korea. Most of the studies include young people in their samples (8), and two specifically incorporate minors over 15 years of age. Regarding methodological design, most studies are cross-sectional (7), although a significant proportion adopted a panel approach (4). It is important to note that only three studies used a random sample with a larger number of observations (more than 500). In that sense, most studies do not exceed 500 observations. Finally, four studies employed an experimental approach.

Unlike the other categories of political efficacy, it is important to note that none of the studies considered in this category has addressed the impact of other socio-demographic variables such as income level, socio-economic status or educational level on political efficacy.

Figure 11 below synthesises the distribution of these variables across the studies reviewed and provides an overview of the direction of their effects.

a. Gender effects Within the set of studies considered for the analysis of the impact of gender on political efficacy, it is noteworthy that only four of the eleven studies included in this category present results that specifically address the effect of the gender variable. In all of the studies identified, it is consistently observed that being a woman is associated with a negative and statistically significant effect on political efficacy.

Figure 11: Overview studies using mixed political efficacy



When analysing the effect of introductory political science courses on undergraduate students, Centellas and Rosenblatt (2018) found evidence of a gender gap in political efficacy at the beginning of the semester. In the same line, Tedesco (2011) examined the effects of internet messages on young adults' political efficacy and observed that young women lagged behind their male counterparts concerning their beliefs in political efficacy. In addition, Ohme et al. (2019) also identified this gender gap in the positive effect of get-out-the-vote campaigns on young people's political efficacy.

Particularly remarkable is the study carried out by Cole and Sabik (2010), in which femininity is examined as the main independent variable, which is composed of two dimensions: Feminine Interpersonal Relations (FIR: warmth, nurturance, and interpersonal appeal) and Feminine Self-Doubt (FSD: submissiveness, self-doubt, anxiety, and passivity). These dimensions were not measured in a binary way, but respective indices were constructed that included various items assessed on a scale from 1 to 9. The results revealed that higher levels of FIR were associated with higher political efficacy. Conversely, higher levels of FSD were linked to lower political efficacy scores. Interacting the two variables, it was observed that those individuals who scored high on both dimensions of femininity showed the lowest levels of political efficacy. In contrast, women who scored high on FIR and low on FSD demonstrated the highest levels of political efficacy.

On the other hand, it has been shown that descriptive representation, both in the

political sphere and in cultural representations, has a positive effect on increasing women's political efficacy. In this sense, the study by High-Pippert and Comer (1998) found that women represented by women experience a greater sense of political efficacy. Similarly, Hoewe et al. (2020) found that viewing a female lead character in a politically driven plotline increases political efficacy and contributes to an increase in women's political efficacy.

b. Age effects Only one of the studies considered addresses the effect of age on political efficacy. In this sense, the study by Ohme et al. (2019) reveals that age has a positive and significant effect on political efficacy. However, it is important to note that the sample analysed in this study is quite specific, as it is limited to high school and university students.

However, electoral mobilisation campaigns and political participation strategies play a relevant role in strengthening political efficacy among young people. In this regard, the study of Ohme et al. (2019) reveals that get-out-the-vote campaigns have a particularly beneficial effect on increasing the political efficacy of young people. Furthermore, the findings of Tedesco (2011) support this trend by observing that online political campaigns positively impact young adults' political efficacy. Likewise, Kononova et al. (2011) observed that newspaper and television news use significantly predicted political efficacy in international students in the US.

Another relevant aspect to consider when analysing political efficacy among young people is the role of personality traits and mental health status. In this context, analyses by Šerek et al. (2012) reveal that experiencing a depressive mood and adopting an avoidant coping style is negatively associated with political efficacy.

Likewise, the political socialisation processes in young people play a fundamental role in explaining their political efficacy. Along these lines, C. Y. Barnes and Hope (2017) findings highlight that parental political socialisation predicts adolescents' political participation by directly and indirectly influencing adolescents' internal political efficacy beliefs.

Finally, another factor that explains our variable of interest is receiving political science or civic education courses. The effect of these courses appears to be ambiguous, which leads to conflicting results. Ohme et al. (2019) found that civic education in schools and universities is particularly important in fostering political engagement among young voters over time. However, other studies, such as Centellas and Rosenblatt (2018), observed no significant effect, and even Angelique et al. (2002) reported a negative effect.

c. Ethnicity effects Most of the studies do not incorporate the effect of ethnicity on political efficacy. Only two of them take ethnicity into account, and both were conduc-

ted in the US. In addition, these studies focus only on African-Americans and do not consider other ethnic groups.

In this respect, results show a contradictory direction of the effect of ethnicity on political efficacy, with no statistically significant effect found in any of the studies. In any case, it is important to note that these studies have limited representativeness of the general population. In the study of Cole and Sabik (2010), the sample is composed of female graduates between 1967 and 1973, while the study of Centellas and Rosenblatt (2018) focuses only on undergraduate students, so it is impossible to draw broader conclusions based on these studies.

Table 16: Overview political efficacy mixed measures

Study	Gender (woman)	Education (higher)	Income (higher)	Age (older)	Ethnicity	Method	Random?	N	Data type	Experiment
Cole and Sabik (2010)	≈	∉	∉	∉	(+)	Regression	no	< 250	panel	no
Centellas and Rosenblatt (2018)	–	ℝ	ℝ	∉	(–)	Regression	no	< 750	panel	yes
Šerek et al. (2012)	∉	∉	∉	∉	∉	SEM	yes	< 750	panel	no
High-Pippert and Comer (1998)	∉	ℝ	ℝ	ℝ	ℝ	Regression	yes	≥ 1500	cross-sectional	no
Hoewe et al. (2020)	ℝ	∉	∉	∉	∉	Regression	no	< 250	cross-sectional	yes
C. Y. Barnes and Hope (2017)	∉	∉	∉	∉	∉	SEM	yes	< 750	cross-sectional	no
Yang et al. (2012)	ℝ	∉	∉	∉	∉	Descriptive analysis	no	< 250	cross-sectional	no
Tedesco (2011)	–	∉	∉	∉	∉	Means' test	no	< 500	cross-sectional	yes
Angelique et al. (2002)	ℝ	ℝ	ℝ	ℝ	ℝ	MANOVA	no	< 250	cross-sectional	yes
Ohme et al. (2019)	–	∉	∉	+	∉	Regression	no	< 500	panel	no
Kononova et al. (2011)	ℝ	∉	ℝ	ℝ	ℝ	MANOVA	no	< 250	cross-sectional	no

Note: +: significant, positive, (+); insignificant, positive; (): insignificant, no direction reported; (–): insignificant, negative; –: significant, negative; ≈: mixed; ℝ: not reported; ∉: not included.

4.3 Discussion

The effects of the examined socio-structural factors indicate conclusive outcomes across different studies. The most consistent variable is gender, where being a woman is associated with lower levels of internal political efficacy in most analysed papers. This result holds across studies with different methods and sample types. Education also points in a positive direction in most of the research, indicating that as education increases, belief in one's abilities to understand and participate in politics also increases. Income and social class do not negatively affect internal efficacy significantly, suggesting that higher income levels are associated with greater internal efficacy.

There is less consensus regarding age, as only eleven out of the 18 papers indicate that self-reported efficacy increases with age. Notably, out of the thirty-seven papers analysed, seventeen included a young sample. Lastly, ethnicity provides fairly conclusive results in the literature. Although seldom included, studies indicated that belonging to an ethnic minority correlates negatively with internal political efficacy.

Overall, the results regarding internal political efficacy are conclusive regarding gender, education, income and ethnicity, showing similar results across the papers. Only age is found to be slightly less consensual.

On the contrary, the variables analysed to measure external political efficacy have not provided conclusive results. However, two variables show some consensus in the literature. This is the case of education, where 90% of the analysed papers indicate that a higher level of education is associated with greater external political efficacy. Only two studies that include this variable point to the opposite effect; however, they are performed on non-randomised population samples. The other variable that shows consensus is income level and socio-economic status, where higher levels are associated with higher external political efficacy, as indicated by 85% of the papers analysed with these variables.

Regarding variables with no clear conclusion, gender stands out, showing significant effects in both directions. Thus, being a woman may or may not increase external political efficacy. Focusing on studies with randomised samples, a majority indicate that being a woman compared to being a man implies lower levels of external political efficacy. There is also no agreement, although slightly more studies indicate a positive effect, meaning that as age increases, so does external political efficacy. It is relevant to point out that out of the 39 analysed papers, 12 include samples exclusively of young people.

Finally, ethnicity also shows very mixed results. Despite this, when considering only those studies with random samples, 60% suggest that belonging to a minority ethnicity is associated with lower levels of external political efficacy than belonging to the majority.

In line with internal efficacy, a negative association exists between gender and our third category of general or mixed political efficacy. Among the eleven studies analysed, three reported a significant and negative effect, while another yielded inconclusive findings regarding the impact of gender on political efficacy.

Only one study considered age's impact on political efficacy and revealed a positive and significant effect. However, we should be cautious when drawing general conclusions from this finding due to the specificities of that particular study. Additionally, most of the studies reviewed did not incorporate the effect of ethnicity on political efficacy. Only two considered this variable, and the results showed contradictory and insignificant directions of the effect.

Nevertheless, the influence of socio-demographic variables, including income level, socio-economic status, or educational level, was not considered in any mixed political efficacy category studies.

When comparing internal and external political efficacy, it becomes apparent that internal political efficacy exhibits more direct results, with significant effects consistently found across the different socio-structural factors examined. However, our review of external political efficacy reveals a higher prevalence of non-significant effects showing more conflicting directions.

Remarkably, income and education variables consistently exhibit positive effects for both dimensions of efficacy, implying that higher-class and higher-educated individuals tend to demonstrate higher levels of both internal and external political efficacy. However, being a man or of older age does not have as clear of a positive impact on external political efficacy as it does on internal political efficacy.

These observed differences in the effects can likely be attributed to the conceptual distinctions between the two dimensions of efficacy, which are separate constructs not too strongly correlated with each other (see section 4.1). Consequently, they may operate through different explanatory mechanisms; thus, factors that greatly impact internal political efficacy might not have the same effect on external political efficacy.

5 Conclusions

This systematic review of empirical literature from the last 30 years aimed to identify evidence on the relationship of gender, ethnic background, social status and/or class on political involvement and political self-efficacy. Moreover, related to that, we wanted to investigate if intersectional approaches exist that look at interactions of these factors and their joint impact on the crucial orientations of political interest and political efficacy. Finally, we looked at the age to get a glimpse of the timing in life when inequalities start. The research question was: To what extent do gender, age, ethnic background, and social status/class (or their interactions) relate to inequalities (different levels) in political interest and political efficacy?

A first finding relates to conceptualising and measuring the two dependent attitudes, political interest and political efficacy. During the last decades, more or less standardised concepts have been developed that are also used by many of the studies reviewed in this literature report. For political interest, this concerns the coverage /measurement of general political interest; for political efficacy, it is the two-dimensional distinction between internal and external political efficacy. Regarding measurement, similarities are larger for political interest, whilst measures of political efficacy vary significantly across studies. Political interest instruments are generally also used by large-scale social science surveys, such as ESS, the ANES or WVS. Most commonly used measures for political efficacy use or borrow examples from the ANES study in political science or the ICCS study in education research; however, variations in the number of items, wording and scaling methods are the norm in both fields. These differences in measurement have, of course, been taken into account in the reporting of effects and require caution to the reader because this means that results are only sometimes comparable across studies.

