Political Efficacy and Expected Political Participation among Lower and Upper Secondary Students.

A Comparative Analysis with Data from the IEA Civic Education Study.

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Introduction

The process of political socialisation of adolescents includes more than the acquisition of knowledge about society, citizenship and the political system. In a democracy, citizens are expected to participate actively in the political process. Active participation, however, requires citizens to believe in their own ability to influence the course of politics, in other words, to feel *politically efficacious*. Therefore, enhancing control beliefs and the willingness to act politically could be viewed as important areas of civic and citizenship education.

This paper examines changes in levels and relationships regarding efficacy and expected participation using data from students at different stages of political socialisation. It uses data collected during the two surveys of the IEA Civic Education Study (Torney-Purta, Lehmann, Oswald and Schulz, 2001; Amadeo, Torney-Purta, Husfeldt and Nikolova, 2002) and comprises two age groups: 14-year-old lower secondary students (grade 8 or 9) and upper secondary students (grade 11 or 12).

Political Efficacy and political participation

The concept of political efficacy has played a prominent role in studies on political behaviour and political socialisation. Political efficacy is the "feeling that political and social change is possible and that the individual citizen can play a part in bringing about this change" (Campbell, Gurin and Miller, 1954, p. 187). Since the early studies on political behaviour of the Ann Arbor Group (Campbell, Gurin and Miller, 1954; Campbell, Converse, Miller and Stokes, 1960) the construct has been considered as an important predictor of political participation (Abramson and Aldrich, 1982) and also as an outcome of participation (Finkel, 1985).

High levels of efficacy among citizens are usually viewed as desirable for the stability of democracy, because "in the modern democratic society, citizens should feel that they have some power to influence the actions of their government" (Wright, 1981, p. 69). Citizens who are confident about having this power are more likely to support the democratic system. David Easton (1965) integrated the construct of political efficacy into his theoretical concept of political support, though questions have been raised regarding the compatibility of this approach.

In the process of political socialisation during childhood and adolescence, acquisition of political efficacy is often seen as crucial for future participation as an active citizen in a democracy. Not surprisingly, the construct has received a lot of attention in studies on the political socialisation of adolescents (Easton and Dennis, 1967; Hess and Torney, 1967; Hahn, 1998). Studies have demonstrated the feasibility of measuring this construct among children and adolescents.

Analyses of the four (later six) SRC (Social Research Centre) items used to measure political efficacy in the studies of the Ann Arbor Group soon revealed a two-dimensional structure of political efficacy: *Internal efficacy* can be defined as the confidence of the individual in his or her own abilities to understand politics and to act politically, whereas external efficacy constitutes the individual's belief in the responsiveness of the political system (see Converse, 1972; Balch, 1974).

Later studies have confirmed the two-dimensionality of the SRC items (Acock, Clarke and Stewart, 1985).[1]

The stability of political efficacy has often been questioned and research (sometimes with different measures) has shown different results regarding this issue. Whereas some researchers claim that both internal and external efficacy are relatively stable over time (Abramson, 1983; Aish and Joreskog, 1990; Iyengar, 1980), others have shown evidence that internal efficacy is less volatile over time than external efficacy (Acock and Clarke, 1990; Gurin and Brim, 1984). Findings that external efficacy is more likely to be influenced by experiences with political participation than internal efficacy (Finkel, 1985) support the view that confidence in system responsiveness is less stable than confidence in one's own ability to act politically.

Research has typically shown internal and external relationship to be moderately correlated.[2] The causal relationship between internal and external efficacy is unclear: Whereas some scholars argue that internal efficacy beliefs are a pre-condition for external control beliefs (Craig et. al., 1990), others suggest that without believing in the general feasibility of influencing politics individuals do not develop a sense of personal competency (Miller, 1970). Studies also suggest that internal efficacy beliefs are positively associated with education, motivation and political participation, but not with trust in political institutions (Morrell, 2003). Trust in government, in turn, is positively correlated with external efficacy (Niemi et. al., 1991).

The internal dimension of political efficacy can been seen as related to the more general notion of *self-efficacy*: The individuals' "judgements of their capabilities to organise and execute courses of action required to attain designated types of performances" (Bandura, 1986, p. 391) are deemed to have a strong influence on individual choices, efforts, perseverance and emotions related to the tasks. The concept of self-efficacy constitutes an important element of Bandura's *social cognitive theory* (1993) about the learning process, in which the learner directs his or her own learning.

According to Bandura's theory perceptions of the individual's control beliefs vary according to domains, activities and circumstances. In the case of political efficacy one would suspect that the individual's control beliefs are generally related to own experiences with political participation or perceptions of the experiences of others with political participation. It should also be noted that judgements about one's own abilities to act are related to expectations about the outcomes of these actions but that they are not equivalent. Self-confidence and confidence about a positive outcome certainly enhance action. However, even with a high sense of self-efficacy, action is unlikely to be taken if individuals have low outcome expectancies.

With regard to political efficacy, Bandura (1997) notes that self-efficacy in the field of politics can be described as the "belief that one can produce effects through political action" (p. 483) and distinguishes between personal and collective efficacy, which mirrors the distinction between internal and external political efficacy. During adolescence the development of control beliefs in the area of politics might be influenced partially by the experiences with student activities in order to influences school matters (Bandura, 1997, p. 491). Some scholars also argue that more democratic

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1 The distinction of internal and external control beliefs is elaborated in Rotter's social learning theory (1966). Regarding the measurement of this (more general) psychological concept of internal versus external control beliefs see Gurin, Gurin and Morrison (1978).

2 Some studies have reported higher correlations between the two dimensions (for example, Aish and Joreskog, 1990), but this may be due to the use of "system-related" items for measuring the internal dimension.

forms of school governance are able to contribute to higher levels of political efficacy (see for example Mosher, Kenny and Garrod, 1994, p. 83).

Beliefs about the possibility of bringing about change when acting politically are not restricted to the broader political arena. Adolescent - who are generally not able to vote or run for office in "adult politics" - may experiment to what extent they have the power to influence the ways schools are run. The sense of students to which they have a say when acting together could be seen as the counter-part of (external) political efficacy. Democratic practices in schools have the potential to serve as a model for the students' perception about the usefulness of political action and the development of feelings of *school efficacy* might influence control beliefs with regard to the democratic system and have effects on later political participation.

Political participation can be defined as "activity that has the intent or effect of influencing government action – either directly by affecting the making of implementation of public policy or indirectly by influencing the selection of people those policies" (Verba et. al., 1995, p. 38). Voting, volunteering for campaign work, membership in parties, running for office or protest activities are all different forms of political participation. Voting is clearly the least intensive and demanding of these activities.

During the Seventies and Eighties, protest behaviour as a form of participation has become more prominent in Western democracies (Barnes, Kaase et. al., 1979). Scholars have distinguished "conventional" (voting, running for office) from "unconventional (social movement)" activities (grass-root campaigns, protest activities) and among the latter legal from illegal forms of behaviour (Kaase, 1990).

Verba et. al. (1995) identify the following three factors as predictors of political participation: (i) Resources enabling individuals to participate (time, knowledge), (ii) psychological engagement (interest, efficacy) and (iii) "recruitment networks" which help to bring individuals into politics (like social movements, church groups or parties).

Research has often emphasised the role of family background for developing positive attitudes towards political participation (see for example Renshon, 1973). However, the school as a competing agent of home background has sometimes been seen as even more influential (see Hess and Torney, 1968). But there is no doubt that family background has consequences for the political development of adolescents. The role of socio-economic background can be seen as influential in (i) providing a more stimulating environment as well as in (ii) enhancing the educational attainment and future prospects of adolescents, which in turn enhance political involvement as an individual resource.

Both efficacy and participation have become prominent factors in research studies about the growing alienation of larger parts of the population from the political system in Western democracies since the Sixties. One popular explanation for the waning of civil society in the United States is the negative effect of television viewing (Putnam, 2000), which leads to decreasing interest, sense of efficacy, trust and participation (see also Gerbner, 1980; Robinson, 1976). However, research has also shown that media use (in particular for information) is usually positively related to political participation and Norris (2000) concludes from an extensive literature review and own findings from a large-scale study that there is no conclusive evidence for a negative relationship between media use and political participation.

Richardson (2003) in her secondary analysis of US-American data from the IEA Civic Education study emphasises the role of political discussion as predictor of both feelings of efficacy and

expected participation. Reported participation in political discussions with peers, parents and teachers proved to be a more influential predictor than civic knowledge.

In the analysis presented in this paper, data from 14-year-old and Upper Secondary students in a sub-set of countries, which participated in the IEA Civic Education Study, were used to address the following research questions:

- What are the differences in levels of political efficacy and expected political participation between both age groups?
- To what extent can political efficacy and expected participation be explained with predictors like student background, political interest, knowledge, trust in institutions, political communication, current political participation and civic-related classroom climate.
- What does political efficacy add to the prediction of expected political participation?

The IEA Civic Education Study

The analyses were based on data from countries, which participated in both surveys (14-year-old students and upper secondary students) of the IEA Civic Education Study. Both surveys consisted of a 45-minute test of civic knowledge and skills (multiple-choice items), a short background questionnaire and a Likert-type assessment of concepts, attitudes and behaviour-related variables.

Students were sampled using a two-stage cluster design: At the first stage, schools were sampled with a "probability proportional to size" (PPS) and intact classrooms were selected within schools. Cyprus assessed all schools with students in the target populations and selected two classrooms per school. Portugal, Slovenia and Sweden sampled one classroom per school for the survey of 14-year-olds and 2-3 classrooms per school in the assessment of upper secondary students (see Sibberns and Foy, 2004).

The survey of upper secondary students was an option for countries participating in the study and had no internationally defined age-group. Therefore, the target populations vary with respect to age and grade across participating countries. As a consequence, the age and grade differences between the two surveys are not uniform across countries. For the analyses in this paper, only data from 10 countries were used: In four countries, the upper secondary students were three grades above their 14-year-old counterparts; in six countries, upper secondary students were four grades above the 14-year-olds.[3]

[3] Other countries participating in the survey of the upper secondary students were Colombia, Hong Kong, Israel, Latvia, Russia and Switzerland. They were excluded for the following reasons: (i) Data from Colombia and Hong Kong did not comply with IEA sampling standards and do not have sampling weights; (ii) Latvia and Russia assessed 16-year-old students only two grades apart from the 14-year-olds; (iii) Switzerland collected data from a smaller sample in the German-speaking part of the country, (iv) Israel did not participate in the survey of 14-year-olds.

Table 1 Age/grade comparisons and coverage for upper secondary population

Countries with...	Grade		Age		Coverage for Upper secondary*
	14-year-olds	Upper sec.	14-year-olds	Upper sec.	
3 grades difference					
Cyprus	9	12	14.8	17.7	0.67
Norway	9	12	14.8	18.1	0.99
Poland	8	11	15.0	17.6	0.90
Portugal	8	11	14.5	17.6	0.76
4 grades difference					
Chile	8	12	14.3	17.9	0.64
Czech Republic	8	12	14.4	17.9	0.78
Denmark	8	12	14.8	19.5	0.55
Estonia	8	12	14.7	18.2	0.49
Slovenia	8	12	14.8	18.4	0.68
Sweden	8	12	14.3	19.0	0.84

* Estimated proportions of upper secondary students among corresponding age group.

Table 1 shows age and grade for each dataset, the last column shows the proportion of upper secondary students among students of the corresponding age group. Whereas at age 14 (almost) all adolescents are still enrolled in school, in some countries only a sub-group of adolescents tends to be still enrolled at school. The amount of coverage depends largely on the characteristics of the educational system: It is highest in Norway where at age 18 almost all of the adolescents are still enrolled at school and lowest in Estonia, where about half of the 18-year-old adolescents are already outside school.

It should also be noted that within the second group of countries with a difference of four grades between the two assessed populations, upper secondary students in Denmark and Sweden are almost five years older than their 14-year-old counterparts. This fact is also due to specific characteristics of the educational systems in these two countries.

Differences in age, grade and coverage across countries have the following implications for the comparability of the data used in the analysis:

1. Upper secondary students may be a sub-population of the corresponding age groups and this affects the comparability between the two samples countries where the older sample represents rather a sub-group of the age cohort.
2. When comparing changes between the cohorts across countries, one needs to be aware that the differences in age and grades vary. Consequently, differences between countries need to be interpreted with care.

One way of addressing the comparability of cohorts within countries is to use information from the background questionnaire to approximate a comparable group of 14-year-olds by selecting a sub-group of students expecting further upper secondary education (those responding that they expect to continue studying more than 2 years). However, responses to this question could be affected by uncertainty about future studies and are only expectations, not predictions. Therefore, the variable on expected years of education was only used as control variable in order to confirm whether means and percentages for 14-year-olds still differ significantly when taking only data from those 14-year-olds who expected to be still in school at the upper secondary level.

Measuring political efficacy and expected participation

The student questionnaire of the IEA Civic Education Study included nine items designed to measure political efficacy. Three items were related to *internal efficacy*, six items to the *external efficacy* dimension. However, analyses of item dimensionality show that three negatively phrased items are rather measures of *cynicism* than *external efficacy*. Confirmatory Factor Analysis based on covariance structures (see Kaplan, 2000) demonstrate that the three-factor model has a consistently better fit than the two-factor model. The estimated (negative) correlations between external efficacy and cynicism are moderate to high but do not suggest that these items measure the same factor. Correlations between internal and external efficacy ranged between .11 and .41 and were typically in the range suggested by prior research (see Table 7 in the Appendix). Cynicism as a third factor had relatively low reliabilities and was not included in the analyses.

The items used to measure political efficacy are not entirely satisfactory: Both efficacy scales have only low to moderate reliabilities among 14-year-old students, for external efficacy this is also true among upper secondary students (see Table 10 in the Appendix). Items were scaled with IRT Partial Credit Model (see details on scaling methodology for the IEA Civic Education Study in Schulz, 2004) and *weighted likelihood estimates* (WLE) were used as individual scores (see Warm, 1989).[4] As other attitude scores included in the international database efficacy scores were standardised as having a mean of 10 and a standard deviation of 2 for equally weighted countries that participated in the 1999 survey of 14-year-olds.

School efficacy was measured with four items asking about the students' perception on the possibilities of student action to bring about change at school. Analysis of items dimensionality, item parameters and reliabilities (.69 for 14-year-olds and .73 for upper secondary students) are reported in Schulz (2004, p. 115f.). The student scores are Maximum Likelihood estimates standardised with regard to the population of 14-year-olds as described above.

Expected political participation as an adult was measured using 12 items asking about *Electoral Participation* (voting, getting informed prior to elections), *Political Activities* (writing letters to newspapers, joining a party, running for office), *Social Movement Activities* (community volunteer work, collecting signatures, collecting money, participating in protest march/rally) and Protest *Behaviour* (spray-painting slogans, blocking traffic, occupying buildings). A re-analysis of the items based on the data presented in this paper suggests a four-model structure for 11 of these items (excluding an item on participation in protest march/rally which was loading on more than one factor).

Table 9 in the Appendix shows the results of a Confirmatory Factor Analysis with these items. The model fit for the four-factor model with 11 items was satisfactory across countries. The estimated correlation between the latent factors *Electoral Participation* and *Political Activities* ranged between .30 and .50 across countries. This demonstrates that more passive and active forms of conventional participation are not part of the same construct.

