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Editorial Note:

This report presents major results of the project 'Political Interest, Involvement, and Affect' (PIEB) financed by the German National Science Foundation (DFG; Grant 630/2-1) and the Mannheimer Zentrum für Europäische Sozialforschung (MZES). *Jan W. van Deth is professor of political science and international comparative social research at the University of Mannheim and director of the MZES. Martin Elff worked as a research fellow at the MZES for the PIEB-Project. Since Autumn 2000 he works as a assistant lecturer at the Chair for political science and international comparative social research at the University of Mannheim.*

Abstract

Many studies have underlined the existence of clear and persistent differences in the levels of political interest among European citizens. In this report these differences and developments in political involvement and political apathy are described and analysed, and conventional explanations in terms of socio-demographic characteristics of individuals (education, gender, age and date of birth) are reviewed. Although the general level of political involvement remains more or less stable, the level of political apathy declines in the last decades. Socio-demographic characteristics still count for differences in political interest, but their impact has declined in several countries since the early 1970s. Especially a waning of gender-related differences can be observed among the youngest cohorts, accounting at least partially for a decline in political apathy across Europe. This conclusion does not defy the observation of persistent and substantial cross-national differences in Europe. Besides, all results underline that political involvement and political apathy cannot be treated as simple complementary concepts.

Contents

1 Introduction

Ever since Pericles delivered his famous funeral speech more than 2,400 years ago the idea of citizens' involvement as a necessary condition for democratic decision-making processes has been stressed. In order to be noticeable, citizens have to express their demands, wishes, expectations, conceptions, and interests, and these expressions require at least some minimum level of engagement. According to Pericles, the unique character of democracy is that a person, who does not take an interest in public affairs, is considered "not as a harmless, but as a useless character".[1] Basically relying on a similar logic Benjamin Barber (1984 and 1995) argued for a much more 'participatory' democracy, as an alternative for liberal 'thin democracy' or 'politics as zoo keeping' more recently. He defends the idea of a 'strong democracy', which "requires unmediated self-government by an engaged citizenry" (Barber 1984: 261). Engagement in politics is not to be considered as a specific type of activity – it is an integral part of social life and essential for the well-being of every individual.[2]

Even if we are not willing to go as far as Barber to regard direct and active involvement of citizens in modern societies as the single symptom of some 'strong' democracy, the echo of Pericles' verdict still can be heard.[3] Nowadays, a lack of political involvement is considered destructive for democracy by most authors and the inevitability of a minimum level of political interest is generally accepted. Without a minimum level of this kind of interest citizens would not even be aware of the political process or of the opportunities to defend their well-being and to contribute to collective decision making. But that does not imply that in modern democracies each and every citizen has to be informed and engaged in discussions about every issue. An 'attentive public' could replace a well informed and participating citizenry (Dahl 1989: 339) and guard democratic decision-making processes. The debate, then, is about the *degree* of involvement in democratic systems – not about the requirement of involvement (cf. Berelson et al. 1954: 307; Almond and Verba 1963: 474-9; Barber 1984: 117). Surely, paying attention to political phenomena will often be accompanied by actual participation. It is, however, the prerequisite of showing some degree of political interest and concern that establishes the line of demarcation between democratic and non-democratic citizenship.

In addition to the prominent role of political interest in normative democratic theory, the specific characteristics of interested citizens have been evident ever since the rise of survey research in the late 1940s. A number of studies show that the more interested citizens have more – and more outspoken – opinions on political issues, participate more actively in campaigns, and expose themselves more to political information than do less interested people, while the better educated, the

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1 This quotation from Thucydides' famous account is taken from Sabine and Thorson (1973: 28). A number of other translations are available, many of them presenting slightly different wordings.

2 Even from these very brief quotations, the Rousseauen background of Barber's work is evident. See for a critical appraisal of his work, for instance, Cohen and Arato (1992) or Reese-Schäfer (1994).

3 Yet most of the time, these 'echoes' do not even mention Pericles (see, for example, Elshtain 1997).

more prosperous, and the more prestigious categories also are among the most interested parts of the population (cf. Lazarsfeld et al. 1948: 42-3; Campbell et al. 1954: 72-3; Lane 1959: 326). Beside, political interest is a major determinant of the coherence and persistence of political orientations ('mass belief systems'): interested citizens clearly demonstrate more coherent and persistent attitudes than other people (cf. Converse 1970; Kinder 1983; Nie and Andersen 1974; Niedermayer 1990: 26; van Deth 1990; Westerhof 1994). Political interest, then, plays a crucial role in both normative and empirical research on the functioning of democratic decision-making processes.

In this paper the differences and developments in political involvement and apathy among European citizens are described and analysed. Firstly, indicators for political involvement and apathy are used to explore the developments in the last few decades and to depict rather persistent cross-national differences. Secondly, conventional explanations in terms of socio-demographic characteristics of individuals (education, gender, age and date of birth) to explain political involvement and apathy are reviewed and tested. Gradually the degree of political interest of citizens seems to become less determined by structural factors. Finally, we present rigorous analyses of the longitudinal and cross-national differences encountered. The database consists of a combination of all Eurobarometer surveys available for the period from 1970 to 1998, compromising a total of more than 900,000 respondents in a number of European countries (see Appendix C).[4]

2 Political Interest

2.1 Measuring Political Interest

In spite of the crucial position of political interest in many approaches and debates about public opinion and democratic decision making, no generally accepted conceptualisation is available. Political interest has been defined and operationalised in several ways and concepts like *interest in politics*, *political involvement*, *psychological involvement*, and *political apathy* are used to cover more or less the same phenomenon.[5] In order to avoid any confusion with direct advantages or profits to be gained from political activities or with behavioural manifestations of political interest like distinct modes of political participation, the concept political interest must be delimited from political motivation, involvement, or participation in an unambiguous way. Political interest is defined here as the "degree to which politics arouses a citizen's curiosity" (van Deth 1990: 278); it is the 'attentiveness to politics' (Zaller 1992:18) and the potential readiness to participate. It is not – as already indicated – a mode of

[4] The data set include the European Community Study 1973, as well as every Eurobarometer survey in the period mentioned (Eurobarometer 3 through 49; see Appendix C). The data set is especially developed for the project 'Political Interest, Involvement, and Affect' (PIEB) financed by the German National Science Foundation (DFG) (Grant 630/2-1) and the Mannheimer Zentrum für Europäische Sozialforschung (MZES). This generous support is gratefully acknowledged here.

[5] See for distinct definitions and demarcations of the concept political interest and related concepts: Sigel and Hoskin (1981: Ch. 3-6), Bennett (1984: 31-9), Gabriel (1986: 179-82), van Deth (1990: 276-82), and Zaller (1992: 43 and 333-6).

political behaviour, but a type of political commitment and involvement only. In this sense, political interest is equivalent to paying 'attention', which is "a prerequisite for learning anything" that might give citizens the opportunity to participate in democratic decision-making processes (Lupia and McCubbins 1998: 22) and "building an informed citizenry" (Delli Carpini and Keeter 1996: 175). Our concern is with the willingness of individuals to take notice of politics, irrespective of possible benefits or losses of this type of action. Consequently, political apathy is defined simply as a clear lack of political interest.[6]

The most commonly used way to avoid the complications related to the distinction between interest and behavioural utterances or consequences of interest, is to register an expression of the degree of political interest with a simple self-placement question: "How interested would you say you are in politics?". This type of measure is called *subjective political interest*. Although variants of this straightforward instrument have been used in many studies in a number of countries since the early voting studies in the 1940s (Lazarsfeld et al. 1948: 24-5), relatively few studies are available for comparative and cross-national analyses of political interest. For that reason another instrument is selected here, and the advantages of using the simple measure of subjective political interest are sacrificed. The disadvantage of this strategy is, of course, the possible introduction of other motivations or goals of the individual then curiosity about politics. An instrument based on this kind of arguments should refer to a type of behaviour in an informal context where the selection of topics depends on the particular concern of the people involved. Virtually all Eurobarometer studies rely for this direct utterance of political interest on a straightforward question:

> "When you get together with friends, would you say you discuss political matters frequently, occasionally, or never?"

This question on the *frequency of political discussion* is used here as an indicator of the direct expression of political interest; that is, as a surrogate indicator of the degree of citizens' curiosity about politics.

Using several variants of the measures for subjective political interest and discussion frequency a number of studies present information about the development of political interest in Europe. For the period up to the early 1970s the authors of the *Political Action Study* note: "One change that can be unambiguously demonstrated with survey data and is of major importance with respect to the structure of political action is the increasing political involvement of the citizenry" (Kaase and Marsh 1979: 36). Dalton concludes for the years between the early 1950s and the 1980s: "The available evidence is often incomplete, and different survey questions are used in each nation, but the trend of increasing political interest is unmistakable" (1988: 22 and 1996: 26). However, the trend of increasing political interest is not a universal phenomenon. For a large number of Western European countries in the last decades it can be shown that political interest increases in some countries, decreases in other, or shows trendless fluctuations in remaining countries (van den Broek and Heunks 1993; Gabriel and

[6] An extensive discussion of the concept 'political apathy' is presented by DeLuca (1995). The seminal article on political apathy is, of course, the exposition by Rosenberg (1954).

van Deth 1995; Topf 1995; van Deth 1996). For the United States a trend of decreasing political interest does not seem to be unlikely (Bennett 1984: 552; van Deth 1990: 282; Miller and Shanks 1996: 107-11). Yet it is also clear that the absolute levels of political interest in most countries are still rather low. The early voting studies depicted the average citizen as not strongly involved in politics (cf. Berelson et al. 1954: 24; Campbell et al. 1960: 91, 102-3) and more recent analyses of trends in political involvement in Europe arrive at the conclusion that on average only one out of every six European citizens frequently discusses politics with his or her friends, while every third citizen never touches upon this topic (cf. Inglehart 1990: 353-4; Topf 1995: 61; van Deth 1991: 204 and 1996: 386-7). Behind each and every summary of aggregated figures huge cross-national differences can be observed (van Deth 1996a: 387).

Most of the results reported in this area are based on analyses of the differences and changes in the average level of subjective interest or the frequency of political discussions. Since the responses 'talking about politics frequently' or 'occasionally' are not easy to distinguish, the use of those categories as quasi-interval scales for political interest is not appropriate and might result in an overestimation of the actual degree of curiosity. The only unambiguous response is 'never' engaging in political discussions. Consequently, the concept political apathy can be defined in a clear-cut way. Respondents providing this answer show an evident lack of political interest and this response – and only this response – is considered to be an indicator of *political apathy* (van Deth 1991: 206). The two remaining positive categories indicate at least some degree of political interest, but especially the response that the respondent discusses politics 'frequently' suggests a clear amount of political interest. Therefore, this response – and only this response – is considered to be an indicator of *political involvement* here (Gabriel and van Deth 1995: 396). So the answers to the straightforward question on the frequency of political discussion are used to construct two dichotomised measures: one for political involvement (those who discuss politics frequently versus all other respondents) and another one for political apathy (respondents who never discuss politics versus all other respondents).[7]

2.2 Constructing Equivalent Measures

Before we turn to the actual development of political involvement and apathy in Europe, the question should be addressed whether the instrument based on discussion frequency taps similar orientations as the traditional question on subjective political interest does. In the Eurobarometer studies both measures are available, with frequency of political discussions present in almost all waves and subjective political interest present in a few waves only. To be considered as equivalent on the individual level two indicators ought to show a substantial degree of association. Indicators showing no association at all can hardly be considered as equivalent measures of similar concepts. Furthermore, if the level of measurement of the indicators is categorical and if the distinct categories of the

[7] Notice that these operationalisations imply conservative estimations of the levels of involvement and apathy if all non-valid answers are also treated as 'not interested' or 'not apathetic' respectively.

indicators are also considered to be equivalent, a large proportion of the observations ought to be classified into identical or highly similar categories; that is, respondents with a high or low level of political interest should obtain the same label when the measure of subjective political interest is applied or the frequency of political discussions is considered. Following this line of reasoning, Table 1 presents several indicators of the equivalence of the two questions.[8] First, the proportions of identical and similar classifications of respondents based on subjective political interest and the frequency of political discussions are shown. Second, the association between the two full scales is computed. Third, similar classifications and associations are computed for the measures of political involvement and political apathy, respectively, based on subjective political interest and on the frequency of political discussions. The results obtained with the full scales of frequency of political discussions and of subjective political interest show that almost two third of all respondents that answered both questions are classified into categories considered to have identical meaning. The same applies, with some qualifications, for the respondents of each country separately. Except for Greece, in every country considered here the proportion of respondents *identically* classified on the basis of both indicators is at least 60 percent. In addition, we find that in all countries almost all respondents are classified into *similar* categories on both scales. Considering the measures of association (gamma), the results obtained also lead to a positive assessment of the equivalence of both instruments of political interest. In all nations gamma is at about 0.7 or higher.[9]

We have seen that the full-scale versions of the indicators of subjective political interest and of the frequency of political discussions are fairly equivalent measures of the concept political interest. Since the two measures of political involvement and political apathy are derived from these full scales, the two specific measures will be equivalent *a fortiori*. The results presented in the right part of Table 1 confirm this expectation. In Europe as well as in each country considered separately, the various measures classify at least about 70 percent of the respondents into identical categories. For political involvement, only in Greece somewhat less than 70 percent of the respondents are classified into identical (both involved and both uninvolved) categories.[10] The measures for political apathy classify at least 73 percent of the respondents into identical categories (both apathetic and both non-apathetic) and show a coefficient of association of at least 0.76.

Although the various measures for political interest are not identical, the results summarised in Table 1 clearly indicate that these instruments tap very similar orientations. For that reason, we will use the

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8 All tables and figures are presented at the end of this report.

9 Obviously, no monotone relationship between the proportion of identically classified respondents and the association measure gamma is observed. This seeming anomaly is due to the fact that the gamma measure is constructed according to a different logic than the proportion of identically classified observations. As is shown by Agresti (1990: 23) gamma can even be *negative* if the proportion of identically classified observations is extremely high.

10 That both measures of political interest classify most of the respondents into identical or similar categories and show a high degree of association is not the whole story. An additional requirement for equivalence is that both measures show the same pattern of relationships with major socio-demographic antecedents (van Deth 1998). As will become clear from Table 2, frequency of political discussion and subjective political interest as well as the two derived measures for involvement and apathy do fulfil this requirement. In all cases, the most important predictor is education, followed by gender, and age or date of birth.

much more extensive set of data based on the question about the frequency of political discussions for our further analyses. The variants for political involvement and for political apathy derived from this measure apparently can be used to trace differences and developments of political interest across Europe in the last three decades.

2.3 Political Interest in Europe

The developments of political involvement and apathy in Europe in the last decades are depicted in Figure 1a and 1b respectively. For these analyses the available Eurobarometer studies are pooled for each year and weighted according to the relative shares of national populations. In that way, estimates are obtained for the developments in Europe. Due to preparations for the enlargements of the European Union and for some other reasons, the original set of country subsamples covered by the Eurobarometer studies since 1973 (Belgium, Denmark, France, Germany (West), Great Britain, Ireland, Italy, Luxembourg, and the Netherlands) was extended over time by additional country subsamples (Northern Ireland 1975; Greece 1980; Spain and Portugal 1985; Germany (East) and Norway 1990; Finland 1993; Austria and Sweden 1995). Therefore, the figures show different lines for different sets of countries in addition to the information based on the pooled data set for all available surveys.

A first inspection of the trends in Figure 1a and 1b already results in a range of interesting conclusions. First, it is clear that about 15 percent of the Europeans undoubtedly pay attention to politics and this amount remains more or less the same over the whole twenty-five years period considered here. Only in the most recent phase we observe a decline in political involvement similar to the decrease in the mid-1970s. The admission of additional countries corroborates this conclusion and virtually no composition effects can be noticed. Political involvement, then, seems to be rather enduring at this level of aggregation. Figure 1b tells a different story for the development of political apathy. At the beginning of the period considered about 35 percent of the Europeans unambiguously show a lack of political interest. This share of the population gradually decreases to about 30 percent in the second part of the 1990s. Especially the entrance of Greece and Northern Ireland unmistakably means a reduction of the average level of political apathy in Europe, which has been neutralised to some extent by the relatively high levels of political apathy, which accompanied the entrance of Spain and Portugal.