Gender was the socio-structural characteristic investigated in most reviewed studies and is also one of the most important variables for the G-EPIC project. Our review confirms the consistent negative effects of being a woman in political interest and political efficacy. This gender effect is clearest for general political interest and internal political efficacy. The results are consistent across studies, with varied populations, random samples and diverse statistical techniques. Evidence in this direction – though less robust – is also found in many studies analysing different levels of political interest and

combined measurements of interest and internal political efficacy. For the combined measures of interest and the mixed efficacy category, the evidence also points in the direction of such a gender effect; however, it is not as clear as in the studies using established operationalisations.

Formal education, investigated in fewer studies than gender, stands out as a second important and robust predictor of political interest and political efficacy across methodological approaches and measurements. Higher-educated people express more political interest and political efficacy than those with lower education levels.

Generally, positive effects of higher social status and/or income have been detected to explain political efficacy and interest. However, for the latter, it is noticeable that there are only a few studies that analyse these characteristics at all.

Since one overall objective of the G-EPIC project is to assess the impact of political socialisation at a young age for developing political efficacy and involvement, the review also looked for age effects. It became apparent that being older is positively connected to being interested in politics and feeling internally efficacious. This finding holds for studies with youth samples as well as for studies with adults and could be an expression of a life cycle effect regarding political orientations meaning that only when young people enter voting age and gradually participate in the labour market or form their own families, the relevance of politics rises for them. Nevertheless, this also points to unequal political involvement and generally lower internal efficacy of youth compared to older groups.

The last characteristic that has been scrutinised in our review is ethnic background. This variable is important, especially from an intersectional perspective, because it is assumed to interact with gender and social status. Despite very heterogeneous approaches to capture ethnic background (due to country-specific concepts and measurements of ethnicity) and not many studies looking explicitly for effects, evidence found suggests that belonging to an ethnic minority by trend/by majority leads to lower political interest and efficacy. However, this conclusion has to be regarded with caution because of the different measurements and some evidence that could not show a significant impact of ethnicity.

Despite these generally conclusive findings regarding political interest and efficacy, we noticed that the investigated socio-structural characteristics are much more similar/effective in explaining political interest and internal political efficacy than in explaining external political efficacy. Some studies on external political efficacy could not find significant and/or convincing evidence for clear social gaps, especially regarding gender and age. However, these differences in antecedents of internal and external political efficacy are consistent with early opinion research arguing that the two represent, conceptually and empirically, different attitudes. Moreover, non-conclusive findings for external political efficacy could be due to variations in political systems, the structure

of political opportunities, but also measurement.

Speaking on a more general note, we can conclude from the reviewed studies some robust and consistent findings regarding the effects of important socio-structural variables on general political interest and (especially internal) efficacy. Open questions remain regarding the conceptual and empirical distinction of different sublevels of political interest and the differences between internal and external efficacy. It has been argued that a more differentiated approach to political interest might discover that the effects of gender and age on political interest are not as straightforward because women and young people could be interested in some specific political issues – beyond party and electoral politics – that are not included in most surveys (Ferrín et al., 2020).

We were also surprised that, so far, studies hardly exist that try to combine characteristics to investigate intersectional and/or accumulated inequalities. We can therefore conclude that interrelated influences of the studied characteristics represent a research lacuna in need of further study. The G-EPIC project will explicitly tackle this research gap with its various data collections and analyses.

References

Abendschön, S., & Tausendpfund, M. (2017). Political knowledge of children and the role of sociostructural factors. *American Behavioral Scientist*, *61*(2), 204–221. https://doi.org/10.1177/0002764216689122

AbuAlRub, R. F., & Abdulnabi, A. (2020). Involvement in health policy and political efficacy among hospital nurses in Jordan: A descriptive survey. *Journal of Nursing Management*, *28*(2), 433–440. https://doi.org/10.1111/jonm.12946

Ahn, B. M., & Boyer, W. W. (1986). Political efficacy and trust in rural South Korea. *The Journal of Developing Areas*, *20*(4), 439–452.

Alozie, N., Simon, J., & Merrill, B. (2003). Gender and political orientation in childhood. *Social Science Journal*, *40*(1), 1–18. https://doi.org/10.1016/S0362-3319(02)00255-0

Alscher, P., Ludewig, U., & McElvany, N. (2022). Civic education, teaching quality and students' willingness to participate in political and civic life: Political interest and knowledge as mediators. *Journal of Youth and Adolescence*, *51*(10), 1886–1900. https://doi.org/10.1007/s10964-022-01639-9

Anderson, M. R. (2010). Community Psychology, Political Efficacy, and Trust. *Political Psychology*, *31*(1), 59–84. https://doi.org/10.1111/j.1467-9221.2009.00734.x

Andrews, A. B. (1998). An exploratory study of political attitudes and acts among child and family services workers. *Children and Youth Services Review*, *20*(5), 435–461. https://doi.org/10.1016/S0190-7409(98)00016-4

ANES. (1988). Measuring Internal Political Efficacy in the 1988 National Election Study | American Political Science Review | Cambridge Core. Retrieved June 26, 2023, from https://www.cambridge.org/core/journals/american-political-science-review/article/abs/measuring-internal-political-efficacy-in-the-1988-national-election-study/C88BC3A52E0CA6E988CD5F0365B0DEF5

Angelique, H. L., Reischl, T. M., & Davidson, W. S. (2002). Promoting Political Empowerment: Evaluation of an Intervention with University Students. *American Journal of Community Psychology*, *30*(6), 815–833. https://doi.org/10.1023/A:1020205119306

Arens, A. K., & Watermann, R. (2017). Political efficacy in adolescence: Development, gender differences, and outcome relations. *Developmental Psychology*, *53*(5), 933–948. https://doi.org/10.1037/dev0000300

Atkeson, L. R., & Carrillo, N. (2007). More is Better: The Influence of Collective Female Descriptive Representation on External Efficacy. *Politics & Gender*, *3*(1), 79–101. https://doi.org/10.1017/S1743923X0707002X

Bachen, C. M., Hernández-Ramos, P. F., Raphael, C., & Waldron, A. (2015). Civic play and civic gaps: Can life simulation games advance educational equity? *Journal of Information Technology & Politics*, *12*(4), 378–395. https://doi.org/10.1080/19331681.2015.1101038

Bandura, A. (2006). Guide for constructing self-efficacy scales. *Self-efficacy beliefs of adolescents*, *5*(1), 307–337.

Barber, C., & Torney-Purta, J. (2009, January). Gender differences in political efficacy and attitudes toward women's rights as influenced by national and school contexts: Analysis from the IEA Civic Education Study. In D. P. Baker & A. W. Wiseman (Eds.), *Gender,*

Equality and Education from International and Comparative Perspectives (pp. 357–394, Vol. 10). Emerald Group Publishing Limited. https://doi.org/10.1108/S1479-3679(2009)0000010014

Barnes, C. Y., & Hope, E. C. (2017). Means-Tested Public Assistance Programs and Adolescent Political Socialization. *Journal of Youth and Adolescence*, *46*(7), 1611–1621. https://doi.org/10.1007/s10964-016-0624-x

Barnes, S. H., Kaase, M., Allerbeck, K. R., Farah, B. G., Heunks, F., Inglehart, R., Jennings, M. K., Klingemann, H.-D., Marsh, A., & Rosenmayr, L. (1979). *Political action. mass participation in five western democracies*. Sage Publications.

Barreto, M., Frasure-Yokley, L., Vargas, E. D., & Wong, J. (2017). The Collaborative Multiracial Post-Election Survey (CMPS) 2016. Los Angeles, CA.

Barrett, M., & Zani, B. (2014). Political and civic engagement: Theoretical understandings, evidence and policies. In *Political and Civic Engagement* (pp. 25–48). Routledge.

Billard, T. J. (2021). Together we rise: The role of communication and community connectedness in transgender citizens' civic engagement in the united states. *Mass Communication and Society*, *25*(3), 335–360. https://doi.org/10.1080/15205436.2021.1954197

Blais, A., Gidengil, E., & Nevitte, N. (2004). Where does turnout decline come from? *European Journal of Political Research*, *43*(2), 221–236. https://doi.org/10.1111/j.1475-6765.2004.00152.x

Borkowska, M., & Luthra, R. (2022). Socialization disrupted: The intergenerational transmission of political engagement in immigrant families. *International Migration Review*. https://doi.org/10.1177/01979183221134277

Bos, A. L., Greenlee, J. S., Holman, M. R., M., O. Z., & Lay, J. C. (2022). This one's for the boys: How gendered political socialization limits girls' political ambition and interest. *American Political Science Review*, *116*(2), 484–501. https://doi.org/10.1017/s0003055421001027

Boulianne, S. (forthcoming). Meta-analysis. In A. Liberati & M. Grömping (Eds.), *Encyclopedia of Political Communication*. Elgar.

Branton, R. P., Carey, T. E., & Martinez-Ebers, V. (2021). Lethal Engagement: The Relationship Between Contextual Exposure to Police Killings and External Political Efficacy. *Political Behavior*. https://doi.org/10.1007/s11109-021-09760-4

Budiningsih, I., Ahmad, M., & Abdulrahman, T. R. (2021). A model for the strengthening of political interest among millennial young women in a digital era. *Asian Women*, *37*(2), 81–94. https://doi.org/10.14431/aw.2021.6.37.2.81

Buzdar, M. A., & Fatima, T. (2022). Frustration and motivation towards political participation in Muslim and non-Muslim young students in Pakistan. *Asian Journal of Comparative Politics*, *7*(4), 861–872. https://doi.org/10.1177/2057891120941066

Campbell, A., Converse, P. E., Converse, W. E., & Stokes, D. E. (1960). *The american voter*. The University of Chicago Press.

Campbell, A., Gurin, G., & Miller, W. E. (1954). *The voter decides*. Row, Petersonand Company.

Cancela, J., & Geys, B. (2016). Explaining voter turnout: A meta-analysis of national and subnational elections. *Electoral Studies*, *42*, 264–275. https://doi.org/10.1016/j.electstud.2016.03.005

Caprara, G. V., Vecchione, M., Capanna, C., & Mebane, M. (2009). Perceived political self-efficacy: Theory, assessment, and applications. *European journal of social psychology*, *39*(6), 1002–1020.

Centellas, M., & Rosenblatt, C. (2018). Do Introductory Political Science Courses Contribute to a Racial "Political Efficacy Gap"? Findings from a Panel Survey of a Flagship University. *PS: Political Science & Politics*, *51*(03), 641–647. https://doi.org/10.1017/S1049096518000380

Chan, M., Wu, X., Hao, Y., Xi, R., & Jin, T. (2012). Microblogging, Online Expression, and Political Efficacy Among Young Chinese Citizens: The Moderating Role of Information

and Entertainment Needs in the Use of Weibo. *Cyberpsychology, Behavior, and Social Networking*, *15*(7), 345–349. https://doi.org/10.1089/cyber.2012.0109

Chen, J., & Zhong, Y. (1999). Mass political interest (or apathy) in urban china. *Communist and Post-Communist Studies*, *32*(3), 281–303. https://doi.org/10.1016/S0967-067X(99)00013-6

Cicognani, E., Zani, B., Fournier, B., Gavray, C., & Born, M. (2012). Gender differences in youths' political engagement and participation. the role of parents and of adolescents' social and civic participation. *Journal of Adolescence*, *35*(3), 561–576. https://doi.org/10.1016/j.adolescence.2011.10.002

Coffé, H. (2013). Women stay local, men go national and global? gender differences in political interest. *Sex Roles*, *69*(5-6), 323–338. https://doi.org/10.1007/s11199-013-0308-x

Cohen, C. (2005). Black youth culture survey. *Black Youth Project, Chicago, IL. Retrieved November*, *15*, 2010.

