

Students' attitudes toward equality opportunities, trust in civic institutions and endorsement of religious influence

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Abstract

This paper will discuss ICCS 2016 results regarding students' beliefs about issues of relevance in society. This paper focuses on four attitudinal constructs: students' endorsement of gender equality, students' endorsement of equal rights for all ethnic and racial groups, students' trust in civic institutions, and students' endorsement of the influence of religion in society (which was measured as part of an international option in which most countries participated). It describes the extent of these beliefs, changes since 2009, and its associations with student characteristics, home background and engagement variables, and factors related to civic learning at school and social interactions at home.

Results already published from ICCS 2009 suggest generally strong endorsement of equal opportunities for gender groups as well as ethnic and racial groups, however, with considerable variation across countries. Students' trust in civic institutions was more limited, was their endorsement of religious influence on society. Factors associated with civic learning, in particular civic knowledge, were positively associated with endorsement of equal opportunities, and negatively related to endorsement of religious influence. Furthermore, the findings suggest associations of these attitudes (regarding gender and ethnic/racial equality, trust in civic institutions and religious influence on society) with school climate factors as well as background and engagement.

Introduction

In this paper we define attitudes as judgments or evaluations regarding ideas, persons, objects, events, situations, and/or relationships. Attitudes can encompass responses that focus on either specific aspects or broader features of society. They can change over time or represent more enduring deeply-rooted beliefs. We investigate students' beliefs regarding the importance of different principles underlying society, perceptions of communities and societies, attitudes that students hold toward civic institutions and society, and perceptions of civic groups, institutions, and sources of information.

The IEA International Civic and Citizenship Education Study (ICCS) investigated outcomes and processes of civic and citizenship education in 2009 (Schulz et al, 2010) and 2016 (Schulz et al, 2017). This paper is based largely on ICCS 2016 but it also references ICCS 2009. Even though these are international large-scale assessments, the aim of the analyses presented in this paper is primarily concerned with attitudes to selected aspects of civic principles and institutions. Our paper emphasizes patterns of associations within countries rather than comparisons of point estimates for countries. We also report on changes in student attitudes between 2009 and 2016.

Our paper focuses on four attitudinal constructs:

- students' endorsement of gender equality,
- students' endorsement of equal rights for all ethnic and racial groups,

- students' trust in civic institutions, and
- students' endorsement of the influence of religion in society (which was measured as part of an international option in which most countries participated).

It describes the extent of these beliefs, changes since 2009 as well as its associations with student characteristics, home background variables and factors related to civic learning at school.

Theoretical background

In the literature, *positive attitudes toward equal opportunities* for all groups within a society independently of their gender or origin are often regarded as part of the ideal of a democratic society (Angvik & von Borries, 1997; Hahn, 1998). Within the assessment framework for ICCS, attitudes towards equal opportunities are related to the content domain *civic principles* and its sub-domain *equity* (see Schulz, Ainley, Fraillon, Losito, & Agrusti, 2016).

Attitudes toward gender equality have been a focus of IEA research on civic education ever since the association conducted its first study in this area in 1971. That study used four items to measure support for women's political rights (Torney et al., 1976). In 1999, the CIVED survey captured students' attitudes regarding women's political rights using an extended set of six three positively and three negatively worded items (Torney-Purta et al., 2001). Female students in that study tended to express higher levels of support for gender equality than did males. Using data from CIVED 1999, Barber and Torney-Purta (2009) examined gender differences in depth, identifying classroom practices that tend to reduce the gap between males and females in support for gender equality.

Another important aspect of students' regard for equity and tolerance are their attitudes toward *equal rights for all ethnic and racial groups* in society. In many countries, surveys of adults show perceptions of persisting high levels of ethnic and racial discrimination (Chong & Ñopo, 2007; European Commission, 2012a; Ñopo, Chong, & Moro, 2010). Previous IEA studies have included measures of students' attitudes toward equal rights and opportunities for all ethnic or racial groups in society: CIVED 1999 measured this construct with four items, while ICCS 2009 used five. The items in both studies were used to derive a scale reflecting this construct (Schulz et al., 2010b; Torney-Purta et al., 2001), which showed relatively high levels of endorsement among young people for equal rights for all ethnic or racial groups across participating countries.

Trust in institutions has been a focus of numerous studies throughout the past decades with some evidence of a gradual decline among adults throughout this period (Newton & Norris, 2000; Torcal & Montero, 2006). Furthermore, research has shown that the recent economic crisis has caused further decreasing levels of trust among citizens (Muro & Vidal, 2017). Studying young people's trust in institutions has also been an important part of IEA research on civic and citizenship education since the association's first study in this area in 1971 (Torney et al., 1975). The CIVED study in 1999 as well as ICCS 2009 used items covering political/civic institutions, media, United Nations, schools, and people in general. Across countries, the results showed students tending to express the lowest levels of trust in political parties and the highest levels of trust for courts of justice, but there was considerable cross-national variation in these findings (Schulz et al., 2010b, pp. 103–109). Further research using ICCS 2009 data (Lauglo, 2013) showed that in countries with higher levels of perceived corruption as well as low scores on indices of government efficiency, students with higher levels of civic knowledge expressed less trust in civic institutions. However, the same study found positive correlations between civic knowledge and trust in countries with low indices of perceived corruption.

Religion is often regarded as an important catalyst of civic participation (see Pancer, 2015; Putnam, & Campbell, 2010; Verba, Schlozman, & Brady, 1995) and research from English-speaking countries suggested associations between religious background and civic participation (Smidt, 1999; Storm, 2015), ICCS 2009 results suggested that students' endorsement of its influence in society was positively related to religious attendance as well as negatively to civic knowledge (Schulz et al., 2010).

Data and methods

Data

In 2016, ICCS gathered data from more than 94,000 Grade 8 students in 3800 schools in 24 countries. These student data were augmented by data from more than 37,000 teachers in those schools. Our analyses focus on the 21 countries in ICCS 2016 that satisfied the participation requirements established by the IEA to reduce the risk of non-participation bias. Eighteen of these 21 countries had participated in ICCS in both 2016 and 2009 and these provide the bases for commenting on changes over time. ICCS employed two-stage cluster sampling procedures within countries. During the first stage, schools were sampled from a sampling frame with a probability proportional to their size. During the second stage, students were randomly sampled within schools.

Measures

Responses to the student questionnaire were used to measure many of the constructs underpinning the scales and items in our paper. IRT (Item Response Theory) scaling was used to derive the scales. The four scales which are used were based on common items across cycles allowing comparisons between ICCS 2009 and 2016. These 2016 scales were equated to those used in ICCS 2009. For these scales, 50 reflects the mean and 10 the standard deviation of all equally weighted countries that participated in ICCS 2009.