Contrary to the findings for political involvement, the level of political apathy has been reduced in Europe since 1973. Besides, the cross-national differences for this last measure of political interest are substantial when compositional effects due to the addition of new countries are considered. While the aggregate figures for political involvement show modest compositional variation only, the results for political apathy suggest much more variation between distinct countries. These results are particularly puzzling if one sticks to the idea that political involvement and apathy can be treated simply as complementary concepts. The divergent conclusions presented in the literature briefly summarised in Section 2.1 could be the consequence of the rather uncritical use of average scores for

ordinal measures of political interest in many analyses. The results presented in Figure 1a and 1b make clear that political involvement remained more or less stable at the aggregate level in Europe in the last decades, while – *at the same time* – the level of political apathy declined. The entrance of new countries does not lead to a modification of this conclusion.[11]

3 Socio-demographic Antecedents of Political Interest

3.1 Expectations

Traditionally, differences in political interest among citizens are attributed to individual resources and skills. A virtually endless number of studies at the micro-level have confirmed the relationships between political interest and socio-economic status, occupation, education, age, gender, and income.[12] Developments at the macro-level as described in the previous section, then, might be the result of compositional changes in socio-structural or socio-demographic antecedents of political interest at the micro-level.

A first candidate for explaining these developments is a rise of the level of education among the population. Education is an indicator of the level of (political) knowledge and of (political) skills that people possess, and can be used as an indicator of the capacity to comprehend political phenomena (Campbell 1962: 20-1; van Deth, 1990: 301). The fact that people with higher levels of education tend to show more interest in politics – and participate at a higher level – than those with lesser education is confirmed in a large number of studies (Lazarsfeld et al. 1948: 43; Berelson et al. 1954: 25; Campbell et al. 1954: 72; Campbell et al. 1960: 479; Almond and Verba 1963: 381; Lane 1965: 50, 222, and 351-2; Bennett and Klecka 1970: 381; Di Palma 1970: 143; Verba and Nie 1972: 98-100 and 126; Milbrath and Goel 1977: 98; Marsh and Kaase 1979: 100; Lipset 1981: 103; Bennett 1986: 72; van Deth 1990: 306; 1995: 6; and 2000b; Denters and Geurts 1995: 104; Verba et al. 1995: 305). In the last few decades higher education is opened up for the general public in many countries, resulting in rapidly increasing average levels of education, especially among younger cohorts. A decrease in the level of political apathy, then, might be well due to a rise in the level of education among the population.

A second major socio-demographic antecedent taken into account in many approaches at the individual level is sex or gender. To the well-established results of empirical research belongs the observation that women are less likely to be interested in politics than men (cf. Berelson et al. 1954: 25; Almond and Verba 1963: 390 and 393; DiPalma 1970: 135; Milbrath and Goel 1977: 48; Welch 1977: 722; Verba et al. 1978: 263; Black and McGlen 1979: 476; Randall 1982: 40; van Deth 1983:

[11] A number of additional analyses have been performed (using unweighted data and data weighted with country weights), but none of these variants leads to conclusions that differ substantially from the inferences presented here on the bases of the data weighted with euroweights.

484; 1990: 306; 2000a; and 2000b; Bennett 1986: 72; Bennett and Bennett 1989: 106; Castenmiller and Dekker 1987: 419; Gemmeke 1998: 131-40; Liebert 1998). The concept gender – the social construction of sex – is preferred in order to make clear that genetic or biological factors are not considered to play a prominent role. Instead of a 'genetic bias' a 'social bias of political involvement' is postulated which accounts for the differences between men and women (cf. Harris 1998: 218-39). A decline of political apathy in Europe might be the result of the changing social and economic position of especially younger women after the second wave of emancipation in the 1970s.

Mentioning specific aspects of younger people brings us to age and year of birth as a third demographic antecedent of political interest. Usually, age is seen as a surrogate variable for social and psychological aging (life-cycle or age effects, cf. Tingsten 1937; Glenn and Grimes 1968: 563-6; Verba and Nie 1972: 139; Milbrath and Goel 1977: 114; Jennings and Niemi 1981: 381; van Deth 1990: 302-3; and 2000b), and – when date of birth is used – for the experience with specific historical events (birth cohort effects, cf. Inglehart, 1990: 77; van Deth 1990: 303; and 2000b; van den Broek 1996: 82; Bennett 1986: 96). Combining the effects of age and education into a cohort composition interpretation results in the prediction that the oldest birth cohorts have lower levels of political interest than younger cohorts, since they are less well equipped with political skills and resources (Jennings and Markus 1988: 2). In this context, their much lower educational level is often mentioned as the main cause for lower levels of political interest (Glenn and Grimes 1968: 565; Verba and Nie 1972: 140; Milbrath and Goel 1977: 115).

3.2 Empirical Results

The three factors education, gender, age or date of birth are used here as indicators of the general level of resources and skills available to the individual. Obviously, these factors are interdependent and so empirical analyses have to take into account the combined impact of these variables on the degree of political interest. Furthermore, in a longitudinal study of these effects age and date of birth are not identical and have to be treated separately. Table 2 presents the results of logistic regressions of political involvement and political apathy as dependent variables and education, gender, and age or year of birth, respectively, as predictors.[13] These computations show that education and gender are most relevant for the explanation of both political involvement and political apathy. Especially education seems to be related to political apathy. Linear effects of year of birth and age are much weaker. For both instruments – discussion frequency and subjective political interest – education and gender show stronger effects on political apathy than on political involvement, whereas age and year of birth have stronger effects on political involvement than on political apathy. These results confirm

[12] See for an early summary of this research Milbrath and Goel (1977: 46-8, 96, 98 and 102). Other discussions are provided, among others, by Bennett (1984) and especially Verba et al. (1995).

[13] For cross-national comparisons, the variable 'education' is operationalised here with the age when respondents finished full-time education, collapsed into three categories: low (up to 15 years old), medium (16 to 19 years old), and high level of education (20 or more years old). Respondents still studying are classified according to their eact age. For the variable 'age' the exact age in years, and for the variable 'year of birth' the exact year of birth is used.

the conclusion drawn at the end of Section 2.2 that involvement and apathy cannot be treated as simple complements of each other.

Before we take a closer look at the cross-national differences and developments in the antecedents of political interest in Europe, possible additional explanatory factors at the individual level should be considered. Including education, gender, and age or date of birth in a multivariate model probably implies that the combined effect of these three factors provides an acceptable estimation of the socio-structural position of each respondent. Adding additional factors like income or occupation will hardly increase the explanatory power of our models in a substantial way since their impact is to a large extent already covered by the traditional three factors included. Moreover, because the willingness of respondents to give information about their incomes is rather limited and because a considerable part of the Eurobarometer samples consists of economically inactive people, the number of available cases would be reduced considerably if these factors were included. For that reason, the empirical analyses presented so far have been restricted to the multivariate effects of education, gender, and age or date of birth for political interest in several countries in the last decades.

Presuming that specific factors will have no additional impact on the level of political interest is an easy strategy to obtain comfortable conclusions. The question is, however, what the empirical validity of these considerations is. In order to obtain a tentative answer to that question, the number of antecedents is expanded with several socio-demographic as well as cultural factors. Unfortunately, the opportunities here are severely limited by the very restricted number of variables available for cross-national and longitudinal comparisons. Many interesting variables are only included in one or two surveys and therefore cannot be used here. Additional socio-demographic factors available in a number of studies are class, income, family situation (couple versus single; number of children), religion (church attendance), and community size (objective and subjective).[14] Available cultural factors are political value orientations (postmaterialism), ideology (left-right placement), attitude towards social change, and satisfaction with democracy.[15] Since the main objective of the analyses

[14] The variable 'class' is operationalised by a fivefold schema that distinguishes manual workers, routine non-manual workers, service class ('salariat'), self-employed, and farmers. This class schema is based on the occupation of economically active respondents or on the occupation of the head of household of economically inactive respondents. 'Family income' is operationalised by the income quartile measures as available in the Eurobarometer studies. The variable 'marital status' distinguishes between single, married, living together/as married, divorced, separated, and widowed. 'Subjective size of community' is based on the estimation of respondents whether they live in a rural area or village, in a small or middle-size town, or in a large town. The variable 'objective size of community' is based on data from the survey institutes, which are homogenised for comparison across countries and time points. The number of children is based on reports of the respondents and comprises the categories one, two, three, and four or more children.

[15] The variable 'postmaterialism' is based on the four-item index developed by Inglehart with categories materialist, mixed, and postmaterialist. 'Attitude towards social change' is based on a question regarding the fundamental or basic attitude towards society and that allows for the following three answers: 'the entire way our society is organised must be radically changed by revolutionary action', 'our society must be gradually improved by reforms', and 'our present society must be valiantly defended against all subversive forces'. The variable 'church attendance' is operationalised by a question how often respondents go to church allowing for the answers: several times a week, once a week, few times a year, and never. 'Satisfaction with democracy' is operationalised by a question asking whether respondents are very satisfied, fairly satisfied, not very satisfied, or not at all satisfied. The variable 'ideology' is based on a ten-category left-right self-placement scale ranging from 'left' (1) to 'right' (10).

presented here is to answer the question whether education, gender, and age or date of birth together cover the position of the respondents sufficiently, no further elucidation of the factors selected is presented. Besides, the additional factors are included in the models only *after* the variables education, gender, age or date of birth are entered. In that way, the effects reported for the impact of these additional factors are not contaminated by the impact of the conventional three variables.

The results of the model estimates for political involvement and for political apathy are summarised in Table 3a and 3b respectively. These tables show the specific effects of including additional predictors on several measures of the 'fit' of the models. If there are any increases of the explanatory power caused by the inclusion of additional socio-demographic or cultural predictors, these effects are rather limited. The predictor that contributes most to the explanatory power of the model of political involvement as indicated by the various Pseudo-R^2 -values is postmaterialism. However, the percentage of correctly predicted responses *decreases* when this predictor is added to the original model! The predictor income contributes most to the explanatory power of the model of political apathy, both in terms of the changes in Pseudo-R^2-values and in the percentages of correctly predicted responses. Yet, these modest gains in explanatory power are largely outweighed by loosing a considerable number of available cases. One fourth to one third of the available cases would have to be sacrificed if we were to add this variable to the original model. Thus neither an extension of the model of political apathy nor of the model of political involvement seems worthwhile.

The attempts to broaden the scope of explanatory factors for political interest in Europe after education, gender, and age are considered, prove to be rather unsuccessful. Although in particular postmaterialism has an independent impact on political involvement and income plays a similar role for political apathy, the improvements of the 'fit' are fairly small. Moreover, these improvements can be obtained only at the expense of loosing a substantial number of cases for cross-national and longitudinal analyses. For those reasons, no additional factors are included in the subsequent discussions of the differences and changes in political interest in Europe in the last decades. The attempts to broaden the scope, however, showed once more that political involvement and political apathy are to be treated as distinct concepts. After the three conventional factors are included in the models, political involvement seems to be modestly related to additional cultural factors like postmaterialism, whereas political apathy seems to be somewhat stronger connected to structural factors such as income.

3.3 Life-cycle or Generation Effects?

If we compare levels of political involvement or political apathy within countries at different points in time, the distinction between age and year of birth as relevant antecedents is crucial, since the composition of national populations changes. The distinction between age and year of birth becomes even more crucial if we take the notions of life-cycle effects and of political generations serious. Life-cycle theories of political interest hold that the relation between age and political interest is curvilinear at the individual level. Political interest increases while the individual matures and reaches a maximum

in the mid of one's life. As an individual grows older he or she also retires gradually from public life. Therefore, the individual level of political interest decreases in later life (cf. Tingsten 1937; Glenn and Grimes 1968: 563-6; Verba and Nie 1972: 139; Milbrath and Goel 1977: 114; Jennings and Niemi 1981: 381). Theories of political generations, on the other hand, postulate that levels of political interest do not reflect specific positions in the life cycles of individuals, but rather differences in the political-historical contexts of his or her upbringing (cf. Inglehart 1990: 77; van Deth 1990: 303; and 2000b; van den Broek 1996: 82; Bennett 1986: 96). Studies concerning political generations (e.g. van den Broek 1996) stress the rise of a specific generation – the so-called protest generation born between 1941 and 1955 – that shows an unprecedented level of political activity never reached again by subsequent generations.[16] Both approaches thus imply curvilinear relationships of both age and year of birth with political interest. However, life-cycle theories imply that the relationship between age and political interest stays constant over time, while the relationship between year of birth and political interest changes, whereas theories of political generations imply that the relation between age and political interest changes over time, while the relationship between year of birth and political interest remains constant.

In order to decide whether interpretations in terms of life cycles or political generations should be preferred, the curvilinear effects of age and year of birth on political involvement and political apathy are examined separately in each of the three decades that constitute the observation period of our study. For modelling these curvilinear effects, the linear effects of age and year of birth are replaced by cubic spline[17] transformations. The curvilinear effects of age and of year of birth on political involvement and political apathy modelled in that way, are plotted against age and year of birth in Figure 2a and 2b respectively, for the three periods 1973-1980, 1981-1989, and 1990-1998. As Figures 2a and 2b show, the crude shapes of the curves that express the relationships of age with political involvement and with political apathy, respectively, are basically the same in all three decades. In each of the three periods, we find an age group that shows a maximal level of political involvement and a minimal level of political apathy. However, the positions of the curves change from decade to decade. The more recent the period of observation, the higher the age of the respondents is that show maximum levels of political involvement and minimum levels of political apathy. On the other hand, the curves that express the relationships between date of birth and political involvement and political apathy, respectively, do not only retain their global shape, but also do not change the position of their respective minimum and maximum levels. In all three decades, the same birth cohorts show

[16] This notion is also at variance with Inglehart's (1977 and 1990) theory of postmaterialism, which states that as a consequence of continuously rising standards of living and social security more and more people hold postmaterialist value orientations and, as a consequence, are more interested in politics.

[17] A cubic spline is a function that is a cubic polynomial over each of a set of contiguous intervals. The borders of these contiguous intervals are called knots. Given a set of knots, the set of all cubic splines with these knots constitute a finite dimensional vector space (cf. Dierckx 1993: 4). Departing from a base of this vector space any cubic spline with these knots can be constructed as a linear combination (i.e. weighted sum) of the members of this base. The non-linear effect of a certain independent variable X, say, can be modelled by constructing a spline basis, which is just a set of functions of this variable X, and including this spline basis into a regression-type model. The linear combination of this spline basis with the corresponding regression

the highest levels of political involvement and the lowest levels of political apathy. This finding suggests – but does not prove – that differences in political involvement and political apathy among individuals of different ages are primarily the consequence of their belonging to different birth cohorts. The most straightforward interpretation of the variation in the pattern of the relationships between age and political involvement and political apathy is that this association largely is a side effect of a more fundamental relationship between year of birth and political involvement and political apathy. In this perspective, birth cohorts keep their relative level of political interest as they go through their life cycles. Differences between age groups in their levels of political involvement and political apathy found at a specific point in time mainly reflect the fact that they belong to different birth cohorts. One can, of course, presume that the findings are the result of period effects that affect distinct age groups in different ways, but it seems quite unlikely that this happens in exactly that way that the impact of birth cohort hardly changes. The view that birth cohort differences account for age group differences in political involvement and political apathy is further supported by separate country analyses that show that the findings summarised in Figure 2a and 2b for the European averages are more than just artefacts of aggregation. Although there are some differences with respect to the impact of year of birth between countries, the curvilinear pattern within each country does not change in a way that suggests a domination of life-cycle effects. The very existence of cross-national differences evidently runs counter to the hypothesis of a general life-cycle effect. For these reasons, we prefer the birth-cohort interpretation to the life-cycle approaches in the following analyses. Consequently, only date of birth is used as the most relevant indicator of these effects.

Although splines are effective tools for uncovering non-linear effects in a very flexible manner, modelling the effect of an independent variable with splines does not lead to effect coefficients that can be interpreted in a substantive, meaningful way.[18] In order to obtain coefficient estimates that allow substantive interpretations the indicator for birth cohort is treated here as a categorical variable. A theoretically based demarcation of birth cohorts for the development of political and social engagement in Dutch society has been presented by Becker (see van den Broek 1996: 30; but also Dekker and Ester 1995) and this scheme seems to be very appropriate for an analysis of political interest in Europe. Becker suggests to discriminate between (1) the ‘pre-war generation’ (people born before 1930), (2) the ‘silent generation’ (people born between 1930 and 1940), (3) the ‘protest generation’ (people born between 1941 and 1955), (4) the ‘lost generation’ (people born between 1956 and 1970), and (5) the ‘pragmatic generation’ (people born after 1970). This demarcation has the clear advantage of not relying on arbitrary distinctions between cohorts, which are usually applied. Moreover, this division fits nicely to the general pattern depicted in the right parts of Figure 2a and 2b. Both the pre-war generation and the pragmatic generation are expected to show relatively low levels of political involvement and high levels of political apathy. The members of the silent generation will be

coefficients as weights constitutes the spline that represents the non-linear effect of X on the dependent variable. For the basic idea of this procedure, see Fox (2000: 65ff) and Hastie and Tibshirani (1990: 22ff).