Cole, E. R., & Sabik, N. J. (2010). Associations Between Femininity and Women's Political Behavior During Midlife. *Psychology of Women Quarterly*, *34*(4), 508–520. https://doi.org/10.1111/j.1471-6402.2010.01600.x

Costa, M., & Wallace, I. (2021). More women candidates: The effects of increased women's presence on political ambition, efficacy, and vote choice. *American Politics Research*, *49*(4), 368–380. https://doi.org/10.1177/1532673x211006386

Craig, S. C., & Maggiotto, M. A. (1982). Measuring Political Efficacy. *Political Methodology*, *8*(3), 85–109. Retrieved May 16, 2023, from https://www.jstor.org/stable/25791157

Craig, S. C., Niemi, R. G., & Silver, G. E. (1990). Political efficacy and trust: A report on the NES pilot study items. *Political behavior*, *12*, 289–314.

Datzberger, S., & Mat, M. L. L. (2019). Schools as change agents? education and individual political agency in uganda. *International Journal of Educational Development*, *67*, 18–28. https://doi.org/10.1016/j.ijedudev.2019.02.007

DeSante, C. D., & Perry, B. N. (2016). Bridging the gap. *American Politics Research*, *44*(3), 548–577. https://doi.org/10.1177/1532673x15606967

Duquette-Rury, L., Waldinger, R., & Lim, N. (2018). Foreign connections and the difference they make: How migrant ties influence political interest and attitudes in mexico. *Comparative Migration Studies*, *6*(1). https://doi.org/10.1186/s40878-018-0098-y

Easterbrook, M. J., Kuppens, T., & Manstead, A. S. R. (2016). The education effect: Higher educational qualifications are robustly associated with beneficial personal and socio-political outcomes. *Social Indicators Research*, *126*(3), 1261–1298. https://doi.org/10.1007/s11205-015-0946-1

Eckstein, K., Jugert, P., Noack, P., Born, M., & Sener, T. (2015). Comparing Correlates of Civic Engagement Between Immigrant and Majority Youth in Belgium, Germany, and Turkey. *Research in Human Development*, *12*(1-2), 44–62. https://doi.org/10.1080/15427609.2015.1010346

Eggert, N., & Giugni, M. (2010). Does associational involvement spur political integration? political interest and participation of three immigrant groups in zurich. *Swiss Political Science Review*, *16*(2), 175–210. https://doi.org/10.1002/j.1662-6370.2010.tb00157.x

Emig, A. G., Hesse, M. B., & Fisher, S. H. (1996). Black-White Differences in Political Efficacy, Trust, and Sociopolitical Participation: A Critique of the Empowerment Hypothesis. *Urban Affairs Review*, *32*(2), 264–276. https://doi.org/10.1177/107808749603200206

Fernandes-Jesus, M., Malafaia, C., Ferreira, P., Cicognani, E., & Menezes, I. (2012). The many faces of hermes: The quality of participation experiences and political attitudes of migrant and non-migrant youth. *Human Affairs*, *22*(3), 434–447. https://doi.org/10.2478/s13374-012-0035-y

Fernández, J. J., Jaime-Castillo, A. M., Mayrl, D., & Valiente, C. (2021). Societal religiosity and the gender gap in political interest, 1990–2014. *The British Journal of Sociology*, *72*(2), 252–269. https://doi.org/10.1111/1468-4446.12789

Ferrín, M., Fraile, M., García-Albacete, G. M., & Gómez, R. (2020). The gender gap in political interest revisited. *International Political Science Review*, *41*(4), 473–489. https://doi.org/10.1177/0192512119860260

Fischer-Neumann, M. (2014). Immigrants ethnic identification and political involvement in the face of discrimination: A longitudinal study of the german case. *Journal of Ethnic and Migration Studies*, *40*(3), 339–362. https://doi.org/10.1080/1369183x.2013.847362

Flanagan, C. A., Syvertsen, A. K., & Stout, M. D. (2007). Civic Measurement Models: Tapping Adolescents' Civic Engagement. CIRCLE Working Paper 55. *Center for Information and Research on Civic Learning and Engagement (CIRCLE)*.

Fraile, M., & de Miguel Moyer, C. (2022). Risk and the gender gap in internal political efficacy in Europe. *West European Politics*, *45*(7), 1462–1480. https://doi.org/10.1080/01402382.2021.1969146

Fraile, M., & Gomez, R. (2017). Bridging the enduring gender gap in political interest in europe: The relevance of promoting gender equality. *European Journal of Political Research*, *56*(3), 601–618. https://doi.org/10.1111/1475-6765.12200

Fraile, M., & Sánchez-Vítores, I. (2020). Tracing the gender gap in political interest over the life span: A panel analysis. *Political Psychology*, *41*(1), 89–106. https://doi.org/10.1111/pops.12600

Furnham, A., & Cheng, H. (2019). Personality traits and socio-demographic variables as predictors of political interest and voting behavior in a british cohort. *Journal of Individual Differences*, *40*(2), 118–125. https://doi.org/10.1027/1614-0001/a000283

García-Albacete, G. M. (2014). *Young people's political participation in western europe*. Palgrave Macmillan UK. https://doi.org/10.1057/9781137341310

Garcìa-Albacete, G. M. (2013). Promoting political interest in schools: the role of civic education. In S. Abendschön (Ed.), *Growing into politics. contexts and timing of political socialisation* (pp. 91–114). ECPR Press.

Geys, B. (2006). Explaining voter turnout: A review of aggregate-level research. *Electoral Studies*, *25*(4), 637–663. https://doi.org/10.1016/j.electstud.2005.09.002

Gothreau, C. M. (2021). Sex Objects: How Self-Objectification Undermines Political Efficacy and Engagement. *Journal of Women, Politics & Policy*, *42*(4), 275–296. https://doi.org/10.1080/1554477X.2021.1941630

Grasso, M., & Smith, K. (2022). Gender inequalities in political participation and political engagement among young people in Europe: Are young women less politically engaged than young men? *Politics*, *42*(1), 39–57. https://doi.org/10.1177/02633957211028813

Grechyna, D. (2023). Parenthood and political engagement. *European Journal of Political Economy*, *76*, 102238. https://doi.org/10.1016/j.ejpoleco.2022.102238

Grotlüschen, A., Chachashvili-Bolotin, S., Heilmann, L., & Dutz, G. (2021). Beyond literacy and language provision: Socio-political participation of migrants and large language minorities in five countries from PIAAC R1/R2. *Journal of Adult and Continuing Education*, *27*(1), 42–62. https://doi.org/10.1177/1477971419898491

Grütter, J., & Buchmann, M. (2021). Civic Competencies During Adolescence: Longitudinal Associations with Sympathy in Childhood. *Journal of Youth and Adolescence*, *50*(4), 674–692. https://doi.org/10.1007/s10964-020-01240-y

Grütter, J., & Buchmann, M. (2022). Cohort differences in the development of civic engagement during adolescence. *Child Development*, *93*(4), e427–e445. https://doi.org/10.1111/cdev.13743

Guidetti, M., Cavazza, N., & Graziani, A. R. (2016). Perceived disagreement and heterogeneity in social networks: Distinct effects on political participation. *The Journal of Social Psychology*, *156*(2), 222–242. https://doi.org/10.1080/00224545.2015.1095707

Hahn, C. (1996). Gender and political learning. *THEORY AND RESEARCH IN SOCIAL EDUCATION*, *24*(1), 8–35. https://doi.org/10.1080/00933104.1996.10505767

Hansen, K. M., & Pedersen, R. T. (2014). Campaigns matter: How voters become knowledgeable and efficacious during election campaigns. *Political Communication*, *31*(2), 303–324.

Harzing, A.-W. K., & van der Wal, R. (2008). Google scholar as a new source for citation analysis. *Ethics in Science and Environmental Politics*, *8*, 61–73. https://doi.org/10.3354/esep00076

Hayes, B. C., & Bean, C. S. (1993). Gender and local political interest: Some international comparisons. *Political Studies*, *41*(4), 672–682. https://doi.org/10.1111/j.1467-9248.1993.tb01665.x

High-Pippert, A., & Comer, J. (1998). Female Empowerment. *Women & Politics*, *19*(4), 53–66. https://doi.org/10.1300/J014v19n04_03

Hochman, O., & García-Albacete, G. (2019). Political interest among european youth with and without an immigrant background. *Social Inclusion*, *7*(4), 257–278. https://doi.org/10.17645/si.v7i4.2312

Hoewe, J., & Sherrill, L. A. (2019). The influence of female lead characters in political TV shows: Links to political engagement. *Journal of Broadcasting & Electronic Media*, *63*(1), 59–76. https://doi.org/10.1080/08838151.2019.1570782

Hoewe, J., Wiemer, E. C., Adekunle, T., Barton, R., Jett, J., & Pijanowski, A. (2020). Linking Political TV Shows with Female Lead Characters to Political Engagement: The Roles of Parasocial Processes and Gender Identity. *Journal of Broadcasting & Electronic Media*, *64*(5), 672–692. https://doi.org/10.1080/08838151.2020.1849703

Hoskins, B., & Janmaat, J. G. (2019). *Education, democracy and inequality*. Palgrave Macmillan UK. https://doi.org/10.1057/978-1-137-48976-0

Hoskins, B., Janmaat, J. G., Han, C., & Muijs, D. (2016). Inequalities in the education system and the reproduction of socioeconomic disparities in voting in England, Denmark and Germany: The influence of country context, tracking and self-efficacy on voting intentions of students age 16–18. *Compare: A Journal of Comparative and International Education*, *46*(1), 69–92. https://doi.org/10.1080/03057925.2014.912796

Hu, L., Kearney, M. W., & Frisby, C. M. (2023). Tweeting and Retweeting: Gender Discrepancies in Discursive Political Engagement and Influence on Twitter. *Journal of Gender Studies*, *0*(0), 1–19. https://doi.org/10.1080/09589236.2021.1995340

Hynes, K., Donnelly, M. E., Banks, B. M., & Horton, A. (2022). Post or protest?: Factors influencing white women's engagement in activism. *Journal of Human Behavior in the Social Environment*, 1–13. https://doi.org/10.1080/10911359.2022.2096739

Karv, T., Lindell, M., & Rapeli, L. (2022). How Context Matters: The Significance of Political Homogeneity and Language for Political Efficacy. *Scandinavian Political Studies*, *45*(1), 46–67. https://doi.org/10.1111/1467-9477.12215

Kenski, K., & Stroud, N. J. (2006). Connections between Internet use and political efficacy, knowledge, and participation. *Journal of broadcasting & electronic media*, *50*(2), 173–192.

Kim, J. H. (2022). Voting in referendums increases internal political efficacy of men but not women: Evidence from Ireland's 2018 abortion referendum. *Journal of Elections, Public Opinion and Parties*, *32*(3), 707–726. https://doi.org/10.1080/17457289.2021.1929258

Knobloch-Westerwick, S., & Meng, J. (2011). Reinforcement of the political self through selective exposure to political messages. *Journal of Communication*, *61*(2), 349–368. https://doi.org/10.1111/j.1460-2466.2011.01543.x

Kononova, A., Alhabash, S., & Cropp, F. (2011). The role of media in the process of socialization to American politics among international students. *International Communication Gazette*, *73*(4), 302–321.

Koos, A. K. (2013). The Diversity of Political Behavior: Some Implications of Communal Identities. *The International Journal of Community Diversity*, *12*(3), 1–16. https://doi.org/10.18848/2327-0004/CGP/v12i03/39923

Kushin, M. J., & Yamamoto, M. (2010). Did social media really matter? College students' use of online media and political decision making in the 2008 election. *Mass communication and society*, *13*(5), 608–630.