Dependent Variables

Attitudes toward gender equality. Seven items were used to measure students' attitudes toward gender equality. These items had also been included in ICCS 2009. We used six to derive a scale reflecting (positive) student attitudes toward gender equality. The items were: (a) "Men and women should have equal opportunities to take part in government" (75% strongly agreed); (b) "Men and women should have the same rights in every way" (72% strongly agreed); (c) "Women should stay out of politics" (55% strongly disagreed); (d) "When there are not many jobs available men should have more right to a job than women" (50% strongly disagreed); (e) "Men and women should get equal pay when they are doing the same jobs" (71% strongly agreed); and (f) "Men are better qualified to be political leaders than women" (46% strongly disagreed). The scale was equated to ensure the resulting scale scores could be compared with those collected in the 2009 survey. The scale had high reliability ($\alpha = 0.78$).

Attitudes towards equal rights for all ethnic and racial groups. Five items were used to measure students' endorsement of equal rights for all ethnic/racial groups in their country: (a) "All <ethnic/racial groups> should have an equal chance to get a good education in <country of test>" (62% of students strongly agreed on average across participating countries); (b) "All <ethnic/racial groups> should have an equal chance to get good jobs in <country of test>" (57% strongly agreed); (c) "Schools should teach students to respect <members of all ethnic/racial groups>" (57% strongly agreed); (d) "Members of all ethnic/racial groups should be encouraged to run in elections for political office" (31% strongly agreed); and (e) "Members of all ethnic/racial groups should have the same

rights and responsibilities” (59% strongly agreed). Because ICCS 2009 used the same question, we were able to derive an equated scale for ICCS 2016 that allowed us to compare the scores on the ICCS 2009 and 2016 scales. The 2016 scale had high reliability across countries ($\alpha = 0.82$), with the higher scores on it reflecting more positive attitudes toward equal rights for all ethnic and racial groups in a country.

Trust in civic institutions. ICCS 2016 used the same item set as in ICCS 2009 to measure student trust. As in ICCS 2009, we used six items (national government, local government, national parliament, police, courts of justice, political parties) to derive a scale reflecting students’ trust in civic institutions. This IRT scale had high reliability across countries ($\alpha = 0.85$), and we equated it with the scale used in ICCS 2009. The response scale was: “completely,” “quite a lot,” “a little,” or “not at all. Given the increased importance of new forms of social media in young people’s engagement with political and social issues (Kahne, Middaugh, & Allen, 2014), social media was added to the list of institutions and groups.

Influence of religion. ICCS 2016 included six items intended to measure attitudes to the influence of religion on society: (a) “Religion is more important to me than what is happening in national politics” (42% agreed); (b) “Religion helps me to decide what is right and what is wrong” (48%); (c) “Religious leaders should have more power in society” (29%); (d) “Religion should influence people’s behaviour towards others” (51%); (e) “Rules of life based on religion are more important than civil laws” (32%); and (f) “Religious people are better citizens”(32%). The first five of these items had been included in ICCS 2009. The scale, which was a measure students’ attitudes toward the influence of religion on society, had high reliability ($\alpha = 0.87$), and we equated it to the ICCS 2009 scale. Twenty of the 24 countries chose to include this option.

Independent Variables

Prior research using data from ICCS 2009 suggested that students’ attitudes reflecting the four different constructs described above would be associated with different variables related to student background, aspects of civic learning and school climate. We used a measure of socioeconomic background together with variables related to civic learning (open classroom climate for discussion of civic issues, student reports on civic learning, and civic knowledge) and variables reflecting school climate (perceptions of student interactions at school and student-teacher relations. In addition, gender and minority status were used as predictors of endorsement of gender equality and equal rights for ethnic/racial groups, parent interest in political/social issues and student civic community participation as predictors of students’ trust in civic institutions, and student attendance of religious services and participation in religious groups or organisations as predictors for endorsement of religious influence.

We used the following predictor variables for multiple regression analyses explaining variance in the four criterion variables:

- Student background
 - Students’ gender (female = 1, male = 0); this variable was only used for analysis of endorsement of gender equality and equal rights for ethnic/racial groups.

- Minority status (based on student reports about speaking another language at home and/or having an immigrant family background¹) (minority = 1, non-minority = 2); this variable was only used for analysis of endorsement of gender equality and equal rights for ethnic/racial groups.
- Parental interest in political and social issues (1= having at least one parent quite or very interested in political and social issues, 0 = other students); this variable was only used for analysis of students' trust in civic institutions.
- Student reports on their past and/or present) participation in community organisations and groups, measured based on seven items with satisfactory reliability across participating countries (Cronbach's $\alpha = 0.70$); nationally standardized scores with averages of 0 and standard deviations of 1; this variable was only used for analysis of students' trust in civic institutions.
- Socioeconomic background using a composite indicator from parental occupation and education and nationally standardized with averages of 0 and standard deviations of 1.
- Aspects of civic learning:
 - Civic knowledge based on a test of 87 items, which included 42 items from ICCS 2009, as described in a companion paper in this symposium (Fraillon, Gebhardt & Schulz, 2018)). In the (preliminary) analyses underlying the results presented in this paper we used the first plausible value in a nationally standardised metric with national averages of 0 and national standard deviations of 1.
 - Student reports on civic learning at school and measured as a scale based on seven items with satisfactory reliability across participating countries (Cronbach's $\alpha = 0.80$); scale scores were nationally standardised with national averages of 0 and national standard deviations of 1.
 - Student reports of an open climate for discussion at school and measured as a scale based on six items with sound reliability (Cronbach's $\alpha = 0.77$); scale scores were nationally standardised with national averages of 0 and national standard deviations of 1.
- School climate
 - Positive perception of student interactions at school as reported by students and measured as a scale based on five items with satisfactory reliability across countries (Cronbach's $\alpha = 0.76$); scale scores were nationally standardised with national averages of 0 and national standard deviations of 1.
 - Positive perceptions of student-teacher relations at school as reported by students and measured as a scale based on four items with satisfactory reliability across countries ($\alpha = 0.81$); scale scores were nationally standardised with national averages of 0 and national standard deviations of 1.
- Religious involvement (only used for the analysis of support for religious influence):
 - Attendance of religious services was based on student reported attendance at religious services at least once each month (coded 1) or rarely or not all (coded 0).

¹ Immigrant background was defined by the country of birth of student and parents, with both (or single) parents born in another country indicated immigrant family background.

- Participation in religious group or organisation was based on student report of being a member of a religious group or organisation (coded 1 or 0).

Analyses

The paper includes comparisons of the country means of the four attitudinal measures for 2016 and 2009, and an examination of the results of multivariate regression analyses to review factors associated with variation in these scales. In the comparisons of means for each questionnaire scale, we compare scale score averages between 2009 and 2016 we conducted significance tests for differences in means based on jack-knife repeated replication (JRR) to compute standard errors (and added an equating error term to the formula for the standard error of the difference between countries because the process of equating the tests across the cycles introduces additional error into the calculation of any test statistic.

Multiple regression analysis was used to investigate the associations between each of the four attitudinal scales and the range of predictor variables. Because we found relatively low proportions of between-school variation in the dependent variables and because the non-response rates in ICCS 2016 were higher for the teacher and school principal questionnaires than for the student instruments, we chose a single-level multiple regression approach when analysing the factors explaining variation. All multiple regression models were estimated using jack-knife repeated replication to obtain correct standard errors, and estimates of the percentage of explained variance were obtained by multiplying R^2 by 100.