[18] In general, a spline basis is not unique. Any set of linearly independent spline functions of appropriate size is a basis of a vector space of splines (cf. Dierckx 1993: 4).

less involved and less apathetic than these two generations, whereas the lost generation will show modest levels of interest. Relatively high levels of political involvement and low levels of political apathy are the expected characteristic of the protest generation. This five-fold distinction between birth cohorts will be used here instead of the variable age and date of birth considered previously. As will become clear, the characterisation of the measure for birth cohorts as a categorical instead as a continuous variable has important consequences for our conclusions about the impact of life-cycle and cohort experiences.

4 Cross-National Differences and Developments

4.1 Main Developments

The three socio-demographic factors education, gender, and birth cohort together account for a part of the variance in the level of political interest. Cross-national differences in both the aggregate levels and aggregate developments of political involvement and apathy, then, may be to some extent the result of these links at the micro-level. Consequently, the compositional effects of these factors have to be eliminated by controlling for education, gender, and birth cohort.

Figure 3 shows corrected percentages[19] of political involvement (left side) and political apathy (right side) for each of the countries studied ranked according to their average level of political involvement. As can easily be seen, there is a lot of variation between countries with respect to the controlled percentage of political involvement, with Greece and East Germany showing high levels of involvement, while in Portugal, Spain, and Belgium the corrected level of political involvement is less than 10 percent. The cross-national variation is much larger for the corrected percentages of political apathy, which amounts to over 40 percent in the last three countries mentioned and to only 11 percent in East Germany. The variation between countries with respect to the level of political apathy, then, is only partially mirrored by their respective levels of political involvement. While the three countries with the highest levels of political apathy are also the three countries with the lowest levels of political involvement and the country with the lowest level of political apathy is among the two countries with the highest levels of political involvement, the ranking of the remaining countries with respect to political apathy is certainly not just the opposite of their ranking for political involvement. Especially Greece is characterised by an exceptionally high level of political involvement and by showing a rather medium level of political apathy simultaneously.[20]

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[19] If we use effect coding for categorical control variables the intercept of a logistic regression of political apathy and political involvement respectively can be interpreted as a controlled log-odds-ratio. Using the inverse logit function these controlled log-odds-ratios can be transformed into corrected proportions or corrected percentages.

[20] This position of Greece is not a mere artefact of correcting for the impact of socio-demographic antecedents since Greece has the same exceptional position with respect to uncorrected percentages as for the corresponding corrected figures.

If we turn to the developments of the levels of political involvement and political apathy for distinct years (see Figure 4a and 4b) we find that – despite some fluctuations – most countries maintain their positions relative to each other. The only exceptions to this general picture are Greece and Eastern Germany. Greece shows a rapid increase of the level of political involvement in the first couple of years of observation and an equally marked decline at the end of that period. Eastern Germany shows both a quite substantial decrease in political involvement and a clear rise in political apathy. These developments in East Germany do not come as a surprise, but confirm nicely the notion that political interest was extremely high in the 'revolutionary' period immediately after the fall of the Berlin Wall and then returned smoothly to a more 'normal' level of interest within one decade. For Greece, no plausible explanations for the extraordinarily levels of political involvement are available. The dynamics in both countries seem to exhibit a kind of 'regression to the mean' pattern, with extreme levels of political interest gradually moving towards more moderate levels of political involvement and political apathy that are regularly found among the populations of other countries.

The conclusions based on Figure 4a and 4b are further supported by statistical evidence as summarised in Table 4. This table shows the results of logistic regressions for the countries covered in our study of political involvement and of political apathy on a time variable and on education, gender, and birth cohort. Since the last three variables are only used as control variables here, the corresponding coefficients are not shown. The time variable is constructed from the year of survey but standardized in such a way that its range is of length one and its midpoint is zero. For the countries included in the Eurobarometer series since 1973, the coefficients of the time variable thus reflect the average change of the log-odds of political involvement and political apathy over the period of 1973-1998. In most countries, controlled trend effects for political involvement and political apathy are either statistically insignificant or very modest only. Once again Greece is among the exceptions, showing a clearly declining trend of political involvement, which mainly reflects the noticeably falling level of political involvement in the second half of the observation period. In addition, East Germany shows marked and statistically significant trends towards less political involvement and more political apathy. In fact, all countries that are included in the Eurobarometer studies after 1992 show statistically significant trend effects for political involvement in a downward direction.[21] On the other hand, Belgium, Italy, and Spain, show substantial trends towards less political apathy. Whereas for Belgium and Spain this indicates a tendency towards less extreme levels of political apathy, such an interpretation is less plausible for Italy, which exhibits a rather moderate corrected level of political apathy. Nevertheless, the trend in Europe since the early 1970s points towards somewhat less political involvement and political apathy in several countries.

Since cross-national comparisons are our main concern, equivalence of the measures used is of prime importance. This requirement can be applied at the individual level as shown in Section 2.2, but

[21] Because of the short period of observation for these countries, it is unclear whether this trend reflects short-time fluctuations or substantial developments (which may be attributed, for instance, to a waning of the debates about the entrance into the European Union).

also at the aggregate level. Valid cross-national comparisons of political interest are based on the expectation that a country showing high levels of interest measured at the aggregate level according to the frequency of political discussions also scores high when the aggregate level of political interest is measured with the question on subjective political interest. For this kind of equivalence assessments, the intercepts of the logistic regressions of political involvement and political apathy can be used, measured as the frequency of political discussions on the one hand, and of similar logistic regressions of political involvement and political apathy, measured as the level of subjective political interest on the other. Since the predictors in these logistic regressions are effect coded, the intercepts can be interpreted as partial log-odds controlled for these predictors; that is, controlled for education, gender, and birth cohort.

Figure 5a shows partial log-odds of political involvement based on subjective political interest plotted against partial log-odds based on frequency of political discussions. Analogously to Figure 5a, Figure 5b shows the respective log-odds for the two variants of the measures of political apathy. In case of political involvement aggregate-level equivalence seems to be more problematic than for political apathy. Whereas most of the countries are fairly near the regression line representing perfect proportionality in the level of political involvement, several countries attain rather deviant positions. These countries are Italy, East Germany, and Greece. It does not come as a surprise that East Germany and Greece are among the problematic cases, since these two countries also depart from the other countries with respect to the level of political involvement. The results obtained with the distinct measures of political apathy are much less ambiguous. As can be seen easily from Figure 5b, there is a strong relationship between the partial log-odds of both measures of political apathy. Although the countries are somewhat scattered around the line of perfect proportionality, the deviations are modest only and do not raise doubts about the equivalence of these measures. The results from these additional analyses underline once again the need to distinguish between measures of political involvement on the one hand and measures of political apathy on the other. At the aggregate level, the cross-national equivalence of the latter measure seems to be much better than the equivalence of the first.

4.2 Cross-national Variations in the Impact of Socio-demographic Antecedents

So far we considered differences across countries with respect to average levels of political involvement and political apathy, using education, gender, and birth cohort merely as control variables for compositional effects. However, one may very well ask whether these control variables differ across Europe with respect to the strength of their impact on political involvement and political apathy. This expectation proves to be true. Table 5a and 5b summarise the results of logistic regressions of political involvement and political apathy on education, gender, and birth cohort in the countries covered by our study. The influence of the most important predictor for both aspects of political interest – education – does not show much variation across countries. The direction of the effect of education is the same in all countries: the higher the level of education of the respondent, the more

likely he or she will be politically involved and the less likely he or she will be politically apathetic. Considerable cross-national differences in the impact of socio-demographic antecedents, however, can be found for gender as well as for birth cohorts.

As was already shown in Section 3.2, education is the most important predictor for political involvement as well as for political apathy at the level of the European averages computed on the basis of the pooled dataset. The second most important predictor was gender, followed by age and year of birth. While in Section 3.2 only linear effects of age and year of birth were considered, we now take into account a non-linear effect of birth cohort. A main result of this change of perspective is that the relevance of birth cohort has greatly increased as compared to the model discussed in Section 3.2. Thus, our general conclusions regarding the relative importance of education, gender, and age or year of birth drawn in Section 3.2 are only partially corroborated.

For both political involvement and political apathy education still is a more important predictor than gender. This becomes clear if one computes the log-odds-ratios for the highest versus the lowest educational groups and the log-odd-ratios between female and male respondents. The first log-odds-ratio is the difference between the effect coefficient of the category ‘high level of education’ and the category ‘low level of education’; the second is twice the effect coefficient of gender. For political involvement, in all but one of the countries examinded, the log-odds-ratios for education are larger than the log-odds-ratios for gender. The only exception is Greece, where the log-odds-ratio of gender is higher than that for education. For political apathy all log-odds-ratios of education are higher than those for gender – even Greece conforms to this general pattern.

However, birth cohort – now taken as a categorical variable – proves to be a much stronger predictor for both political involvement and political apathy than we found in Section 3.2. In all countries the log-odds-ratios between the birth cohort with the highest level of political involvement and the birth cohort with the lowest level of political involvement, are larger than the corresponding log-odds-ratios for gender. Essentially the same applies for political apathy, although the relative importance of birth cohort and education is not the same in all countries. In Belgium, Denmark, France, West Germany, Italy, Northern Ireland, Portugal, East Germany, and Norway the level of education proves to be a more important predictor of political involvement, while in Great Britain, Ireland, Luxembourg, Greece, Finland, and Sweden birth cohort appears to be more important. In The Netherlands, Spain, and Austria the importance of the predictors of education and birth cohort is roughly equal for political involvement. For political apathy, however, in all countries but Greece education is a more important predictor than birth cohort. Although the strength of the effect of education as well as its relative importance compared to the effect of birth cohort varies across countries, the direction of the effect of education remains more or less the same. In all countries, we find that individuals have a higher propensity to be politically involved and a lower propensity to be political apathetic, the higher their level of education is.

While there are considerable variations among countries with respect to the effect of gender on political involvement – Italy and Greece showing quite strong effects and The Netherlands, Norway, and Sweden showing rather modest effects – the effect of gender on political apathy shows even more variation. In the case of The Netherlands, the effect of gender is even below 0.1. Nevertheless, both for political involvement and for political apathy, the general pattern is evident. The effect of gender is significant in all countries and all point into the same conventional direction: females are less interested in politics than males.

Not only gender, but also birth cohort shows substantial cross-national variations in its effect on political involvement and political apathy. The effects of belonging to the pre-war or to the lost generation on both concepts vary in direction and size; the differences among the pre-war generation probably reflecting different histories of the respective countries. On the other hand, the effects of belonging to the silent generation or to the lost generation depend much less on the question which country is considered. The silent generation shows positive effects on political involvement in all countries and negative effects on political apathy (which are, however, statistically insignificant in several countries). With the exception of Northern Ireland, the same applies for the protest generation. And with only minor exceptions, the pragmatic generation clearly is the least politically involved and the most politically apathetic cohort in Europe.

Generally speaking, these results underline the conclusion about the apparent difference between political involvement and political apathy. The impact of all three predictors education, gender, and birth cohort on political involvement is weaker than their respective impact on political apathy in each and every country considered. Obviously, political apathy is not the complement of political involvement – both concepts develop differently and are rooted in different societal constellations.

5 The Levelling Consequences of Societal Modernisation

5.1 Weakening Socio-demographic Effects?

The developments in many countries in the last few decades can be characterised as a period of rapid social, societal, political, and economic transformations broadly indicated by the term 'modernisation'.[22] Economic growth continued despite unemployment and budgetary problems, the standard of living increased tremendously, the division of labour has changed clearly, higher education has become available for many people, geographical and social mobilisation increased considerable, mass communication and new media spread rapidly, parents raise their children with different goals than a few decades ago, the position of especially women improved clearly, and so forth. As a result of what might be called the *levelling consequences of societal modernisation* political interest can be

[22] See for a brief discussion of this concept and an overview of the relevant literature Riegel (1995).

expected to become increasingly independent of the socio-structural position of people. Political orientations are chosen *a-la-carte*, and citizens construct their private *bricolage* to be used in social contacts and public life. Consequently, the relationship between the level of political interest and socio-demographic factors like education, gender, and date of birth should become weaker with the passing of time.

The expectation about the levelling consequences of societal modernisation for political interest can be converted into empirical statements in two ways. First, a decline of the impact of education, gender, and date of birth can be expected to become visible in declining amounts of variance explained or by a reduction of other measures of statistical correspondence between model and data. Figure 6a and 6b show the developments of the explanatory power (Nagelkerke's Pseudo-R^2) of logistic regression models when education, gender, and birth cohort are used as predictors of political involvement and political apathy respectively. As becomes clear from a first glance, the combined explanatory power of the three socio-demographic variables decreases for both political involvement and political apathy during the last decades. A second glance reveals some differences between the developments concerning the dependent and independent variables. The explanatory power of gender clearly declines for political involvement as well as for political apathy. Thus, the 'gender gap' in political interest seems to narrow (cf. van Deth 2000b). The explanatory power of education, however, does not show such a clear declining tendency. Whereas the explanatory power of education for political involvement decreases even more than the explanatory power of gender, only a very slight decrease in the explanatory power of education for political apathy can be observed. Besides, this last decrease is virtually overwhelmed by short-term fluctuations.

Although the developments of the explanatory power of education and gender are in line with the hypothesis of the levelling consequences of modernisation, the developments with respect to the consequences of belonging to a specific birth cohort run counter to it. In fact, the explanatory power of birth cohorts both for political involvement and political apathy actually increases! This may at least in part be due to the fact that the composition of the populations changes over time. Yet, this result is not a mere artefact of socio-demographic changes. Additional analyses in which birth cohorts are replaced by age group clearly show that the explanatory power of age groups for political involvement and apathy also increases.

A similar objection concerning compositional effects can be raised with respect to the impact of education. As a consequence of modernisation and the rising levels of education, groups with very low levels of education gradually diminish, whereas the minority of people with a high level of education grows. Measures of explanatory power do not only reflect the impact of independent variables on the dependent variable, but also the variation of the independent variables. To find more substantial support for the conclusions about the waning impact of socio-demographic factors on political interest, we need to have a closer look at the changes in the effect coefficients of education, gender, and birth cohort.

A subsequent way to understand the levelling consequences of societal modernisation is to model explicitly trends of the impact of education, gender, and birth cohort on political involvement and political apathy. A straightforward method is to extend the original socio-demographic models of political interest with interaction terms of time with education, gender, and birth cohort respectively.[23] Estimation results of the extended models for each country separately are shown in Table 6a and 6b. These results provide some qualification to the general conclusions formulated above. The extended models show that the effect of education on political involvement declines only in a subset of the countries: in Belgium, Denmark, France, West Germany, Italy, The Netherlands, and Greece. On the other hand, in Luxembourg, Ireland, Northern Ireland, Portugal, and to some extend in Britain, differences in political involvement between educational groups appear to increase. Similar ambiguous results are obtained when we turn to political apathy. In many, yet not all countries the effect of education on political apathy is weakening. The interaction effects of education with time indicate the opposite direction for the main effects of education in Belgium, Denmark, France, The Netherlands, Greece, Spain, and East Germany. However, in the rest of the countries no weakening of the education effect can be found. In Portugal the effect of education on political apathy even increases.

Some nations clearly constitute deviant cases with respect to the general impression of a trend of declining consequences of education for political involvement and political apathy. A similar result is obtained when the impact of gender on political involvement is considered. Whereas a decline of the impact of gender on political involvement would show up as an interaction term coefficient with a positive sign, we find statistically significant negative coefficients of this term in some countries, indicating an increase of gender differences with respect to political involvement. This applies to East Germany, Norway, and Austria. However, the period of observation in these countries is rather small, so we cannot exclude the possibility that only short-term fluctuations are observed. The results are less ambivalent when the impact of gender on political apathy is considered. In every country where a statistically significant trend of the impact of gender on political apathy is found, the coefficients have a negative sign. No single deviant case is observed in this case.