Landberg, M., Eckstein, K., Mikolajczyk, C., Mejias, S., Macek, P., Motti-Stefanidi, F., Enchikova, E., Guarino, A., Rämmer, A., & Noack, P. (2017). Being both – a european and a national citizen? comparing young people's identification with europe and their home country across eight european countries. *European Journal of Developmental Psychology*, *15*(3), 270–283. https://doi.org/10.1080/17405629.2017.1391087

Lane, R. L. (1959). *Political life: Why people get involved in politics*. The Free Press.

Lasorsa, D. L. (2009). Political interest, political knowledge, and evaluations of political news sources: Their interplay in producing context effects. *Journalism & Mass Communication Quarterly*, *86*(3), 533–544. https://doi.org/10.1177/107769900908600305

Lay, J. C. (2017). She Was Born in a Small Town: The Advantages and Disadvantages in Political Knowledge and Efficacy for Rural Girls. *Journal of Women, Politics & Policy*, *38*(3), 318–334. https://doi.org/10.1080/1554477X.2016.1219590

Le, K., & Nguyen, M. (2021). Education and political engagement. *INTERNATIONAL JOURNAL OF EDUCATIONAL DEVELOPMENT*, *85*. https://doi.org/10.1016/j.ijedudev.2021.102441

Leath, S., & Chavous, T. (2017). "We really protested": The Influence of Sociopolitical Beliefs, Political Self-efficacy, and Campus Racial Climate on Civic Engagement among Black College Students attending Predominantly White Institutions. *The Journal of Negro Education*, *86*(3), 220–237. https://doi.org/10.7709/jnegroeducation.86.3.0220

Lee, K. M. (2006). Effects of Internet Use on College Students' Political Efficacy. *CyberPsychology & Behavior*, *9*(4), 415–422. https://doi.org/10.1089/cpb.2006.9.415

Lenzi, M., Vieno, A., Altoè, G., Scacchi, L., Perkins, D. D., Zukauskiene, R., & Santinello, M. (2015). Can Facebook Informational Use Foster Adolescent Civic Engagement? *American Journal of Community Psychology*, *55*(3), 444–454. https://doi.org/10.1007/s10464-015-9723-1

Levy, B. L. M., Solomon, B. G., & Collet-Gildard, L. (2016). Fostering political interest among youth during the 2012 presidential election. *Educational Researcher*, *45*(9), 483–495. https://doi.org/10.3102/0013189x16683402

Levy, B. L. (2013). An empirical exploration of factors related to adolescents' political efficacy. *Educational Psychology*, *33*(3), 357–390. https://doi.org/10.1080/01443410.2013.772774

Lupia, A., & Philpot, T. S. (2005). Views from inside the net: how websites affect young adults' political interest. *The Journal of Politics*, *67*(4), 1122–1142.

Machackova, H., & Šerek, J. (2017). Does 'clicking' matter? The role of online participation in adolescents' civic development. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, *11*(4). https://doi.org/10.5817/CP2017-4-5

Mansell, J., Harell, A., Thomas, M., & Gosselin, T. (2022). Competitive loss, gendered backlash and sexism in politics. *Political Behavior*, *44*(1), 455–476. https://doi.org/10.1007/s11109-021-09724-8

Marques, M. D., Hill, S. R., Clarke, E. J. R., Williams, M. N., Ling, M., Kerr, J. R., Douglas, K. M., Cichocka, A., & Sibley, C. G. (2022). Democracy and belief in conspiracy theories in

new zealand. *Australian Journal of Political Science*, *57*(3), 264–279. https://doi.org/10.1080/10361146.2022.2122773
Marx, P., & Nguyen, C. (2016). Are the Unemployed Less Politically Involved? A Comparative Study of Internal Political Efficacy. *European Sociological Review*, *32*(5), 634–648. https://doi.org/10.1093/esr/jcw020
Mayer, J. D., & Schmidt, H. M. (2004). Gendered political socialization in four contexts: Political interest and values among junior high school students in china, japan, mexico, and the united states. *The Social Science Journal*, *41*(3), 393–407. https://doi.org/10.1016/j.soscij.2004.04.024
Merolla, J. L., Sellers, A. H., & Fowler, D. J. (2012). Descriptive representation, political efficacy, and african americans in the 2008 presidential election. *Political Psychology*, *34*(6), 863–875. https://doi.org/10.1111/j.1467-9221.2012.00934.x
Metzger, A., Alvis, L., & Oosterhoff, B. (2020). Adolescent views of civic responsibility and civic efficacy: Differences by rurality and socioeconomic status. *Journal of Applied Developmental Psychology*, *70*, 101183. https://doi.org/10.1016/j.appdev.2020.101183
Miklikowska, M., Rekker, R., & Kudrnac, A. (2022). A little more conversation a little less prejudice: The role of classroom political discussions for youth's attitudes toward immigrants. *Political Communication*, *39*(3), 405–427. https://doi.org/10.1080/10584609.2022.2032502
Milbrath, L. W. (1965). *Political participation. how and why do people get involved in politics?* Rand Mcnally College.
Moher, D., Liberati, A., Tetzlaff, J., & and, D. G. A. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, *6*(7), e1000097. https://doi.org/10.1371/journal.pmed.1000097
Morrell, M. E. (2003). Survey and experimental evidence for a reliable and valid measure of internal political efficacy. *Public Opinion Quarterly*, *67*(4), 589–602. https://doi.org/10.1086/378965
Murphy, P. (2016). Unsettled in the starting blocks: A case study of internal efficacy socialisation in the republic of ireland. *Irish Political Studies*, *32*(3), 479–497. https://doi.org/10.1080/07907184.2016.1255201
Neundorf, A., Niemi, R. G., & Smets, K. (2016). The compensation effect of civic education on political engagement: How civics classes make up for missing parental socialization. *Political Behavior*, *38*(4), 921–949. https://doi.org/10.1007/s11109-016-9341-0
Neundorf, A., Smets, K., & García-Albacete, G. M. (2013). Homemade citizens: the development of political interest during adolescence and young adulthood. *Acta Politica*, *48*(1), 92–116. https://doi.org/10.1057/ap.2012.23
Newhagen, J. E. (1994). Media use and political efficacy: The suburbanization of race and class. *Journal of the American Society for Information Science*, *45*(6), 386–394. https://doi.org/10.1002/(SICI)1097-4571(199407)45:6<386::AID-ASI4>3.0.CO;2-9
Niemi, R. G., Craig, S. C., & Mattei, F. (1991). Measuring Internal Political Efficacy in the 1988 National Election Study. *American Political Science Review*, *85*(4), 1407–1413. https://doi.org/10.2307/1963953
Oberle, M., Ivens, S., & Leunig, J. (2018). Effects of EU simulation games on secondary school students' political motivations, attitudes and knowledge: Results of an intervention study. In *Simulations of decision-making as active learning tools* (pp. 145–164). Springer International Publishing. https://doi.org/10.1007/978-3-319-74147-5_12
Oberle, M., & Leunig, J. (2016). Simulation games on the european union in civics: Effects on secondary school pupils' political competence. *Citizenship, Social and Economics Education*, *15*(3), 227–243. https://doi.org/10.1177/2047173416689794
Ohme, J., Marquart, F., & Kristensen, L. M. (2019). School lessons, social media and political events in a get-out-the-vote campaign: Successful drivers of political engagement

among youth? *Journal of Youth Studies*, *23*(7), 886–908. https://doi.org/10.1080/13676261.2019.1645311

Ohme, J., Marquart, F., & Kristensen, L. M. (2020). School lessons, social media and political events in a get-out-the-vote campaign: Successful drivers of political engagement among youth? *Journal of Youth Studies*, *23*(7), 886–908. https://doi.org/10.1080/13676261.2019.1645311

Ojeda, C., Bernardi, L., & Landwehr, C. (2023). Depression and the gender gap in political interest. *Electoral Studies*, *82*, 102598. https://doi.org/10.1016/j.electstud.2023.102598

O'Rourke, N. C., Crawford, S. L., Morris, N. S., & Pulcini, J. (2017). Political efficacy and participation of nurse practitioners. *Policy, Politics, & Nursing Practice*, *18*(3), 135–148.

Osborne, D., Yogeeswaran, K., & Sibley, C. G. (2015). Hidden consequences of political efficacy: Testing an efficacy–apathy model of political mobilization. *Cultural Diversity and Ethnic Minority Psychology*, *21*, 533–540. https://doi.org/10.1037/cdp0000029

Oser, J., Feitosa, F., & Dassonneville, R. (2023). Who feels they can understand and have an impact on political processes? socio-demographic correlates of political efficacy in 46 countries, 1996–2016. *International Journal of Public Opinion Research*, *35*(2). https://doi.org/10.1093/ijpor/edad013

Otto, L., & Bacherle, P. (2011). Politisches Interesse Kurzskala (PIKS) Entwicklung und Validierung. *Politische Psychologie*, *1*(1), 19–35.

Pang, H. (2018). Is mobile app a new political discussion platform? An empirical study of the effect of WeChat use on college students' political discussion and political efficacy. *PLOS ONE*, *13*(8), e0202244. https://doi.org/10.1371/journal.pone.0202244

Parry, G., Moyser, G., & Day, N. (1992, January). *Political participation and democracy in britain*. Cambridge University Press. https://doi.org/10.1017/cbo9780511558726

Paulhus, D. L., & Van Selst, M. (1990). The spheres of control scale: 10 yr of research. *Personality and Individual Differences*, *11*(10), 1029–1036.

Pesic, J., Biresev, A., & Petrovic-Trifunovic, T. (2021). Political disaffection and disengagement in serbia. *Sociologija*, *63*(2), 355–380. https://doi.org/10.2298/soc2102355p

Peterson, R. D., & Palmer, C. L. (2017). Effects of physical attractiveness on political beliefs. *Politics and the Life Sciences*, *36*(2), 3–16. https://doi.org/10.1017/pls.2017.18

Piumatti, G., Magistro, D., Zecca, M., & Esliger, D. W. (2018). The mediation effect of political interest on the connection between social trust and wellbeing among older adults. *Ageing and Society*, *38*(11), 2376–2395. https://doi.org/10.1017/s0144686x1700071x

Preece, J. R. (2016). Mind the gender gap: An experiment on the influence of self-efficacy on political interest. *Politics & Gender*, *12*(01), 198–217. https://doi.org/10.1017/s1743923x15000628

Prior, M. (2010). You've either got it or you don't? the stability of political interest over the life cycle. *The Journal of Politics*, *72*(3), 747–766. https://doi.org/10.1017/s0022381610000149

Pruysers, S., & Blais, J. (2014). Anything women can do men can do better: An experiment examining the effects of stereotype threat on political knowledge and efficacy. *The Social Science Journal*, *51*(3), 341–349. https://doi.org/10.1016/j.soscij.2014.05.005

Quaranta, M., & Dotti Sani, G. M. (2018). Left behind? gender gaps in political engagement over the life course in twenty-seven european countries. *Social Politics: International Studies in Gender, State & Society*, *25*(2), 254–286. https://doi.org/10.1093/sp/jxy005

Reher, S. (2020). Mind this gap, too: Political orientations of people with disabilities in europe. *Political Behavior*, *42*(3), 791–818. https://doi.org/10.1007/s11109-018-09520-x

Ro, H. K., Kim, S., & Bergom, I. (2019). Political engagement among undergraduate women of color. *Journal of Student Affairs Research and Practice*, *56*(5), 564–581. https://doi.org/10.1080/19496591.2019.1669453

Russo, S., & Stattin, H. (2017). Self-determination theory and the role of political interest in adolescents' sociopolitical development. *Journal of Applied Developmental Psychology*, *50*, 71–78. https://doi.org/10.1016/j.appdev.2017.03.008

Sánchez-Vítores, I. (2019). Different governments, different interests: The gender gap in political interest. *Social Politics: International Studies in Gender, State & Society*, *26*(3), 348–369. https://doi.org/10.1093/sp/jxy038

Saris, W. E., & Torcal, M. (2009). Alternative measurement procedures and models for political efficacy.