Results

Results in 2016 and changes since 2009

Attitudes towards gender equality

Students in most of the ICCS 2016 countries tended to express strong agreement with the three positively worded statements (71% to 75% on average across countries) and also tended to strongly disagree with negatively worded statements (46% to 55% on average across countries) about gender equality. Scale scores were notably high (five or more scale points above the international average) in the Nordic countries (Norway, Sweden, Denmark and Finland) as well as in Chinese Taipei (Table 1). When we compared the scale scores of the ICCS 2009 and ICCS 2016 common countries, we recorded statistically significant increases across time in eight of the 18 common countries. On average across all common countries, we observed a statistically significant, but very small, increase of just over one score point.

Attitudes to equal rights for all ethnic and racial groups

Presented with positive statements about equal rights for all ethnic and racial groups in their countries, students tended to express strong agreement (about 50%) except for encouraging members of these groups to run in elections for public office (31% strong agreement). The highest levels of endorsement were recorded in Chile, Chinese Taipei and Sweden, whilst the lowest average scores were found in Bulgaria, Latvia and the Netherlands (Table 1). When we compared the scale scores of the ICCS 2009 and ICCS 2016 common countries, we recorded statistically significant increases across time in 15 of those countries. On average across all common countries, we observed a statistically significant increase of just under three score points which represents a moderate increase. The increases in Sweden and Finland were large being approximately five score points.

Table 1 National average scales scores indicating students' endorsement of gender equality and equal rights for all ethnic/racial groups

Country	Gender equality			Equal rights for all ethnic/racial groups		
	2016	2009	Differences (2016 - 2009)	2016	2009	Differences (2016 - 2009)
Belgium (Flemish)	54 (0.3) △	52 (0.3)	1.9 (0.6)	50 (0.3) ▽	48 (0.3)	2.5 (0.6)
Bulgaria	46 (0.3) ▼	46 (0.3)	0.4 (0.6)	49 (0.3) ▼	48 (0.2)	0.5 (0.6)
Chile	52 (0.3) △	51 (0.3)	1.1 (0.6)	57 (0.2) ▲	54 (0.2)	2.1 (0.5)
Chinese Taipei	56 (0.2) ▲	55 (0.2)	0.9 (0.5)	58 (0.2) ▲	57 (0.2)	1.2 (0.5)
Colombia	50 (0.3) ▽	49 (0.2)	1.0 (0.6)	54 (0.2) △	53 (0.2)	1.0 (0.5)
Croatia	53 (0.3) △	-	-	52 (0.2) ▽	-	-
Denmark†	56 (0.2) ▲	54 (0.2)	1.9 (0.5)	51 (0.2) ▽	48 (0.3)	2.7 (0.6)
Dominican Republic	44 (0.2) ▼	44 (0.2)	0.8 (0.5)	54 (0.2) △	51 (0.3)	3.1 (0.5)
Estonia ¹	51 (0.3)	49 (0.3)	1.9 (0.6)	53 (0.2)	-	- (0.5)
Finland	55 (0.2) ▲	53 (0.2)	1.3 (0.5)	53 (0.2)	48 (0.2)	4.9 (0.5)
Italy	53 (0.2) △	52 (0.2)	1.4 (0.5)	52 (0.2) ▽	49 (0.2)	2.5 (0.5)
Latvia ¹	46 (0.2) ▼	46 (0.2)	0.5 (0.5)	48 (0.2) ▼	46 (0.2)	1.8 (0.5)
Lithuania	49 (0.2) ▽	48 (0.2)	0.7 (0.5)	53 (0.2)	50 (0.2)	2.8 (0.5)
Malta	53 (0.2) △	51 (0.3)	1.7 (0.5)	51 (0.2) ▽	46 (0.3)	4.3 (0.5)
Mexico	45 (0.1) ▼	45 (0.1)	-0.2 (0.5)	55 (0.2) △	52 (0.2)	2.5 (0.5)
Netherlands†	52 (0.3) △	-	-	49 (0.3) ▼	-	-
Norway (9) ¹	57 (0.2) ▲	54 (0.3)	2.7 (0.5)	55 (0.2) △	51 (0.3)	4.6 (0.6)
Peru	49 (0.3) ▽	-	-	54 (0.2) △	-	-
Russian Federation	44 (0.2) ▼	44 (0.1)	0.8 (0.5)	52 (0.4) ▽	48 (0.2)	3.6 (0.6)
Slovenia	53 (0.2) △	52 (0.2)	0.9 (0.5)	51 (0.2) ▽	-	- (0.5)
Sweden ¹	57 (0.2) ▲	55 (0.3)	1.9 (0.6)	57 (0.3) ▲	52 (0.3)	5.4 (0.6)
Average ICCS 2016	51 (0.1)			53 (0.1)		
Average common countries	51 (0.1)	50 (0.1)	1.2 (0.1)	53 (0.1)	50 (0.1)	2.8 (0.1)

National ICCS 2016 results are:

- more than 3 score points above ICCS 2016 average ▲
- significantly above ICCS 2016 average △
- significantly below ICCS 2016 average ▽
- more than 3 score points below ICCS 2016 average ▼

() Standard errors appear in parentheses. Statistically significant changes ($p < 0.05$) between 2009 and 2016 are displayed in **bold**.

(9) Country deviated from international defined population and surveyed adjacent upper grade.

† Met guidelines for sampling participation rates only after replacement schools were included.

¹ National Defined Population covers 90% to 95% of National Target Population

- No comparable data available.

Trust in civic institutions.

In ICCS 2016, on average across countries majorities among students expressed quite or complete trust in national and local governments, courts of justice, the police and national parliaments, while less than half expressed trust in political parties. We found high levels of trust in civic institutions in Norway and Finland as well as the Dominican Republic (Table 2). Even though survey data over past decades suggest a gradual decline in trust among adults (Torcal & Montero, 2006), we did not detect a general decline across countries among Grade 8 students. In 11 of the 18 common countries there were increases in trust in civic institutions scores between 2009 and 2016 and a decline in only three. Overall there was a very small increase of one scale point. In this context it is interesting to note that there is some evidence about particularly low levels of trust among adults following economic crises such as the Global Financial Crisis prior to the ICCS 2009 survey (Muro & Vidal, 2017).

Endorsement of religious influence in society

While on average across countries only about a third of students endorsed statements reflecting that religious leaders should have more power or that religious people are better citizens, about half of them expressed that religion should influence people's behaviour towards others. The highest levels of endorsement of religious influence were recorded in Colombia, Croatia, Dominican Republic, Malta and Peru, while the lowest scores were observed in Belgium (Flemish), Denmark, Estonia, the Netherlands, Norway and Sweden (Table 2). Four of the 12 countries that participated in this option in both 2009 and 2016 recorded average scores in 2016 that were significantly lower than those observed in ICCS 2009. Students in just one country recorded significantly higher scores in the 2016 than in the 2009 survey. Across common participating countries, the ICCS 2016 average scale score was one point lower than in ICCS 2009.