Beside education and gender, birth cohort is used here as a third major socio-demographic antecedent of political interest. For the figures presented in Table 6a and 6b it is difficult to find a general pattern of the development of the impact of belonging to a birth cohort on political involvement and political apathy. Cohort-by-time interaction effects show cross-national differences in size as well as in direction. If there are significant time-by-birth cohort interaction effects to be found in some country, not all of these interaction effects are statistically significant and substantial in size. In Belgium, Great Britain, Ireland, Luxembourg, and Greece, statistically significant coefficients indicate increasing differences between birth cohorts with respect to political involvement. Northern Ireland shows a decrease of these differences between birth cohorts. These results are more or less mirrored

[23] This is done by generating new variables from the products of the education and gender dummies with time, and from the product of age with time. The time variable represents the time of the survey, standardised in

by the findings for political apathy. A trend of decreasing differences between birth cohorts with respect to political apathy can be found only in Italy, Northern Ireland, and Portugal, whereas a trend of increasing differentiation can be found in Great Britain, Ireland, Luxembourg, and Greece. A note of caution, however, has to be added. Since these results refer to the interpretation of trends with education held constant, they might be a side effect of increasing educational levels among younger cohorts. These cohorts consist, in the period of observation, to a large part of adolescents and young adults many of whom are still enrolled in the educational system. The trend at the aggregate level for this cohort therefore can be the result of different processes at the individual level: The level of political involvement and political apathy of these individuals stays constant while their level of education increases.

5.2 Cohort Specific Effects

The previous analyses have underlined the various ways in which the three socio-demographic antecedents are related to political interest in distinct countries. Especially the puzzling results obtained for specific birth cohorts presented in Section 5.1 deserve additional attention, taking into account the interdependence of education, gender, and birth cohort effects.

As we have seen in Section 3.3, both political involvement and political apathy vary consistently with year of birth. That is, the relative levels of political involvement and political apathy of people belonging to specific birth cohorts hardly change over time. These persistent differences between cohorts suggest that levels of political involvement and political apathy reflect differing experiences (political socialisation). The post-war era is a period of massive expansion of educational attainment and growing access to educational institutions. If we assume that the value of education is a function of its scarcity as a human resource, one may hypothesise diminishing returns on education with respect to the social status and to the material resources that individuals can gain. Among birth cohorts with higher average levels of education, then, higher education becomes a less distinctive feature of individuals and, as a consequence, the impact of education on political interest declines.[24] On the basis of these presumptions, we can expect that the impact of education on political involvement and apathy is smaller for younger than for older cohorts.

Gender – as opposed to sex – is not a biological feature of individuals, but a social construction, and so gender differences are related to different societal structures and processes of rewards for males and females, and to different gender-related socialisation experiences. One key aspect of modernisation in advanced industrial societies is the erosion of traditional gender roles. If patterns of upbringing of younger birth cohorts are less gender-biased than of older birth cohorts raised according to traditional values and traditional gender roles, gender differences will be less relevant among

such a way that the difference between the minimum and the maximum of this variable equals one, and the midpoint of its range equals zero.

[24] The relationship between political interest and different levels of education among different cohorts is considered by Glenn and Grimes (1968) in their seminal article on this topic.

younger cohorts than among older. Therefore, if educational practices become less conventional in the late twentieth century, younger cohorts will show less gender-related differences with respect to political involvement and political apathy.

Following these lines of reasoning, clear expectations regarding cohort differences with respect to the impact of education and gender on both political involvement and political apathy can be formulated. The more recently a cohort is born, the smaller the impact of both education and gender is expected to be. Since the pace of modernisation does not need not to be constant there, are no reasons to model the impact of education and of gender on political interest as linear effects only.

Effects of certain variables on political involvement and political apathy varying with year of birth are best modelled in terms of interaction effects. If the impact of education and of gender varies linearly with year of birth, simple interaction terms can be constructed by multiplying education effect dummies and gender effect dummies, respectively, with year of birth. If we want to allow for curvilinear relationships in these effects, a strategy similar to the analyses presented in Section 3.3 can be applied. In that section, a set of cubic transformations of age and of year of birth was constructed and included in models to predict political involvement and political apathy. In the present section we also construct cubic transformations of year of birth, but in addition interaction terms of cubic transformations with effect dummies for education and for gender are computed. Thus, the complete model comprises effect dummies of educational level and gender, cubic transformations of year of birth, and products of cubic transformations of year of birth with effect dummies of educational level and gender. As in Section 3.3, coefficients of the cubic transformations of year of birth constitute the curvilinear effect of year of birth on political involvement and political apathy. The coefficients of the interaction terms of cubic transformations of year of birth with level of education or gender, then, describe the non-linearly varying effects of the level of education and gender on political involvement and political apathy, respectively.[25] On the basis of the coefficients estimated by means of logistic regression procedures, conditional log-odds can be computed for each level of education, for men and women, and for each year of birth.

For the three levels of education and for men and women, conditional log-odds of political involvement are plotted against year of birth in Figure 7a. The respective conditional log-odds of political apathy are plotted against year of birth in Figure 7b. The curves in these figures describe how the effect of education and of gender on political involvement and on political apathy varies with year of birth.

As becomes clear from Figure 7a, political generations do not differ much in their overall consequences of education for political involvement. The distance between the line for people with a low level of education and the line for people with a high level of education – which is proportional to the log-odds-ratio of these educational groups with respect to political involvement – hardly changes for the successive birth cohorts. Only the group with a medium level of education shows a change

relative to the other two groups. The more recent the year of birth, the more similar the group with a medium level of education becomes to the group with a low level of education. A clearer pattern of differences between generations is observable with respect to the influence of gender on political involvement. The more recently people are born, the smaller the difference in political involvement between men and women is. Yet, this tendency does not seem to be very strong. For political apathy, differences between generations with respect to the influence of education and gender follow the same pattern. In this case the differences are even stronger for the impact of gender than for the impact of education.

Contrary to the expectation formulated at the beginning of this section, the impact of education on political involvement and political apathy does not seem to diminish. There is no clear tendency of declining differences between educational groups among younger cohorts. This finding suggests that education in general does not effect political interest because it could effect relative social status positions of individuals. The conclusion seems to be that education has some impact on political interest because education gives people the capacity to deal with politics in a more sophisticated way. However, there is a clear tendency of declining differences between men and women with respect to both political involvement and political apathy among younger birth cohorts. This finding supports the hypothesis that changing educational practices erode gender differences in political interest.

5.3 Does Socio-demographic Change Explain Diminishing Gender Effects?

The results presented in Section 5.1 show that in most countries a decline in the impact of gender on political involvement and political apathy can be observed. In the preceding section, it became clear that the differences in political interest between men and women are smaller among younger than among older birth cohorts. On the other hand, we did not find that the impact of education declines with year of birth. In a period of twenty-five years, older birth cohorts tend to disappear while younger cohorts mature. Demographic change thus leads to a changing composition of the population. Since birth cohorts born more recently tend to exhibit lower gender differences in political involvement as well as in political apathy, the declining gender effect could be the result of these compositional changes.

This interpretation in terms of compositional variations implies that the trend of gender effects presented in Section 5.1 should disappear after an interaction term of gender and birth cohort is included in the models. To obtain stable results when dealing with trends over time, the non-linear effect of belonging to a birth cohort is modelled here once again as an effect-coded categorical variable. So the model discussed in Section 5.1 is extended by cohort-by-gender interactions. If logistic regression estimates of the coefficients of the time-by-gender interactions already present in

[25] This model can thus be considered as a simplification of Hastie and Tibshirani's (1993) varying-coefficient models.

that model are substantially smaller or even statistically insignificant, the trends of gender effects will be explained away.

Table 7 shows the results of a comparison of the estimates for the trend of gender effects based on both the original model and on the extended model. Only in Greece the magnitude of the time-by-gender interaction effect on political involvement falls below the threshold of statistical significance when the model is extended by controls for cohort-specific gender effects. The time-by-gender interaction effect actually increases in Belgium and in Denmark in the extended model as compared to the original model. However, these increases stay within the range of one standard error and should not be regarded as substantial. For the significant interaction effects found in Eastern Germany, Norway, and Austria again the note of caution should be added that for these countries the period of observation is too small to exclude short-time fluctuations. The findings for political apathy look different. In seven out of ten countries that show a trend of declining gender differences with respect to political apathy, these trends can be attributed to changing compositions of birth cohorts. The time-by-gender interaction effect remains statistically significant only in Denmark, Great Britain, and Italy. Yet, although this interaction effect is still statistically significant in Italy, it is reduced substantially and has only a trivial magnitude after the cohort-by-gender interactions are introduced in the model.

Apparently, the declining impact of gender on political involvement cannot be explained away by taking the changing composition of the population in terms of birth cohorts into account. In other words: contextual effects on political involvement affect males and females differently. Nevertheless, with some exceptions the declining effect of gender on political apathy *indeed can be* explained away. In virtually all countries covered by long time series, males and females are similar in their level of political apathy on the aggregate level, because males and females in younger birth cohorts become more similar. In Denmark and Great Britain there seem to be additional contextual effects. The deviating results obtained for political involvement and political apathy in this section do not come as a surprise, since in Section 5.2 weaker cohort differences were found for the impact of gender on political involvement than for political apathy. Obviously, if cohort differences are weak, compositional change in birth cohorts can explain trends only to a very limited degree.

6 In Conclusion

In this paper the existence of substantial and persistent differences and changes in the levels of political involvement and political apathy among European citizens are described and analysed. Conventional explanations in terms of socio-demographic characteristics of individuals (education, gender, age or date of birth) are reviewed and tested. The results of these analyses underline, first of all, the importance of differentiating between seemingly identical measures of political interest. Instead of using conventional scales for subjective political interest or the frequency of political discussion, the equivalence of these instruments is assessed here in several ways. Consequently, the concepts of political involvement and political apathy are operationalised as dichotomised variables and used separately in subsequent analyses. Virtually from each and every application presented, it has

become absolutely clear that the two concepts political involvement and political apathy should be treated separately and not as complements, even if they are operationalised on the basis of a single indicator (subjective interest or discussion frequency).

A second conclusion concerns the general trends in political involvement and apathy in Europe in the last decades. Although many authors reported a clear trend of increasing levels of political interest, such undifferentiated statements are evidently challenged by our findings. The level of political involvement remains more or less constant since the early 1970s, with the clear exception of Greece and East Germany that show a decrease of their relatively high levels of involvement. For political apathy we found a slightly declining trend, which appears to be relatively strong in Greece and East Germany. Substantial cross-national differences in both the level and the development of political involvement and apathy can be easily traced. Besides, each indicator shows considerable short-term fluctuations, making an unambiguous discernment of trends rather complicated. If we take compositional effects of different populations in terms of education, gender, age or date of birth into account, the general conclusions of more or less stable levels of involvement and declining levels of apathy are not affected. Yet, more sophisticated analyses show that life-cycle interpretations are less likely to account for these observed changes than generational approaches.

The declining impact of socio-demographic factors on political involvement and apathy constitutes the topic of our third conclusion. Due to the evident interdependence of these factors, disentangling specific effects appears to be rather complicated from both a theoretical and a methodological/technical point of view. The level of education appears to have a clear and more or less constant impact on political interest. For gender and date of birth, similar conclusions are less simple to formulate. As it turns out, particularly the gender-related differences among younger cohorts gradually decline, resulting in a corresponding decline of especially the effect of gender on political apathy in a number of countries.

The detailed analyses of the differences and developments in political interest in Europe presented here revealed persistent substantial cross-national variation. These apparent dissimilarities cannot be explained in terms of compositional effects and do not disappear when micro-level approaches are used. What is required, then, is the introduction of country specific contextual factors in addition to the micro-level characteristics dealt with in this paper. The gains and complications of using multi-level models for cross-national differences and developments in political involvement and apathy in Europe will be the main topic of a matching paper (van Deth and Elff, forthcoming).

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Appendices

A. Tables

Table 1: Equivalence of Indicators for Subjective Political Interest and Frequency of Political Discussions

		Full scales			Involvement		Apathy		
	Country	Identical[a]	Similar[b]	Gamma[c]	Identical[a]	Gamma[c]	Identical[a]	Gamma[c]	Obs.
	All countries	65 %	99 %	0.793	86 %	0.834	79 %	0.845	96774
Covered by the Euro-barometer studies since 1973	Belgium	67 %	99 %	0.796	91 %	0.907	75 %	0.822	7786
	Denmark	66 %	99 %	0.783	82 %	0.802	83 %	0.879	7964
	France	64 %	99 %	0.759	86 %	0.845	76 %	0.795	8022
	Germany (West)	71 %	99 %	0.789	85 %	0.831	86 %	0.861	8317
	Great Britain	62 %	99 %	0.761	85 %	0.820	76 %	0.817	8017
	Ireland	62 %	99 %	0.735	88 %	0.849	73 %	0.762	7813
	Italy	68 %	99 %	0.837	89 %	0.915	78 %	0.855	8155
	Luxembourg	67 %	99 %	0.827	86 %	0.856	81 %	0.878	2683
	Netherlands	65 %	99 %	0.703	82 %	0.725	81 %	0.813	8029
Since 1975	Northern Ireland	62 %	99 %	0.692	88 %	0.787	73 %	0.727	2409
Since 1980	Greece	56 %	98 %	0.799	69 %	0.839	84 %	0.875	7932
Since 1985	Portugal	68 %	99 %	0.775	95 %	0.896	73 %	0.796	6739
	Spain	67 %	99 %	0.795	92 %	0.875	75 %	0.819	6851
Since 1990	Germany (East)	70 %	100 %	0.852	79 %	0.879	90 %	0.874	2000
	Norway	69 %	99 %	0.719	80 %	0.770	88 %	0.783	1005
Since 1993	Finland	71 %	99 %	0.759	89 %	0.817	81 %	0.804	1035
Since 1994	Austria	68 %	99 %	0.792	87 %	0.820	81 %	0.826	995
	Sweden	68 %	99 %	0.783	86 %	0.860	81 %	0.843	1022

Notes: The full scale of the measure for frequency of political discussion contains the categories frequently (1), occasionally (2), and never (3). The original scale of the measure for subjective political interest consists of the categories a great deal (1), to some extend (2), not much (3), and not at all (4). For this comparison, the two middle categories of subjective political interest were collapsed into one category.

Obs.: Number of observations.

a. Percentages of respondents showing the same score on both instruments.

b. Percentages of respondents showing a maximum difference of one point.

c. All gamma coefficients are significant at 1% level.

Source: Eurobarometer studies 19, 30, 31, 31A, 32, 33, 34, 49.

Table 2: Effects of Education, Gender, Age and Year of Birth on Political Involvement and Political Apathy in Europe

		Political involvement				Political apathy			
		Based on frequency of political discussions		Based on subjective political interest		Based on frequency of political discussions		Based on subjective political interest	
Education[a]	Low	-0.353**	-0.450**	-0.514**	-0.659**	0.657**	0.685**	0.751**	0.778**
		(0.012)	(0.012)	(0.033)	(0.036)	(0.011)	(0.009)	(0.035)	(0.030)
	Medium[b]	-0.112	-0.066	-0.105	-0.035	0.028	0.016	0.010	-0.001
	High	0.465**	0.516**	0.619**	0.694**	-0.685**	-0.701**	-0.761**	-0.777**
		(0.010)	(0.010)	(0.023)	(0.024)	(0.010)	(0.011)	(0.034)	(0.034)
Gender[c]		-0.261**	-0.268**	-0.422**	-0.434**	0.313**	0.316**	0.324**	0.327**
		(0.007)	(0.007)	(0.015)	(0.015)	(0.007)	(0.007)	(0.016)	(0.016)
Age[d]		-0.007*		-0.069*		0.021**		0.058**	
		(0.004)		(0.029)		(0.003)		(0.016)	
Year of birth[d]			0.055**		0.119**		-0.195**		-0.343**
			(0.011)		(0.031)		(0.009)		(0.028)
Constant		-1.005**	-1.009**	-1.543**	-1.556**	-1.557**	-1.557**	-2.189**	-2.188**
		(0.023)	(0.023)	(0.067)	(0.068)	(0.017)	(0.017)	(0.056)	(0.053)
Pseudo-R^2[e]		0.056	0.056	0.060	0.061	0.027	0.032	0.054	0.065
Observations		810925	809212	122684	122612	810925	809212	122684	122612

Notes: Coefficient estimates and robust standard errors (in parentheses) for logistic regression models.

* Significant at 5% level.

** Significant at 1% level.

a. Effect coded, 16 to 19 years is reference category, therefore no standard errors are shown.

b. Effect coefficients for this category are computed from the effect coefficients for the other categories, therefore no standard errors are shown.

c. Effect coded, male is reference category. The effect coefficient for male is the negative of the effect coefficient for female shown in the table.

d. Standardised, i.e. divided by one standard deviation.

e. McFadden's Pseudo-R^2.