Sasse, G., & Lackner, A. (2020). The displaced as 'ordinary citizens': Exploring variation in the political attitudes of the displaced from donbas. *Europe-Asia Studies*, *72*(3), 354–382. https://doi.org/10.1080/09668136.2020.1725448

Schmuck, D., Hirsch, M., Stevic, A., & Matthes, J. (2022). Politics – simply explained? how influencers affect youth's perceived simplification of politics, political cynicism, and political interest. *The International Journal of Press/Politics*, *27*(3), 738–762. https://doi.org/10.1177/19401612221088987

Schur, L., Shields, T., & Schriner, K. (2003). Can I Make a Difference? Efficacy, Employment, and Disability. *Political Psychology*, *24*(1), 119–149. https://doi.org/10.1111/0162-895X.00319

Scotto, T. J., Xena, C., & Reifler, J. (2021). Alternative measures of political efficacy: The quest for cross-cultural invariance with ordinally scaled survey items. *Frontiers in Political Science*, *3*. https://doi.org/10.3389/fpos.2021.665532

Šerek, J., Lacinová, L., & Macek, P. (2012). Does family experience influence political beliefs? Relation between interparental conflict perceptions and political efficacy in late adolescence. *Journal of Adolescence*, *35*(3), 577–586. https://doi.org/10.1016/j.adolescence.2011.10.001

Šerek, J., & Macek, P. (2010). Proč se politicky (ne) angažovat: Obsah a struktura přesvědčení u adolescent\uu. *Československá psychologie*, (2).

Šerek, J., Machackova, H., & Macek, P. (2017). The chicken or egg question of adolescents' political involvement. *Zeitschrift für Psychologie*, *225*(4), 347–356. https://doi.org/10.1027/2151-2604/a000297

Shala, A., & Grajcevci, A. (2018). Examining the role of socioeconomic status, formal and informal education on political interest levels among university students. *Politics & Policy*, *46*(6), 1050–1070. https://doi.org/10.1111/polp.12274

Shockley, B. (2016). Women and political interest in qatar: Moving ahead but not catching up. *Journal of Arabian Studies*, *6*(1), 53–73. https://doi.org/10.1080/21534764.2016.1192771

Sloam, J. (2007). Rebooting democracy: Youth participation in politics in the UK. *Parliamentary Affairs*, *60*(4), 548–567. https://doi.org/10.1093/pa/gsm035

Smets, K., & van Ham, C. (2013). The embarrassment of riches? a meta-analysis of individual-level research on voter turnout. *Electoral Studies*, *32*(2), 344–359. https://doi.org/10.1016/j.electstud.2012.12.006

Sohl, S., & Arensmeier, C. (2015). The school's role in youths' political efficacy: Can school provide a compensatory boost to students' political efficacy? *Research Papers in Education*, *30*(2), 133–163.

Stadelmann-Steffen, I., & Sulzer, L. (2018). Just another brick in the wall? the relationship between classroom-based political education and the political interest of young adults in switzerland. *Journal of Youth Studies*, *21*(4), 550–573. https://doi.org/10.1080/13676261.2017.1395832

Stattin, H., Hussein, O., Özdemir, M., & Russo, S. (2017). Why do some adolescents encounter everyday events that increase their civic interest whereas others do not? *Developmental Psychology*, *53*(2), 306–318. https://doi.org/10.1037/dev0000192

Stattin, H., & Korol, L. (2020). Is love politically blind? the role that the romantic partner plays for young adults' socio-political interest. *Journal of Youth Studies*, *24*(4), 481–498. https://doi.org/10.1080/13676261.2020.1742301

Stauffer, K. E. (2021). Public Perceptions of Women's Inclusion and Feelings of Political Efficacy. *American Political Science Review*, *115*(4), 1226–1241. https://doi.org/10.1017/S0003055421000678

Stockemer, D. (2012). Students' political engagement: A comprehensive study of university of ottawa undergraduate students. *Journal of Youth Studies*, *15*(8), 1028–1047. https://doi.org/10.1080/13676261.2012.693587

Strohmeier, D., Barrett, M., Bora, C., Caravita, S. C. S., Donghi, E., Dragoti, E., Fife-Schaw, C., Gómez-López, M., Kapéter, E., Mazzone, A., Rama, R., Roşeanu, G., Ortega-Ruiz, R., Steiner, H., Trip, S., Tenenbaum, H., Urhahne, D., & Viejo, C. (2017). Young People's Engagement With the European Union. *Zeitschrift für Psychologie*, *225*(4), 313–323. https://doi.org/10.1027/2151-2604/a000314

Superti, C. (2023). A foot in both countries: The effect of origin-country enfranchisement on migrants' political interest and partisanship. *Journal of Ethnic and Migration Studies*, *49*(10), 2582–2606. https://doi.org/10.1080/1369183x.2023.2182716

Syal, R. (2012). What are the effects of educational mobility on political interest and participation in the indian electorate? *Asian Survey*, *52*(2), 423–439. https://doi.org/10.1525/as.2012.52.2.423

Takyar, D. (2019). When interest doesn't turn into action: Discrimination, group identification, and muslim political engagement in the post-9/11 era. *Social Psychology Quarterly*, *82*(3), 231–253. https://doi.org/10.1177/0190272519853542

Tedesco, J. C. (2011). Political information efficacy and Internet effects in the 2008 US presidential election. *American Behavioral Scientist*, *55*(6), 696–713.

Tormos, R., & Verge, T. (2022). Challenging the gender gap in political interest. *Public Opinion Quarterly*, *86*(1), 107–133. https://doi.org/10.1093/poq/nfab070

Torney-Purta, J. (2001). *Citizenship and education in twenty-eight countries: Civic knowledge and engagement at age fourteen*. International Association for the Evaluation of Educational Achievement.

Turnbull-Dugarte, S. J., & Townsley, J. (2020). Political engagement and turnout among same-sex couples in western europe. *Research & Politics*, *7*(4), 1–8. https://doi.org/10.1177/2053168020976952

Uslucan, H. H., & Sauer, M. (2020). Political participation and party preferences among immigrants of turkish origin in germany. *Uluslararası İlişkiler Dergisi*. https://doi.org/10.33458/uidergisi.865541

van Deth, J. W. (2000). Interesting but irrelevant: Social capital and the saliency of politics in western europe. *European Journal of Political Research*, *37*(2), 115–147. https://doi.org/10.1111/1475-6765.00507

van Deth, J. W., Abendschön, S., & Vollmar, M. (2011). Children and politics: An empirical reassessment of early political socialization. *Political Psychology*, *32*(1), 147–174. https://doi.org/10.1111/j.1467-9221.2010.00798.x

van Deth, J. W., & Elff, M. (2004). Politicisation, economic development and political interest in europe. *European Journal of Political Research*, *43*(3), 477–508. https://doi.org/10.1111/j.1475-6765.2004.00162.x

van Deth, J. W. (1990). Interest in politics. In M. K. Jennings, J. W. van Deth, S. H. Barnes, D. Fuchs, F. Heunks, R. Inglehart, M. Kaase, H.-D. Klingemann & J. J. A. Thomassen (Eds.), *Continuities in political action: A longitudinal study of political orientations in three western democracies* (pp. 275–312). De Gruyter.

van Deth, J. W. (2007). Norms of citizenship. In R. J. Dalton & H.-D. Klingemann (Eds.), *The oxford handbook of political behavior* (pp. 383–401). Oxford University Press.

Vashdi, D. R., Navot, D., Lavi, I., Hobfoll, S. E., & Canetti, D. (2019). Political Efficacy as a Buffer of the Heightened Risk of Posttraumatic Stress in Disadvantaged Communities. *Journal of traumatic stress*, *32*(4), 555–565. https://doi.org/10.1002/jts.22426

Verba, S., Schlozman, K. L., & Brady, H. E. (1995). *Voice and equality: Civic voluntarism in american politics*. Harvard University Press.

Wei, H.-S., Shih, A.-T., Chen, Y.-F., & Hong, J. S. (2021). The impact of adolescent parentification on family relationship and civic engagement. *Journal of Social Work*, *21*(6), 1413–1432. https://doi.org/10.1177/1468017320955249

Wen, N., Xiaoming, H., & George, C. (2013). Gender and Political Participation: News Consumption, Political Efficacy and Interpersonal Communication. *Asian Journal of Women's Studies*, *19*(4), 124–149. https://doi.org/10.1080/12259276.2013.11666168

Williamson, A. R., & Scicchitano, M. J. (2015). Minority Representation and Political Efficacy in Public Meetings. *Social Science Quarterly*, *96*(2), 576–587. https://doi.org/10.1111/ssqu.12143

Wolak, J. (2020). Self-confidence and gender gaps in political interest, attention, and efficacy. *The Journal of Politics*, *82*(4), 1490–1501. https://doi.org/10.1086/708644

Wolak, J. (2022). Conflict avoidance and gender gaps in political engagement. *Political Behavior*, *44*(1), 133–156. https://doi.org/10.1007/s11109-020-09614-5

Wong, T. K., García, A. S., & Valdivia, C. (2019). The Political Incorporation of Undocumented Youth. *Social Problems*, *66*(3), 356–372. https://doi.org/10.1093/socpro/spy009

Wray-Lake, L., Arruda, E. H., & Schulenberg, J. E. (2020). Civic development across the transition to adulthood in a national u.s. sample: Variations by race/ethnicity, parent education, and gender. *Developmental Psychology*, *56*(10), 1948–1967. https://doi.org/10.1037/dev0001101

Wu, C.-L. (2003). Psycho-political correlates of political efficacy: The case of the 1994 New Orleans mayoral election. *Journal of Black Studies*, *33*(6), 729–760.

Yang, S.-B., Lee, Y., & Torneo, A. R. (2012). Political efficacy and political trust among marriage immigrants in South Korea. *Philippine Political Science Journal*, *33*(2), 202–223.