Table 2 National average scales scores indicating students' trust in civic institutions and endorsement of religious influence in society

Country	Trust in civic institutions			Endorsement of religious influence in society		
	2016	2009	Differences (2016 - 2009)	2016	2009	Differences (2016 - 2009)
Belgium (Flemish)	53 (0.2) ▲	49 (0.2)	3.8 (0.4)	45 (0.3) ▼	45 (0.2)	-0.3 (0.5)
Bulgaria	50 (0.3) ▼	48 (0.3)	1.4 (0.5)	51 (0.3) ▲	51 (0.3)	0.2 (0.5)
Chile	47 (0.3) ▼	50 (0.3)	-2.9 (0.5)	49 (0.2)	53 (0.2)	-4.0 (0.4)
Chinese Taipei	51 (0.2)	48 (0.2)	3.6 (0.4)	48 (0.2) ▼	48 (0.2)	-0.4 (0.4)
Colombia	48 (0.3) ▼	50 (0.3)	-1.4 (0.5)	55 (0.2) ▲	54 (0.1)	0.3 (0.4)
Croatia	48 (0.3) ▼	-	-	55 (0.3) ▲	-	-
Denmark†	53 (0.2) ▲	52 (0.2)	0.7 (0.4)	43 (0.2) ▼	44 (0.2)	-0.4 (0.4)
Dominican Republic (r)	55 (0.3) ▲	54 (0.4)	1.3 (0.6)	60 (0.2) ▲	58 (0.2)	1.5 (0.4)
Estonia ¹	51 (0.2) ▼	48 (0.2)	2.6 (0.4)	44 (0.3) ▼	-	-
Finland	54 (0.2) ▲	53 (0.2)	1.1 (0.4)			
Italy	51 (0.2)	52 (0.2)	-1.1 (0.4)			
Latvia ¹	49 (0.2) ▼	45 (0.2)	4.3 (0.4)	46 (0.3) ▼	47 (0.3)	-1.4 (0.5)
Lithuania	53 (0.2) ▲	48 (0.2)	4.5 (0.4)	48 (0.2)	49 (0.2)	-0.1 (0.4)
Malta	52 (0.2) ▲	52 (0.3)	0.5 (0.5)	54 (0.2) ▲	55 (0.2)	-1.7 (0.4)
Mexico	50 (0.2) ▼	49 (0.2)	1.1 (0.4)			
Netherlands†	53 (0.3) ▲	-	-	44 (0.4) ▼	-	-
Norway (9) ¹	55 (0.2) ▲	52 (0.2)	2.9 (0.4)	44 (0.3) ▼	45 (0.4)	-0.8 (0.6)
Peru	48 (0.2) ▼	-	-	56 (0.1) ▲	-	-
Russian Federation	53 (0.3) ▲	52 (0.2)	0.6 (0.4)			
Slovenia	49 (0.3) ▼	48 (0.3)	1.0 (0.5)	48 (0.3) ▼	-	-
Sweden ¹	54 (0.3) ▲	52 (0.3)	1.6 (0.5)	42 (0.4) ▼	44 (0.2)	-2.9 (0.6)
Average ICCS 2016	51 (0.1)			49 (0.1)		
Average common countries	52 (0.1)	50 (0.1)	1.4 (0.1)	48 (0.1)	50 (0.1)	-0.8 (0.1)

National ICCS 2016 results are:

- more than 3 score points above ICCS 2016 average ▲
- significantly above ICCS 2016 average △
- significantly below ICCS 2016 average ▼
- more than 3 score points below ICCS 2016 average ▼

() Standard errors appear in parentheses. Statistically significant changes ($p < 0.05$) between 2009 and 2016 are displayed in **bold**.

(9) Country deviated from international defined population and surveyed adjacent upper grade.

† Met guidelines for sampling participation rates only after replacement schools were included.

¹ National Defined Population covers 90% to 95% of National Target Population

- No comparable data available.

An "(r)" indicates that data are available for at least 70% but less than 85% of students.

Factors associated with student civic attitudes

Multiple regression was used to investigate the net influence of predictor variables representing student background, aspects of civic learning and school climate on the four dependent variables: attitudes to gender equality, attitudes to ethnic and racial equality, trust in civic institutions and attitudes to the influence of religion. Each regression analysis was conducted separately for each country to enable a comparative review.

Attitudes to gender equality

The strongest and most consistent predictors of student endorsement of gender equality were student gender and student civic knowledge (Table 3). Female students had higher levels of endorsement of gender equality than did male students in all 21 countries. The average difference in scale scores was four scale points (equivalent to 0.4 standard deviations). Civic knowledge was also strongly associated with endorsement of gender equality in all 21 countries and the average effect size was also four scale points.

Table 3 Multiple regression coefficients for students' endorsement of gender equality