Source: For measures based on frequency of political discussions: European Community Study '73, Eurobarometer studies 3-49; for measures based on subjective political interest: Eurobarometer studies 19, 30, 31, 31A, 32, 33, 34, 41.1, 42, 49. Data are weighted for population sizes.

Table 3a: Explanatory Power of Additional Predictors in the Model of Political Involvement

	Maximum number of cases					Identical cases				
	Macf.	McH. & Z.	Nagelk.	PCP	Obs.	Macf.	McH. & Z.	Nagelk.	PCP	Obs.
Education, gender, and age	0.036	0.065	0.054	83.5	649339	0.036	0.065	0.054	83.5	649339
Socio-structural predictors										
Class	0.041	0.074	0.061	82.9	436804	0.041	0.074	0.061	82.9	436804
Income (quartiles)	0.038	0.069	0.058	82.6	484639	0.041	0.075	0.063	81.8	323081
Couple vs. single	0.037	0.067	0.055	83.5	648163	0.041	0.075	0.063	81.8	322575
Subjective size of community	0.038	0.068	0.057	83.1	526237	0.043	0.078	0.066	81.2	266889
Objective size of communitiy	0.036	0.066	0.054	83.9	591329	0.044	0.079	0.066	81.6	239912
Number of children	0.036	0.064	0.053	83.5	602641	0.043	0.079	0.066	81.6	223551
Cultural predictors										
Postmaterialism	0.047	0.085	0.070	82.9	459726	0.047	0.085	0.070	82.9	459726
Attitude towards social change	0.041	0.072	0.062	82.6	287305	0.051	0.091	0.077	82.5	276533
Church attendance	0.038	0.068	0.056	84.2	238582	0.047	0.085	0.070	83.6	105503
Satisfaction with democracy	0.037	0.067	0.056	82.6	418350	0.048	0.085	0.071	82.9	77018
Ideology	0.035	0.064	0.053	82.1	528331	0.045	0.081	0.069	81.8	68013

Notes: Goodness-of-fit measures for logistic regression models. Macf.: MacFadden‘s Pseudo-R2. McH. & Z: McHelvey & Zaviona’s Pseudo-R2. Nagelk.: Nagelkerke/Cragg & Uhler’s Pseudo-R2. PCP: Percentage of correctly predicted responses. Obs.: Number of observations.

Source: European Community Study ‘73, Eurobarometer studies 3-49.

Table 3b: Explanatory Power of Additional Predictors in the Model of Political Apathy

	Maximum number of cases					Identical cases				
	Macf.	McH. & Z.	Nagelk.	PCP	Obs.	Macf.	McH. & Z.	Nagelk.	PCP	Obs.
Education, gender, and age	0.064	0.119	0.107	68.5	649339	0.064	0.119	0.107	68.5	649339
Socio-structural predictors										
Income (quartiles)	0.075	0.139	0.124	71.1	484639	0.075	0.139	0.124	71.1	484639
Class	0.071	0.134	0.117	71.6	436804	0.075	0.141	0.122	73.4	323081
Couple vs. single	0.067	0.126	0.113	69.2	648163	0.076	0.143	0.123	73.4	322575
Subjective size of community	0.064	0.120	0.108	68.9	526237	0.075	0.141	0.121	73.0	266889
Objective size of community	0.064	0.119	0.108	68.8	591329	0.075	0.141	0.123	72.9	239912
Number of children	0.063	0.119	0.107	68.5	602641	0.076	0.142	0.123	72.9	223551
Cultural predictors										
Postmaterialism	0.072	0.134	0.121	70.1	459726	0.072	0.134	0.121	70.1	459726
Church attendance	0.064	0.119	0.109	67.9	238582	0.071	0.131	0.120	68.9	197546
Ideology	0.059	0.113	0.097	72.1	528331	0.066	0.124	0.109	71.4	167546
Satisfaction with democracy	0.059	0.111	0.099	69.5	418350	0.063	0.120	0.104	72.3	133003
Attitude towards social change	0.058	0.110	0.098	68.2	287305	0.058	0.111	0.097	71.6	68013

Notes: Goodness-of-fit measures for logistic regression models. Macf.: MacFadden‘s Pseudo-R^2. McH. & Z: McHelvey & Zaviona’s Pseudo-R^2. Nagelk.: Nagelkerke/Cragg & Uhler’s Pseudo-R^2. PCP: Percentage of correctly predicted responses. Obs.: Number of observations.

Source: European Community Study ‘73, Eurobarometer studies 3-49.

Table 4: Trends of Political Involvement and Political Apathy in European Countries, 1973-1998 (controlled for education, gender, and birth cohort)

		Political Involvement			Political Apathy			
		Trend		Pseudo-$R^{2\,a}$	Trend		Pseudo-$R^{2\,a}$	Observations
	Country	Coeff.	Stderr.		Coeff.	Stderr.		
Covered by the Eurobarometer studies since 1973	Belgium	0.024	(0.084)	0.052	-0.860**	(0.080)	0.083	63904
	Denmark	-0.303**	(0.075)	0.027	-0.094	(0.070)	0.061	63299
	France	-0.471**	(0.130)	0.044	-0.268*	(0.129)	0.061	69127
	Germany (West)	-0.122	(0.127)	0.044	-0.105	(0.114)	0.075	68175
	Great Britain	-0.058	(0.080)	0.034	-0.106	(0.069)	0.052	69668
	Ireland	0.030	(0.090)	0.047	-0.174*	(0.082)	0.069	62563
	Italy	0.243	(0.131)	0.069	-0.896**	(0.127)	0.110	69655
	Luxembourg	-0.283**	(0.086)	0.066	0.173*	(0.085)	0.079	25469
	Netherlands	-0.364*	(0.141)	0.031	-0.242*	(0.121)	0.053	64485
Since 1975	Northern Ireland	-0.393*	(0.184)	0.020	0.119	(0.098)	0.033	18332
Since 1980	Greece	-1.408**	(0.270)	0.079	-0.094	(0.193)	0.078	51621
Since 1985	Portugal	0.867*	(0.347)	0.066	-0.243	(0.278)	0.078	40277
	Spain	0.157	(0.267)	0.038	-0.924**	(0.144)	0.081	43968
Since 1990	Germany (East)	-4.388**	(0.375)	0.061	2.925**	(0.401)	0.063	31344
	Norway	-1.399*	(0.556)	0.019	1.293	(0.762)	0.054	10396
Since 1993	Finland	-2.596**	(0.663)	0.048	0.866	(0.974)	0.044	17527
Since 1994	Austria	-2.260**	(0.671)	0.042	0.115	(0.467)	0.059	17446
	Sweden	-1.199*	(0.494)	0.031	0.419	(1.136)	0.037	17110

Notes: Coefficient estimates and robust standard errors (in parentheses) for logistic regression models. Coefficients for the effects of education, gender, and birth cohort and the constant are not shown.

Coeff.: coefficients.

Stderr.: standard errors.

* Significant at 5% level.

** Significant at 1% level.

a. McFadden's Pseudo-R^2.

Source: European Community Study '73, Eurobarometer studies 3-49.

Table 5a: Effects of Education, Gender, and Birth Cohort on Political Involvement European Countries, 1973-1998

		Covered by the Eurobarometer studies since 1973									Since 1975	Since 1980	Since 1985		Since 1990		Since 1993	Since 1994	
		Belgium	Denmark	France	Germany (West)	Great Britain	Ireland	Italy	Luxem-bourg	Nether-lands	Northern Ireland	Greece	Portugal	Spain	Germany (East)	Norway	Finland	Austria	Sweden
Education[a]	Low	-0.620**	-0.365**	-0.611**	-0.469**	-0.412**	-0.547**	-0.592**	-0.536**	-0.455**	-0.303**	-0.415**	-0.730**	-0.488**	-0.385**	-0.154	-0.295**	-0.346**	-0.329**
		(0.033)	(0.025)	(0.028)	(0.020)	(0.022)	(0.022)	(0.019)	(0.029)	(0.022)	(0.035)	(0.023)	(0.041)	(0.031)	(0.025)	(0.083)	(0.059)	(0.045)	(0.046)
	Medium[b]	-0.034	-0.034	-0.026	-0.117	-0.186	-0.098	0.087	-0.059	-0.004	-0.133	0.060	0.001	0.020	-0.179	-0.186	-0.132	-0.088	-0.117
	High	0.654**	0.399**	0.637**	0.586**	0.598**	0.645**	0.505**	0.595**	0.459**	0.436**	0.355**	0.729**	0.468**	0.564**	0.340**	0.427**	0.434**	0.446**
		(0.025)	(0.021)	(0.026)	(0.017)	(0.021)	(0.024)	(0.021)	(0.027)	(0.019)	(0.045)	(0.022)	(0.045)	(0.026)	(0.024)	(0.053)	(0.038)	(0.041)	(0.034)
Gender[c]	Female	-0.368**	-0.203**	-0.225**	-0.340**	-0.241**	-0.345**	-0.447**	-0.314**	-0.120**	-0.283**	-0.417**	-0.352**	-0.264**	-0.197**	-0.135**	-0.203**	-0.389**	-0.114**
		(0.018)	(0.011)	(0.012)	(0.015)	(0.013)	(0.015)	(0.018)	(0.023)	(0.014)	(0.024)	(0.019)	(0.019)	(0.020)	(0.019)	(0.037)	(0.017)	(0.017)	(0.025)
Birth cohort[d]	Prewar	0.249**	0.034	0.203**	0.074*	0.400**	0.385**	0.216**	0.475**	0.369**	0.172**	0.230**	-0.285**	-0.071	0.036	0.047	0.526**	-0.055	0.391**
		(0.037)	(0.033)	(0.034)	(0.032)	(0.032)	(0.030)	(0.031)	(0.035)	(0.025)	(0.055)	(0.027)	(0.057)	(0.048)	(0.037)	(0.053)	(0.041)	(0.070)	(0.029)
	Silent	0.302**	0.210**	0.296**	0.227**	0.311**	0.465**	0.295**	0.532**	0.370**	0.118*	0.429**	0.213**	0.189**	0.242**	0.110	0.545**	0.216**	0.328**
		(0.034)	(0.029)	(0.028)	(0.026)	(0.032)	(0.033)	(0.025)	(0.039)	(0.029)	(0.052)	(0.023)	(0.043)	(0.041)	(0.032)	(0.094)	(0.054)	(0.058)	(0.063)
	Protest[b]	0.228	0.166	0.208	0.054	0.211	0.297	0.309	0.320	0.291	-0.010	0.519	0.307	0.389	0.134	0.131	0.268	0.229	0.219
	Lost	-0.154**	-0.180**	-0.296**	-0.129**	-0.186**	-0.212**	-0.295**	-0.235**	-0.324**	-0.060	0.014	-0.070	0.006	-0.082**	-0.047	-0.471**	-0.011	-0.293**
		(0.031)	(0.024)	(0.029)	(0.038)	(0.030)	(0.029)	(0.040)	(0.040)	(0.032)	(0.048)	(0.027)	(0.041)	(0.032)	(0.031)	(0.057)	(0.068)	(0.049)	(0.044)
	Pragmatic	-0.625**	-0.230**	-0.411**	-0.226**	-0.736**	-0.935**	-0.525**	-1.092**	-0.706**	-0.220**	-1.192**	-0.165**	-0.513**	-0.330**	-0.241*	-0.868**	-0.379**	-0.645**
		(0.070)	(0.048)	(0.060)	(0.055)	(0.046)	(0.062)	(0.047)	(0.074)	(0.069)	(0.093	(0.055)	(0.054)	(0.047)	(0.034)	(0.095)	(0.074)	(0.060)	(0.056)
Constant		-2.442**	-1.571**	-1.718**	-1.611**	-1.715**	-1.919**	-1.555**	-1.665**	-1.798**	-1.959**	-0.773**	-2.327**	-2.365**	-1.023**	-1.493**	-1.999**	-1.559**	-1.923**
		(0.028)	(0.024)	(0.031)	(0.027)	(0.023)	(0.026)	(0.043)	(0.032)	(0.032)	(0.048)	(0.064)	(0.061)	(0.048)	(0.083)	(0.060)	(0.033)	(0.030)	(0.031)
Pseudo R^{2} [e]		0.052	0.026	0.041	0.044	0.034	0.047	0.068	0.065	0.030	0.019	0.067	0.064	0.038	0.036	0.017	0.046	0.041	0.031
Observations		63904	63299	69127	68175	69668	62563	69655	25469	64485	18332	51621	40277	43968	31344	10396	17527	17446	17110

Notes: Coefficient estimates and robust standard errors (in parentheses) for logistic regression models. * Significant at 5% level. ** Significant at 1% level. *a.* Effect coded with 16 to 19 years as baseline category. *b.* Effect coefficients for this category are computed from effect coefficients for the other categories, therefore no standard errors are shown. *c*. Effect coded with male as baseline category. The effect coefficient for male is the negative of the effect coefficient for female shown in the table. *d*. Effect coded with protest as baseline category. *e*. McFadden's Pseudo-R^2.

Source: European Community Study '73, Eurobarometer studies 3-49.

Table 5b: The Effect of Education, Gender, and Birth Cohort on Political Apathy in European Countries, 1973-1998

		Covered by the Eurobarometer studies since 1973									Since 1975	Since 1980	Since 1985		Since 1990		Since 1993	Since 1994	
		Belgium	Denmark	France	Germany (West)	Great Britain	Ireland	Italy	Luxem-bourg	Nether-lands	Northern Ireland	Greece	Portugal	Spain	Germany (East)	Norway	Finland	Austria	Sweden
Education[a]	Low	0.704**	0.524**	0.747**	0.639**	0.724**	0.727**	0.835**	0.761**	0.683**	0.611**	0.584**	0.667**	0.608**	0.549**	0.461**	0.478**	0.438**	0.457**
		(0.028)	(0.026)	(0.030)	(0.025)	(0.025)	(0.020)	(0.017)	(0.025)	(0.021)	(0.034)	(0.025)	(0.031)	(0.021)	(0.042)	(0.069)	(0.026)	(0.036)	(0.043)
	Medium[b]	0.061	0.075	0.026	0.021	0.180	0.139	-0.109	0.007	0.031	0.174	-0.054	-0.039	0.008	0.158	0.152	0.113	0.060	0.107
	High	-0.765**	-0.599**	-0.773**	-0.660**	-0.904**	-0.866**	-0.726**	-0.768**	-0.714**	-0.785**	-0.530**	-0.628**	-0.616**	-0.707**	-0.613**	-0.591**	-0.498**	-0.564**
		(0.025)	(0.025)	(0.029)	(0.026)	(0.026)	(0.025)	(0.024)	(0.029)	(0.022)	(0.052)	(0.027)	(0.041)	(0.021)	(0.042)	(0.051)	(0.030)	(0.034)	(0.040)
Gender[c]	Female	0.321**	0.284**	0.265**	0.488**	0.254**	0.403**	0.464**	0.302**	0.098**	0.250**	0.421**	0.392**	0.306**	0.288**	0.260**	0.223**	0.431**	0.127**
		(0.011)	(0.014)	(0.013)	(0.016)	(0.010)	(0.014)	(0.014)	(0.018)	(0.013)	(0.018)	(0.024)	(0.012)	(0.011)	(0.018)	(0.024)	(0.018)	(0.026)	(0.013)
Birth cohort[d]	Prewar	0.125**	0.222**	0.027	0.179**	-0.261**	-0.275**	0.108**	-0.119**	-0.004	-0.104**	0.153**	0.435**	0.370**	0.371**	0.279**	-0.085*	0.339**	-0.070*
		(0.025)	(0.027)	(0.028)	(0.029)	(0.031)	(0.021)	(0.025)	(0.034)	(0.029)	(0.036)	(0.028)	(0.027)	(0.024)	(0.037)	(0.058)	(0.035)	(0.035)	(0.033)
	Silent	-0.214**	-0.125**	-0.250**	-0.262**	-0.402**	-0.465**	-0.153**	-0.358**	-0.287**	-0.195**	-0.278**	-0.039	-0.027	-0.153**	-0.276**	-0.292**	-0.095	-0.289**
		(0.024)	(0.026)	(0.025)	(0.029)	(0.026)	(0.022)	(0.022)	(0.034)	(0.031)	(0.039)	(0.024)	(0.025)	(0.023)	(0.053)	(0.066)	(0.046)	(0.052)	(0.050)
	Protest[b]	-0.215	-0.230	-0.206	-0.294	-0.348	-0.360	-0.278	-0.392	-0.386	-0.190	-0.534	-0.290	-0.413	-0.341	-0.255	-0.299	-0.410	-0.331
	Lost	0.028	-0.011	0.198**	-0.022	0.273**	0.179**	0.090**	0.072**	0.089**	0.200**	-0.125**	-0.141**	-0.232**	-0.179**	-0.120*	0.167**	-0.197**	0.181**
		(0.026)	(0.030)	(0.031)	(0.023)	(0.025)	(0.018)	(0.035)	(0.026)	(0.021)	(0.033)	(0.028)	(0.022)	(0.019)	(0.034)	(0.052)	(0.037)	(0.035)	(0.047)
	Pragmatic	0.276**	0.144**	0.231**	0.399**	0.738**	0.921**	0.233**	0.797**	0.588**	0.289**	0.784**	0.035	0.302**	0.302**	0.372**	0.509**	0.363**	0.509**
		(0.049)	(0.041)	(0.041)	(0.038)	(0.040)	(0.033)	(0.046)	(0.046)	(0.055)	(0.064)	(0.037)	(0.037)	(0.033)	(0.057)	(0.082)	(0.036)	(0.052)	(0.048)
Constant		-0.328**	-1.264**	-0.830**	-1.754**	-0.964**	-0.612**	-1.056**	-0.996**	-1.151**	-0.794**	-1.304**	-0.322**	-0.301**	-2.058**	-1.849**	-1.273**	-1.408**	-1.429**
		(0.032)	(0.022)	(0.033)	(0.038)	(0.025)	(0.023)	(0.052)	(0.029)	(0.026)	(0.034)	(0.037)	(0.037)	(0.028)	(0.069)	(0.057)	(0.038)	(0.022)	(0.032)
Pseudo R^{2} [e]		0.075	0.061	0.060	0.075	0.052	0.069	0.101	0.078	0.053	0.033	0.078	0.078	0.079	0.054	0.053	0.044	0.059	0.037
Observations		63904	63299	69127	68175	69668	62563	69655	25469	64485	18332	51621	40277	43968	31344	10396	17527	17446	17110

Notes: Coefficient estimates and robust standard errors (in parentheses) for logistic regression models. * Significant at 5% level. ** Significant at 1% level. *a.* Effect coded with 16 to 19 years as baseline category. *b.* Effect coefficients for this category are computed from effect coefficients for the other categories, therefore no standard errors are shown. *c*. Effect coded with male as baseline category. The effect coefficient for male is the negative of the effect coefficient for female shown in the table. *d*. Effect coded with protest as baseline category. *e*. McFadden's Pseudo-R^2.