The analyses in this paper will focus on the two constructs conventional electoral participation and political activities. Table 10 in the Appendix shows the reliabilities for the new scale on electoral participation. Measured with only two items, the scale has a median reliability of .70 across country

[4] Using IRT scaling methodology has the advantage of reducing missing data because students can be assigned scores even with missing data on some of the items.

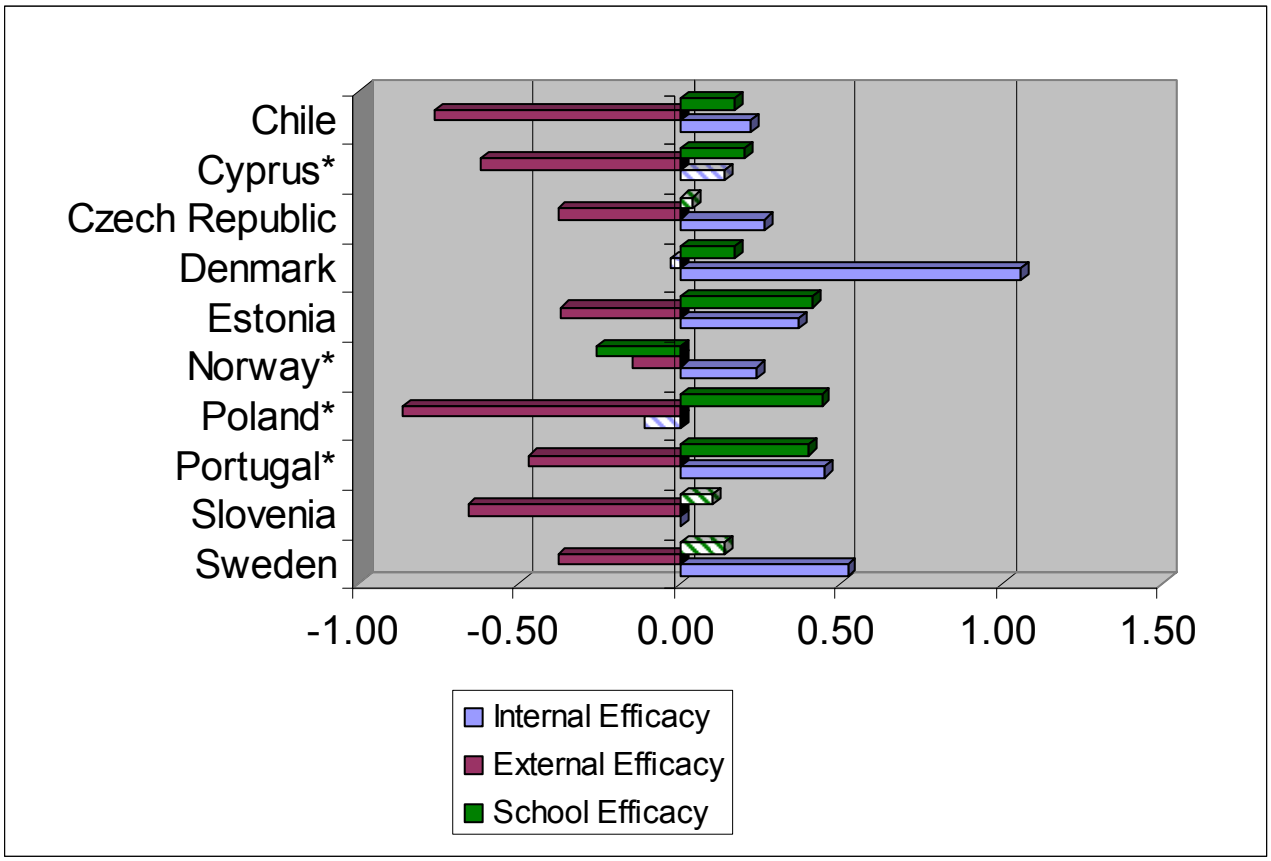
samples from both populations. The scale reliabilities for the scale *political activities* (already included in the CivEd database) range between .65 and .80 across countries (see Schulz, 2004, p. 119).

Differences in efficacy beliefs and expected participation between age groups

Generally, comparisons between the two populations show higher levels of internal efficacy among upper secondary students but lower levels of external efficacy in most of the countries (Figure 1). The largest differences in internal efficacy were found in Denmark and Sweden, the countries that also had the largest age difference between the two populations. No significant changes in internal efficacy were observed in Cyprus, Poland and Slovenia. The first two of these countries had already relatively high levels of internal efficacy among 14-year-olds. Decreases in feelings of external efficacy of about more than a quarter of a standard deviation can be found in most countries. Notably, in Denmark and Norway there are considerably smaller differences between lower and upper secondary students (see detailed results in Table 11 in the Appendix).

It can be observed that in the three Scandinavian countries (Denmark, Norway and Sweden) students had both relatively small decreases between the two populations in external but higher increases in internal efficacy. This might be explained with the very long democratic tradition in these countries.

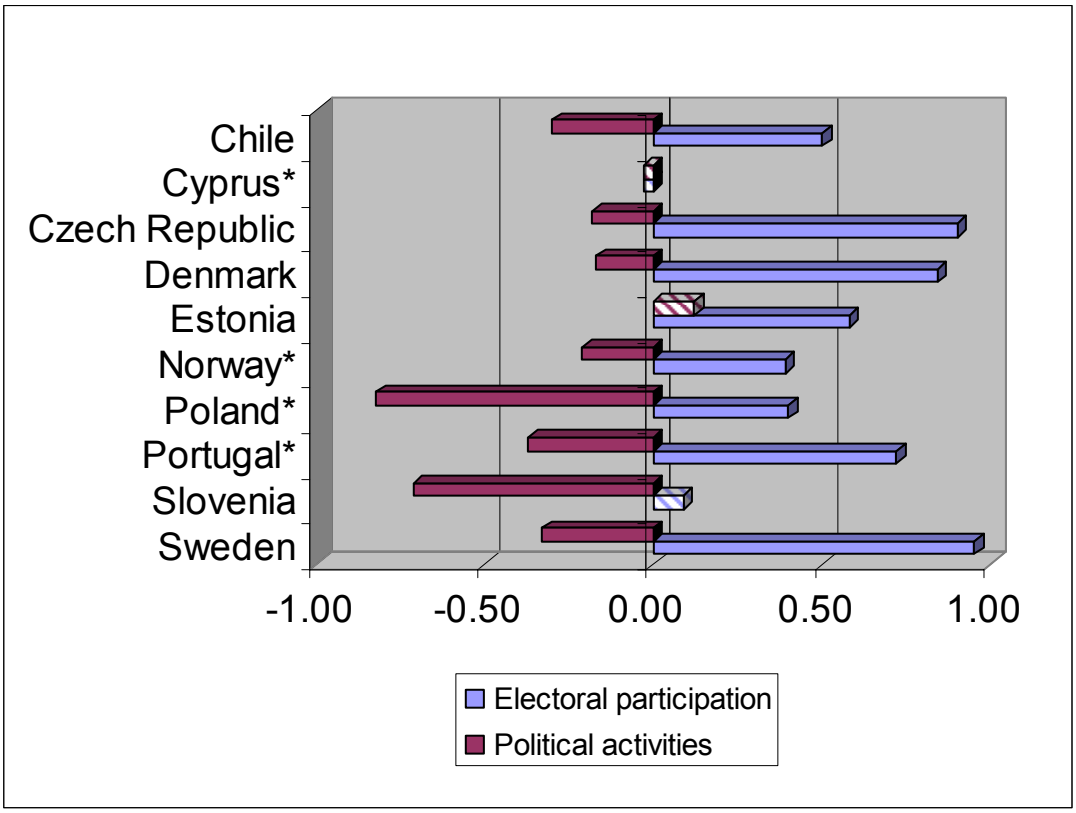
Figure 1 Difference in Efficacy Levels between 14-year-old and Upper Secondary students



Bars in diagonal shading indicate differences not significant at p = .05.

Figure 2 shows the differences in expected electoral participation and expected political activities as an adult (see detailed results in Table 12). It illustrates that whereas expectations about electoral participation increase, those regarding an active involvement in politics decrease. Student scores on expected electoral participation are sometimes almost half a standard deviation higher among upper secondary students, only in Cyprus and Slovenia there is no significant difference. The results for Cyprus are plausible because in this country voting is compulsory and strictly enforced, which explains the very high levels on this scale for students in both populations. Decreases in students' expectations to participate more actively in politics are largest in Poland and Slovenia, in Cyprus and Estonia there are no significant differences.

Figure 2 Difference in Expected Participation between 14-year-old and Upper Secondary students



Bars in diagonal shading indicate differences not significant at p = .05.

Comparisons of efficacy and expected political participation between lower and upper secondary students indicate considerable changes during the process of political socialisation in most countries: Whereas self-confidence in dealing with politics and propensity towards electoral participation increases, both confidence in the responsiveness of the political system and expectancies to participate actively in politics decrease. As mentioned earlier, some of these changes might be due to the decrease in age group coverage of the upper secondary population. However, differences between 14-year-olds and upper secondary students on these five scales did not change much after excluding those 14-year-olds who expected less than three years of further education and only slightly smaller differences were observed.

Predictors of Efficacy and Political Participation

In order to analyse those variables that influence feelings of political efficacy, (multi-level) linear regression models (see Raudenbush and Bryk, 1992) with students nested within classrooms were estimated. In most of the country samples (except in Cyprus for both populations and in Slovenia and Sweden for the population of upper secondary students) the classroom level is equivalent to the school level, because typically only one classroom was selected within each school. Therefore, in the analyses presented in this paper, the effects of classroom and schools cannot be disentangled.

Table 2 Percentages of Variance between Schools

14-year-old students

	Civic knowledge	Internal Efficacy	External Efficacy	School Efficacy	Electoral Behaviour	Political Activities
Chile	39	2	4	3	9	4
Cyprus	9	2	2	2	3	2
Czech Rep.	42	3	3	4	12	4
Denmark	9	2	3	3	4	2
Estonia	21	2	3	7	13	4
Norway	6	2	2	4	4	3
Poland	25	5	6	4	5	5
Portugal	21	2	2	5	6	2
Slovenia	12	2	3	5	4	3
Sweden	11	5	5	3	7	2

Upper Secondary students

	Civic knowledge	Internal Efficacy	External Efficacy	School Efficacy	Electoral Behaviour	Political Activities
Chile	41	4	3	2	7	4
Cyprus	29	2	4	6	5	5
Czech Rep.	38	2	2	4	12	7
Denmark	11	3	4	6	7	4
Estonia	17	3	1	4	9	7
Norway	32	8	4	6	11	9
Poland	42	3	5	7	10	4
Portugal	15	5	4	3	6	6
Slovenia	48	5	7	7	6	15
Sweden	38	6	5	4	17	7

In order to assess in a first step the amount of variance that lies between classrooms (schools), a random intercept model was estimated with intercepts varying randomly across classrooms. This model gives estimates of between- and within-cluster variance that can be used to calculate the proportion of variance that lies between classrooms (also called intra-class correlation). Table 2 shows the percentages of variance between classes (schools) for the three efficacy scales, expected electoral participation and expected political activities. In the first data column, the corresponding numbers for the Civic Knowledge scale are reported.

When compared with the school/classroom differences for civic knowledge, it appears that the proportion of variance between schools (or classes) is rather low for the efficacy and participation measures. Among the efficacy and participation scales, electoral behaviour is the variable with the largest percentages of between-cluster variance. For feelings of efficacy and expected political activities, however, around 95 or more percent of the variance lies within schools/classes. This indicates that school (or class) does not have a strong impact on the variation of these variables.

For variables with very low percentages of between school variance, school-level effects are not expected to be strong. Furthermore, there is not much variance that can be explained with these models. Comparison between outcomes for single- and multi-level linear regression models with fixed (non-random) coefficients show that the results are almost identical. The regression analyses to predict efficacy and expected participation were carried out using multi-level models with fixed coefficients[5] using the SPSS (version 13.0) MIXED procedure. Using multi-level modelling served two major purposes in this context:

- Obtaining correct standard errors for data from a complex sampling design (in spite of rather small clustering-effects for the criterion variables).
- Using a methodology appropriate for the analysis of student-level and school/class-level variables.

Table 3 Criterion variables and predictors

Variable groups	Variable
Predictors in models	
Student background	Gender (female) Educational and Cultural status of parents (ECS) Expected years of further education School mean ECS
Political Interest	Item "I am interested in politics" (4-point Likert) Dummy indicator for "Don't know"
Knowledge	Civic knowledge scale (z-standardised)
Political Trust	Trust in institutions scale (z-standardised)
Communication	Discussion with peers/parents scale (z-standardised) News in Media scale (z-standardised)
Participation	Participation in school council (yes) Participation in political youth organisation (yes)
Classroom Climate	Open Classroom Climate scale (z-standardised) Class-level average of classroom climate scale
Criterion and predictor variables	
Efficacy	Internal Political Efficacy scale (z-standardised) External Political Efficacy scale (z-standardised) School Efficacy scale (z-standardised)
Criterion variables	
Expected Participation	Expected Electoral Participation scale (z-standardised) Expected Political Activities scale (z-standardised)

Table 3 lists the variables used in the multi-level regression models for efficacy and expected participation. Though modelling implicitly assumes some form of causality between predictors and criterion variables, it should be noted that causal relationships are not entirely clear. Some variables like student background factors are clearly exogenous, others like expected participation can assumed to be endogenous. But the causal relationships between other variables in this model are far less obvious.

[5] Random coefficients for the predictor variables were not estimated as (i) it would have increased the complexity of modelling with numerous predictors across a larger number of datasets and (ii) the main purpose was the identification of factors influencing efficacy and expected participation across countries.

All criterion variables were z-standardised so that each population within each country has a mean of 0 and a standard deviation of 1. Therefore, un-standardised regression coefficients indicate the change in the criterion variable in standard deviations. The following variables are included as predictors for political efficacy and expected political participation:

- *Gender*: This variable was coded 1 for females and 0 for males.
- *Educational and Cultural status of parents* (ECS): This indicator of socio-economic background was computed as the mean of z-standardised variables on home literacy (number of books), mother's and father's educational level. The z-standardisation was done for each dataset separately so that for each country and population the mean is 1 and the standard deviation is 0.[6]
- *Expected years of further education*: Students were asked how much further education they expect, the (categorical) variable was coded in (approximated) years.
- *School mean ECS*: The indicator of family educational and cultural background was aggregated at the school level. Educational research has shown this variable to be an important predictor of student performance in most countries. It reflects both the learning context and social intake of a school.
- *Political Interest*: This variable was a Likert-type item coded from 0 (strongly disagree) to 3 (strongly agree). In view of the huge number of students choosing the "Don't Know" (DK) category for this item, those indicating lack of knowledge were assigned the mean of the Likert-type item within each country and population and a dummy variable indicating DK responses was added as a way of taking all available (non-missing) information into account.[7]
- *Knowledge*: The combined Civic Knowledge scale derived from a multiple-choice test (see Schulz and Sibberns, 2004) was z-standardised for each data set so that for each country and population the mean is 0 and the standard deviation 1.
- *Political Trust*: The scale derived from 6 items asking about trust in government, local council, courts, police, parties and parliament (see Schulz, 2004, p. 103f.) was z-standardised for each data set. The scale had a reliability of around .77 among 14-year-olds and around .79 among upper secondary students.
- *Discussion*: Four items asking about the frequency of discussion about national and international politics with peers and parents were scaled using the IRT Partial Credit Model. The resulting WL (weighted likelihood) estimates of the latent dimension were z-standardised for each data set. Table 10 in the Appendix shows the alpha reliabilities (ranging between .76 and .88) for this scale across countries and populations.
- *Media information*: Four items asking about the frequency of reading newspapers about national and international issues, watching TV news or listening to radio news were scaled using the IRT Partial Credit Model. The resulting WL (weighted likelihood) estimates of the

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6 The concept of socio-economic status consists of combining education, income and occupational status. In the IEA Civic Education Study only data on home literacy resources (number of books at home) and the educational level of parents were collected. Therefore, the index used in these analyses is called "Educational and Cultural Status" (ECS) rather than "Socio-economic Status" (SES). See Buchmann (2000) about the problems associated with the collection of data on socio-economic family background of students in educational survey research.