Zamora, P. F., & Guerrero-Solé, F. (2018). Measuring political attitudes in new democracies: The case of chile. *Communication & Society*, *31*(3), 93–108. https://doi.org/10.15581/003.31.3.93-108

Zeglovits, E., & Zandonella, M. (2013). Political interest of adolescents before and after lowering the voting age: The case of austria. *Journal of Youth Studies*, *16*(8), 1084–1104. https://doi.org/10.1080/13676261.2013.793785

Annex

1 Measurements political interest

Table A1: Measures all studies political interest general

Study	Measurement source	Measurement	Item scale
Easterbrook et al. (2016)	British Household Panel Study	How interested would you say you are in politics? Would you say you are…	1 very interested 2 fairly interested 3 not very interested 4 not at all interested
Cicognani et al. (2012), Fraile and Gomez (2017), Fraile and Sánchez-Vítores (2020), Ojeda et al. (2023), Quaranta and Dotti Sani (2018), Reher (2020), Superti (2023) and Turnbull-Dugarte and Townsley (2020)	ESS	How interested would you say you are in politics - are you...	1 Very interested 2 Quite interested 3 Hardly interested 4 Not at all interested
Easterbrook et al. (2016) and Le and Nguyen (2021)	ISSP	How interested would you say you are personally in politics?	1 very interested 2 fairly interested (3 somewhat interested) 4 not very interested 5 Not at all interested
Fernández et al. (2021) and van Deth (2000)	WVS/EVS	How interested would you say you are in politics?	1 very interested 2 somewhat interested 3 not very interested 4 not at all interested

Continuing on the next page

Continued from previous page

Study	Measurement Source	Measurement	Item scale
Borkowska and Luthra (2022)	UK Household Longitudinal Study	How interested would you say you are in politics?	very interested fairly interested not very interested not at all interested
Datzberger and Mat (2019)	-	*not reported*	only two categories reported: agree, agree strongly
DeSante and Perry (2016)	Latino National Survey 2006	How interested are you in politics and public affairs? Would you say you are very interested, somewhat interested, or not at all interested?	not sure / don't know not interested somewhat interested very interested
Duquette-Rury et al. (2018)	Mexico 2006 Panel Study	How much interest do you have in politics? How often do you talk about politics with other people	1 a lot 2 some 3 a little 4 none 1 daily 2 a few days a week 3 a few days a month 4 rarely 5 never
Easterbrook et al. (2016)	British Social Attitudes Survey (BSAS)	How much interest do you generally have in what is going on in politics?	1 a great deal 2 quite a lot 3 some 4 not very much 5 none at all

Continuing on the next page

Continued from previous page

Study	Measurement Source	Measurement	Item scale
Ferrín et al. (2020)	-	In general, how interested would you say you are in politics? 19 topics in seven categories	0 not interested … 3 very interested
Fischer-Neumann (2014)	German Socio-Economic Panel (1993–2006)	Generally speaking, how interested are you in politics?	very interested moderately interested not interested disinterested
Furnham and Cheng (2019)	National Child Development Study	not found	0 not at all interested 1 not very interested 2 fairly interested 3 very interested
Hochman and García-Albacete (2019)	CILS4EU	interest in the politics of the survey country, measured as:	very much interested a lot quite a lot a little very little not at all interested
Lasorsa (2009)	-	Would you say that you follow what's going on in government and public affairs most of the time, some of the time, only now and then, or hardly at all?	*not reported*
Mansell et al. (2022)	-	*not reported*	0 not interest at all … 10 a great deal of interest

Continuing on the next page

Continued from previous page

Study	Measurement Source	Measurement	Item scale
Mayer and Schmidt (2004)	-	How would you rate your interest in politics?	very interested interested not really interested uninterested
Miklikowska et al. (2022)	-	How interested are you in politics?	1 very interested … 5 totally uninterested
Ohme et al. (2020)	-	Generally speaking, how interested are you in politics?	0 not interested at all … 10 very interested
Preece (2016)	-	*not reported*	*not reported*
Sasse and Lackner (2020)	-	Interest in politics was measured by the respondents' self-reported level of interest in politics compared to three years ago	1 more interested 2 the same 3 less interested
Shockley (2016)	-	How interested would you say you are in politics?	very interested somewhat interested not very interested not at all interested
Stattin et al. (2017)	-	How interested are you in politics? How interested are you in what is going on in society?	1 totally uninterested … 5 very interested
Syal (2012)	Indian National Election Study 2004	Leaving aside the period of elections, how much interest would you say you have in politics and public affairs – a great deal of interest, some interest or no interest at all?	no interest some interest great deal

Continuing on the next page

Continued from previous page

Study	Measurement Source	Measurement	Item scale
Wolak (2020)	National Longitudinal Survey of Youth 2008	How interested are you in information about what's going on in government and politics?	extremely interested very interested moderately interested slightly interested not interested at all
Wray-Lake et al. (2020)	Monitoring the Future	Some people think about what's going on in the government very often, and others are not that interested. How much of an interest do you take in government and current events?	1 no interest at all 2 very little interest 3 some interest 4 a lot of interest 5 a very great interest

Table A2: Measures all studies political interest different levels

Study	Measurement Source	Measurement	Item scale
Coffé (2013)	-	How interested in … 1 politics 2 local issues 3 national issues 4 international issues	1 very interested 2 fairly interested 3 not very interested 4 not at all interested
Eggert and Giugni (2010)	-	People's interest sometimes varies across different areas of politics. How interested are you personally in each of the following areas? Areas: local (city) politics, country (Swiss) politics, homeland politics (only used local in analysis)	very interested fairly interested not very interested not at all interested
Hahn (1996)	-	*not reported*	*not reported*
Hayes and Bean (1993)	-	I am usually interested in local elections.	1 agree 2 disagree 3 can't choose
Levy et al. (2016)	adapted from Civic Education Study (Torney-Purta, 2001)	rating of political interest on 11 political issues	*not reported*
Sánchez-Vítores (2019)	-	1 In general, how interested in politics are you? People's interest sometimes varies across different areas of politics. How interested are you personally in each of the following areas? 2 local politics 3 national politics	very interested fairly interested not very interested not at all interested

Continuing on the next page

Continued from previous page

Study	Measurement Source	Measurement	Item scale
Stadelmann-Steffen and Sulzer (2018)	-	Measured on five levels: international, national, cantonal, local politics, and politics in general	0 no interest at all … 15 very interested at all levels

Continuing on the next page

Continued from previous page

Study	Measurement Source	Measurement	Item scale
Tormos and Verge (2022)	-	First experiment: 1 Please indicate your level of interest in politics on a scale from 0 to 10, where 0 means 'no interest at all' and 10 means 'a lot of interest'. 2 Please indicate your level of interest in each of the following political issues, on a scale from 0 to 10, where 0 means 'no interest at all' and 10 means 'alot of interest': (1) the environment; (2) The gender pay gap; (3) The quality of the public health system; (4) The situation of refugee people; (5) Gender-based violence. Second experiment: Please indicate your level of interest in politics on a scale from 0 to 10, where 0 means 'no interest at all' and 10 means 'a lot of interest.' By politics we refer to a variety of issues such as … 1 the quality of social services or gender inequalities [order of items rotated]. (Female-oriented issues) 2 governmental and parliamentary activity or the quality of social services [order of items rotated]. (Both female- and male-oriented issues) 3 governmental and parliamentary activity or electoral competition [order of items rotated] (Male-oriented issues)	0 no interest at all … 10 a lot of interest

Continuing on the next page

Continued from previous page

Study	Measurement Source	Measurement	Item scale
Uslucan and Sauer (2020)	-	*not reported*	strong middle less
Zamora and Guerrero-Solé (2018)	-	1 How interested are you in politics? 2 How interested are you in the events that occur in the city? 3 How interested are you in the events that occur in the region? 4 How interested are you in the reality of the country 5 How interested are you in the events that occur in the world	1 not interested at all … 4 absolutely interested

Table A3: Measures all studies political interest indices

Study	Measurement source	Measurement	Item scale
Alozie et al. (2003)	-	1 Did you go to the polls and vote on election day? 2 How important is it for people to vote on election day? 3 When political and social issues are debated at your school, do you participate in those discussions? 4 Would you like to have Kids Voting as part of what you learned in school the next time there was an election? 5 Did you ask questions about voting at home? 6 How often did you watch things about voting on TV? 7 How often did you read things in the newspaper about voting? 8 How often did you hear things about voting on the radio? 9 How often did you read things about voting in magazines?	*not reported* index resulted in: 0 to 9 points

Continuing on the next page

Continued from previous page

Study	Measurement Source	Measurement	Item scale
Alscher et al. (2022)	-	1 If I notice that I am lacking knowledge on a political topic, I seek the necessary information. 2 For me politics is an exciting topic. 3 I often think intensively about a political issue. 4 I observe political events with great interest. 5 Generally speaking I'm interested in politics	totally agree agree neither agree nor disagree disagree totally disagree
Bachen et al. (2015)	-	*not reported fully* *e.g. 'I am interested in political issues'* *(3 items)*	1 Disagree strongly … 5 Agree strongly
Bos et al. (2022)	Noyce Enthusiasm for Science scale	1 Politics, government, and history is something I get excited about. 2 I am curious to learn more about politics, government, history, and things going on in the world. 3 I would like to have a job in government or politics in the future. 4 Learning about history and how the government works is boring.	strongly disagree disagree agree strongly agree
Budiningsih et al. (2021)	-	1 Constant attention 2 enjoyment 3 pride and satisfaction 4 participation support reported these four groups but mentioned 14 question items	1 strongly disagree 2 disagree 3 agree 4 strongly agree

Continuing on the next page

Continued from previous page

Study	Measurement Source	Measurement	Item scale
Chen and Zhong (1999)	-	1 How much are you interested in politics? 2 How much do you care for national affairs? 3 How much do you care for major issues in Beijing? 4 How often do you talk about politics with friends and family members?	1 no interest/never talk … 4 high interest/always talk
Grechyna (2023)	-	*BSS*: 1 Generally speaking, do you think of yourself as a supporter of any one political party? 2 How interested would you say you are in politics? 3 Did you vote in this (past) year's general election? 4 Whether you are a member or not, do you join in the activities of political parties on a regular basis? *ESS*: combined factor of 1 support for a political party 2 interest in politics 3 participation in elections 4 participate demonstrations 5 signed petition 6 contacted politician 7 worked in political group	*BSS*: Each item dichotomised and final index from 0 to 4 *ESS*: Each item dichotomised and final index from 0 to

Continuing on the next page

Continued from previous page

Study	Measurement Source	Measurement	Item scale
Guidetti et al. (2016)	-	1 general political interest in politics 2 frequency of conversations about politics in the previous week 3 interest in the election results	mean of 3 items
Hoewe and Sherrill (2019)	Knobloch-Westerwick and Meng (2011)	1 following news and information about government and public affairs 2 following news and information about elections	1 strongly disagree … 7 strongly agree
Landberg et al. (2017)	-	not findable	1 not interested at all … 5 extremely interested
Oberle and Leunig (2016) and Oberle et al. (2018)	-	five items, item text *not reported* item example: 'Learning about politics is very important to me – regardless of school and other people'	*not reported*
Piumatti et al. (2018)	-	1 How often do you seek information about Italian politics? 2 How often do you talk about politics?	1 never … 6 every day

Continuing on the next page

Continued from previous page

Study	Measurement Source	Measurement	Item scale
Russo and Stattin (2017)	-	1 How interested are you in politics? 2 People differ in what they feel about politics. What are your feelings?	1 totally uninterested … 5 very interested 1 loath 2 very boring 3 boring 4 neither fun nor boring 5 fun 6 great fun
Schmuck et al. (2022)	-	1 I am interested in politics. 2 Politics is an interesting topic for me	1 strongly disagree … 5 strongly agree
Šerek et al. (2017)	-	1 I am interested in politics. 2 I try to keep up with what is happening in politics.	1 absolutely disagree … 4 absolutely agree
Shala and Grajcevci (2018)	-	1 I am interested in political development. 2 I am well informed on the political developments that Kosovo is facing. 3 I pay attention to political campaigns. 4 I am interested on being informed about developments in the government and politics.	*not reported*
Stattin and Korol (2020)	-	1 How interested are you in politics? 2 How interested are you in what is going on in society?	1 totally uninterested … 5 very interested

Continuing on the next page

Continued from previous page

Study	Measurement Source	Measurement	Item scale
Stockemer (2012)	-	1 How much time they spend per day consumed in the news media. 2 How many political discussions they normally conduct per month.	free in hours never rarely sometimes often very often
Takyar (2019)	Survey questions are from Muslims in the American Public Square Survey	*Experiment*: 1 In the next year, how likely do you think you are to visit a political website? 2 In the next year, how often do you think you will discuss politics with family and friends? *MAPS Survey*: 1 How often do you discuss politics with family and friends? 2 How often would you say you follow what's going on in government and public affairs? 3 How important is it for you to participate in politics? 4 How important would you say it is for your children to participate in politics	*not reported*