Source: European Community Study '73, Eurobarometer studies 3-49.

Table 6a: Trends of the Effects of Education, Gender, and Birth Cohort on Political Involvement in European Countries, 1973-1998

		Covered by the Eurobarometer studies since 1973									Since 1975	Since 1980	Since 1985		Since 1990		Since 1993	Since 1994	
		Belgium	Denmark	France	Germany (West)	Great Britain	Ireland	Italy	Luxem-bourg	Nether-lands	Northern Ireland	Greece	Portugal	Spain	Germany (East)	Norway	Finland	Austria	Sweden
Education[a]	Low	0.289**	0.239**	0.430**	0.226**	0.027	-0.013	0.248**	-0.192*	0.294**	-0.083	0.570**	-0.332	0.360*	0.008	0.087	1.294	0.341	-0.886
		(0.095)	(0.091)	(0.061)	(0.063)	(0.057)	(0.069)	(0.057)	(0.096)	(0.057)	(0.144)	(0.082)	(0.279)	(0.183)	(0.294)	(1.084)	(1.116)	(1.151)	(1.233)
	Medium[b]	0.007	0.029	-0.067	-0.120	-0.231	-0.023	-0.097	0.045	-0.105	-0.364	-0.090	-0.492	-0.063	-0.274	0.515	0.314	1.361	1.405
	High	-0.296**	-0.268**	-0.363**	-0.106	0.204**	0.036	-0.151*	0.147	-0.189**	0.447*	-0.480**	0.824**	-0.297	0.266	-0.602	-1.608*	-1.702	-0.519
		(0.080)	(0.078)	(0.059)	(0.072)	(0.073)	(0.088)	(0.062)	(0.084)	(0.061)	(0.196)	(0.114)	(0.240)	(0.185)	(0.226)	(0.816)	(0.738)	(1.081)	(0.939)
Gender[c]	Female	-0.116	0.157**	-0.007	0.113*	0.201**	0.184**	0.317**	0.162	-0.083	-0.091	0.140*	0.241	0.049	-0.733**	-0.766*	-0.419	-1.139**	-0.907
		(0.065)	(0.030)	(0.045)	(0.048)	(0.035)	(0.043)	(0.039)	(0.091)	(0.046)	(0.090)	(0.067)	(0.134)	(0.137)	(0.151)	(0.384)	(0.435)	(0.365)	(0.861)
Birth cohort[d]	Prewar	0.500**	-0.138	0.217	0.043	0.316*	0.249	-0.486**	0.547*	0.354*	-0.765**	1.112**	0.544	0.304	0.783	-0.229	0.153	-1.050	-0.404
		(0.176)	(0.149)	(0.136)	(0.142)	(0.133)	(0.164)	(0.144)	(0.216)	(0.165)	(0.257)	(0.175)	(0.345)	(0.308)	(0.412)	(0.608)	(0.852)	(1.492)	(0.701)
	Silent	0.395*	-0.023	0.363**	0.328*	0.426**	0.412**	-0.241	0.450*	0.286	-0.010	0.699**	0.019	-0.091	0.262	0.941	1.252	2.434*	3.638**
		(0.184)	(0.148)	(0.125)	(0.148)	(0.152)	(0.156)	(0.137)	(0.211)	(0.179)	(0.293)	(0.174)	(0.285)	(0.328)	(0.327)	(1.448)	(1.400)	(1.035)	(1.365)
	Protest[b]	0.643	0.019	0.077	0.268	0.530	0.359	-0.087	0.586	0.203	-0.214	0.519	0.204	-0.695	-0.332	1.106	0.334	-1.752	-1.190
	Lost	0.080	0.144	-0.194	-0.164	0.089	0.253	0.379	0.184	-0.486**	-0.132	-0.075	0.320	-0.060	-0.435	-0.139	1.208	-1.782	-0.395
		(0.153)	(0.147)	(0.147)	(0.164)	(0.176)	(0.168)	(0.219)	(0.264)	(0.174)	(0.285)	(0.141)	(0.238)	(0.249)	(0.260)	(0.688)	(1.456)	(1.181)	(1.082)
	Pragmatic	-1.618**	-0.002	-0.463	-0.475	-1.361**	-1.273*	0.435	-1.767*	-0.357	1.121	-2.255**	-1.087*	0.542	-0.278	-1.679	-2.947*	2.150	-1.649
		(0.515)	(0.437)	(0.419)	(0.433)	(0.475)	(0.526)	(0.479)	(0.772)	(0.580)	(0.918)	(0.550)	(0.532)	(0.476)	(0.406)	(1.432)	(1.157)	(1.231)	(1.574)
Pseudo R^{2} [e]		0.054	0.027	0.045	0.045	0.035	0.047	0.071	0.067	0.033	0.022	0.083	0.067	0.039	0.062	0.020	0.048	0.043	0.032
Observations		63904	63299	69127	68175	69668	62563	69655	25469	64485	18332	51621	40277	43968	31344	10396	17527	17446	17110

Notes: Coefficient estimates and robust standard errors (in parentheses) for logistic regression models. Only coefficients of interaction effects of education, gender, and birth cohort with time are shown. Main effects were present in the model, but are not shown in the table. * Significant at 5% level. ** Significant at 1% level. *a.* Effect coded with 16 to 19 years as baseline category. *b*. Effect coded with male as baseline category. *c*. Effect coded with protest as baseline category. The interaction effect coefficient for male is the negative of the interaction effect coefficient for female shown in the table. *d.* Effects for this category are computed from the other estimates, therefore no standard errors are shown. *e*. McFadden's Pseudo-R^2.

Source: European Community Study '73, Eurobarometer studies 3-49.

Table 6b: Trends of the Effects of Education, Gender, and Birth Cohort on Political Apathy in European Countries, 1973-1998

		Covered by the Eurobarometer studies since 1973									Since 1975	Since 1980	Since 1985		Since 1990		Since 1993	Since 1994	
		Belgium	Denmark	France	Germany (West)	Great Britain	Ireland	Italy	Luxem-bourg	Nether-lands	Northern Ireland	Greece	Portugal	Spain	Germany (East)	Norway	Finland	Austria	Sweden
Education[a]	Low	-0.366**	-0.472**	-0.437**	-0.050	-0.074	-0.083	-0.128**	0.211	-0.243**	-0.013	-0.601**	0.544**	-0.434**	-1.178**	-1.384	-0.962	0.514	-0.589
		(0.067)	(0.079)	(0.068)	(0.097)	(0.058)	(0.061)	(0.046)	(0.123)	(0.062)	(0.112)	(0.105)	(0.189)	(0.120)	(0.456)	(1.121)	(0.568)	(0.992)	(1.109)
	Medium[b]	0.030	0.055	0.047	0.166	0.247	0.031	0.008	-0.063	0.089	0.119	0.051	0.599	0.381	0.551	0.751	-0.410	0.057	-0.400
	High	0.336**	0.417**	0.390**	-0.116	-0.173*	0.052	0.120	-0.148	0.154	-0.106	0.550**	-1.143**	0.053	0.627	0.633	1.372*	-0.571	0.989
		(0.064)	(0.088)	(0.075)	(0.113)	(0.083)	(0.091)	(0.074)	(0.141)	(0.092)	(0.173)	(0.123)	(0.156)	(0.149)	(0.415)	(0.903)	(0.577)	(1.134)	(0.874)
Gender[c]	Female	0.005	-0.216**	-0.136**	-0.132*	-0.156**	-0.204**	-0.223**	-0.224**	0.021	0.062	-0.506**	-0.169*	-0.179*	0.294	0.101	0.468	0.324	0.165
		(0.044)	(0.028)	(0.044)	(0.056)	(0.026)	(0.038)	(0.043)	(0.063)	(0.049)	(0.070)	(0.084)	(0.070)	(0.073)	(0.195)	(0.316)	(0.372)	(0.704)	(0.430)
Birth cohort[d]	Prewar	0.170	0.235	0.189	0.001	-0.383**	-0.041	1.010**	-0.218	0.117	0.615**	-0.671**	0.418*	0.281	0.251	1.732*	1.077	-0.193	0.375
		(0.158)	(0.133)	(0.121)	(0.148)	(0.117)	(0.099)	(0.101)	(0.149)	(0.126)	(0.173)	(0.151)	(0.177)	(0.164)	(0.423)	(0.717)	(0.656)	(0.834)	(0.707)
	Silent	-0.186	0.427**	0.183	-0.089	-0.241*	-0.021	0.467**	-0.395*	0.234	0.485**	-0.317*	0.447*	-0.076	1.327**	-1.660*	-1.334	1.054	-3.564**
		(0.146)	(0.127)	(0.133)	(0.139)	(0.123)	(0.108)	(0.094)	(0.170)	(0.142)	(0.172)	(0.152)	(0.176)	(0.162)	(0.431)	(0.763)	(1.073)	(1.161)	(0.770)
	Protest[b]	-0.237	0.006	0.040	-0.174	-0.493	-0.204	0.262	-0.420	-0.004	0.359	-0.404	0.407	0.361	-0.032	-0.724	-0.562	0.889	-0.314
	Lost	-0.101	-0.498**	-0.297	-0.252	-0.818**	-0.413**	-0.164	-0.288	-0.084	-0.206	0.434**	-0.478**	-0.048	-0.797	0.099	-0.586	0.549	1.015
		(0.126)	(0.138)	(0.152)	(0.132)	(0.115)	(0.105)	(0.151)	(0.153)	(0.106)	(0.170)	(0.145)	(0.123)	(0.134)	(0.443)	(0.843)	(0.751)	(0.793)	(1.160)
	Pragmatic	0.354	-0.170	-0.115	0.514	1.935**	0.679*	-1.575**	1.321**	-0.263	-1.253**	0.958**	-0.794*	-0.518	-0.749	0.553	1.405	-2.299*	2.488
		(0.495)	(0.397)	(0.444)	(0.448)	(0.361)	(0.293)	(0.329)	(0.423)	(0.374)	(0.477)	(0.363)	(0.330)	(0.310)	(0.573)	(1.317)	(0.759)	(1.155)	(1.290)
Pseudo R^{2}[e]		0.084	0.063	0.062	0.075	0.054	0.070	0.113	0.080	0.054	0.035	0.082	0.080	0.082	0.064	0.055	0.045	0.059	0.038
Observations		63904	63299	69127	68175	69668	62563	69655	25469	64485	18332	51621	40277	43968	31344	10396	17527	17446	17110

Notes: Coefficient estimates and robust standard errors (in parentheses) for logistic regression models. Only coefficients of interaction effects of education, gender, and birth cohort with time are shown. Main effects were present in the model, but are not shown in the table. * Significant at 5% level. ** Significant at 1% level. *a.* Effect coded with 16 to 19 years as baseline category. *b.* Effect coded with male as baseline category. The interaction effect coefficient for male is the negative of the interaction effect coefficient for female shown in the table. *c*. Effect coded with protest as baseline category. *d.* Effects for this category are computed from the other estimates, therefore no standard errors are shown. *e*. McFadden's Pseudo-R^2.

Source: European Community Study '73, Eurobarometer studies 3-49.

Table 7: Trends of the Effects of Gender on Political Involvement and Political Apathy in European Countries, without and with Controlling for Interactions of Education and Gender with Birth Cohort

		Political Involvement				Political Apathy				
		Without controls		With controls		Without controls		With controls		Obser-vations
	Country	Coeff.	Stderr.	Coeff.	Stderr.	Coeff.	Stderr.	Coeff.	Stderr.	
Covered by the Euro-barometer studies since 1973	Belgium	-0.116	(0.065)	-0.148*	(0.067)	0.005	(0.044)	0.073	(0.045)	63904
	Denmark	0.157**	(0.030)	0.173**	(0.032)	-0.216**	(0.028)	-0.174**	(0.030)	63299
	France	-0.007	(0.045)	0.011	(0.047)	-0.136**	(0.044)	-0.078	(0.045)	69127
	Germany (West)	0.113*	(0.048)	0.033	(0.053)	-0.132*	(0.056)	0.005	(0.064)	68175
	Great Britain	0.201**	(0.035)	0.223**	(0.035)	-0.156**	(0.026)	-0.121**	(0.025)	69668
	Ireland	0.184**	(0.043)	0.106*	(0.043)	-0.204**	(0.038)	-0.036	(0.039)	62563
	Italy	0.317**	(0.039)	0.209**	(0.040)	-0.223**	(0.043)	-0.086*	(0.040)	69655
	Luxembourg	0.162	(0.091)	0.138	(0.090)	-0.224**	(0.063)	-0.123	(0.066)	25469
	Netherlands	-0.083	(0.046)	-0.055	(0.047)	0.021	(0.049)	0.075	(0.051)	64485
since 1975	Northern Ireland	-0.091	(0.090)	-0.043	(0.092)	0.062	(0.070)	0.078	(0.068)	18332
since 1980	Greece	0.140*	(0.067)	-0.024	(0.069)	-0.506**	(0.084)	-0.133	(0.078)	51621
since 1985	Portugal	0.241	(0.134)	0.143	(0.143)	-0.169*	(0.070)	-0.063	(0.072)	40277
	Spain	0.049	(0.137)	-0.033	(0.135)	-0.179*	(0.073)	0.020	(0.075)	43968
since 1990	Germany (East)	-0.733**	(0.151)	-0.731**	(0.143)	0.294	(0.195)	0.365	(0.196)	31344
	Norway	-0.766*	(0.384)	-0.780*	(0.369)	0.101	(0.316)	0.134	(0.314)	10396
since 1993	Finland	-0.419	(0.435)	-0.360	(0.446)	0.468	(0.372)	0.757*	(0.366)	17527
since 1994	Austria	-1.139**	(0.365)	-1.283**	(0.368)	0.324	(0.704)	0.578	(0.731)	17446
	Sweden	-0.907	(0.861)	-0.839	(0.823)	0.165	(0.430)	0.241	(0.443)	17110

Notes: Coefficient estimates and robust standard errors (in parentheses) for logistic regression models. Only coefficients for time-by-gender interaction effects are shown.

Coeff.: coefficients.

Stderr.: standard errors.