Country	Student background variables			Variables reflecting civic learning			School climate	
	Gender (female)	Indicator of minority status	Indicator of socioeconomic background	Open classroom climate for discussion	Student reports on civic learning at school	Students' civic knowledge	Positive perceptions of student interactions at school	Positive perceptions of student-teacher relations at school
Belgium (Flemish)	3.9 (0.3)	-0.7 (1.2)	0.5 (0.2)	0.6 (0.1)	-0.4 (0.2)	3.6 (0.2)	0.2 (0.2)	0.9 (0.2)
Bulgaria	4.3 (0.3)	-0.4 (0.5)	0.6 (0.2)	0.4 (0.2)	-0.2 (0.1)	4.0 (0.2)	0.1 (0.2)	0.6 (0.2)
Chile	3.8 (0.3)	-0.3 (1.0)	0.9 (0.1)	0.1 (0.1)	0.1 (0.1)	5.1 (0.1)	-0.2 (0.2)	0.7 (0.2)
Chinese Taipei	3.5 (0.2)	0.2 (0.4)	-0.4 (0.1)	0.3 (0.1)	0.9 (0.1)	3.2 (0.2)	0.6 (0.1)	1.2 (0.2)
Colombia	1.8 (0.2)	-0.6 (1.1)	0.6 (0.2)	0.5 (0.1)	0.2 (0.2)	4.8 (0.1)	-0.1 (0.2)	0.5 (0.1)
Croatia	5.8 (0.4)	-2.6 (1.4)	0.3 (0.2)	0.4 (0.2)	-0.2 (0.2)	3.6 (0.2)	0.0 (0.2)	1.2 (0.2)
Denmark†	5.6 (0.2)	-1.1 (0.9)	0.5 (0.1)	0.4 (0.2)	0.2 (0.1)	2.8 (0.2)	0.2 (0.2)	1.0 (0.2)
Dominican Republic	0.8 (0.2)	-1.2 (1.1)	0.4 (0.1)	0.4 (0.1)	0.1 (0.1)	3.6 (0.2)	-0.4 (0.1)	0.8 (0.2)
Estonia ¹	3.1 (0.4)	1.4 (0.8)	0.2 (0.2)	0.3 (0.2)	0.3 (0.2)	4.3 (0.2)	-0.1 (0.2)	0.5 (0.2)
Finland	6.2 (0.4)	-1.0 (0.9)	0.2 (0.2)	0.3 (0.2)	-0.2 (0.2)	3.5 (0.2)	0.4 (0.2)	0.9 (0.2)
Italy	4.3 (0.3)	-0.5 (0.3)	0.4 (0.1)	0.2 (0.2)	0.5 (0.2)	4.0 (0.2)	0.0 (0.2)	1.1 (0.2)
Latvia ¹	3.0 (0.4)	-0.6 (0.5)	0.6 (0.2)	0.3 (0.1)	-0.1 (0.2)	3.3 (0.2)	-0.1 (0.2)	0.1 (0.2)
Lithuania	3.6 (0.4)	-1.2 (0.6)	0.4 (0.2)	0.4 (0.2)	0.0 (0.2)	4.3 (0.2)	0.0 (0.2)	0.5 (0.2)
Malta	5.3 (0.3)	0.3 (0.4)	0.3 (0.1)	0.5 (0.2)	0.0 (0.2)	4.7 (0.2)	-0.2 (0.2)	0.8 (0.1)
Mexico	2.3 (0.1)	0.4 (0.5)	0.1 (0.1)	0.0 (0.1)	0.2 (0.1)	3.2 (0.1)	-0.4 (0.1)	0.4 (0.1)
Netherlands†	5.8 (0.4)	-1.5 (1.1)	0.6 (0.2)	0.3 (0.1)	-0.5 (0.2)	3.4 (0.3)	0.2 (0.2)	1.2 (0.2)
Norway (9) ¹	5.3 (0.2)	-1.1 (0.8)	0.1 (0.1)	0.4 (0.2)	0.2 (0.2)	3.4 (0.1)	0.2 (0.1)	1.2 (0.1)
Peru	2.9 (0.2)	0.2 (0.3)	0.3 (0.1)	0.4 (0.1)	0.5 (0.1)	5.0 (0.1)	-0.1 (0.1)	0.8 (0.1)
Russian Federation	3.8 (0.3)	-0.7 (0.4)	0.3 (0.1)	0.2 (0.1)	0.3 (0.2)	2.6 (0.1)	0.2 (0.2)	0.5 (0.2)
Slovenia	5.3 (0.4)	-1.7 (0.7)	0.1 (0.2)	0.1 (0.2)	0.4 (0.2)	3.5 (0.2)	0.3 (0.2)	1.0 (0.2)
Sweden ¹	5.1 (0.4)	-1.7 (1.0)	0.1 (0.3)	0.4 (0.2)	0.1 (0.2)	3.4 (0.2)	-0.1 (0.2)	1.0 (0.2)
ICCS 2016 average	4.1 (0.1)	-0.7 (0.2)	0.3 (0.0)	0.3 (0.0)	0.1 (0.0)	3.8 (0.0)	0.0 (0.0)	0.8 (0.0)

* Statistically significant (p<0.05) coefficients in **bold**.

() Standard errors appear in parentheses.

(9) Country deviated from international defined population and surveyed adjacent upper grade.

† Met guidelines for sampling participation rates only after replacement schools were included.

¹ National Defined Population covers 90% to 95% of National Target Population

² Country surveyed target grade in the first half of the school year.

There was a weaker association between the endorsement of gender equality and positive perceptions of student-teacher relations. The average regression coefficient was just less than one but it was consistent, being significant in 20 of the 21 countries. There were even weaker and less consistent associations between the endorsement of gender equality with socioeconomic background and student reports of an open climate for discussion. The influence of socioeconomic background was significant in 13 of the 21 countries and the regression coefficient averaged 0.3. The association

of endorsement of gender equality with an open climate for discussion of political and social issues was significant in 14 countries and the regression coefficient averaged 0.3.

Endorsement of gender equality was very weakly associated with student reports of civic learning at school. The association was statistically significant in just five countries and the average size of the regression coefficient was 0.1. In two countries there was a significant negative association between the endorsement of gender equality and minority status.

Endorsement of ethnic and racial equality

The strongest and most consistent predictor of student endorsement of ethnic and racial equality was students' civic knowledge (Table 4). Civic knowledge was strongly associated with endorsement of ethnic and racial equality in all 21 countries and, on average, one standard deviation difference on civic knowledge was associated with two scale points on the attitude scale. Other aspects of civic learning were also associated with the endorsement of ethnic and racial equality but the effect was rather weaker. Student reports of civic learning were associated with the endorsement of ethnic and racial equality in 18 countries but one standard deviation was associated with less than one scale point. Similarly, student reports of an open climate for discussion associated with the endorsement of ethnic and racial equality in 17 countries and one standard deviation on the open climate scale was associated with 0.7 of a scale point the ethnic and racial equality on average.

Table 4 Multiple regression coefficients for students' endorsement of equal rights for all ethnic/racial groups