Continuing on the next page

Continued from previous page

Study	Measurement Source	Measurement	Item scale
van Deth and Elff (2004)	-	When you get together with friends, would you say you discuss political matters frequently, occasionally, or never?	built two dichotomised measures: 1 political involved (who discuss frequently against all others) 2 political apathy: who never discuss against all others
Wei et al. (2021)	-	*not reported* (3 items)	1 never … 4 every day
Wolak (2022)	2016 Cooperative Congressional Election Study	*not fully reported* 1 attention to politics 2 enjoys following politics 3 enjoys discussing politics 4 frequency of political discussions	*not reported*
Zeglovits and Zandonella (2013)	-	1 How interested are you in politics? 2 How often do you follow political news on TV, radio, or the newspaper?	1 very much 2 fairly 3 little 4 not interested at all 1 daily 2 several times a week 3 once or twice a week 4 less often 5 never

2 Measurements political efficacy

Table B1: Measures political efficacy

Study	Measurement source	Measurement item(s)	Item scale	Efficacy dimension	Single item per dimension
AbuAlRub and Abdulnabi (2020)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	*Internal*: 1 I feel that I have a pretty good understanding of the important political issues facing our country. 2 I feel that I have a pretty good understanding of the important political issues facing our world. 3 I consider myself well-qualified to participate in politics. 4 I am confident that I can construct good arguments about political issues. 5 When I share my ideas about political issues, people listen to me. 6 When I have to work with other people towards a goal, I can get others to work towards that goal. 7 I can persuade my peers of my point of view on political issues. 8 I am confident in my public speaking abilities. *External*: 1 If there's a serious national problem, I can do something to get federal government officials to improve the situation. 2 If there's a serious problem in my state, I can do something to get state government official to improve the situation. 3 Public officials care what people like me think. 4 Leaders in my community care what people like me think. 5 I can make a difference in my community. 6 If I think there's a serious problem in my community. 7 I can do something to improve the situation. 8 If there's a serious local problem. 9 I can do something to get local government officials to improve the situation	1 strongly disagree … 6 strongly agree	internal & external	no

Continuing on the next page

Continued from previous page

Study	Measurement source	Measurement item(s)	Item scale	Efficacy dimension	Single item per dimension
Anderson (2010)	-	*Internal*: How much of a difference do you believe you can make in [city name]? Do you believe that you can make a big difference, a moderate difference, a small difference, or no difference at all? *External*: How much do you believe your local representatives (such as county commissioners and city council members) care about what you think is important for [city name]?	1 doesn't care at all … 4 cares to a great extent	internal & external	no
Andrews (1998)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	*Internal*: 1 I feel I have a pretty good understanding of the important political issues facing our country. 2 I consider myself well-qualified to participate in politics. 3 I often don't feel sure of myself when talking with other people about politics and government. 4 I think that I am as well-informed about politics and government as most people. 5 I feel that I could do as good a job in public office as most other people. 6 Sometimes politics and government seem so complicated that a person like me can't really understand what's going on. *External*: 1 Under our form of government, the people have the final say about how our country is run, no matter who is in office. 2 There are many legal ways for citizens to successfully influence what the government does. 3 If public officials are not interested in hearing what the people think, there is really no way to make them listen. 4 People like me don't have any say about what the government does.	1 strongly disagree … 5 strongly agree	internal & external	no

Continuing on the next page

Continued from previous page

Study	Measurement source	Measurement item(s)	Item scale	Efficacy dimension	Single item per dimension
Angelique et al. (2002)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	Six items from a scale constructed to measure political efficacy	1 strongly disagree … 5 strongly agree	mixed	no
Arens and Watermann (2017)	ICCS	1 Thinking in political contexts suits me. 2 As far as the discussion of politics is concerned, I can actually always find something to say. 3 I find it easy to understand political matters. 4 Participation in debates on political topics is easy for me.	1 absolutely disagree … 4 absolutely agree	internal	no
Atkeson and Carrillo (2007)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	Public officials don't care much what people like me think	1 strongly agree … 5 strongly disagree	external	yes
Barber and Torney-Purta (2009)	ICCS	1 I know more about politics than most people my age. 2 When political issues or problems are discussed, I usually have something to say. 3 I am able to understand most political issues easily. 4 I am interested in politics.	*not reported*	internal	no

Continuing on the next page

Continued from previous page

Study	Measurement source	Measurement item(s)	Item scale	Efficacy dimension	Single item per dimension
C. Y. Barnes and Hope (2017)	Cohen (2005)	1 I believe that by participating in politics I can make a difference. 2 I have the skills and knowledge necessary to participate in politics.	1 strongly agree … 4 strongly disagree	mixed	no
Billard (2021)	National Annenberg Election Survey	Someone like me can't really influence government decisions.	1 strongly disagree … 5 strongly agree	external	yes
Branton et al. (2021)	Collaborative Multiracial Post-Election Survey (CMPS) (Barreto et al., 2017)	How effective, if at all, are the following tactics for getting your voice heard by elected officials? 1 voting 2 non-violent protesting.	1 not at all effective 2 not too effective 3 somewhat effective 4 very effective	external	no
Buzdar and Fatima (2022)	ICCS	The section 'political efficacy' consisted of three factors: Internal and external political efficacy.	1 strongly disagree … 4 strongly agree	internal & external	no

Continuing on the next page

Continued from previous page

Study	Measurement source	Measurement item(s)	Item scale	Efficacy dimension	Single item per dimension
Centellas and Rosenblatt (2018)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	*internal*: 1 Voting is the only way that people like me have any say about how government runs things. 2 People like me have no say about what the government does. 3 Sometimes politics and government seem so complicated that a person like me can't really understand what's going on. *External*: 1 Public officials don't care what people like me think. 2 Those we elect to Congress lose touch with the people pretty quickly. 3 Parties are only interested in people's votes, but not their opinions.	*not reported*	mixed & external	no
Cole and Sabik (2010)	Participants were asked to rate their agreement with statements, such as 'I feel like I could do as good a job in public office as most of the politicians we elect'	1 strongly disagree … 7 strongly agree	mixed	no	
Costa and Wallace (2021)	-	1 People like me don't have any say about what the government does. 2 Public officials don't care much what people like me think.	1 strongly disagree … 5 strongly agree	external	no

Continuing on the next page

Continued from previous page

Study	Measurement source	Measurement item(s)	Item scale	Efficacy dimension	Single item per dimension
Eckstein et al. (2015)	ICCS	When political issues or problems are being discussed, I usually have something to say.	1 I do not agree at all. … 5 I totally agree.	internal	no
Emig et al. (1996)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	*External*: 1 Here in the city of Mobile there are many legal ways for citizens to successfully influence what the government does. 2 Under our form of government, the people here in the city of Mobile have the final say about how the city is run, no matter who is in office. 3 If elected public officials here in the city of Mobile are not interested in hearing what the people think, there is really no way to make them listen. 4 The government here in the city of Mobile is very responsive to the needs of people like yourself. *Internal*: How much personal influence do you feel you have in community decision-making?	1 strongly disagree … 5 strongly agree	external & internal	no
Fernandes-Jesus et al. (2012)	-	*Internal*: 1 I know more about politics than most people of my age. 2 When political issues or problems are being discussed, I usually have something to say. *External*: 1 The powerful leaders in the government care very little about the opinions of people. 2 In this country, a few individuals have a lot of political power, while the rest of the people have very little power.	Likert-type scale strongly disagree to strongly agree	internal & external	no
Fraile and de Miguel Moyer (2022)	European Social Survey (different waves)	1 How able do you think you are to take an active role in a group involved with political issues? 2 How confident are you in your own ability to participate in politics?	1 not at all able … 5 completely able	internal	no

Continuing on the next page

Continued from previous page

Study	Measurement source	Measurement item(s)	Item scale	Efficacy dimension	Single item per dimension
Gothreau (2021)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	e.g., 'I consider myself to be well-qualified to participate in politics,' and 'I feel that I could do as good a job in public office as most other people.'	1 strongly disagree … 7 strongly agree	internal	no
Grasso and Smith (2022)	-	*Internal*: 1 I consider myself well-qualified to participate in politics. 2 I feel that I have a pretty good understanding of the important political issues facing our country. *External*: 1 Public officials do not care much what people like me think. 2 People like me do not have any say about what the government does.	*not reported*	internal & external	yes
Grotlüschen et al. (2021)	-	People like me don't have any say in what the government does	1 strongly agree … 5 strongly disagree	external	yes
High-Pippert and Comer (1998)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	1 People like me have no say about what the government does 2 Public officials do not care what people like me think 3 Government and politics is too complicated for people like me to understand.	1 agreement 0 disagreement	mixed	no
Hoewe et al. (2020)	Kushin and Yamamoto (2010)	1 My vote makes a difference. 2 I have a real say in what the government does. 3 I can make a difference if I participate in the election process. 4 Voting gives people an effective way to influence what the government does.	1 strongly disagree … 7 strongly agree	mixed	no

Continuing on the next page

Continued from previous page

Study	Measurement source	Measurement item(s)	Item scale	Efficacy dimension	Single item per dimension
Hoskins et al. (2016)	ICCS	1 I know more about politics than most people [in my age group]. 2 When political issues or problems are being discussed, I usually have something to say. 3 I am able to understand most political issues easily. 4 I am interested in politics.	1 agree strongly 2 agree 3 neither agree nor disagree 4 disagree 5 disagree strongly	internal	no
Hu et al. (2023)	-	*Internal*: 1 I feel that I could do as good a job in public office as most other people. 2 I think that I am as well-informed about politics and government as most people. *External*: 1 It is no use expressing personal opinions because it will not affect government policy anyway. 2 It does not do me any good to express my opinion in public. 2 Discussion with others will not make any difference, so I do not want to waste such time.	1 strongly agree … 5 strongly disagree	internal & external	no
Hynes et al. (2022)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	4 items (*not reported*)	1 strongly disagree … 7 strongly agree	internal	no

Continuing on the next page

Continued from previous page

Study	Measurement source	Measurement item(s)	Item scale	Efficacy dimen-sion	Single item per dimension
Karv et al. (2022)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	I consider myself to be well-qualified to participate in politics. (internal) People like me don't have any say about what the government does. (external)	*not reported*	internal & external	yes
Kim (2022)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	*not reported*	*not reported*	internal & external	no
Kononova et al. (2011)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	seven statements measuring *internal efficacy* toward the US and their home country (e.g. 'People like me don't have any say about what the government does'). *Regime-based efficacy* was measured by statements about the role of political rules and procedures that shape the development of a political regime in a country (e.g. 'There are many legal ways for citizens to successfully influence what the government does'). *Incumbent-based efficacy* was measured by statements about political actors and officials (e.g. 'Politicians are supposed to be the servants of the people, but too many of them think they are the masters')	Seven-point Likert scale	mixed & external	no
Koos (2013)	European Social Survey (different waves)	1 Politics too complicated to understand. 2 Making mind up about political issues.	*not reported*	internal	no

Continuing on the next page

Continued from previous page

Study	Measurement source	Measurement item(s)	Item scale	Efficacy dimen-sion	Single item per dimension
Lay (2017)	-	1 Government is too complicated for me to understand. 2 I'm about as well informed as others on politics and government. 3 I have a good understanding of political issues. 4 Other people understand political issues better than I do.	Likert-scale (*not reported*)	internal	no
Leath and Chavous (2017)	modified version from Cohen (2005)	e.g., 1 I can do something to make the world a better place to live. 2 I believe that by participating in politics, I can make a difference.	1 strongly disagree … 5 strongly agree	external	no
Lee (2006)	Newhagen (1994)	*Internal*: 1 I consider myself well-qualified to participate in politics. 2 I feel that I have a pretty good understanding of the important political issues facing our countr. 3 I feel that I could do as good a job in public office as most other people. 4 I often don't feel sure of myself when talking with other people about politics and government. *External*: 1 There are many legal ways for citizens to successfully influence what the government does. 2 Under our form of government, the people have the final say about how the country is run, no matter who is in office. 3 If public officials are not interested in hearing what the people think, there is really no way to make them listen. 4 People like me don't have any say about what the government does.	*not reported*	internal & external	no