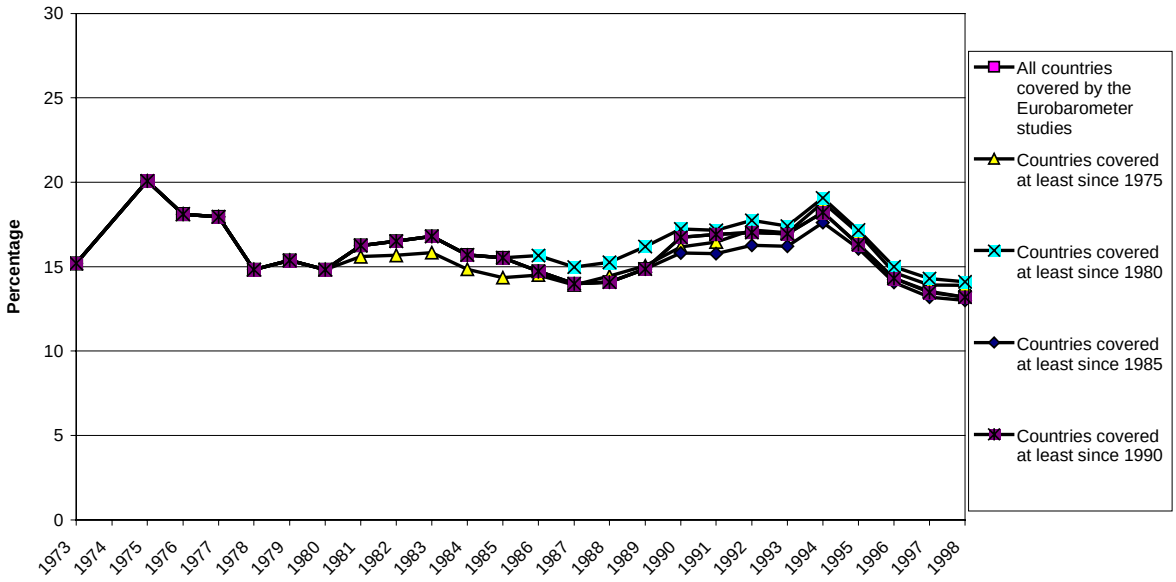
* Significant at 5% level.

** Significant at 1% level.

Source: European Community Study '73, Eurobarometer studies 3-49.

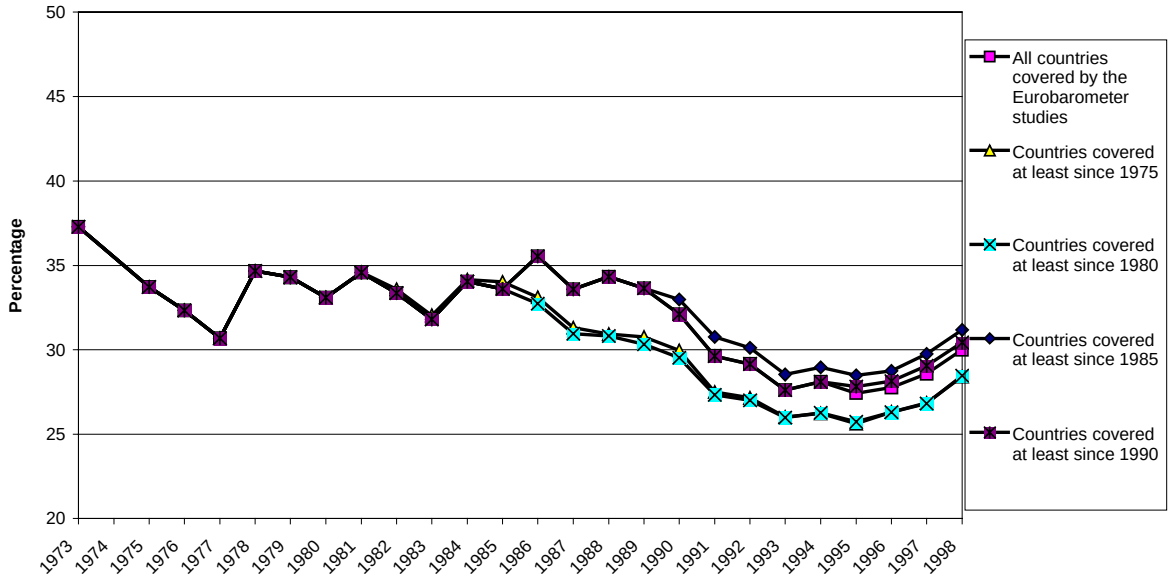
B. Figures

Figure 1 a: Political Involvement in Europe, 1973-1998 (percentage involved in frequent political discussion)



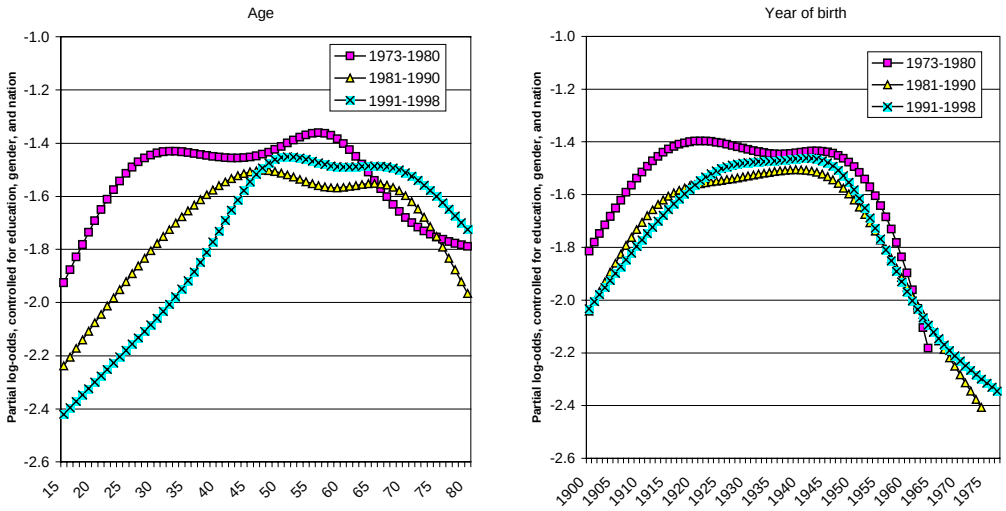
Source : European Community Study '73, Eurobarometer studies 3-49. Data are weighted for country population size.

Figure 1b: Political Apathy in Europe, 1973 –1998 (percentage never involved in political discussions)



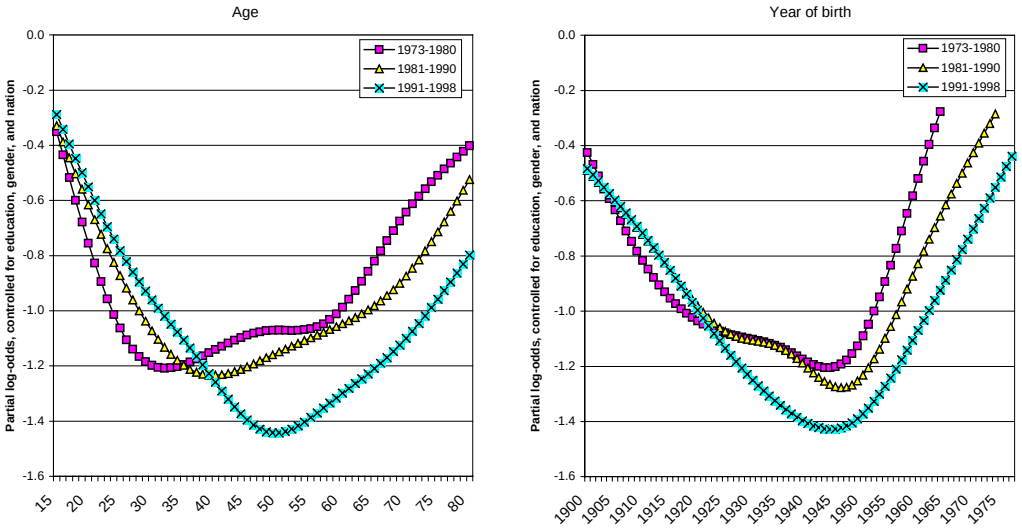
Source: European Community Study '73, Eurobarometer studies 3-49. Data are weighted for country population size.

Figure 2a: Political Involvement, Age, and Year of Birth in Three Decades (partial log-odds based on logistic regression, controlled for education, gender, and nation)



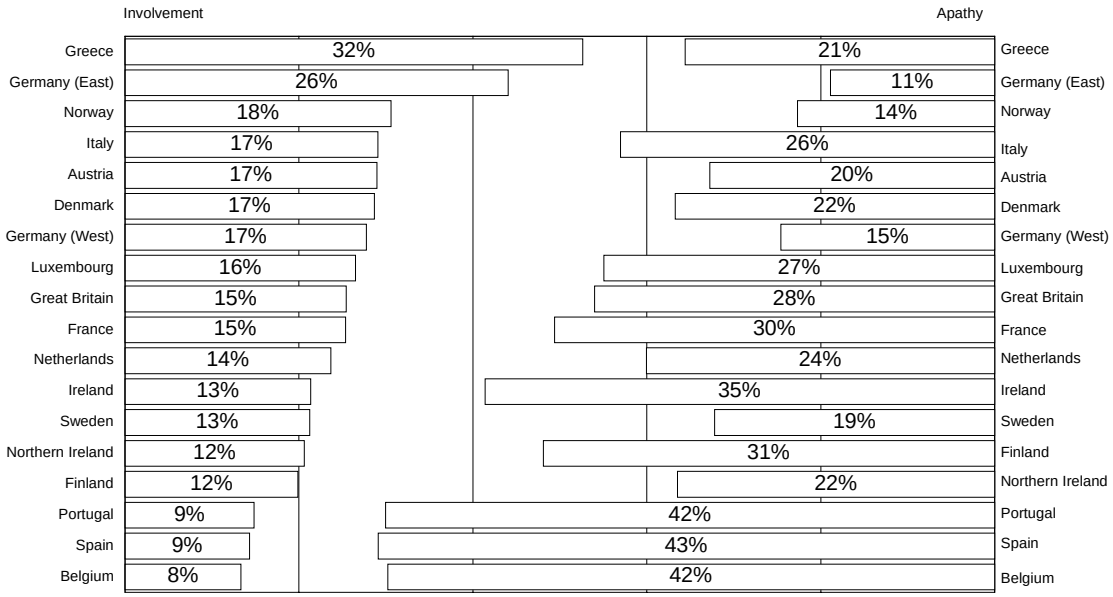
Source : European Community Study '73, Eurobarometer studies 3-49; only nations are included that are covered by the Eurobarometer studies since 1973.

Figure 2b: Political Apathy, Age, and Year of Birth in Three Decades (partial log-odds based on logistic regression, controlled for education, gender, and nation)



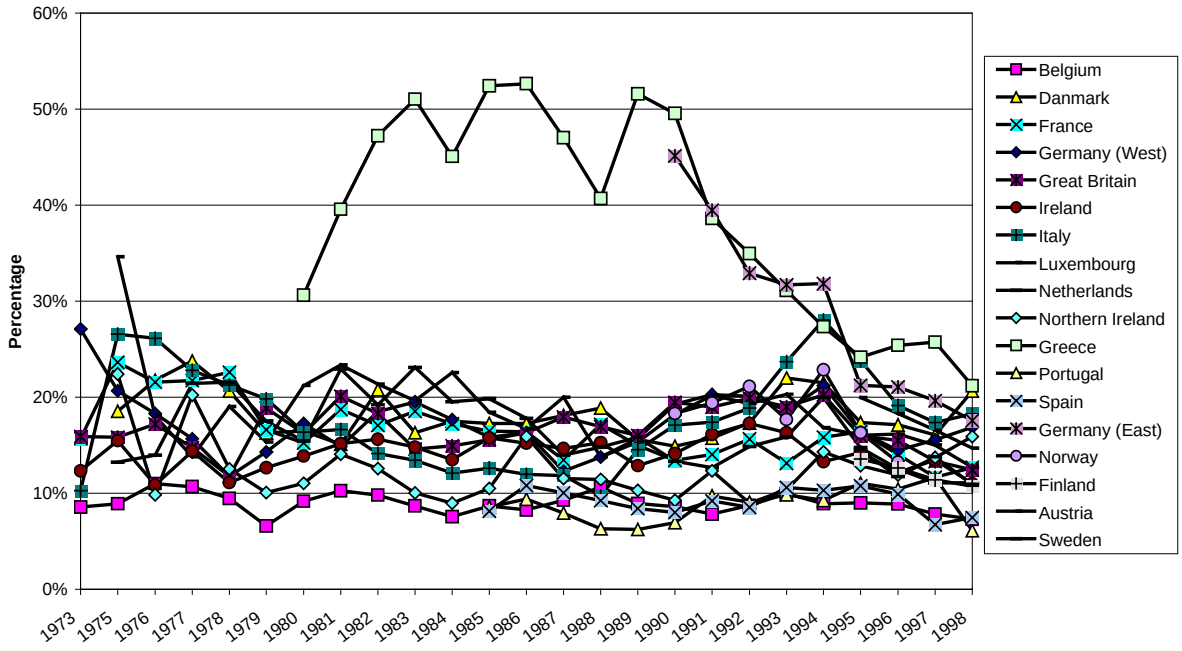
Source : European Community Study '73, Eurobarometer studies 3-49; only nations are included that are covered by the Eurobarometer studies since 1973.

Figure 3: Political Involvement and Political Apathy in European Countries (corrected percentages based on logistic regression, controlled for education, gender, and birth cohort)



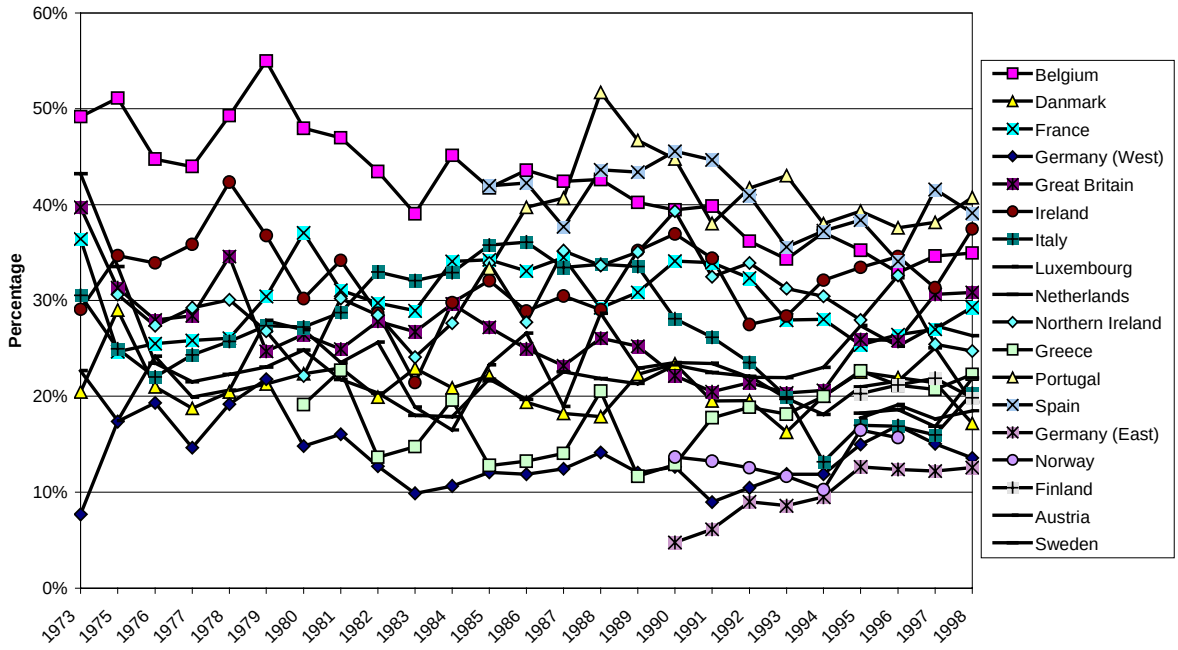
Source : European Community Study '73, Eurobarometer studies 3-49.