7 This approach to the treatment of missing data was proposed by Cohen and Cohen (1983).

latent dimension were z-standardised for each data set. Table 10 in the Appendix shows the alpha reliabilities for this scale (ranging between .59 and .73) across countries and populations.

- *School council*: Students were asked whether they had participated in a school council or parliament. Positive responses were coded 1, negative responses as 0.
- *Youth organisation*: Students were asked whether they had participated in a youth organisation of a political party or union. Positive responses were coded 1, negative responses as 0.
- *Class room climate (student)*: This scale was derived from six items asking about aspects of classroom climate in civic-related subjects and positive scores indicate an open climate for discussion during class. Scale reliabilities ranged between .69 and .83 (see Schulz, 2004, p. 199f).
- *Class room climate (mean)*: In order to control for context effects the average scores on the open classroom climate scale for each classroom were computed and used as an additional predictor at the classroom level.
- Scores on *Internal, external and school efficacy* were included as additional predictors in the regression models for expected political participation.

Table 4 Median regression coefficients for efficacy across countries

	Internal Efficacy		External Efficacy		School Efficacy	
	14-years-olds	Upper Secondary	14-years-olds	Upper Secondary	14-years-olds	Upper Secondary
Gender (female)	-0.28 **	-0.30 **	-0.19 **	-0.17 *	0.10 *	0.16 *
ECS (SD)	0.05 **	0.05 *	0.00	0.01	0.00	-0.01
School mean ECS (SD)	-0.04	-0.06	-0.02	0.06 *	-0.03	0.00
Expect. Education (year)	0.01	0.02 *	-0.01	-0.01	0.01	0.01
Political Interest (0-3)	0.41 **	0.50 **	0.10 **	0.07 *	-0.02	0.02
Political Interest (DK)	0.20	0.15	0.10	0.06	-0.09	-0.10
Knowledge (SD)	0.03	0.05 *	-0.08 *	-0.04 *	0.09 **	0.06 *
Political Trust (SD)	0.01	-0.02 *	0.27 **	0.34 **	0.09 **	0.07 **
Discussion (SD)	0.21 **	0.22 **	0.03	0.03 *	0.03 *	0.03
Media information (SD)	0.06 *	0.06 *	0.01	-0.01	0.09 **	0.05 *
School Council (yes)	0.04	0.07 *	-0.04	-0.01	0.11 **	0.15 **
Youth Organisation (yes)	0.20 *	0.18 *	-0.02	-0.05	0.02	0.08
Class climate (stud., SD)	0.00	-0.02	0.13 **	0.12 **	0.16 **	0.14 **
Class climate (mean, SD)	-0.01	-0.02	-0.02	-0.07	-0.01	0.07

Regression coefficients indicate changes for one standard deviation within country and population.
* Significant in about half of the countries.
** Consistently or almost consistently significant across countries.

Table 4 summarises the results of the multi-level regression models for the three efficacy dimensions. Each column contains the median regression coefficients across countries separately for 14-year-olds and upper secondary students. This summary does not reveal between-country differences and some of the effects vary in strength (or sometimes even direction) across countries. Therefore, (unidirectional) effects are flagged with "**" when they were consistently significant across countries (9 out of 10) and with "*" when they were consistently significant in about half of

the countries (5 out of 10). The coefficients for each country and population are shown in Table 13, Table 14 and Table 15 in the Appendix.

Females consistently tend to have lower levels of internal efficacy (of almost one third of a standard deviation) than boys. Effects of gender on external efficacy are also consistently negative. For school efficacy, girls tend to have significantly higher scores than boys in about half of the countries. Parental educational and cultural background tends to have a rather weak effect on internal efficacy and no effects on external and school efficacy. School mean ECS and student expectations regarding their future education are not consistently related to sense of efficacy.

Not surprisingly, political interest has a strong effect on internal political efficacy and a weaker but (for 14-year-olds still consistently significant) effect on external political efficacy. Feelings of school efficacy are not related to political interest. This is plausible as students' perceptions about their influence on school matters is not necessarily related to their views on politics. 14-year-old students who do not have an opinion regarding their personal interest in politics tend to have higher scores on internal external efficacy in nine out of 10 countries.

Civic knowledge does not have strong effects on any of the efficacy dimensions. A weak but consistently significant effect of civic knowledge is found only for school efficacy among 14-year-olds. This indicates that judgements about one's own ability to act politically are rather influenced by interest than actual knowledge.

Trust in institutions has a consistently strong effect on external efficacy and a weaker (but still consistently significant) effect on school efficacy. The effect of trust in institutions on feelings of system responsiveness is consistent with findings from research among adults. However, whether lower feelings of external efficacy are a result of "accumulating distrust" in institutions (Miller, Goldenberg and Erbring, 1979) or whether the general belief in the system's responsiveness is rather a pre-condition for developing trust in the institutions of this system cannot be tested with cross-sectional data.

Participation in political discussions with peers and parents has consistently strong effects on feelings of internal efficacy. It is plausible that frequent talks about politics enhance self-confidence in this domain. However, it is also obvious that discussing politics may require certain levels of confidence in one's own ability to do so. Therefore, the relationship between internal efficacy and participation in political discussion should certainly be seen as a reciprocal one.

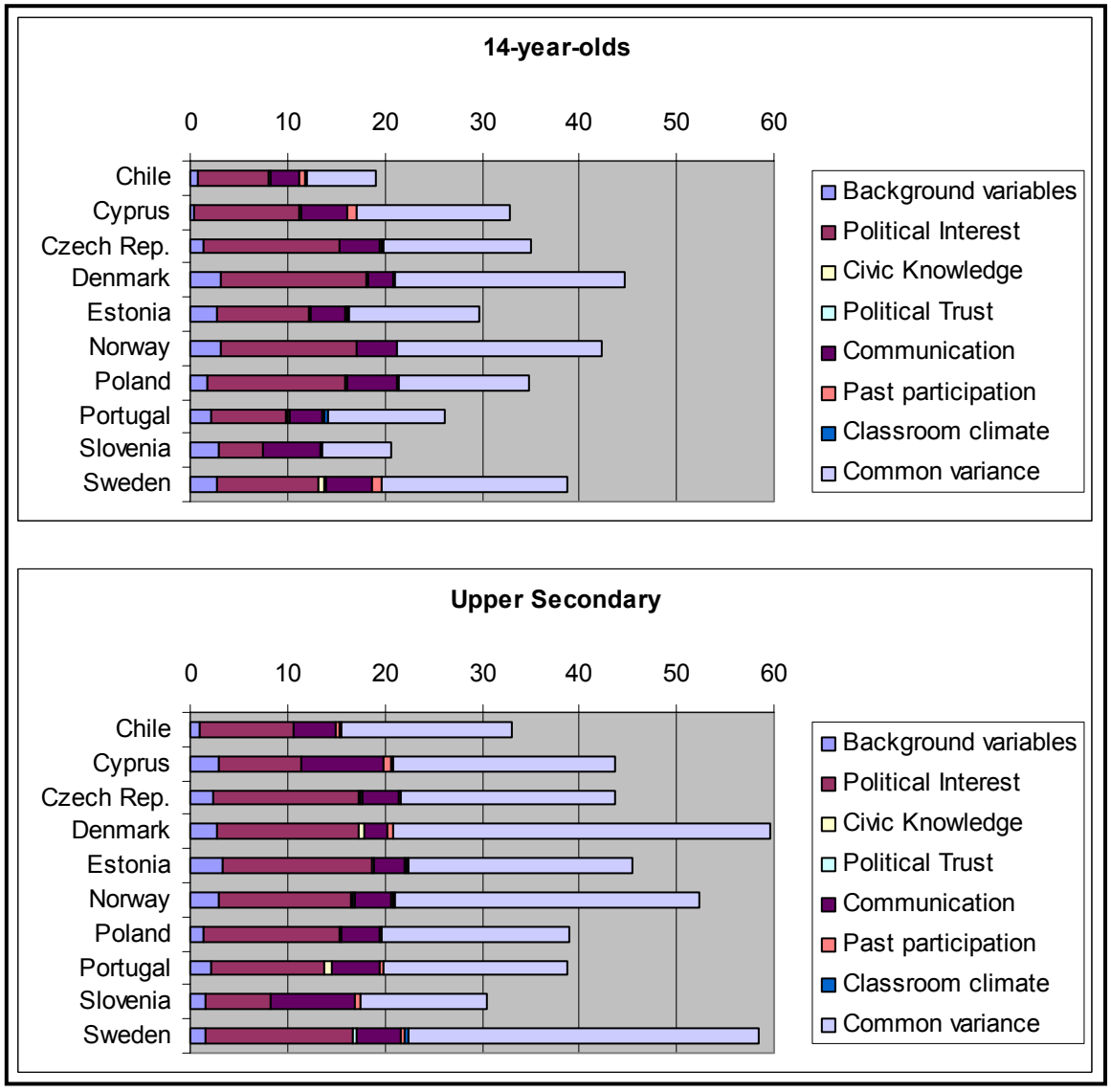
Reported participation in a school council has consistently significant positive effects on feelings of school efficacy, these effects are somewhat stronger among upper secondary students. Students who have been active at school tend to have stronger beliefs in student influence at school. Likewise, reported participation in youth organisation is positively associated with internal efficacy: Students who have already been involved in political activities tend to have also higher levels of self-confidence in their ability to act politically. These findings are plausible but are certainly not conclusive with regard to causality: Students who believe in their ability to influence school decisions are certainly more likely to be active at school and students who have higher levels of internal efficacy are also more likely to engage in youth organisations.

Individual perceptions of an open classroom climate in civic-related subjects are positively associated with external and school efficacy. However, hardly any significant effects of the average classroom climate on efficacy were found. Both external efficacy and school efficacy are obviously

related to the students' perceptions of having civic classes open for student discussion. But there is no evidence of any major context effects.

It is clear that many of the predictors used in these models are correlated with each other[8] and that part of the variance explained by the model is due to more than one predictor. In order to address what the contribution of groups of predictors in the model is, different (single-level)[9] linear regressions were computed, each leaving one group of variables out of a model. The difference in variance explanation for the full model and the model without a certain factor shows the unique contribution this factor has made to explain variance. Common variance is computed as the part of the explained variance which is not uniquely accounted for by any of the factors.

Figure 3 Unique and common explained variance for Internal Efficacy



[8] Checks showed no major evidence of multi-collinearity in the model.

[9] As pointed out earlier, model estimates from single-level and multi-level regression are very similar. As most of the variance is student-level variance, the variance decomposition was only done for the overall variance using single-level linear regression models.

Figure 3 illustrates that the model for internal efficacy explains more variance among upper secondary students. Among the explanatory factors, political interest (including the indicator of non-response due to lack of knowledge) has the largest proportion of variance, which is only explained by this factor. Both communication-related predictors have the second largest proportion of unique variance. Only a very small part of the explained variance is unique to student background variables. In particular among upper secondary students, the largest part of the explained variance is due to more than one group of predictors.

Figure 4 Unique and common explained variance in External Efficacy

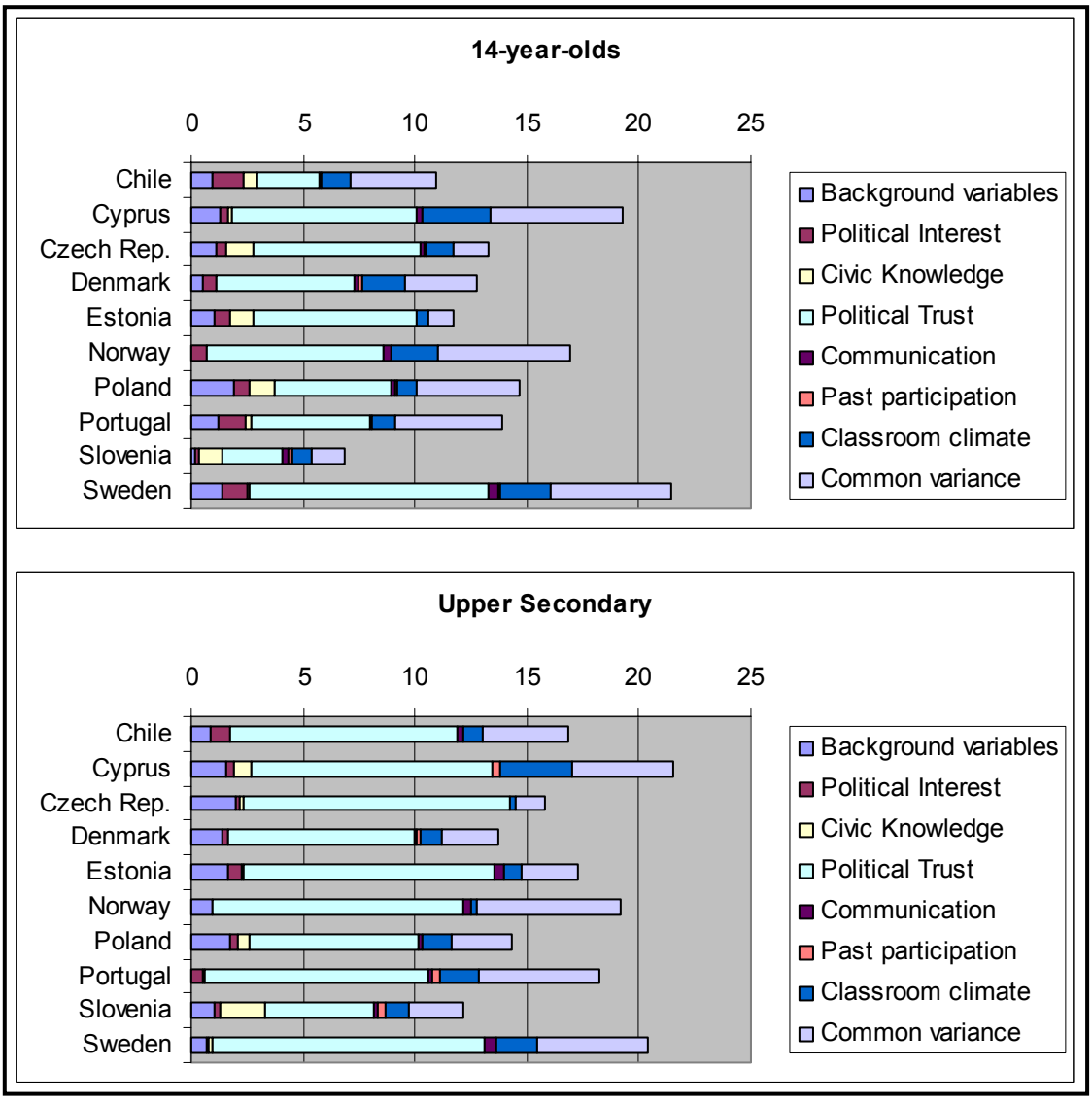


Figure 4 illustrates that only between 10 and 20 percent of the variance in external efficacy scores is typically explained with the model. Trust in institutions has the largest proportion of uniequely explained variance; among upper secondary students almost half of the variance explanation is due to this predictor. Perceptions of classroom climate contribute a still notable, but minor part of unique variance to the model. As for internal efficacy, only a small part of the explained variance is unique to student background factors.