Continuing on the next page

Continued from previous page

Study	Measurement source	Measurement item(s)	Item scale	Efficacy dimen-sion	Single item per dimension
Lenzi et al. (2015)	Adapted version of the Competence for Civic Action scale (Flanagan et al., 2007)	If you found out about a problem in your community that you wanted to do something about (for example, illegal drugs were being sold near a school, or lack of meeting places for young people), how well do you think you would be able to do each of the following? 1 Get other people to care about the problem 2 Organise a public meeting 3 Express your views in front of a group of people 4 Identify individuals or groups who could help you with the problem 5 Write an opinion letter to a local newspaper. .	1 I definitely can … 2 I definitely can't	internal	no
Levy (2013)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	*Internal*: 1 I feel that I have a pretty good understanding of the important political issues facing our country. 2 I feel that I have a pretty good understanding of the important political issues facing our world. 3 I consider myself well-qualified to participate in politics. 4 I am confident that I can construct good arguments about political issues. 5 When I share my ideas about political issues, people listen to me. 6 When I have to work with other people towards a goal, I can get others to work towards that goal. 7 I can persuade my peers of my point of view on political issues. 8 I am confident in my public speaking abilities. *External*: 1 If there's a serious national problem, I can do something to get federal government officials to improve the situation. 2 If there's a serious problem in my state, I can do something to get state government official to improve the situation. 3 Public officials care what people like me think. 4 Leaders in my community care what people like me think. 5 I can make a difference in my community. 6 If I think there's a serious problem in my community. 7 I can do something to improve the situation. 8 If there's a serious local problem. 9 I can do something to get local government officials to improve the situation	1 strongly disagree … 6 strongly agree	internal & external	no

Continuing on the next page

Continued from previous page

Study	Measurement source	Measurement item(s)	Item scale	Efficacy dimension	Single item per dimension
Machackova and Šerek (2017)	modified from Bandura (2006), Caprara et al. (2009) and Sohl and Arensmeier (2015)	1 organize a demonstration (PE1) 2 organize a petition (PE2) 3 negotiate with local politicians (PE3) 4 lead a group of people that is enforcing a certain cause (PE4).	1 absolutely disagree … 4 absolutely agree	internal	no
Marques et al. (2022)	Paulhus and Van Selst (1990) Socio-Political Control scale	1 By taking an active part in political and social affairs we, the people, can control world events. 2 The average citizen can have an influence on government decisions. 3 With enough effort we can wipe out political corruption.	1 absolutely disagree … 4 absolutely agree	external	no
Marx and Nguyen (2016)	European Social Survey (different waves)	All analyses therefore use an additive index of the two internal efficacy questions used in the ESS: the perceived complexity of political reality and the ease with which the respondents can make up their mind about politics.	1 not at all able … 5 completely able	internal	no
Merolla et al. (2012)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	1 How much can people affect government? 2 How much do government officials care? 3 How often does government do what most people want?	1 not at all … 4 a great deal	external	no

Continuing on the next page

Continued from previous page

Study	Measurement source	Measurement item(s)	Item scale	Efficacy dimension	Single item per dimension
Metzger et al. (2020)	-	3 items on *political knowledge efficacy* (e.g., 'I think that I am better informed about politics than most people my age') 2 items on *political action efficacy* (e.g., teens like me can join political rallies or protests and make a difference) .	1 strongly disagree … 5 strongly agree	internal & external	no
Murphy (2016)	-	1 I consider myself well able to participate in politics. 2 I feel I could do as good a job in political office as most other people of my age. 3 I feel that I have a pretty good understanding of the important political issues facing Ireland. 4 I think that I am better informed about politics and government than most people	1 not at all true … 5 very true	internal	no
Newhagen (1994)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	*Internal*: 1 I am qualified enough to participate in politics. 2 I understand political issues correctly. 3 I could do as good of a job as a public official as any other person. 4 I don't feel sure of myself when discussing politics. *External*: 1 There are legal ways for people to influence government decisions. 2 Under our form of government, the people have the final say about how the country is run, no matter who is in office. 3 People like me don't have any say about what the government does. 4 I don't think public officials hear what people like me think	1 agree strongly 2 agree somewhat 3 disagree somewhat 4 disagree strongly	internal & external	no

Continuing on the next page

Continued from previous page

Study	Measurement source	Measurement item(s)	Item scale	Efficacy dimension	Single item per dimension
Ohme et al. (2019)	-	*Internal*: 1 Sometimes politics is so complicated that a person like me cannot really understand what is going on. 2 Generally speaking, I do not find it that difficult to take a stand on political issues. 3 When politicians debate economic policy, I only understand a small part of what they are talking about. 4 Citizens like me do not have any influence on the decisions of the Parliament and Government. 5 Citizens like me are qualified to participate in political discussions. 6 Citizens like me have opinions on politics that are worth listening to. *External*: 1 Politicians do not really care what the voters think. 2 Usually you can trust the political leaders to do what is best for the country. 3 In fact, there is almost no difference between what the major parties say. 4 The politicians waste a lot of the taxpayer's money	1 totally disagree … 5 totally agree	mixed & external	no
O'Rourke et al. (2017)		*Internal*: 13 questions, derived from ANES (1988). *External*: trust and confidence in government based on Gallus poll	*not reported*	internal & external	no
Osborne et al. (2015)	Paulhus and Van Selst (1990) Socio-Political Control scale	1 The average citizen can have an influence on government decisions. 2 By taking an active part in political and social affairs we, the people, can control world events.	1 strongly disagree … 7 strongly agree	external	no

Continuing on the next page

Continued from previous page

Study	Measurement source	Measurement item(s)	Item scale	Efficacy dimension	Single item per dimension
Pang (2018)	Kenski and Stroud (2006)	1 People like me don't have any say about the government authorities do. (external) 2 Sometimes politics and government appear so intricate that a person like me can't really know what the hell is happening. (internal)	1 strongly disagree … 5 strongly agree	internal & external	yes
Pesic et al. (2021)	European Social Survey (different waves)	1 How much would you say that the political system in Serbia allows people like you to have an influence on politics? 2 How much would you say the political system in Serbia allows people like you to have a say in what the government does? 3 How much would you say the political system in Serbia ensures that everyone has a fair chance to participate in politics? 4 How much would you say the government in Serbia takes into account the interests of all citizens? 5 How much would you say that decisions in Serbian politics are transparent, meaning that everyone can see how they were made?	five-point Likert-scale	external	no
Peterson and Palmer (2017)	-	1 whether he or she has any say in government. 2 whether officials care about what the respondent thinks.	*not reported*	external	no
Pruysers and Blais (2014)	-	Sometimes politics and government seem so complicated that a person like me can't really understand what's going on.	1 strongly disagree … 10 strongly agree	internal	yes

Continuing on the next page

Continued from previous page

Study	Measurement source	Measurement item(s)	Item scale	Efficacy dimension	Single item per dimension
Ro et al. (2019)	-	1 I feel like I have a good understanding of political issues facing this country. 2 I believe I have a role to play in the political process. 3 When policy issues are being discussed, I usually have something to say. 4 I think I am better informed about politics and government than most people. 5 I consider myself well qualified to participate in the political process.	1 strongly disagree … 6 strongly agree	internal	no
Schur et al. (2003)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	*Internal*: 1 Sometimes politics and government seem so complicated that a person like me can't really understand what's going on. 2 I consider myself well-qualified to participate in politics. 3 I think that I am better informed about politics and government than most people). *External*: 1 Public officials don't care much about what people like me think 2 People like me don't have any say about what the government does.	1 strongly agree … 5 strongly disagree	internal & external	no
Šerek et al. (2012)	Šerek and Macek (2010)	1 If I don't like what's happening in my surroundings, it pays off to do something. 2 The effort to change something in my surroundings is usually condemned to failure. 3 If something bad happened in my surroundings, I believe I could stop it, together with other people. 4 People like me can influence what is happening at the place where they live. 5 The effort to change something at the place where I live is usually a waste of time and resources. 6 People have many opportunities to successfully achieve change in their surroundings.	1 completely disagree … 4 completely agree	mixed	no

Continuing on the next page

Continued from previous page

Study	Measurement source	Measurement item(s)	Item scale	Efficacy dimension	Single item per dimension
Stauffer (2021)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	1 Government officials care what people like me think. 2 People like me have a say in what the government does	1 strongly disagree … 5 strongly agree	external	no
Strohmeier et al. (2017)	Barrett and Zani (2014)	*Internal*: three items, e.g. 'I know more about European issues than most people of my age.' *External*: three items, e.g. 'The European Union is doing its best to find out about what young people in Europe want.'	1 strongly disagree … 5 strongly agree	internal & external	no
Tedesco (2011)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	1 Whether I vote or not has no influence on what politicians do. 2 One never knows what politicians really think. 3 People like me don't have any say about what the government does. 4 Sometimes politics and government seem so complicated that a person like me can't really understand what's going on. 5 One can be confident that politicians will always do the right thing. 6 Politicians often quickly forget their election promises after a political campaign is over. 7 Politicians are more interested in power than in what the people think. 8 One cannot always trust what politicians say.	1 strongly disagree … 5 strongly agree	mixed	no
Vashdi et al. (2019)	Anderson (2010)	To what extent does your government care about the community you reside in?	1 doesn't care at all … 4 cares to a great extent	external	yes

Continuing on the next page

Continued from previous page

Study	Measurement source	Measurement item(s)	Item scale	Efficacy dimension	Single item per dimension
Wen et al. (2013)	-	1 I am knowledgeable enough to participate in politics and community affairs. 2 I am better informed about politics and government than most people.	1 strongly disagree … 4 strongly agree	internal	no
Williamson and Scicchitano (2015)	-	Feeling a great deal of ability to influence government decision making	1 not feeling able … 5 feeling a great deal of ability	external	yes
Wolak (2020)	Young Adults panel survey in the National Longitudinal Survey of Youth (NLSY)	*not reported*	*not reported*	internal	no
Wong et al. (2019)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	1 How much do public officials care what people like you think? 2 How much can people like you affect what the government does?	*not reported*	external	no
Wu (2003)	adapted/based on Craig and Maggiotto (1982) or Craig et al. (1990) or ANES (1988) or Niemi et al. (1991)	1 People like me don't have any say about what the government in City Hall does. Do you agree or disagree about this? 2 I don't think public officials in City Hall care much what people like me think. 3 Sometimes politics and government in City Hall seem so complicated that a person like me can't understand what is going on.	1 agree 3 neither [volunteered] 5 disagree	external	no

Continuing on the next page

Continued from previous page

Study	Measurement source	Measurement item(s)	Item scale	Efficacy dimension	Single item per dimension
Yang et al. (2012)	Ahn and Boyer (1986)	1 There is nothing for a person like me to influence on what happens in the government. 2 The government is not interested in the opinion of a person like me. 3 Politics seems so complicated that a person like me cannot really understand what is going on.	five-point Likert-scale	mixed	no
Zamora and Guerrero-Solé (2018)	Hansen and Pedersen (2014)	*External*: 1 Politicians do not really care what the voters think. 2 Politicians waste a lot of the taxpayer's money. 3 Citizens like me do not have any influence on the decisions of congress and government. *Internal*: 1 Generally speaking, I do not find it that difficult to take a stand on political issues. 2 Citizens like me are skilled enough to participate in political discussions. 3 Citizens like me have opinions on politics that are worth being heard.	1 do not agree at all … 5 totally agree	internal & external	no

www.g-epic.eu

gepicproject@gmail.com
gepicteam@gmail.com
inf@g-epic.eu

@gepicproject

G-EPIC
Gender Empowerment through Politics in Classrooms

Horizon Europe