Country	Student background variables			Variables reflecting civic learning			School climate	
	Gender (female)	Indicator of minority status	Indicator of socioeconomic background	Open classroom climate for discussion	Student reports on civic learning at school	Students' civic knowledge	Positive perceptions of student interactions at school	Positive perceptions of student-teacher relations at school
Belgium (Flemish)	1.1 (0.4)	0.6 (0.8)	0.2 (0.3)	0.7 (0.2)	0.6 (0.3)	1.3 (0.2)	0.7 (0.1)	0.6 (0.2)
Bulgaria	2.1 (0.4)	1.7 (0.8)	-0.7 (0.3)	0.2 (0.3)	0.9 (0.2)	1.9 (0.3)	1.4 (0.3)	1.6 (0.3)
Chile	1.1 (0.4)	-0.4 (1.3)	0.6 (0.2)	0.7 (0.2)	0.8 (0.2)	3.0 (0.2)	0.6 (0.2)	1.5 (0.2)
Chinese Taipei	0.6 (0.3)	-0.1 (0.4)	-0.1 (0.1)	0.7 (0.2)	1.3 (0.2)	1.1 (0.2)	1.0 (0.2)	1.5 (0.2)
Colombia	0.3 (0.3)	-0.6 (0.9)	0.0 (0.1)	0.6 (0.2)	0.9 (0.2)	2.2 (0.1)	0.9 (0.3)	1.5 (0.2)
Croatia	1.0 (0.4)	-0.4 (1.9)	0.5 (0.2)	0.4 (0.2)	0.6 (0.2)	2.8 (0.2)	0.4 (0.2)	1.2 (0.2)
Denmark†	0.7 (0.3)	2.2 (1.1)	0.4 (0.2)	0.7 (0.2)	0.8 (0.2)	2.1 (0.2)	0.4 (0.2)	1.0 (0.2)
Dominican Republic (r)	-0.5 (0.3)	0.1 (0.9)	0.0 (0.2)	0.4 (0.2)	1.4 (0.2)	0.7 (0.2)	0.6 (0.2)	2.5 (0.2)
Estonia ¹	1.2 (0.3)	2.8 (0.7)	0.1 (0.2)	0.2 (0.2)	0.6 (0.2)	3.5 (0.2)	0.6 (0.2)	0.9 (0.2)
Finland	2.9 (0.4)	1.3 (1.1)	0.9 (0.2)	0.9 (0.2)	0.2 (0.2)	2.8 (0.2)	0.3 (0.2)	1.7 (0.2)
Italy	1.0 (0.3)	-0.6 (0.6)	0.6 (0.2)	1.2 (0.2)	0.3 (0.2)	2.0 (0.2)	0.4 (0.2)	1.4 (0.2)
Latvia ¹	0.7 (0.3)	1.3 (0.6)	-0.1 (0.2)	0.5 (0.2)	0.6 (0.2)	2.0 (0.2)	0.4 (0.2)	1.2 (0.3)
Lithuania	0.6 (0.4)	0.2 (1.0)	0.2 (0.2)	0.8 (0.2)	0.6 (0.2)	2.7 (0.2)	0.5 (0.2)	0.6 (0.3)
Malta	0.5 (0.3)	0.4 (0.4)	0.7 (0.2)	0.9 (0.2)	0.9 (0.2)	2.1 (0.2)	0.6 (0.2)	1.0 (0.2)
Mexico	0.0 (0.3)	2.3 (0.7)	0.4 (0.2)	0.6 (0.2)	1.4 (0.2)	2.7 (0.2)	0.2 (0.2)	1.5 (0.2)
Netherlands†	1.5 (0.4)	1.5 (1.2)	1.1 (0.2)	0.8 (0.2)	0.6 (0.2)	2.3 (0.3)	0.6 (0.2)	1.1 (0.2)
Norway (9) ¹	1.9 (0.3)	-0.3 (1.1)	0.6 (0.2)	0.8 (0.2)	0.6 (0.2)	2.4 (0.2)	0.7 (0.2)	1.6 (0.2)
Peru	0.0 (0.2)	-1.1 (0.5)	-0.2 (0.1)	0.7 (0.1)	1.4 (0.2)	1.4 (0.2)	0.6 (0.1)	1.5 (0.2)
Russian Federation	0.0 (0.3)	1.7 (0.6)	0.7 (0.2)	0.7 (0.3)	0.9 (0.2)	2.5 (0.2)	0.6 (0.2)	1.6 (0.2)
Slovenia	2.1 (0.4)	-0.1 (1.0)	0.1 (0.2)	0.8 (0.2)	0.8 (0.3)	1.6 (0.2)	0.5 (0.2)	1.1 (0.2)
Sweden ¹	2.6 (0.4)	1.6 (1.1)	0.4 (0.4)	0.7 (0.2)	0.4 (0.2)	3.8 (0.3)	0.7 (0.3)	1.6 (0.2)
ICCS 2016 average	1.0 (0.1)	0.7 (0.2)	0.3 (0.0)	0.7 (0.0)	0.8 (0.0)	2.2 (0.0)	0.6 (0.0)	1.3 (0.0)

* Statistically significant (p<0.05) coefficients in **bold**.

() Standard errors appear in parentheses.

(9) Country deviated from international defined population and surveyed adjacent upper grade.

† Met guidelines for sampling participation rates only after replacement schools were included.

¹ National Defined Population covers 90% to 95% of National Target Population

² Country surveyed target grade in the first half of the school year.

An "(r)" indicates that data are available for at least 70% but less than 85% of students.

There was also a weak influence on student endorsement of ethnic and racial equality of positive perceptions of student-teacher relations. One standard deviation on the student-teacher relations scale was associated with just over one scale point on the endorsement of ethnic/racial equality scale. However, the effect was consistent being evident in all 21 countries. The other aspect of school climate, positive perceptions of interactions between students had a slightly weaker association with the average effect of one standard deviation being just 0.6 scale points and being significant in 17 countries.

There was a difference between female and male students in scores on the endorsement of ethnic and racial equality scale. The difference was significant in 11 countries and averaged one scale point on the scale. The effects of minority status and socioeconomic background were smaller and not consistently evident across countries.

Trust in civic institutions

The strongest and most consistent predictors of trust in civic institutions were positive perceptions of student-teacher relations and gender (Table 5). Both had significant associations with the trust scale in all countries and for each the average regression coefficient was two. On average one standard deviation on the student-teacher relations scale was associated with two scale points on the trust scale and the difference between the average for female and male students was two scale points.

Table 5 Multiple regression coefficients for students' trust in civic institutions

Country	Student background variables			Variables reflecting civic learning			School climate	
	Parental interest in civic issues	Participation in community groups or organisations	Indicator of socioeconomic background	Open classroom climate for discussion	Student reports on civic learning at school	Students' civic knowledge	Positive perceptions of student interactions at school	Positive perceptions of student-teacher relations at school
Belgium (Flemish)	2.6 (0.4)	0.2 (0.2)	0.2 (0.2)	-0.2 (0.2)	0.5 (0.2)	-0.1 (0.2)	1.3 (0.2)	1.8 (0.2)
Bulgaria	2.0 (0.5)	0.6 (0.2)	-1.3 (0.3)	0.1 (0.3)	1.8 (0.3)	-2.1 (0.3)	1.4 (0.3)	1.9 (0.3)
Chile	3.2 (0.3)	0.4 (0.2)	-0.4 (0.2)	-0.2 (0.2)	1.3 (0.3)	-1.8 (0.2)	1.3 (0.3)	2.2 (0.2)
Chinese Taipei	1.3 (0.3)	0.1 (0.1)	-0.1 (0.1)	0.0 (0.2)	0.6 (0.2)	-1.0 (0.2)	1.5 (0.2)	1.4 (0.2)
Colombia	2.6 (0.3)	0.5 (0.2)	-0.2 (0.2)	-0.2 (0.2)	1.2 (0.2)	-1.9 (0.2)	1.4 (0.2)	2.0 (0.2)
Croatia	2.3 (0.5)	0.6 (0.2)	-0.2 (0.2)	-0.2 (0.2)	1.1 (0.3)	-1.2 (0.2)	1.5 (0.2)	2.6 (0.2)
Denmark†	1.7 (0.4)	0.0 (0.2)	0.5 (0.1)	0.1 (0.2)	0.5 (0.1)	0.3 (0.2)	0.9 (0.1)	1.7 (0.1)
Dominican Republic (r)	2.2 (0.4)	0.9 (0.3)	-0.3 (0.2)	0.2 (0.3)	0.9 (0.3)	-3.3 (0.2)	1.6 (0.2)	1.9 (0.3)
Estonia ¹	2.0 (0.6)	0.0 (0.2)	0.1 (0.2)	0.3 (0.2)	1.0 (0.2)	-0.2 (0.2)	1.0 (0.2)	1.8 (0.2)
Finland	1.6 (0.3)	0.0 (0.1)	0.4 (0.2)	0.4 (0.2)	0.7 (0.2)	0.0 (0.1)	1.1 (0.2)	2.3 (0.2)
Italy	1.9 (0.5)	0.4 (0.1)	0.6 (0.1)	0.1 (0.2)	0.8 (0.2)	-0.8 (0.2)	1.2 (0.2)	1.8 (0.2)
Latvia ¹	1.2 (0.4)	0.4 (0.2)	-0.1 (0.2)	-0.2 (0.2)	0.9 (0.2)	-0.3 (0.2)	0.7 (0.2)	2.7 (0.2)
Lithuania	1.0 (0.4)	0.1 (0.2)	-0.2 (0.2)	0.3 (0.2)	1.4 (0.2)	-1.1 (0.2)	0.6 (0.2)	2.4 (0.2)
Malta	2.5 (0.4)	0.2 (0.2)	-1.1 (0.1)	0.4 (0.2)	2.2 (0.2)	-0.6 (0.2)	1.5 (0.2)	1.7 (0.2)
Mexico	2.9 (0.3)	0.3 (0.2)	-0.5 (0.2)	0.1 (0.2)	1.6 (0.2)	-2.7 (0.2)	1.1 (0.2)	1.6 (0.2)
Netherlands†	1.5 (0.5)	0.0 (0.2)	0.7 (0.2)	0.5 (0.3)	0.2 (0.3)	-0.3 (0.2)	1.4 (0.2)	2.0 (0.3)
Norway (9) ¹	1.4 (0.3)	0.2 (0.2)	0.6 (0.1)	0.1 (0.2)	0.9 (0.1)	0.4 (0.1)	1.6 (0.2)	2.3 (0.2)
Peru	1.9 (0.4)	0.8 (0.2)	-0.1 (0.1)	0.0 (0.2)	1.3 (0.2)	-3.0 (0.2)	1.1 (0.2)	1.3 (0.2)
Russian Federation	1.2 (0.5)	0.5 (0.1)	-0.3 (0.1)	-0.2 (0.2)	1.4 (0.2)	-0.6 (0.2)	1.6 (0.2)	2.1 (0.2)
Slovenia	2.5 (0.5)	0.5 (0.2)	0.1 (0.2)	-0.1 (0.2)	0.4 (0.2)	0.4 (0.2)	1.0 (0.2)	2.4 (0.2)
Sweden ¹	2.2 (0.4)	0.0 (0.2)	0.5 (0.2)	0.2 (0.2)	0.5 (0.2)	0.0 (0.2)	1.2 (0.2)	2.3 (0.3)
ICCS 2016 average	2.0 (0.1)	0.3 (0.0)	0.0 (0.0)	0.1 (0.0)	1.0 (0.0)	-0.9 (0.0)	1.2 (0.0)	2.0 (0.0)