Figure 5 Unique and common explained variance for School Efficacy

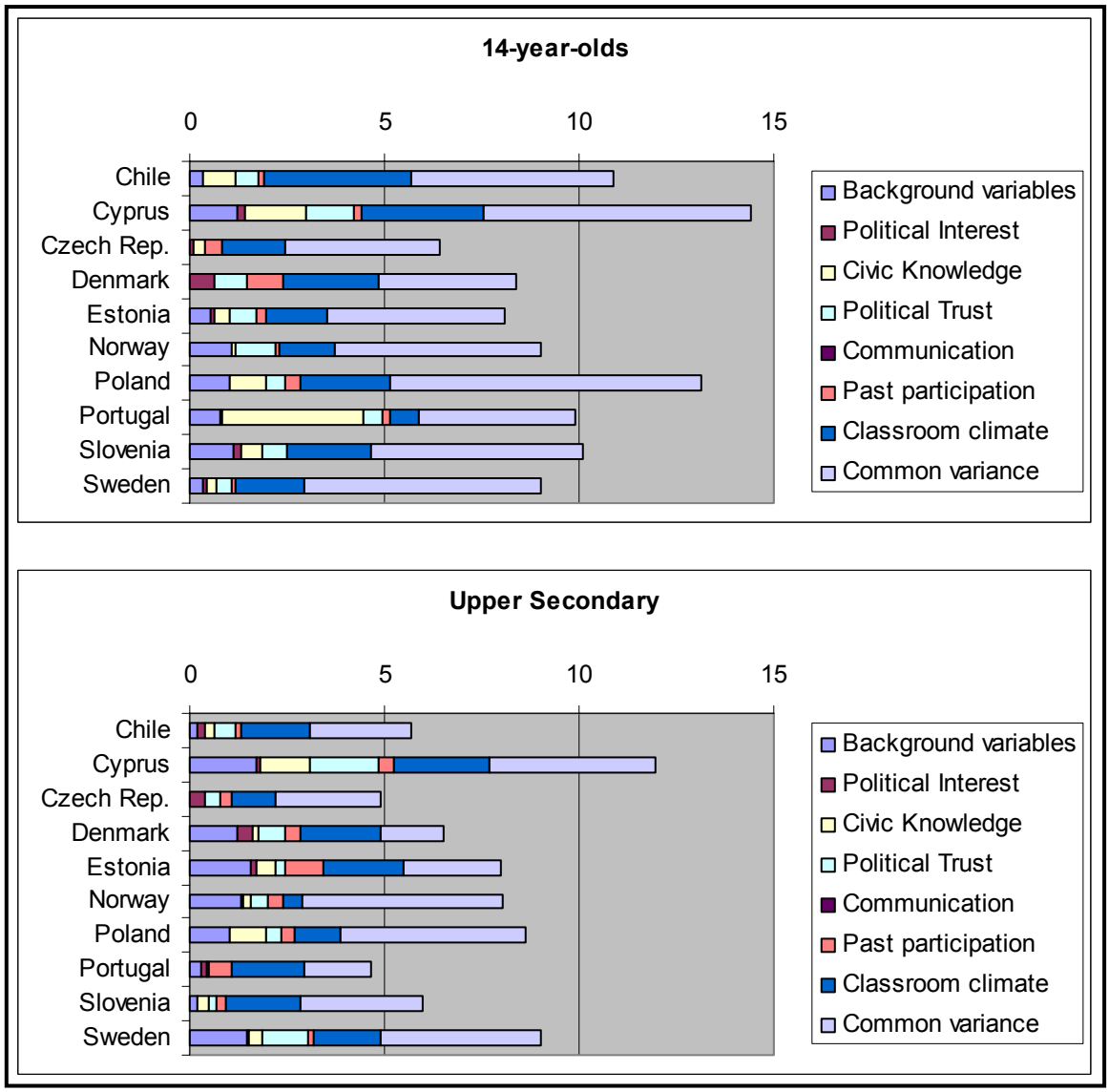


Figure 5 shows that the overall model does not explain much of the variance in school efficacy scores. The variance explanation is even less for upper secondary students. On average across countries, classroom climate contributes the largest part of unique variance. As for internal and external efficacy, about half of the explained variance is due to more than one predictor group.

Table 5 Median regression coefficients for expected participation across countries

	Expected Electoral Participation		Expected Political Activities	
	14-years-olds	Upper Secondary	14-years-olds	Upper Secondary
Gender (female)	0.05	0.13 *	-0.01	0.01 *
ECS (SD)	0.05	0.04 *	0.03	0.01
School mean ECS (SD)	-0.02	0.09	-0.11 *	-0.03
Expect. Education (year)	0.02 *	0.02 *	0.01	0.03 *
Political Interest (0-3)	0.13 **	0.15 **	0.22 **	0.26 **
Political Interest (DK)	0.01	-0.05	0.12 *	-0.01
Knowledge (SD)	0.17 **	0.12 **	-0.04	0.01
Political Trust (SD)	0.09 **	0.11 **	0.07 **	0.07 *
Discussion (SD)	0.08 **	0.14 **	0.15 **	0.15 **
Media information (SD)	0.09 **	0.08 **	0.05 *	0.05 *
School Council (yes)	0.00	0.04	0.05	0.09 *
Youth Organisation (yes)	-0.03	0.06	0.15 *	0.39 **
Class climate (stud., SD)	0.06 **	0.05 **	0.03 *	0.01
Class climate (mean, SD)	0.04	0.06	-0.05	0.02
Internal Efficacy (SD)	0.01 *	0.05 *	0.11 **	0.11 **
External Efficacy (SD)	0.02	0.03	0.05 *	0.04 *
School Efficacy (SD)	0.13 **	0.12 **	-0.02	-0.01

Regression coefficients indicate changes for one standard deviation within country and population.
* Significant in about half of the countries.
** Consistently or almost consistently significant across countries.

Table 5 contains the median (multi-level) regression coefficients across the ten countries for each population. For expected electoral participation, political interest, civic knowledge, participation in political discussions and media information are consistent positive predictors across countries in both populations. Classroom climate has a weak but consistently significant positive effect on this variable. It is interesting to note that school efficacy is in all countries and both populations positively associated with expected electoral participation. This provides some evidence that feelings of being able to influence things at school enhance positive attitudes towards electoral participation among students.

Political interest, internal efficacy and participation in political discussions are consistently positive predictors for expected political activities. Trust in institutions has a minor impact on expectations to act politically as an adult. Past participation in youth organisations becomes a more important predictor of these expectations among upper secondary students than among 14-year-olds. Patterns, as could be expected, become more consistent here: Students at this age report more frequently to have participated in youth organisations at the upper secondary stage and those who have already participated politically have consistently higher expectations to continue political activities as an adult.

Figure 6 Unique and common explained variance in Expected Electoral Participation

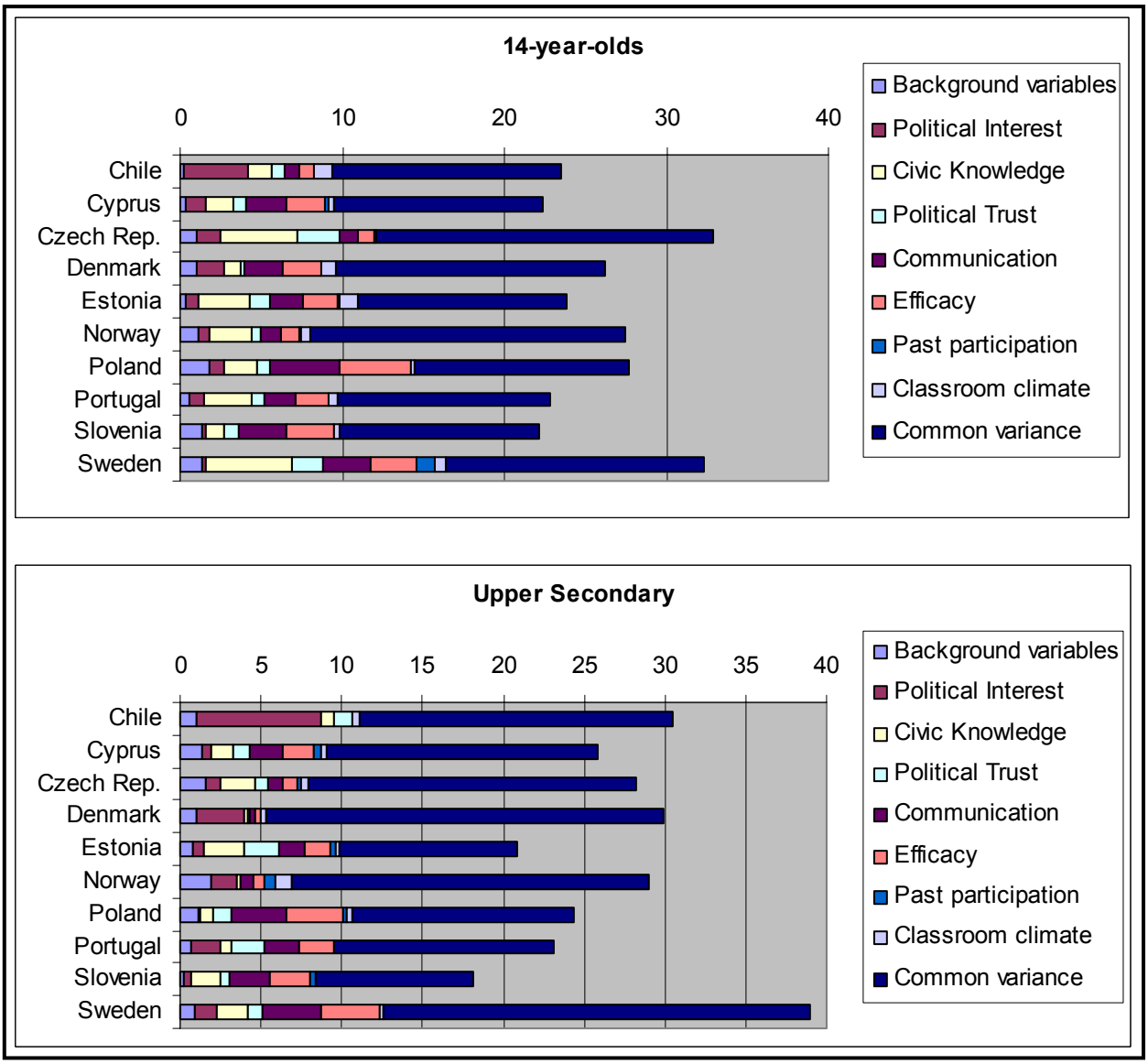


Figure 6 shows the decomposition of the explained variance in expected electoral participation into unique and common variance. Between 20 and 30 percent of the variance is explained by the full model. More than half of the explained variance is due to more than one group of predictors. Political interest adds unique variance explanation in some countries, in particular in Chile. Civic Knowledge and political efficacy account for more explained variance among 14-year-olds than among upper secondary students.

Figure 7 Unique and common explained variance in Expected Political Activities

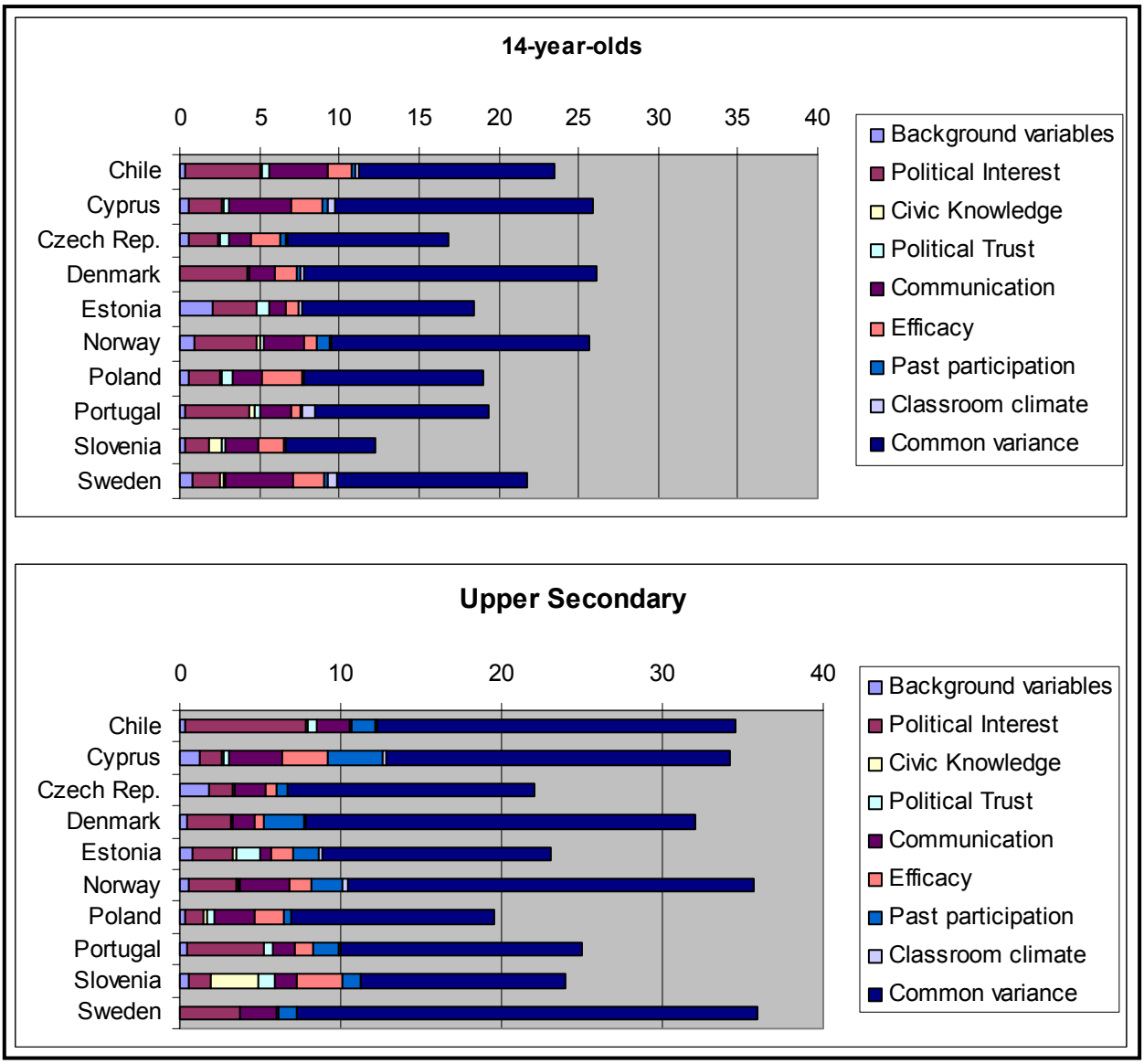


Figure 7 illustrates the decomposition of explained variance by the model for expected political activities. The model explains larger parts of the variance among upper secondary students than among 14-year-olds. Most of the explained variance is due to more than one variable. Uniquely explained variance is found in most countries for political interest and political efficacy. Activities in youth organisations account for a smaller but notable part of the explained variance by the model among upper secondary students.