Figure 4a: Political Involvement in European Countries, 1973-1998 (corrected percentages based on logistic regression, controlled for education, gender, and birth cohort)



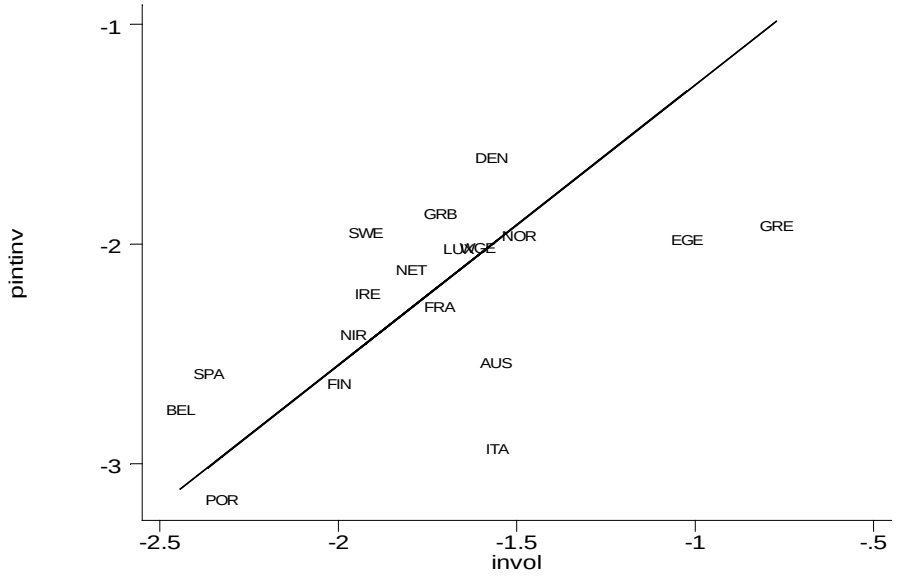
Source : European Community Study '73, Eurobarometer studies 3-49.

Figure 4b: Political Apathy in European Countries, 1973-1998 (corrected percentages based on logistic regression, controlled for education, gender, and birth cohort)



Source : European Community Study '73, Eurobarometer studies 3-49.

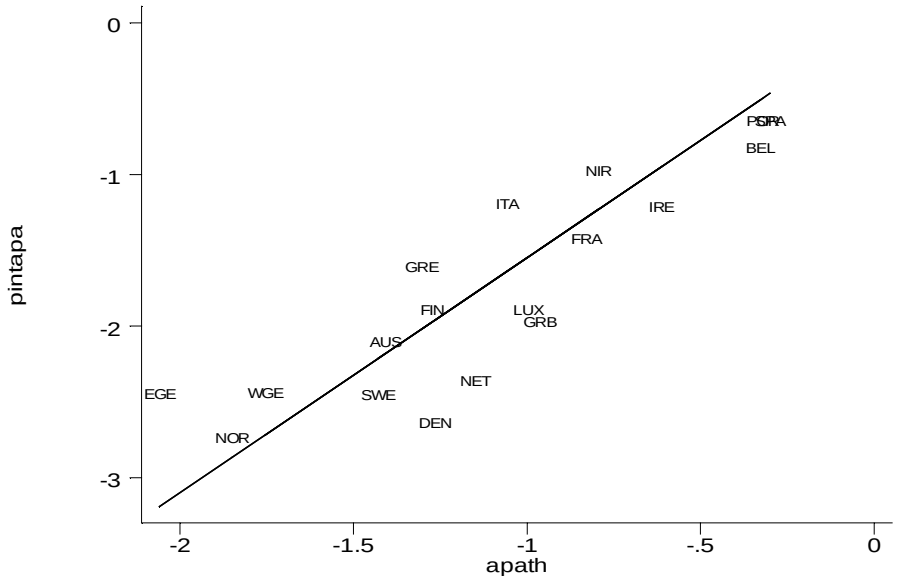
Figure 5a: Nation-level Equivalence of Indicators for Political Involvement Based on Frequency of Political Discussions (invol) and Subjective Political Interest (pintinv) (partial log-odds based on logistic regression, controlled for education, gender, and birth cohort)



Note: The straight line in the diagram is a line of a linear regression through the origin of *pintapa* on *apath.*

Source: Eurobarometer studies 19, 30, 31, 31A, 32, 33, 34, 49.

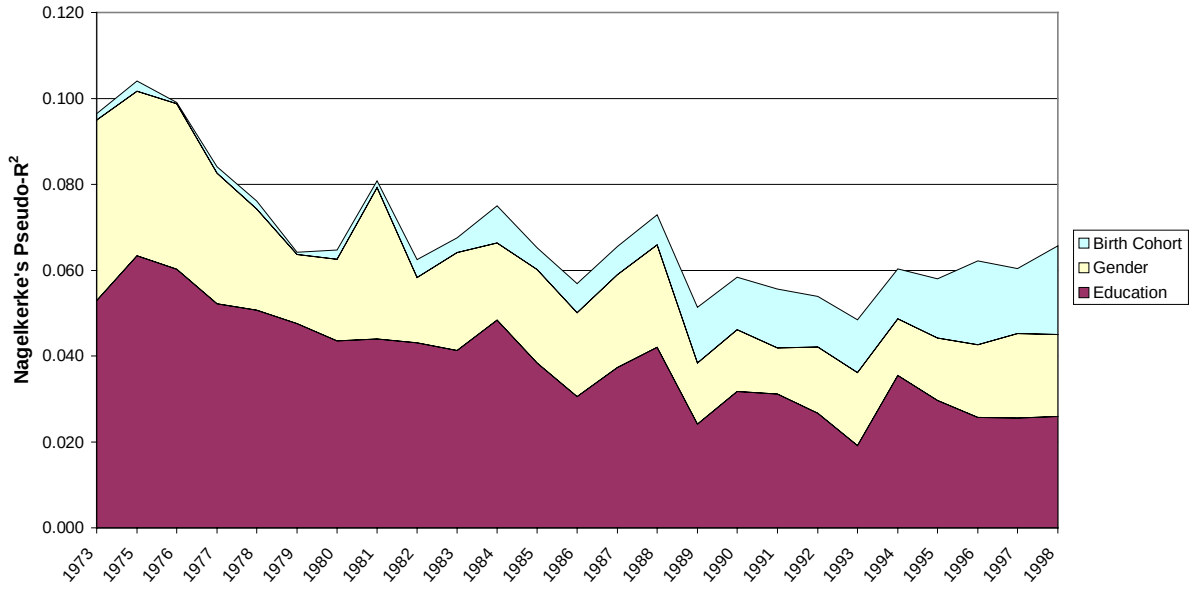
Figure 5b: Nation-level Equivalence of Indicators for Political Apathy Based on Frequency of Political Discussions (apath) and Subjective Political Interest (pintapa) (partial log-odds based on logistic regression, controlled for education, gender, and birth cohort)



Note: The straight line in the diagram is a line of a linear regression through the origin of *pintapa* on *apath*.

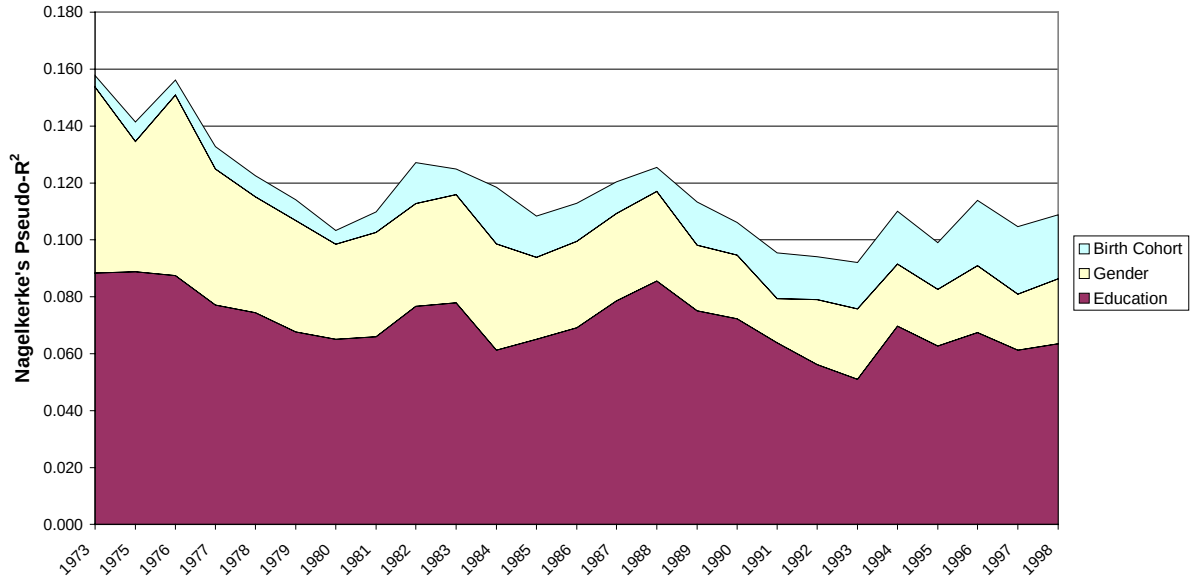
Source: Eurobarometer studies 19, 30, 31, 31A, 32, 33, 34, 49.

Figure 6a: Explanatory Power of Education, Gender, and Birth Cohort for Political Involvement, 1973-1998 (Nagelkerke's Pseudo-R2 from logistic regression)



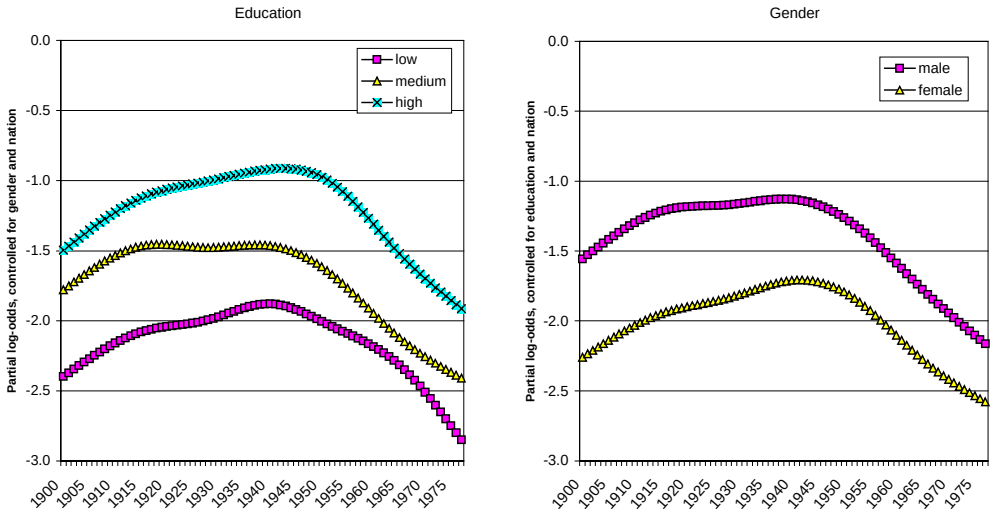
Source : European Community Study '73, Eurobarometer studies 3-49. Data are weighted for country population size.

Figure 6b: Explanatory Power of Education, Gender, and Birth Cohort for Political Apathy, 1973-1998 (Nagelkerke's Pseudo-R2 from logistic regression)



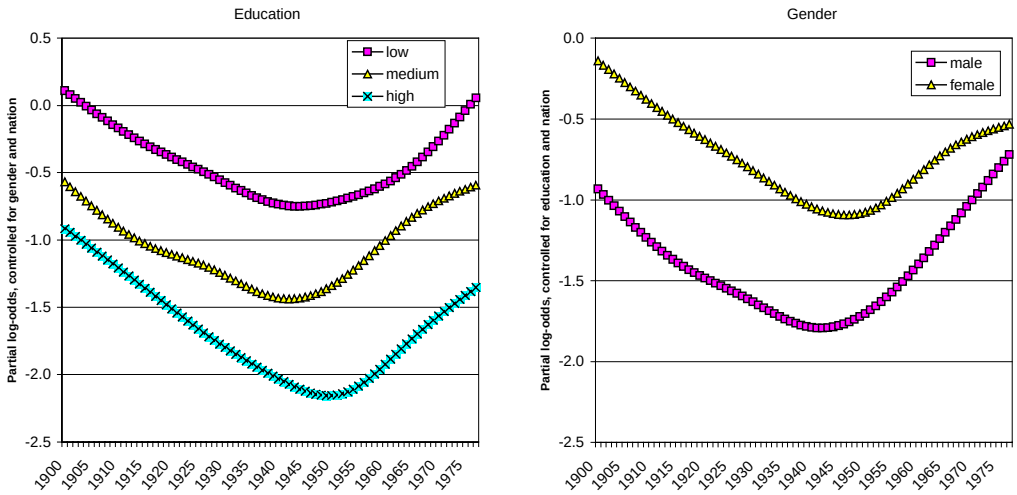
Source : European Community Study '73, Eurobarometer studies 3-49. Data are weighted for country population size.

Figure 7a: Effects of Education and Gender on Political Involvement by Year of Birth (partial log-odds based on logistic regression)



Source : European Community Study '73, Eurobarometer studies 3-49.

Figure 7b: Effects of Education and Gender on Political Apathy by Year of Birth (partial log-odds based on logistic regression)



Source : European Community Study '73, Eurobarometer studies 3-49.

C. Integrated Data Set (PIEB)

The analyses presented in this paper are based on a specially developed integrated data set of all available Eurobarometer studies. Most of the original data sets are obtained from ZEUS (Mannheim), while additional data sets were supplied by the Zentral Archiv (Cologne) and INRA (Brussels). Neither these institutes, nor the principal investigators bear any responsibility for the integration and harmonisation of the distinct studies or the results presented here. The studies included are:

Study:	Date:	Number of cases:
European Community Study	Fall, 1973	13484
Eurobarometer 3	May, 1975	9610
Eurobarometer 4	October, 1975	9153
Eurobarometer 5	May-June, 1976	8622
Eurobarometer 6	November, 1976	9210
Eurobarometer 7	April, 1977	9056
Eurobarometer 8	October-November, 1977	8826
Eurobarometer 9	May-June, 1978	9151
Eurobarometer 10	October-November, 1978	8677
Eurobarometer 11	April, 1979	8884
Eurobarometer 12	October, 1979	8989
Eurobarometer 13	April, 1980	8827
Eurobarometer 14	October-November, 1980	9992
Eurobarometer 15	April, 1981	9898
Eurobarometer 16	October-November, 1981	9909
Eurobarometer 17	March-April, 1982	11772
Eurobarometer 18	October, 1982	9689
Eurobarometer 19	March-April, 1983	9790
Eurobarometer 20	October, 1983	9718
Eurobarometer 21	March-April, 1984	9745
Eurobarometer 22	October-November, 1984	9909
Eurobarometer 23	March-April, 1985	9929
Eurobarometer 24	October-November, 1985	11845
Eurobarometer 25	March-April, 1986	11831
Eurobarometer 26	October-November, 1986	11837
Eurobarometer 27	April, 1987	11651
Eurobarometer 28	October-November, 1987	11583
Eurobarometer 29	March-April, 1988	11729
Eurobarometer 30	October-November, 1988	11794

Eurobarometer 31	March-April, 1989	11678
Eurobarometer 31.A	July, 1989	11819
Eurobarometer 32	October-November, 1989	23397
Eurobarometer 33	March-April, 1990	11775
Eurobarometer 34.0	October-November, 1990	13883
Eurobarometer 34.1	November, 1990	12733
Eurobarometer 35.0	March, 1991	13121
Eurobarometer 35.1	March, 1991	13149
Eurobarometer 36	October-November, 1991	14006
Eurobarometer 37.0	March-April, 1992	14082
Eurobarometer 37.1	April-May, 1992	12995
Eurobarometer 38.0	September-October, 1992	14014
Eurobarometer 38.1	November, 1992	13024
Eurobarometer 39.0	March-April, 1993	15136
Eurobarometer 39.1	May-June, 1993	14045
Eurobarometer 40	October-November, 1993	15079
Eurobarometer 41.0	March-May, 1994	15406
Eurobarometer 41.1	June-July, 1994	13096
Eurobarometer 42	November-December, 1994	16677
Eurobarometer 43.0	March-April, 1995	16238
Eurobarometer 43.1	April-May, 1995	17166
Eurobarometer 43.1bis	May-June, 1995	16300
Eurobarometer 44.0	October-November, 1995	16641
Eurobarometer 44.1	November-December, 1995	17298
Eurobarometer 44.2bis	January-March, 1996	65178
Eurobarometer 44.3	February-April, 1996	21465
Eurobarometer 45.1	April-May, 1996	16335
Eurobarometer 46.0	October-November, 1996	16248
Eurobarometer 46.1	October-November, 1996	17212
Eurobarometer 47.0	January-February, 1997	16362
Eurobarometer 47.1	March-April, 1997	16154
Eurobarometer 47.2	April-June, 1997	16201
Eurobarometer 48.0	October-November, 1997	16186
Eurobarometer 49	April-May, 1998	16165