* Statistically significant (p<0.05) coefficients in bold.

() Standard errors appear in parentheses.

(9) Country deviated from international defined population and surveyed adjacent upper grade.

† Met guidelines for sampling participation rates only after replacement schools were included.

¹ National Defined Population covers 90% to 95% of National Target Population

² Country surveyed target grade in the first half of the school year.

An "(r)" indicates that data are available for at least 70% but less than 85% of students.

Positive perceptions of interactions between students had a slightly weaker association with the average effect of one standard deviation being just over one scale points but the effect was evident in all countries. Student reports of civic learning at school had an effect of similar average magnitude and was evident in 19 countries.

Interestingly, civic knowledge was negatively associated with trust in civic institutions. The effect was significant in 15 countries and one standard deviation higher on the civic knowledge scale was associated with just under one scale point lower on the trust scale.

The influences of minority status, socioeconomic background and open climate for discussion on trust in government were evident in only a few countries and were very small in magnitude.

Endorsement of religious influence in society

Not surprisingly, the strongest and most uniform predictors of student endorsement of religious influence in society were attendance of religious services and participation in a religious group or organisation (Table 6). Those who attended religious services on a monthly or greater frequency scored higher on the endorsement of religious influence scale in every country except one and by an average of over five scale points. Those who participated in a religious group or organisation scored higher on the endorsement of religious influence scale in every country and by an average of over three scale points.

Table 6 Multiple regression coefficients for students' endorsement of religious influence in society

Country	Student background variables			Variables reflecting civic learning			School climate	
	Attendance of religious services	Participation in religious group or organisation	Indicator of socioeconomic background	Open classroom climate for discussion	Student reports on civic learning at school	Students' civic knowledge	Positive perceptions of student interactions at school	Positive perceptions of student-teacher relations at school
Belgium (Flemish)	7.6 (0.6)	4.2 (0.5)	-0.6 (0.2)	0.1 (0.2)	0.7 (0.2)	-2.9 (0.2)	0.4 (0.2)	0.2 (0.2)
Bulgaria	5.1 (0.4)	2.5 (0.6)	-0.6 (0.2)	0.2 (0.3)	0.5 (0.3)	-2.7 (0.2)	0.0 (0.2)	0.6 (0.3)
Chile	6.6 (0.3)	4.5 (0.4)	-1.2 (0.2)	0.1 (0.2)	0.8 (0.2)	-2.5 (0.2)	0.2 (0.2)	0.5 (0.2)
Chinese Taipei	3.6 (0.3)	2.7 (0.3)	-0.1 (0.1)	0.1 (0.2)	0.1 (0.1)	-2.5 (0.2)	0.1 (0.1)	0.2 (0.2)
Colombia	2.6 (0.3)	3.0 (0.2)	-0.5 (0.2)	-0.2 (0.2)	0.4 (0.1)	-2.6 (0.1)	0.4 (0.2)	0.5 (0.2)
Croatia	6.5 (0.5)	3.0 (0.3)	-0.9 (0.2)	0.2 (0.2)	0.3 (0.2)	-2.3 (0.2)	0.6 (0.2)	0.4 (0.2)
Dominican Republic (s)	0.5 (0.3)	1.1 (0.3)	-0.1 (0.1)	0.1 (0.2)	0.9 (0.2)	-1.4 (0.2)	0.5 (0.2)	0.7 (0.2)
Estonia ¹	7.5 (0.6)	4.0 (0.6)	-0.2 (0.2)	0.4 (0.2)	0.9 (0.2)	-3.3 (0.2)	0.2 (0.2)	0.4 (0.2)
Latvia ¹	5.7 (0.4)	3.9 (0.5)	-0.7 (0.2)	-0.1 (0.2)	0.6 (0.2)	-2.6 (0.2)	0.8 (0.2)	0.4 (0.2)
Lithuania	5.1 (0.3)	3.2 (0.3)	-0.1 (0.2)	0.2 (0.2)	0.7 (0.2)	-2.4 (0.2)	0.0 (0.2)	0.8 (0.2)
Malta	5.3 (0.4)	2.8 (0.3)	0.2 (0.2)	0.0 (0.2)	0.8 (0.2)	-2.9 (0.2)	0.7 (0.2)	0.9 (0.2)
Netherlands [†]	9.6 (0.5)	4.6 (0.7)	-0.3 (0.2)	0.5 (0.2)	1.1 (0.2)	-3.3 (0.3)	-0.2 (0.2)	-0.3 (0.2)
Norway (9) ¹	6.3 (0.3)	3.8 (0.3)	-0.5 (0.2)	0.3 (0.2)	0.2 (0.2)	-2.5 (0.2)	-0.3 (0.1)	0.5 (0.2)
Peru	1.6 (0.2)	1.9 (0.3)	-0.2 (0.1)	0.1 (0.1)	0.5 (0.1)	-1.9 (0.1)	0.3 (0.1)	0.6 (0.2)
Slovenia	7.6 (0.4)	3.8 (0.4)	-0.3 (0.2)	0.3 (0.2)	0.4 (0.2)	-2.5 (0.2)	0.3 (0.2)	0.4 (0.2)
ICCS 2016 average	5.4 (0.1)	3.3 (0.1)	-0.4 (0.0)	0.2 (0.0)	0.6 (0.0)	-2.5 (0.0)	0.3 (0.0)	0.5 (0.0)

* Statistically significant (p<0.05) coefficients in **bold**.