Discussion

Data from lower and upper secondary students in ten countries show that levels of political efficacy and expectations to participate politically as an adult change during the process of political socialisation. Self-confidence in dealing with politics increases and so do expectations to participate in elections in later life. However, beliefs in the responsiveness of the political system weaken and older students have lower expectations to become actively involved in politics in adult life. Decreasing external efficacy and expectations to participate actively as an adult are largest in two post-communist countries (Slovenia and Poland). Notably, these changes are less prominent in Scandinavian countries with a long democratic tradition.

When explaining political efficacy dimensions, it becomes clear that these variables are associated with different factors. Internal efficacy is mainly related to political interest, political discussions and media use, external efficacy rather to trust in institutions and to lesser extent to perceptions of an open classroom climate. Female gender has a negative impact on feelings of both internal and external efficacy. However, more girls than boys believe that students are able to influence what happens at school. School efficacy is also positively associated with school-related variables like participation in school councils or parliaments and perceptions of an open classroom climate.

Expected electoral participation is associated with political interest, knowledge, trust and political communication. Both internal efficacy and external efficacy have only weak effects but school efficacy has a consistently positive effect on this variable: Beliefs in the effectiveness of student action at school tend to go together with positive attitudes towards voting.

Expectations of becoming more actively involved in politics are also influenced by political interest, discussions and media information. Internal efficacy turns out to have a consistently positive effect on this variable, whereas effects of external efficacy are rather weak. The increased importance of having participated in political youth organisations among upper secondary students confirms that an early involvement in political activities increases the likelihood of doing this also as in adult life.

The decomposition into unique and common components shows that large parts of explained variance in these models are attributable to more than one factor. This is more pronounced among upper secondary students, which might indicate that patterns of attitudes and behaviour with regard to politics become more consistent at later stages of the political socialisation. It can be shown that political efficacy does contribute unique variance explanation to the models for expected political participation. In the case of expected electoral participation this is largely due to school efficacy, in the case of expected political activities internal efficacy is the more important predictor than other efficacy beliefs.

References

Abramson, P. R., and Aldrich, J. H. (1982). The decline of electoral participation in America. *American Political Science Review*, 76(3), 502-521.

Acock, A., Clarke, H. D. and Stewart, M. C. (1985). A New Model for Old Measures: A Covariance Structure Analysis of Political Efficacy. In: *Journal of Politics*, 47, 1062-1084.

Amadeo, J., Torney-Purta, J., Lehmann, R., Husfeldt, V., and Nikolova, R. (2002). *Civic knowledge and engagement: An IEA study of upper secondary students in sixteen count*ries. Amsterdam: International Association for the Evaluation of Educational Achievement (IEA).

Barnes, S. H., Kaase, M. et al. (Eds.), *Political action: Mass participation in five Western democracies.* (pp.487–521) Beverly Hills: Sage Publications.

Balch, G. I. (1974). Multiple indicators in survey research: The concept "sense of political efficacy." *Political Methodology*, 1(2), 1-43.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, N. J.: Prentice-Hall.

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28 (2), 117-148.

Buchmann, C. (2000). *Measuring Family Background in International Studies of Educational Achievement: Conceptual Issues and Methodological Challenges*. Paper presented at a symposium convened by the Board on International Comparative Studies in Education of the National Academy of Sciences/National Research Council on November 1, 2000, in Washington, D.C.

Bryk, A. S. and Raudenbush, S. W. (1992). *Hierarchical Linear Models: Application and Data Analysis Methods.* Newbury Park: SAGE.

Campbell, A., Gurin, G., & Miller, W. E. (1954). *The Voter Decides*. Evanston, IL: Row, Peterson and Company.

Cohen, J. and Cohen, P. (1983) *Applied multiple regression/correlation analysis for the behavioral sciences* (2nd ed.).Hillsdale, NJ: Erlbaum.

Converse, P. E. (1972). Change in the American Electorate. In A. Campbell & P. E. Converse (Eds.), *The Human Meaning of Social Change* (pp. 263-337). New York: Russell Sage Foundation.

Easton, David. 1965. *A Systems Analysis of Political Life*. New York: John Wiley and Sons.

Easton, D. and Dennis, J. (1967). The Child's Acquisition of Regime Norms: Political Efficacy. In: *American Political Science Review*, 61, 25-68.

Finkel, S. E. (1985). Reciprocal effects of participation and political efficacy: A panel analysis. *American Journal of Political Science*, 29(4), 891-913.

Gurin, P., Gurin, G. and Morrison, B. M. (1978). Personal and Ideological Aspects of Internal and External Control. In: *Social Psychology*, 41, 275-296.

Hahn, C. (1998). *Becoming Political: Comparative perspectives on citizenship education*. Albany: State University of New York Press.

Hess, R. D. and Torney, J. (1967). *The Development of Political Attitudes in Children*. Garden City: Anchor.

Kaase, M. (1990) Mass participation. In M. K. Jennings, J. W. van Deth et al. (Eds.), *Continuities in political action* (pp.23–67) Berlin, New York: Walter de Gruyter.

Kaplan, D. (2000). *Structural equation modeling: foundation and extensions.* Thousand Oaks: SAGE publications.

Miller, A. H., Goldenberg, E. N. and Erbring, L. (1979). Type-Set Politics: Impact of Newspapers on Public Confidence. In: *American Political Science Review*, 79, 67-84.

Morrell, M. E. (2003). Survey and experimental evidence for a reliable and valid measure of internal political efficacy. *Public Opinion Quarterly*, 67, 589-602.

Mosher, R./Kenny, R.A./Garrod, A. (1994). *Preparing for Citizenship. Teaching Youth Live Democratically*. Westport/London: Praeger.

Niemi, R. G., Craig, S. C., & Mattei, F. (1991). Measuring internal political efficacy in the 1988 national election study. *American Political Science Review*, 85(4), 1407-1413.

Putnam, R. (2000). *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster.

Richardson, W. (2003). *Connecting Political Discussion to Civic Engagement: The Role of Civic Knowledge, Efficacy and Context for Adolescents.* Doctoral Dissertation (PhD). College Park: University of Maryland.

Robinson, Michael J. (1976) Public Affairs Television and the Growth of Political Malaise: The Case of 'the Selling of the Pentagon'. In: *American Political Science Review*, 70, 409-432.

Rotter, J. B. (1966). Generalized Expectancies for Internal versus External Control of Reinforcement. In: *Psychological Monographs*, 80, 1-28.

Schulz, W. (2004). Scaling Procedures for Likert-type Items on Students' Concepts, Attitudes and Actions. In: W. Schulz and H. Sibberns (eds.) *IEA Civic Education Study. Technical Report*. Amsterdam: IEA, pp. 93-126.

Schulz, W. and Sibberns, H. (2004). Scaling Procedures for Cognitive Items. In: W. Schulz and H. Sibberns (eds.) *IEA Civic Education Study. Technical Report*. Amsterdam: IEA, pp. 69-91.

Sibberns, H. and Foy, P. (2004). The CivEd Sampling Design. In: W. Schulz and H. Sibberns (eds.) *IEA Civic Education Study. Technical Report*. Amsterdam: IEA, pp. 41-54.

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

Appendix

Table 6 Items measuring Political Efficacy

Internal efficacy items	
I2	I know more about politics than most people my age
I5	When political issues or problems are being discussed, I usually have something to say
I8	I am able to understand most political issues easily
External efficacy items	
I1	The government [people in government] cares [care] a lot about what all of us think about new laws
I3	The government [people in government] is [are] doing its best to find out what people [ordinary people] want
I9	When people get together [organise] to demand change, the leaders in government listen
Cynicism items	
I4	The powerful leaders in government [Government] care very little about the opinions of people [ordinary people]
I6	In this country a few individuals have a lot of political power while the rest of the people have very little power
I7	The politicians quickly forget the needs of the voters who elected them.

Table 7 CFA Results for Efficacy Items

		Estimated correlations between latent variables		
	Model fit:	**Internal Efficacy with**		**External Efficacy with**
	RMSEA	**External Efficacy**	**Cynicism**	**Cynicism**
14-year-olds				
Chile	*0.033*	0.36	0.18	-0.25
Cyprus	*0.039*	0.27	-0.08	-0.56
Czech R.	*0.039*	0.11	-0.07	-0.54
Denmark	*0.054*	0.32	-0.27	-0.68
Estonia	*0.039*	0.20	-0.01	-0.59
Norway	*0.056*	0.33	-0.11	-0.66
Poland	*0.037*	0.24	0.14	-0.08
Portugal	*0.026*	0.41	0.05	-0.36
Slovenia	*0.056*	0.26	0.03	-0.45
Sweden	*0.065*	0.35	-0.08	-0.53
Upper secondary				
Chile	*0.055*	0.25	-0.01	-0.61
Cyprus	*0.048*	0.20	0.05	-0.49
Czech R.	*0.049*	0.16	0.01	-0.64
Denmark	*0.050*	0.24	-0.17	-0.91
Estonia	*0.056*	0.16	-0.07	-0.61
Norway	*0.050*	0.19	-0.06	-0.68
Poland	*0.036*	0.22	0.11	-0.31
Portugal	*0.045*	0.19	-0.08	-0.69
Slovenia	*0.046*	0.33	-0.08	-0.60
Sweden	*0.050*	0.20	-0.15	-0.68

Table 8 Items measuring Political Participation

Electoral Behaviour	
M1	Vote in national elections
M2	Get information about candidates before voting in an election
Political Activities	
M3	Join a political party
M4	Write letters to a newspaper about social or political concerns
M5	Be a candidate for a local or city office
Social Movement Activities	
M6	Volunteer time to help [benefit] [poor or elderly] people in the community
M7	Collect money for a social cause
M8	Collect signatures for a petition
Protest Activities	
M10	Spray-paint protest slogans on walls
M11	Block traffic as a form of protest
M12	Occupy public buildings as a form of protest.....

Table 9 CFA Results for Political Participation Items

		Estimated correlations between latent variables					
	Model fit:	Electoral Behaviour with		Political Activities with		Soc. Mov. activities with	
Country	RMSEA	Political Activities	Soc. Mov. activities	Protest activities	Soc. Mov. activities	Protest activities	Protest activities
14-year-olds							
Chile	*0.047*	0.46	0.23	-0.07	0.28	0.30	0.02
Cyprus	*0.073*	0.33	0.31	-0.11	0.33	0.27	0.05
Czech R.	*0.069*	0.42	0.23	-0.14	0.42	0.26	0.07
Denmark	*0.064*	0.46	0.32	-0.13	0.45	0.16	0.05
Estonia	*0.079*	0.55	0.21	0.06	0.30	0.27	0.08
Norway	*0.072*	0.39	0.33	-0.04	0.46	0.28	0.10
Poland	*0.065*	0.33	0.29	-0.06	0.44	0.29	0.11
Portugal	*0.066*	0.40	0.29	-0.12	0.40	0.22	0.09
Slovenia	*0.068*	0.33	0.26	-0.16	0.25	0.27	-0.09
Sweden	*0.063*	0.49	0.32	-0.15	0.57	0.26	0.16
Upper Secondary							
Chile	*0.053*	0.55	0.17	-0.02	0.24	0.23	0.07
Cyprus	*0.075*	0.38	0.18	-0.14	0.27	0.35	0.12
Czech R.	*0.060*	0.46	0.16	-0.09	0.31	0.21	0.05
Denmark	*0.067*	0.50	0.28	0.00	0.46	0.30	0.19
Estonia	*0.082*	0.47	0.22	0.05	0.29	0.28	0.10
Norway	*0.073*	0.43	0.28	-0.08	0.48	0.28	0.20
Poland	*0.056*	0.34	0.28	-0.01	0.39	0.30	0.11
Portugal	*0.063*	0.46	0.33	-0.05	0.37	0.23	0.06
Slovenia	*0.074*	0.22	0.34	-0.22	0.44	0.52	0.14
Sweden	*0.075*	0.48	0.32	-0.11	0.42	0.27	0.16

Table 10 Reliabilities (Cronbach's alpha) for new scales

14-year-old students

	Internal Efficacy	External Efficacy	Political Discussion	Media information	Electoral Participation	Educational& Cultural Status
Chile	0.59	0.60	0.76	0.66	0.73	0.73
Cyprus	0.61	0.64	0.78	0.69	0.55	0.65
Czech R.	0.62	0.54	0.83	0.68	0.80	0.64
Denmark	0.72	0.58	0.86	0.69	0.58	0.65
Estonia	0.68	0.60	0.79	0.65	0.65	0.64
Norway	0.68	0.56	0.86	0.69	0.71	0.68
Poland	0.62	0.60	0.83	0.71	0.74	0.76
Portugal	0.58	0.61	0.80	0.66	0.71	0.75
Slovenia	0.52	0.35	0.82	0.72	0.71	0.67
Sweden	0.70	0.65	0.87	0.68	0.72	0.63
Median	**0.62**	**0.60**	**0.82**	**0.69**	**0.71**	**0.66**

Upper secondary students

	Internal Efficacy	External Efficacy	Political Discussion	Media information	Electoral Participation	Educ.& Cultural Status
Chile	0.64	0.67	0.78	0.68	0.81	0.75
Cyprus	0.72	0.71	0.83	0.73	0.66	0.67
Czech R.	0.72	0.61	0.81	0.68	0.72	0.64
Denmark	0.77	0.57	0.84	0.63	0.54	0.61
Estonia	0.72	0.62	0.82	0.67	0.63	0.54
Norway	0.72	0.65	0.88	0.68	0.72	0.64
Poland	0.66	0.66	0.83	0.72	0.74	0.67
Portugal	0.62	0.63	0.81	0.65	0.69	0.77
Slovenia	0.63	0.37	0.79	0.59	0.60	0.68
Sweden	0.79	0.66	0.88	0.66	0.72	0.65
Median	**0.72**	**0.64**	**0.82**	**0.68**	**0.70**	**0.66**

Table 11 Levels of efficacy among 14-year-old and Upper Secondary students

Country	14-year-olds	Upper Sec.	Difference
Internal Efficacy			
Chile	10.50 (.04)	10.72 (.03)	**0.22 (.05)**
Cyprus*	10.78 (.05)	10.92 (.06)	0.14 (.08)
Czech Republic	9.54 (.04)	9.80 (.04)	**0.26 (.05)**
Denmark	9.31 (.05)	10.37 (.04)	**1.06 (.06)**
Estonia	9.86 (.04)	10.23 (.04)	**0.37 (.06)**
Norway*	9.54 (.05)	9.78 (.07)	**0.24 (.08)**
Poland*	10.18 (.07)	10.07 (.04)	-0.11 (.08)
Portugal*	9.86 (.04)	10.31 (.05)	**0.45 (.06)**
Slovenia	9.82 (.05)	9.81 (.06)	0.00 (.07)
Sweden	9.49 (.08)	10.00 (.06)	**0.52 (.10)**
External Efficacy			
Chile	10.56 (.05)	9.80 (.04)	**-0.76 (.06)**
Cyprus*	10.71 (.04)	10.09 (.09)	**-0.62 (.10)**
Czech Republic	9.07 (.04)	8.70 (.04)	**-0.38 (.06)**
Denmark	10.34 (.04)	10.30 (.03)	-0.03 (.05)
Estonia	9.64 (.04)	9.27 (.03)	**-0.37 (.05)**
Norway*	10.30 (.04)	10.16 (.04)	**-0.15 (.06)**
Poland*	9.43 (.06)	8.57 (.05)	**-0.86 (.08)**
Portugal*	10.03 (.04)	9.56 (.04)	**-0.47 (.06)**
Slovenia	10.21 (.04)	9.55 (.05)	**-0.66 (.06)**
Sweden	10.14 (.07)	9.76 (.05)	**-0.38 (.09)**
School Efficacy			
Chile	10.52 (.04)	10.69 (.04)	**0.17 (.05)**
Cyprus*	11.25 (.05)	11.46 (.07)	**0.20 (.09)**
Czech Republic	9.59 (.05)	9.62 (.04)	0.04 (.06)
Denmark	10.15 (.04)	10.33 (.05)	**0.17 (.07)**
Estonia	9.90 (.05)	10.31 (.06)	**0.41 (.08)**
Norway*	10.27 (.06)	10.01 (.06)	**-0.26 (.08)**
Poland*	10.54 (.08)	10.98 (.05)	**0.44 (.10)**
Portugal*	10.84 (.05)	11.24 (.05)	**0.40 (.07)**
Slovenia	9.55 (.05)	9.65 (.06)	0.10 (.07)
Sweden	10.21 (.06)	10.34 (.06)	0.14 (.08)

* Countries with 3 grades differences between the two populations.

Table 12 Expected Electoral Participation among 14-year-old and Upper Secondary students

Country	14-year-olds	Upper Sec.	Difference
Expected Electoral Activities			
Chile	10.20 (.05)	10.70 (.04)	**0.50 (.07)**
Cyprus*	11.58 (.04)	11.54 (.08)	-0.03 (.09)
Czech Republic	9.52 (.07)	10.42 (.04)	**0.90 (.08)**
Denmark	10.03 (.04)	10.87 (.04)	**0.84 (.06)**
Estonia	9.20 (.04)	9.78 (.07)	**0.58 (.08)**
Norway*	10.19 (.05)	10.58 (.06)	**0.39 (.08)**
Poland*	10.62 (.08)	11.02 (.05)	**0.40 (.10)**
Portugal*	10.18 (.05)	10.91 (.05)	**0.72 (.07)**
Slovenia	9.94 (.04)	10.03 (.05)	0.09 (.07)
Sweden	9.64 (.07)	10.59 (.06)	**0.95 (.09)**
Expected Political Activities			
Country	**14-year-olds**	**Upper Sec.**	**Difference**
Chile	10.16 (.05)	9.87 (.03)	**-0.30 (.06)**
Cyprus*	10.37 (.04)	10.35 (.10)	-0.03 (.11)
Czech Republic	9.44 (.04)	9.26 (.03)	**-0.18 (.06)**
Denmark	9.51 (.04)	9.34 (.04)	**-0.17 (.05)**
Estonia	9.92 (.04)	10.05 (.07)	0.12 (.08)
Norway*	9.71 (.04)	9.50 (.06)	**-0.21 (.07)**
Poland*	10.49 (.06)	9.67 (.04)	**-0.82 (.07)**
Portugal*	10.39 (.04)	10.02 (.05)	**-0.37 (.06)**
Slovenia	9.95 (.04)	9.24 (.09)	**-0.71 (.10)**
Sweden	9.76 (.04)	9.42 (.05)	**-0.33 (.07)**

* Countries with 3 grades differences between the two populations.

Table 13 Regression coefficients for Internal Efficacy (Standard errors in parenthesis, coefficients (p < .05) in bold)

	Chile		Cyprus		Czech Rep.		Denmark		Estonia		Norway		Poland		Portugal		Slovenia		Sweden	
14-years-old																				
Gender (female)	**-0.10**	(.03)	**-0.13**	(.03)	**-0.23**	(.03)	**-0.34**	(.03)	**-0.30**	(.03)	**-0.35**	(.03)	**-0.25**	(.03)	**-0.25**	(.03)	**-0.32**	(.03)	**-0.36**	(.03)
ECS	**0.10**	(.02)	-0.01	(.02)	**-0.04**	(.02)	**0.04**	(.02)	**0.05**	(.02)	**0.06**	(.02)	**0.05**	(.02)	**0.09**	(.03)	**0.06**	(.03)	**0.05**	(.02)
School mean ECS	**-0.09**	(.03)	-0.03	(.06)	-0.03	(.06)	-0.04	(.06)	-0.09	(.06)	-0.02	(.06)	0.01	(.04)	**-0.14**	(.05)	-0.07	(.07)	-0.03	(.07)
Expect. Education	-0.01	(.00)	0.01	(.01)	-0.01	(.01)	0.01	(.01)	0.01	(.01)	**0.02**	(.01)	-0.01	(.01)	**0.02**	(.01)	0.00	(.01)	-0.01	(.01)
Political Interest	**0.29**	(.01)	**0.40**	(.02)	**0.51**	(.02)	**0.49**	(.02)	**0.39**	(.02)	**0.47**	(.02)	**0.42**	(.02)	**0.34**	(.02)	**0.22**	(.02)	**0.42**	(.02)
Political Interest (DK)	**0.17**	(.04)	**-0.16**	(.08)	**0.25**	(.07)	**0.30**	(.06)	**0.27**	(.05)	**0.19**	(.05)	**0.31**	(.08)	**0.16**	(.06)	**0.19**	(.07)	**0.22**	(.06)
Knowledge	0.02	(.02)	0.03	(.02)	0.02	(.02)	**0.06**	(.02)	0.03	(.02)	0.01	(.02)	0.02	(.02)	**0.06**	(.02)	-0.01	(.02)	**0.08**	(.02)
Political Trust	**0.05**	(.01)	0.01	(.02)	-0.01	(.01)	-0.01	(.02)	0.01	(.02)	-0.02	(.02)	**0.03**	(.02)	0.01	(.02)	**0.04**	(.02)	-0.01	(.02)
Discussion	**0.16**	(.01)	**0.21**	(.02)	**0.22**	(.02)	**0.18**	(.02)	**0.20**	(.02)	**0.21**	(.02)	**0.22**	(.02)	**0.18**	(.02)	**0.26**	(.02)	**0.21**	(.02)
Media	**0.06**	(.01)	**0.08**	(.02)	0.02	(.02)	0.02	(.02)	**0.05**	(.02)	**0.06**	(.02)	**0.08**	(.02)	**0.06**	(.02)	0.03	(.02)	**0.09**	(.02)
School Council	-0.02	(.03)	-0.04	(.03)	0.03	(.04)	0.03	(.03)	**0.10**	(.04)	**0.09**	(.03)	0.01	(.04)	0.05	(.04)	0.06	(.05)	0.06	(.03)
Youth Organisation	0.13	(.07)	**0.19**	(.04)	**0.55**	(.18)	**0.23**	(.07)	0.14	(.09)	0.06	(.06)	**0.36**	(.13)	**0.28**	(.12)	0.21	(.15)	0.12	(.07)
Class climate (student)	**0.03**	(.01)	0.01	(.02)	-0.02	(.02)	0.02	(.02)	0.00	(.02)	**-0.03**	(.02)	-0.02	(.02)	**0.04**	(.02)	0.00	(.02)	0.00	(.02)
Class climate (average)	0.01	(.04)	-0.03	(.06)	-0.06	(.05)	-0.04	(.04)	0.01	(.04)	0.05	(.04)	0.07	(.05)	**-0.12**	(.06)	-0.02	(.06)	0.05	(.06)
Upper Secondary																				
Gender (female)	**-0.15**	(.02)	**-0.37**	(.04)	**-0.32**	(.03)	**-0.34**	(.03)	**-0.38**	(.03)	**-0.36**	(.03)	**-0.19**	(.03)	**-0.25**	(.03)	**-0.23**	(.03)	**-0.28**	(.03)
ECS	**0.09**	(.02)	0.03	(.03)	0.04	(.02)	**0.06**	(.02)	0.00	(.02)	0.00	(.02)	**0.08**	(.02)	**0.10**	(.02)	**0.05**	(.02)	0.03	(.02)
School mean ECS	-0.06	(.03)	-0.01	(.08)	**-0.13**	(.05)	**-0.13**	(.05)	-0.02	(.06)	0.00	(.06)	-0.05	(.05)	-0.06	(.05)	-0.10	(.05)	-0.01	(.06)
Expect. Education	**0.01**	(.01)	0.00	(.01)	0.01	(.01)	0.01	(.01)	**0.02**	(.01)	**0.02**	(.01)	**0.03**	(.01)	**0.02**	(.01)	0.01	(.01)	**0.02**	(.01)
Political Interest	**0.38**	(.01)	**0.36**	(.02)	**0.57**	(.02)	**0.58**	(.02)	**0.56**	(.02)	**0.51**	(.02)	**0.48**	(.02)	**0.46**	(.02)	**0.28**	(.02)	**0.53**	(.02)
Political Interest (DK)	-0.03	(.04)	0.00	(.08)	**0.26**	(.08)	**-0.14**	(.07)	**0.14**	(.06)	**0.14**	(.07)	0.16	(.08)	0.16	(.08)	**0.17**	(.07)	**0.22**	(.08)
Knowledge	**0.04**	(.01)	0.00	(.02)	**0.05**	(.02)	**0.08**	(.01)	**0.06**	(.01)	0.03	(.02)	0.01	(.02)	**0.10**	(.02)	0.01	(.02)	**0.05**	(.02)
Political Trust	-0.02	(.01)	0.00	(.02)	**-0.05**	(.01)	0.02	(.01)	-0.02	(.01)	**-0.07**	(.02)	**-0.04**	(.01)	0.02	(.02)	0.01	(.02)	**-0.03**	(.01)
Discussion	**0.20**	(.01)	**0.31**	(.02)	**0.20**	(.02)	**0.19**	(.02)	**0.20**	(.02)	**0.23**	(.02)	**0.22**	(.02)	**0.22**	(.02)	**0.27**	(.02)	**0.29**	(.02)
Media	**0.08**	(.01)	**0.10**	(.02)	**0.08**	(.01)	**0.04**	(.01)	0.02	(.01)	0.02	(.02)	**0.04**	(.01)	**0.08**	(.02)	**0.10**	(.02)	0.02	(.01)
School Council	**0.07**	(.03)	0.05	(.04)	0.06	(.04)	**0.10**	(.03)	**0.07**	(.03)	**0.11**	(.03)	0.05	(.05)	-0.04	(.03)	**0.18**	(.05)	**0.09**	(.03)
Youth Organisation	**0.19**	(.05)	**0.17**	(.04)	**0.22**	(.07)	**0.18**	(.05)	0.07	(.06)	**0.10**	(.05)	0.20	(.11)	-0.02	(.07)	**0.20**	(.09)	0.05	(.04)
Class climate (student)	**0.03**	(.01)	-0.03	(.02)	-0.02	(.02)	-0.02	(.01)	-0.03	(.01)	**-0.04**	(.02)	-0.01	(.01)	-0.03	(.02)	0.01	(.02)	-0.02	(.02)
Class climate (average)	-0.07	(.04)	-0.04	(.08)	0.00	(.04)	0.01	(.04)	0.05	(.04)	0.07	(.05)	0.04	(.04)	-0.07	(.06)	-0.04	(.05)	-0.03	(.04)

Table 14 Regression coefficients for External Efficacy (Standard errors in parenthesis, coefficients (p < .05) in bold)