() Standard errors appear in parentheses.

(9) Country deviated from international defined population and surveyed adjacent upper grade.

† Met guidelines for sampling participation rates only after replacement schools were included.

¹ National Defined Population covers 90% to 95% of National Target Population

² Country surveyed target grade in the first half of the school year.

An "(s)" indicates that data are available for at least 50% but less than 70% of students.

Interestingly, the endorsement of religious influence in society was negatively associated with students' civic knowledge. The effect of being one standard deviation higher on the civic knowledge scale was between two and three points lower on the endorsement of religious influence scale.

The effects of the school climate variables, open climate for discussion and socioeconomic background on the endorsement of religious influence were not uniformly evident across countries and were small on average.

Table 7 Percentage of variance in students' attitudes explained by multiple regression models

Country	Students' endorsement of gender equality	Students' endorsement of equal rights for all ethnic/racial groups	Students' trust in civic institutions	Students' endorsement of religious influence
Belgium (Flemish)	28 (1.5)	7 (1.3)	13 (1.5)	29 (2.0)
Bulgaria	37 (1.7)	13 (1.5)	21 (1.5)	21 (1.8)
Chile	37 (1.5)	19 (1.5)	14 (1.2)	23 (1.3)
Chinese Taipei	29 (1.5)	16 (1.3)	12 (1.3)	17 (1.3)
Colombia	34 (1.3)	15 (1.3)	20 (1.4)	19 (1.4)
Croatia	33 (1.8)	16 (1.4)	25 (1.7)	27 (1.7)
Denmark†	28 (1.3)	12 (1.2)	13 (1.4)	
Dominican Republic (s)	31 (1.7)	18 (2.0)	21 (1.6)	8 (1.4)
Estonia ¹	29 (1.8)	21 (1.5)	15 (1.8)	22 (1.7)
Finland	34 (1.8)	21 (1.4)	20 (1.9)	
Italy	34 (1.4)	16 (1.4)	15 (1.3)	
Latvia ¹	25 (1.6)	12 (1.4)	16 (1.5)	22 (1.6)
Lithuania	32 (1.7)	13 (1.3)	19 (2.0)	20 (1.4)
Malta	36 (1.5)	13 (1.2)	21 (1.6)	24 (1.4)
Mexico	34 (1.3)	21 (1.5)	17 (1.1)	
Netherlands†	30 (2.8)	17 (1.9)	14 (1.6)	31 (1.8)
Norway (9) ¹	31 (1.1)	17 (1.3)	19 (1.2)	23 (1.2)
Peru	40 (1.2)	18 (1.4)	18 (1.3)	12 (1.3)
Russian Federation	24 (1.4)	16 (1.5)	21 (1.8)	
Slovenia	28 (1.6)	12 (1.4)	15 (1.9)	31 (1.5)
Sweden ¹	30 (1.8)	27 (1.9)	16 (1.7)	
ICCS 2016 average	32 (0.4)	16 (0.3)	17 (0.3)	22 (0.3)

* Statistically significant ($p < 0.05$) coefficients in **bold**.

() Standard errors appear in parentheses.

(9) Country deviated from international defined population and surveyed adjacent upper grade.

† Met guidelines for sampling participation rates only after replacement schools were included.

¹ National Defined Population covers 90% to 95% of National Target Population

² Country surveyed target grade in the first half of the school year.

An "(s)" indicates that data are available for at least 50% but less than 85% of students.

Percentage of variance in students' attitudes explained by multiple regression models

The regression model for endorsement of gender equality explained on average 32 percent of the variance in scale scores, ranging from 24 in Russia to 40 percent in Peru (Table 7). For the endorsement of equal rights for ethnic and racial groups, the percentage was only 16 percent on average, with a minimum of seven percent in Belgium (Flemish) and a maximum of 27 percent in Sweden. For trust in institutions, the model explained 17 percent across countries, ranging from 12 percent in Chinese Taipei to 25 percent in Croatia. The percent of explained variance for endorsing religious influence in society ranged from eight percent (Dominican Republic) to 31 percent (Slovenia) with an average of

22 percent. These results show that the models explain only a somewhat limited amount of variation in scale scores, in particular for students' endorsement of equal rights for ethnic/racial groups and trust in civic institutions.

Conclusion

The measurement of young people's attitudes is an important part of comparative studies of civic and citizenship education studies. This paper provides information about young people's beliefs about equal opportunities, trust in institutions, and the influence of religion in a comparative perspective across a range of countries and between 2009 and 2016. It further provides insights in to the influence of contextual and civic learning factors on young people's beliefs.

One of the most salient findings is the association of attitudes with civic knowledge. While across all countries students' endorsement of gender equality and equal rights for all ethnic and racial groups was notably higher among those with higher levels of civic knowledge, support for religious influence is much lower. For trust in civic institutions we confirmed earlier findings that in countries where institutions are generally perceived as suffering from high levels of corruption or inefficiency, more knowledgeable students tended to express less trust.

It is also interesting to note that in many countries perceptions of open classroom climates and higher levels of civic learning, after controlling for civic knowledge, were significantly and positively associated with endorsement of equal rights or trust in institutions. Interestingly, student reports on civic learning were positively related to endorsement of religious influence while there was a negative association with civic knowledge.

Variables related to school climate (positive perceptions of social interaction between students and student-teacher relations) tended to have significant positive associations across countries with the endorsement of equal rights for all ethnic and racial groups, and trust in civic institutions. This findings deserves further attention, it suggests that more positive school environments are related to higher levels of tolerance as well as trust, once other factors are taken into account.

While socioeconomic home context was not consistently related to students' attitudes, female gender was consistently related to support for gender equality, and in many countries also to endorsement of equal rights for all ethnic and racial groups. The indicator of belonging to a minority had significant net associations with the latter criterion variable in only few of the ICCS 2016 countries. This may be related to the fact that it captures only partly the ethnic origin of a student.

Coming from a family background with higher parental interest political and social issues was a positive predictor of students' trust in institutions. This suggests that young people from families more engaged in society tend to develop somewhat higher levels of attachment to institutions. Prior engagement in community groups and organisations was a significant predictor of trust in less than half of the countries. Both regular attendance of religious services and participation in a religious organisation had significant (positive) effects on the endorsement of religious influence of society.

The analyses in this paper are a first step toward a better understanding of factors shaping young people's attitudes toward important issues in society. The results highlight the importance of civic learning for the development of attitudes and the need for taking contexts and background into account. Similar to earlier findings (see for example Schulz, 2015) the results provide evidence that attitudes are also shaped by the individual perspectives of young people, with females tending to be

more supportive of gender equality, and those involved in activities related to religion being more supportive of religious influence in society.

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