	Chile		Cyprus		Czech Rep.		Denmark		Estonia		Norway		Poland		Portugal		Slovenia		Sweden	
14-years-old																				
Gender (female)	**-0.16**	(.03)	**-0.19**	(.03)	**-0.19**	(.03)	**-0.17**	(.04)	**-0.19**	(.03)	**-0.12**	(.04)	**-0.22**	(.03)	**-0.20**	(.04)	-0.05	(.04)	**-0.22**	(.04)
ECS	-0.01	(.02)	0.00	(.03)	0.00	(.02)	-0.04	(.03)	0.01	(.03)	0.01	(.03)	0.01	(.02)	-0.03	(.03)	0.01	(.03)	-0.05	(.02)
School mean ECS	-0.07	(.04)	-0.11	(.08)	-0.01	(.06)	0.08	(.08)	0.01	(.07)	-0.06	(.07)	-0.02	(.05)	**0.15**	(.05)	0.02	(.07)	-0.10	(.08)
Expect. Education	**-0.01**	(.00)	**-0.02**	(.01)	-0.01	(.01)	0.00	(.01)	-0.01	(.01)	0.01	(.01)	**-0.03**	(.01)	-0.01	(.01)	-0.01	(.01)	-0.01	(.01)
Political Interest	**0.12**	(.01)	**0.08**	(.02)	0.04	(.02)	**0.10**	(.02)	**0.10**	(.02)	**0.10**	(.02)	**0.08**	(.02)	**0.13**	(.02)	**0.05**	(.02)	**0.15**	(.02)
Political Interest (DK)	**0.10**	(.04)	0.11	(.08)	**0.27**	(.08)	**0.15**	(.07)	**0.12**	(.06)	0.07	(.06)	**0.24**	(.08)	0.06	(.07)	0.00	(.07)	0.01	(.07)
Knowledge	**-0.10**	(.02)	**-0.04**	(.02)	**-0.15**	(.02)	-0.02	(.02)	**-0.11**	(.02)	0.00	(.02)	**-0.13**	(.02)	**-0.06**	(.02)	**-0.13**	(.02)	-0.02	(.02)
Political Trust	**0.18**	(.01)	**0.30**	(.02)	**0.28**	(.02)	**0.26**	(.02)	**0.28**	(.02)	**0.30**	(.02)	**0.24**	(.02)	**0.24**	(.02)	**0.17**	(.02)	**0.34**	(.02)
Discussion	0.01	(.01)	0.03	(.02)	0.02	(.02)	0.00	(.02)	-0.02	(.02)	**0.07**	(.02)	0.02	(.02)	**0.04**	(.02)	0.03	(.02)	**0.07**	(.02)
Media	**0.04**	(.01)	0.01	(.02)	0.00	(.02)	-0.01	(.02)	-0.02	(.02)	0.00	(.02)	0.02	(.02)	0.01	(.02)	0.03	(.02)	-0.01	(.02)
School Council	0.05	(.04)	-0.06	(.04)	-0.04	(.05)	-0.03	(.04)	0.03	(.04)	-0.02	(.04)	-0.06	(.04)	0.00	(.04)	-0.08	(.05)	-0.06	(.04)
Youth Organisation	-0.02	(.08)	-0.02	(.04)	**-0.42**	(.21)	0.18	(.09)	**0.23**	(.10)	-0.04	(.08)	**0.36**	(.15)	0.19	(.13)	-0.15	(.16)	-0.06	(.08)
Class climate (student)	**0.10**	(.01)	**0.18**	(.02)	**0.12**	(.02)	**0.15**	(.02)	**0.07**	(.02)	**0.15**	(.02)	**0.09**	(.02)	**0.13**	(.02)	**0.11**	(.02)	**0.13**	(.02)
Class climate (average)	0.06	(.04)	-0.01	(.07)	-0.02	(.05)	-0.06	(.06)	**-0.16**	(.05)	0.07	(.05)	0.06	(.06)	-0.10	(.06)	-0.04	(.07)	0.06	(.07)
Upper Secondary																				
Gender (female)	**-0.15**	(.03)	**-0.20**	(.05)	**-0.30**	(.04)	**-0.13**	(.04)	**-0.27**	(.04)	-0.07	(.04)	**-0.22**	(.03)	-0.07	(.04)	**-0.18**	(.04)	-0.03	(.04)
ECS	0.01	(.02)	**0.07**	(.03)	-0.01	(.03)	0.02	(.03)	-0.03	(.03)	0.01	(.03)	0.01	(.02)	0.04	(.03)	0.04	(.02)	0.00	(.03)
School mean ECS	**-0.08**	(.04)	0.10	(.11)	0.01	(.06)	**0.21**	(.07)	**0.25**	(.07)	**0.19**	(.07)	-0.10	(.06)	-0.02	(.06)	**-0.17**	(.06)	**0.18**	(.08)
Expect. Education	**-0.01**	(.01)	0.00	(.01)	-0.01	(.01)	0.01	(.01)	0.00	(.01)	**-0.03**	(.01)	**-0.02**	(.01)	0.01	(.01)	0.00	(.01)	-0.01	(.01)
Political Interest	**0.11**	(.02)	**0.08**	(.03)	0.02	(.02)	**0.08**	(.03)	**0.10**	(.02)	0.03	(.03)	**0.04**	(.02)	**0.08**	(.02)	**0.05**	(.02)	0.00	(.03)
Political Interest (DK)	0.08	(.04)	0.06	(.10)	-0.16	(.09)	0.08	(.10)	0.09	(.07)	-0.03	(.09)	-0.02	(.09)	0.06	(.09)	-0.02	(.07)	0.17	0.08
Knowledge	0.00	(.02)	**-0.09**	(.03)	**-0.04**	(.02)	0.01	(.02)	-0.03	(.02)	0.03	(.03)	**-0.08**	(.02)	0.04	(.02)	**-0.14**	(.02)	**-0.05**	(.02)
Political Trust	**0.33**	(.01)	**0.35**	(.02)	**0.36**	(.02)	**0.30**	(.02)	**0.34**	(.02)	**0.36**	(.02)	**0.28**	(.02)	**0.33**	(.02)	**0.23**	(.02)	**0.38**	(.02)
Discussion	0.00	(.02)	0.01	(.03)	0.03	(.02)	0.01	(.02)	**0.07**	(.02)	0.03	(.03)	**0.05**	(.02)	**0.05**	(.02)	-0.02	(.02)	**0.10**	(.03)
Media	**0.03**	(.01)	-0.01	(.03)	-0.01	(.02)	-0.01	(.02)	0.00	(.02)	0.03	(.02)	-0.02	(.02)	-0.02	(.02)	0.02	(.02)	-0.03	(.02)
School Council	-0.01	(.04)	-0.05	(.05)	0.02	(.04)	0.03	(.04)	0.06	(.04)	-0.05	(.04)	-0.03	(.05)	0.00	(.04)	0.05	(.06)	-0.02	(.04)
Youth Organisation	-0.02	(.05)	-0.07	(.05)	-0.02	(.09)	**-0.16**	(.07)	-0.07	(.07)	0.01	(.06)	-0.16	(.13)	-0.12	(.08)	**0.36**	(.10)	0.00	(.06)
Class climate (student)	**0.11**	(.01)	**0.19**	(.02)	**0.07**	(.02)	**0.11**	(.02)	**0.10**	(.02)	**0.13**	(.02)	**0.12**	(.02)	**0.13**	(.02)	**0.11**	(.02)	**0.17**	(.02)
Class climate (average)	**-0.12**	(.05)	-0.11	(.10)	-0.02	(.05)	-0.01	(.06)	-0.08	(.05)	**-0.16**	(.07)	0.01	(.05)	0.03	(.07)	-0.06	(.06)	**-0.15**	(.06)

Table 15 Regression coefficients for School Efficacy (Standard errors in parenthesis, coefficients (p < .05) in bold)

	Chile		Cyprus		Czech Rep.		Denmark		Estonia		Norway		Poland		Portugal		Slovenia		Sweden	
14-years-old																				
Gender (female)	0.04	(.03)	**0.19**	(.04)	0.00	(.03)	0.03	(.04)	**0.13**	(.04)	**0.19**	(.04)	**0.13**	(.03)	**0.07**	(.04)	**0.17**	(.04)	0.06	(.04)
ECS	0.00	(.02)	0.00	(.03)	0.00	(.02)	-0.02	(.03)	0.01	(.03)	0.03	(.03)	0.03	(.02)	-0.05	(.03)	-0.02	(.03)	-0.03	(.03)
School mean ECS	0.05	(.04)	-0.06	(.08)	0.10	(.07)	0.00	(.08)	-0.09	(.08)	0.02	(.09)	-0.08	(.06)	-0.10	(.06)	-0.13	(.08)	0.08	(.09)
Expect. Education	0.01	(.00)	0.02	(.01)	0.00	(.01)	**0.02**	(.01)	0.00	(.01)	0.01	(.01)	**0.03**	(.01)	**0.02**	(.01)	0.01	(.01)	0.01	(.01)
Political Interest	0.01	(.01)	0.04	(.02)	-0.03	(.02)	**-0.08**	(.02)	-0.01	(.02)	0.00	(.02)	0.00	(.02)	-0.02	(.02)	-0.02	(.02)	-0.05	(.02)
Political Interest (DK)	-0.04	(.04)	**-0.16**	(.08)	**0.16**	(.08)	**-0.14**	(.07)	-0.06	(.06)	-0.02	(.06)	0.14	(.09)	-0.12	(.07)	-0.12	(.07)	-0.11	(.07)
Knowledge	**0.12**	(.02)	**0.15**	(.02)	**0.08**	(.02)	-0.02	(.02)	**0.08**	(.02)	0.04	(.02)	**0.13**	(.02)	**0.22**	(.02)	**0.09**	(.02)	**0.06**	(.02)
Political Trust	**0.08**	(.01)	**0.12**	(.02)	0.03	(.02)	**0.09**	(.02)	**0.10**	(.02)	**0.10**	(.02)	**0.07**	(.02)	**0.07**	(.02)	**0.06**	(.02)	**0.10**	(.02)
Discussion	**0.04**	(.01)	**0.06**	(.02)	0.01	(.02)	0.03	(.02)	**0.05**	(.02)	**0.06**	(.02)	0.03	(.02)	0.02	(.02)	0.00	(.02)	0.03	(.02)
Media	**0.06**	(.01)	0.03	(.02)	**0.12**	(.02)	**0.09**	(.02)	**0.09**	(.02)	**0.05**	(.02)	**0.11**	(.02)	**0.06**	(.02)	**0.14**	(.02)	**0.10**	(.02)
School Council	**0.08**	(.04)	**0.08**	(.04)	**0.19**	(.05)	**0.18**	(.04)	**0.12**	(.04)	**0.14**	(.04)	**0.21**	(.04)	0.06	(.04)	0.06	(.05)	**0.09**	(.04)
Youth Organisation	-0.03	(.08)	0.01	(.04)	-0.31	(.22)	0.16	(.10)	0.02	(.10)	0.10	(.08)	0.02	(.15)	-0.10	(.13)	-0.10	(.16)	0.03	(.08)
Class climate (student)	**0.21**	(.01)	**0.19**	(.02)	**0.15**	(.02)	**0.18**	(.02)	**0.08**	(.02)	**0.14**	(.02)	**0.18**	(.02)	**0.11**	(.02)	**0.14**	(.02)	**0.16**	(.02)
Class climate (average)	-0.07	(.04)	-0.05	(.07)	-0.09	(.06)	-0.01	(.06)	**0.18**	(.06)	0.00	(.06)	-0.09	(.06)	0.05	(.07)	0.04	(.07)	0.02	(.07)
Upper Secondary																				
Gender (female)	-0.01	(.03)	**0.22**	(.05)	0.06	(.04)	**0.18**	(.04)	**0.28**	(.04)	**0.15**	(.05)	**0.17**	(.04)	0.07	(.04)	**0.12**	(.04)	**0.22**	(.04)
ECS	0.00	(.02)	-0.06	(.04)	0.01	(.03)	-0.05	(.03)	-0.03	(.03)	-0.01	(.03)	0.02	(.02)	-0.04	(.03)	0.00	(.02)	0.03	(.03)
School mean ECS	**-0.10**	(.04)	0.04	(.11)	-0.01	(.07)	**0.22**	(.08)	-0.05	(.09)	0.01	(.08)	0.01	(.06)	0.03	(.06)	-0.04	(.07)	-0.02	(.08)
Expect. Education	0.01	(.01)	0.00	(.01)	0.01	(.01)	0.01	(.01)	0.01	(.01)	**0.04**	(.01)	**0.03**	(.01)	**0.03**	(.01)	0.00	(.01)	0.00	(.01)
Political Interest	**0.04**	(.02)	-0.03	(.03)	0.03	(.03)	0.04	(.03)	0.02	(.02)	-0.02	(.03)	0.02	(.02)	**0.05**	(.03)	0.02	(.02)	-0.02	(.03)
Political Interest (DK)	-0.06	(.05)	-0.12	(.10)	**-0.29**	(.09)	**-0.25**	(.10)	**-0.23**	(.07)	0.08	(.09)	-0.03	(.09)	-0.09	(.10)	0.00	(.07)	-0.15	(.11)
Knowledge	**0.06**	(.02)	**0.13**	(.03)	0.02	(.02)	-0.04	(.02)	**0.06**	(.02)	0.05	(.03)	**0.10**	(.02)	0.04	(.02)	0.01	(.02)	**0.07**	(.02)
Political Trust	**0.07**	(.01)	**0.15**	(.03)	**0.06**	(.02)	**0.08**	(.02)	0.03	(.02)	**0.11**	(.02)	**0.06**	(.02)	0.00	(.02)	**0.07**	(.02)	**0.09**	(.02)
Discussion	0.02	(.02)	0.02	(.03)	**0.06**	(.02)	0.01	(.03)	0.03	(.02)	**0.07**	(.03)	**0.05**	(.02)	0.02	(.02)	0.03	(.02)	0.05	(.03)
Media	**0.07**	(.01)	**0.08**	(.03)	0.03	(.02)	0.03	(.02)	**0.04**	(.02)	0.02	(.02)	**0.07**	(.02)	0.03	(.02)	**0.07**	(.02)	**0.05**	(.02)
School Council	**0.09**	(.04)	**0.17**	(.05)	**0.09**	(.05)	**0.13**	(.04)	**0.22**	(.04)	**0.14**	(.04)	**0.22**	(.05)	**0.16**	(.04)	**0.15**	(.06)	**0.11**	(.04)
Youth Organisation	0.07	(.05)	-0.03	(.05)	0.12	(.09)	0.02	(.07)	0.08	(.08)	0.08	(.07)	0.02	(.14)	0.03	(.09)	0.13	(.10)	**0.13**	(.06)
Class climate (student)	**0.14**	(.01)	**0.15**	(.03)	**0.09**	(.02)	**0.14**	(.02)	**0.14**	(.02)	**0.09**	(.02)	**0.12**	(.02)	**0.15**	(.02)	**0.12**	(.02)	**0.14**	(.02)
Class climate (average)	-0.05	(.05)	0.10	(.11)	0.09	(.06)	0.06	(.07)	0.09	(.06)	0.08	(.07)	-0.06	(.06)	-0.07	(.08)	0.10	(.07)	-0.02	(.06)

Table 16 Regression coefficients for Expected Electoral Participation (Standard errors in parenthesis, coefficients (p < .05) in bold)

	Chile		Cyprus		Czech Rep.		Denmark		Estonia		Norway		Poland		Portugal		Slovenia		Sweden	
14-years-old																				
Gender (female)	0.02	(.03)	0.06	(.03)	**-0.09**	(.03)	**0.11**	(.04)	**0.07**	(.03)	0.03	(.03)	**0.07**	(.03)	-0.03	(.03)	0.02	(.04)	**0.13**	(.04)
ECS	0.03	(.02)	0.00	(.03)	**0.07**	(.02)	**0.13**	(.03)	0.02	(.02)	**0.10**	(.02)	-0.03	(.02)	**0.05**	(.03)	0.05	(.03)	**0.05**	(.02)
School mean ECS	**0.10**	(.04)	0.03	(.07)	-0.06	(.06)	-0.05	(.08)	-0.14	(.09)	0.10	(.07)	0.01	(.05)	-0.08	(.05)	**-0.20**	(.07)	**0.18**	(.08)
Expect. Education	0.01	(.00)	**0.02**	(.01)	**0.03**	(.01)	**0.02**	(.01)	0.01	(.01)	**0.02**	(.01)	**0.05**	(.01)	**0.02**	(.01)	**0.04**	(.01)	**0.03**	(.01)
Political Interest	**0.22**	(.01)	**0.13**	(.02)	**0.19**	(.02)	**0.19**	(.03)	**0.13**	(.02)	**0.11**	(.02)	**0.07**	(.02)	**0.13**	(.02)	**0.04**	(.02)	**0.10**	(.02)
Political Interest (DK)	**-0.12**	(.04)	**-0.31**	(.09)	-0.11	(.07)	0.06	(.07)	0.02	(.06)	-0.01	(.06)	0.04	(.09)	0.05	(.07)	-0.07	(.07)	0.07	(.07)
Knowledge	**0.15**	(.02)	**0.15**	(.02)	**0.28**	(.02)	**0.12**	(.02)	**0.17**	(.02)	**0.19**	(.02)	**0.16**	(.02)	**0.20**	(.02)	**0.13**	(.02)	**0.26**	(.02)
Political Trust	**0.11**	(.01)	**0.09**	(.02)	**0.17**	(.02)	**0.05**	(.02)	**0.10**	(.02)	**0.09**	(.02)	**0.09**	(.02)	**0.09**	(.02)	**0.09**	(.02)	**0.14**	(.02)
Discussion	**0.05**	(.01)	**0.11**	(.02)	**0.12**	(.02)	**0.07**	(.02)	**0.07**	(.02)	**0.06**	(.02)	**0.08**	(.02)	**0.08**	(.02)	**0.12**	(.02)	**0.13**	(.02)
School Council	**0.10**	(.01)	**0.07**	(.02)	**0.08**	(.02)	**0.08**	(.02)	**0.11**	(.02)	**0.13**	(.02)	**0.13**	(.02)	0.03	(.02)	**0.12**	(.02)	**0.05**	(.02)
School Council	0.03	(.03)	0.00	(.04)	0.08	(.04)	-0.02	(.04)	-0.05	(.04)	**0.07**	(.03)	-0.03	(.04)	0.03	(.04)	-0.01	(.05)	-0.01	(.04)
Youth Organisation	0.05	(.07)	**0.11**	(.04)	-0.07	(.19)	0.02	(.09)	-0.11	(.10)	0.07	(.07)	-0.07	(.14)	-0.13	(.12)	-0.08	(.15)	**0.30**	(.07)
Class climate (student)	**0.10**	(.01)	**0.06**	(.02)	0.00	(.02)	**0.08**	(.02)	**0.06**	(.02)	**0.08**	(.02)	**0.06**	(.02)	**0.07**	(.02)	**0.06**	(.02)	**0.05**	(.02)
Class climate (average)	0.02	(.05)	0.03	(.06)	0.03	(.05)	0.04	(.06)	**0.26**	(.07)	-0.05	(.05)	0.04	(.05)	0.04	(.06)	0.04	(.06)	0.10	(.06)
Internal Efficacy	-0.02	(.01)	-0.01	(.02)	**-0.04**	(.02)	0.01	(.02)	**0.07**	(.02)	**0.05**	(.02)	0.01	(.02)	**0.04**	(.02)	0.01	(.02)	0.02	(.02)
External Efficacy	0.01	(.01)	0.03	(.02)	**-0.04**	(.02)	0.02	(.02)	**0.04**	(.02)	0.00	(.02)	-0.03	(.02)	0.02	(.02)	**0.07**	(.02)	**0.08**	(.02)
School Efficacy	**0.08**	(.01)	**0.16**	(.02)	**0.09**	(.01)	**0.15**	(.02)	**0.11**	(.02)	**0.11**	(.02)	**0.22**	(.02)	**0.17**	(.02)	**0.15**	(.02)	**0.09**	(.02)
Upper Secondary																				
Gender (female)	**0.14**	(.04)	**0.09**	(.04)	**0.13**	(.04)	**0.12**	(.03)	**0.16**	(.04)	0.05	(.04)	**0.12**	(.04)	**0.14**	(.04)	**0.09**	(.04)	**0.13**	(.04)
ECS	**0.06**	(.03)	**0.11**	(.02)	**0.07**	(.03)	**0.05**	(.02)	0.02	(.03)	0.03	(.02)	0.03	(.02)	**0.06**	(.03)	**0.11**	(.02)	**0.07**	(.03)
School mean ECS	**0.14**	(.06)	-0.01	(.10)	0.08	(.06)	0.11	(.06)	0.03	(.05)	-0.05	(.07)	**0.17**	(.07)	**0.14**	(.06)	-0.01	(.10)	0.08	(.06)
Expect. Education	0.01	(.01)	**0.03**	(.01)	**0.04**	(.01)	**0.02**	(.01)	**0.02**	(.01)	0.00	(.01)	0.01	(.01)	0.01	(.01)	**0.03**	(.01)	**0.04**	(.01)
Political Interest	**0.29**	(.03)	**0.13**	(.03)	**0.19**	(.03)	**0.09**	(.02)	**0.19**	(.03)	**0.07**	(.02)	**0.14**	(.03)	**0.29**	(.03)	**0.13**	(.03)	**0.19**	(.03)
Political Interest (DK)	**-0.31**	(.09)	0.00	(.07)	-0.04	(.09)	-0.05	(.10)	-0.12	(.09)	0.12	(.08)	-0.14	(.11)	**-0.31**	(.09)	0.00	(.07)	-0.04	(.09)
Knowledge	**0.06**	(.02)	**0.15**	(.02)	**0.06**	(.02)	**0.09**	(.02)	**0.09**	(.02)	**0.13**	(.02)	**0.16**	(.02)	**0.06**	(.02)	**0.15**	(.02)	**0.06**	(.02)
Political Trust	**0.04**	(.02)	**0.14**	(.02)	**0.06**	(.02)	**0.11**	(.02)	**0.16**	(.02)	**0.11**	(.02)	**0.12**	(.02)	**0.04**	(.02)	**0.14**	(.02)	**0.06**	(.02)
Discussion	**0.17**	(.02)	**0.10**	(.02)	**0.11**	(.03)	**0.14**	(.02)	**0.11**	(.02)	**0.18**	(.02)	**0.16**	(.02)	**0.17**	(.02)	**0.10**	(.02)	**0.11**	(.03)
School Council	**0.06**	(.02)	**0.10**	(.02)	**0.09**	(.02)	**0.10**	(.02)	**0.07**	(.02)	**0.08**	(.02)	**0.08**	(.02)	**0.06**	(.02)	**0.10**	(.02)	**0.09**	(.02)
School Council	-0.01	(.03)	-0.01	(.04)	0.04	(.04)	-0.01	(.05)	0.02	(.04)	0.07	(.05)	0.04	(.03)	-0.01	(.03)	-0.01	(.04)	0.04	(.04)
Youth Organisation	0.03	(.06)	**0.25**	(.07)	**0.13**	(.06)	-0.15	(.12)	0.12	(.08)	0.17	(.10)	0.06	(.05)	0.03	(.06)	**0.25**	(.07)	**0.13**	(.06)
Class climate (student)	**0.05**	(.02)	**0.04**	(.02)	**0.11**	(.02)	**0.06**	(.02)	-0.02	(.02)	**0.04**	(.02)	**0.04**	(.02)	**0.05**	(.02)	**0.04**	(.02)	**0.11**	(.02)
Class climate (average)	0.06	(.05)	0.12	(.07)	**0.13**	(.06)	0.04	(.05)	0.08	(.06)	-0.06	(.07)	0.10	(.05)	0.06	(.05)	0.12	(.07)	**0.13**	(.06)
Internal Efficacy	**0.05**	(.03)	0.02	(.02)	0.03	(.03)	0.02	(.02)	**0.05**	(.02)	**0.06**	(.02)	**0.10**	(.03)	**0.05**	(.03)	0.02	(.02)	0.03	(.03)
External Efficacy	0.02	(.02)	**0.05**	(.02)	0.01	(.02)	-0.01	(.02)	**0.04**	(.02)	0.01	(.02)	**0.04**	(.02)	0.02	(.02)	**0.05**	(.02)	0.01	(.02)
School Efficacy	**0.04**	(.02)	**0.10**	(.02)	**0.08**	(.02)	**0.18**	(.01)	**0.14**	(.02)	**0.13**	(.02)	**0.13**	(.02)	**0.04**	(.02)	**0.10**	(.02)	**0.08**	(.02)

Table 17 Regression coefficients for Expected Political Activities (Standard errors in parenthesis, coefficients (p < .05) in bold)

	Chile		Cyprus		Czech Rep.		Denmark		Estonia		Norway		Poland		Portugal		Slovenia		Sweden	
14-years-old																				
Gender (female)	**-0.06**	(.03)	-0.01	(.03)	-0.06	(.03)	0.05	(.04)	**-0.20**	(.03)	**0.09**	(.04)	-0.02	(.04)	0.06	(.04)	-0.02	(.04)	**0.15**	(.04)
ECS	0.02	(.02)	**0.06**	(.02)	0.02	(.02)	-0.02	(.03)	0.04	(.03)	**0.05**	(.03)	0.03	(.02)	0.04	(.03)	0.01	(.03)	-0.02	(.03)
School mean ECS	**-0.10**	(.04)	0.05	(.07)	**-0.14**	(.07)	0.01	(.07)	**-0.35**	(.08)	**-0.19**	(.07)	**-0.19**	(.05)	-0.10	(.05)	-0.11	(.07)	-0.11	(.08)
Expect. Education	-0.01	(.00)	0.01	(.01)	**0.03**	(.01)	0.01	(.01)	0.01	(.01)	**0.03**	(.01)	0.01	(.01)	0.01	(.01)	**0.02**	(.01)	0.01	(.01)
Political Interest	**0.25**	(.01)	**0.18**	(.02)	**0.21**	(.02)	**0.28**	(.03)	**0.23**	(.02)	**0.25**	(.02)	**0.18**	(.02)	**0.26**	(.02)	**0.12**	(.02)	**0.19**	(.03)
Political Interest (DK)	-0.07	(.04)	-0.03	(.09)	-0.01	(.08)	**0.16**	(.07)	**0.12**	(.06)	**0.27**	(.07)	0.04	(.10)	0.12	(.07)	**0.16**	(.07)	**0.18**	(.08)
Knowledge	**-0.05**	(.02)	**0.04**	(.02)	0.03	(.02)	-0.03	(.02)	-0.03	(.02)	**-0.05**	(.02)	-0.02	(.02)	**-0.07**	(.02)	**-0.10**	(.02)	**-0.04**	(.02)
Political Trust	**0.09**	(.01)	**0.07**	(.02)	**0.07**	(.02)	**0.05**	(.02)	**0.07**	(.02)	**0.06**	(.02)	**0.09**	(.02)	0.03	(.02)	**0.07**	(.02)	**0.07**	(.02)
Discussion	**0.12**	(.01)	**0.17**	(.02)	**0.09**	(.02)	**0.15**	(.02)	**0.13**	(.02)	**0.15**	(.02)	**0.15**	(.02)	**0.13**	(.02)	**0.16**	(.02)	**0.25**	(.02)
School Council	**0.14**	(.01)	**0.11**	(.02)	**0.09**	(.02)	0.03	(.02)	**0.05**	(.02)	**0.08**	(.02)	0.02	(.02)	**0.06**	(.02)	0.01	(.02)	0.02	(.02)
School Council	0.01	(.03)	**0.07**	(.03)	**0.15**	(.05)	0.02	(.04)	0.01	(.04)	**0.15**	(.03)	0.04	(.04)	0.06	(.04)	0.07	(.05)	-0.02	(.04)
Youth Organisation	**0.14**	(.07)	**0.12**	(.04)	-0.34	(.22)	0.16	(.09)	-0.09	(.10)	**0.20**	(.07)	**0.43**	(.15)	0.17	(.13)	0.13	(.16)	**0.20**	(.08)
Class climate (student)	**0.03**	(.01)	0.01	(.02)	0.02	(.02)	**0.06**	(.02)	**0.04**	(.02)	-0.02	(.02)	0.04	(.02)	**0.11**	(.02)	**0.06**	(.02)	0.03	(.02)
Class climate (average)	-0.05	(.04)	0.10	(.06)	-0.01	(.06)	**-0.13**	(.05)	0.06	(.06)	-0.07	(.05)	-0.04	(.05)	-0.11	(.06)	0.00	(.07)	**-0.15**	(.07)
Internal Efficacy	**0.07**	(.01)	**0.15**	(.02)	**0.11**	(.02)	**0.12**	(.02)	**0.10**	(.02)	**0.11**	(.02)	**0.09**	(.02)	**0.09**	(.02)	**0.11**	(.02)	**0.12**	(.02)
External Efficacy	**0.04**	(.01)	0.02	(.02)	**0.06**	(.02)	**0.07**	(.02)	**0.04**	(.02)	**0.05**	(.02)	**0.13**	(.02)	0.03	(.02)	**0.06**	(.02)	-0.01	(.02)
School Efficacy	**0.05**	(.01)	**-0.05**	(.02)	-0.03	(.02)	-0.02	(.02)	0.00	(.02)	-0.01	(.02)	0.00	(.02)	-0.03	(.02)	-0.03	(.02)	**-0.05**	(.02)
Upper Secondary																				
Gender (female)	0.02	(.02)	-0.07	(.05)	**-0.09**	(.04)	**0.08**	(.04)	-0.03	(.04)	**0.09**	(.04)	-0.01	(.03)	0.05	(.04)	**-0.07**	(.03)	**0.11**	(.04)
ECS	-0.03	(.02)	0.04	(.03)	**0.06**	(.02)	0.04	(.03)	-0.02	(.02)	0.03	(.03)	-0.02	(.02)	0.01	(.03)	**-0.05**	(.02)	0.01	(.02)
School mean ECS	**-0.06**	(.03)	-0.08	(.10)	-0.07	(.07)	-0.01	(.06)	-0.17	(.10)	-0.01	(.06)	0.00	(.06)	**-0.19**	(.05)	0.03	(.07)	0.07	(.07)
Expect. Education	**0.02**	(.01)	**0.04**	(.01)	**0.06**	(.01)	0.01	(.01)	**0.04**	(.01)	**0.03**	(.01)	**0.04**	(.01)	**0.03**	(.01)	**0.02**	(.01)	-0.01	(.01)
Political Interest	**0.36**	(.01)	**0.15**	(.03)	**0.20**	(.03)	**0.30**	(.03)	**0.25**	(.03)	**0.27**	(.03)	**0.16**	(.02)	**0.32**	(.03)	**0.12**	(.02)	**0.28**	(.03)
Political Interest (DK)	**-0.15**	(.04)	**-0.25**	(.09)	-0.06	(.10)	-0.14	(.09)	0.06	(.07)	0.03	(.08)	-0.05	(.10)	0.05	(.10)	0.08	(.07)	0.02	(.11)
Knowledge	**0.04**	(.01)	**0.06**	(.02)	**0.04**	(.02)	0.03	(.02)	0.02	(.02)	-0.03	(.02)	**-0.05**	(.02)	0.00	(.02)	**-0.11**	(.02)	-0.03	(.02)
Political Trust	**0.09**	(.01)	**0.07**	(.02)	0.03	(.02)	0.00	(.02)	**0.10**	(.02)	**0.06**	(.02)	**0.07**	(.02)	**0.07**	(.02)	**0.09**	(.02)	0.01	(.02)
Discussion	**0.13**	(.01)	**0.17**	(.03)	**0.17**	(.02)	**0.13**	(.02)	**0.09**	(.02)	**0.23**	(.03)	**0.17**	(.02)	**0.11**	(.02)	**0.12**	(.02)	**0.20**	(.02)
School Council	**0.08**	(.01)	**0.09**	(.02)	0.02	(.02)	**0.06**	(.02)	0.03	(.02)	0.04	(.02)	**0.05**	(.02)	**0.07**	(.02)	**0.06**	(.02)	0.02	(.02)
School Council	**0.18**	(.03)	0.07	(.05)	**0.18**	(.04)	**0.10**	(.03)	**0.19**	(.04)	**0.08**	(.04)	0.07	(.05)	**0.08**	(.04)	**0.13**	(.05)	0.06	(.03)
Youth Organisation	**0.39**	(.05)	**0.38**	(.05)	**0.22**	(.08)	**0.56**	(.06)	**0.34**	(.07)	**0.39**	(.06)	**0.59**	(.13)	**0.44**	(.08)	**0.59**	(.09)	**0.35**	(.05)
Class climate (student)	0.01	(.01)	-0.02	(.02)	0.02	(.02)	0.01	(.02)	-0.01	(.02)	-0.03	(.02)	0.01	(.02)	0.04	(.02)	**0.03**	(.02)	-0.02	(.02)
Class climate (average)	-0.03	(.04)	0.09	(.10)	0.01	(.05)	0.02	(.05)	0.11	(.07)	-0.02	(.06)	-0.03	(.05)	0.06	(.07)	0.05	(.07)	-0.05	(.06)
Internal Efficacy	**0.08**	(.01)	**0.16**	(.03)	**0.09**	(.02)	**0.11**	(.03)	**0.13**	(.02)	**0.10**	(.03)	**0.11**	(.02)	**0.09**	(.02)	**0.15**	(.02)	**0.16**	(.03)
External Efficacy	**0.03**	(.01)	0.04	(.02)	**0.06**	(.02)	**0.04**	(.02)	0.00	(.02)	**0.07**	(.02)	**0.09**	(.02)	**0.05**	(.02)	**0.05**	(.02)	0.03	(.02)
School Efficacy	**0.02**	(.01)	**-0.07**	(.02)	-0.02	(.02)	-0.01	(.02)	**0.06**	(.02)	0.02	(.02)	0.02	(.02)	**-0.05**	(.02)	-0.02	(.02)	0.00	(.02)