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Educating Tomorrow's Citizens: Globalization and Gender Equality in European Young people

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Abstract

The present study investigates young peoples' attitudes towards gender equality across 14 countries who participated in The International Civic and Citizenship Study (ICCS) 2016. The main aim of the present study is to verify whether students' background variables, civic knowledge and civic self-efficacy contribute to explaining the attitudes towards gender equality. The relationship between these variables was evaluated using a structural equation modeling approach. Data from 50,000 students representative of grade 8 population from 14 European countries who participated in ICCS 2016 were analysed. A mediation analysis with structural equation modeling assessed the direct and indirect effects of the immigrant background and socio-economic and cultural background on attitudes towards gender through the mediation of civic knowledge and civic self-efficacy. The results showed the role of civic knowledge in mediating the effect of socio-economic background on gender equality. These findings suggest that school policy invests on improving civic knowledge at school.

Keywords: ICCS, Gender equality, Civic knowledge.

Introduction

The 21st century is characterized by a great increase of "globalization", that could be defined as a complex set of economic, cultural, political, and geographic processes making goods, capital, people, information, and ideas move across the limits of single countries (McMichael, 2011). In literature, the majority of definitions includes three elements: economic, social and political dimensions (e.g. Robinson, 2003; Carnoy & Rhoten, 2002; Burbules & Torres, 2000).

In the present study, we referred to the KOF Index of Globalization which incorporates the three dimensions above mentioned (for a detailed description, see Gygli, Haelg, & Sturm, 2018; Dreher, 2006):

1. Economic globalization is referred to the commercial flows, portfolio investment and foreign direct investment, along with the restrictions to them.
2. Social globalization is defined as the wide diffusion of information, images, ideas, cultural models and people. It is measured on the basis of three elements: personal contact (international letters, tourism and traveling, international telephone contacts, and foreign population; information flows (television ownership, internet users, trade in newspapers); cultural proximity (number of Ikea shops, number of McDonald's restaurants, and trade in books).
3. Political globalization is expressed as the amount of political collaboration. It is estimated by membership of international organizations, participation in UN Security Council missions, the number of embassies, and number of international treaties signed.

Even though the phenomenon of globalization influences people across countries, these impacts are not the same for everyone. It broadens opportunities and in-

creases wealth for some nations, while for others it produces poverty, disparity and unfairness (McMichael, 2011). Likewise, the influences of globalization on women's empowerment have been contradictory, depending on the time period and on the researcher investigating it (McMichael, 2011; Stromquist, 2005; Acker, 2004).

In the 1980s and 1990s, for example, in many countries middle-class women had better chances to engage in professional and managerial careers, but this aggravated social disparities among women (Acker, 2004). Getting a paid employment means independence and greater equality of personal life, for some women, greater disadvantage and poverty for others, often leading to the choice of remaining in oppressive or violent relationships with men.

Furthermore, modernization theory suggests the gender equality is higher where security and wealth have improved and better education and employment opportunities are granted to women (Inglehart & Norris, 2003).

Regarding this aspect, in the last decades, governments around the world are paying a growing attention to reducing discrimination against women; nonetheless, a gap between women and men continues to exist in many countries. In the 2017, for example, the World Economic Forum published The Global Gender Gap Report (World Economic Forum, 2017), where the composite index of gender gap was constructed based on different indicators: Economic Participation and Opportunity, Educational Attainment, Health and Survival, Political Empowerment. The index score varied from 0 (disparity) to 1 (parity).

Although the trend in gender gaps is in the direction of a general decrease across all world regions, there is still much work to be done to speed up the process towards the complete parity-

This report reveals that, in Europe and in particular in Italy, gender gap still exists and also role stereotypes persist, as well as certain prejudices that family, school, labour market tend to build and replicate. Considering the specific Italian context, the results presented on the Global Gender Gap Report (2017) indicated that discrepancy of opportunities between the two sexes are still present, especially in wages. Moreover, if we consider the educational system, there is a great difference between males and females in university enrolment: in 2016/2017, 38 percent of freshmen in scientific courses were female, and 62 percent were male. Even though the whole number of females enrolling at the university is greater than the number of males, only 25 percent of female freshmen choose scientific study courses compared to 51 percent of males (MIUR, 2017). A variety of studies have examined the relationship between people's socio-cultural background and their attitudes toward gender equality. In society, the egalitarian attitudes towards gender reflect the actual condition of women and men in lives, and they are mainly related to the cultural background (see, Crompton & Lyonette, 2005; Kulik, 1992; Lackey, 1989).

Moreover, different studies evidenced a relationship between level of education and positive attitude toward gender. Leaper and Valin (1996) found that Mexican American mothers' and fathers' attitudes toward gender equality is positively related to their level of education. This relation was also confirmed in other cultures (Slagsvold, 2012; Kulik, 2002).

The Civic Education Study (CIVED), regarding the knowledge of democratic practices and institutions in a representative sample of 14-year-old students from 28 participating countries, evidenced that students in countries with lower GDP per capita and higher unemployment rates were somewhat less supportive of women's political rights (Torney-Purta, Lehmann, Oswald & Schulz, 2001).

In literature, the relationship of attitudes towards gender equality with human capital-related issues, such as work, earnings, and education was investigated. For example, Davis & Pearce (2007) examined the effects of gender ideology on ado-

lescents' expectations of educational attainment. They found that girls and boys holding more non-traditional or egalitarian ideologies were more likely to aspire to a post-secondary degree and that the effect was stronger for girls.

In a recent case study based on 190 Scottish young people aged 14- to 16-years-old, Tinklin *et al.* (2005) found that they believed in the principle of equal opportunities and expectations for females' and males' future, both in their family and in their work life. Such a belief is not merely abstract; they also believe, for example, that nowadays females and males could do any kind of job. However, these principles and attitudes are not fully reflected in the workplace and in their families, where many inequalities persist. For instance, young people usually continue to choose gender-typical subjects at school and end up getting different types of occupations. Hence the current scenario is that, although a remarkable progress has been made in changing attitudes towards gender equality, their impact on reality is still quite scarce.

Schoon and Polek (2011) carried out a study on two representative samples of the UK population. They followed them from birth into the adult age, and found that occupational aspirations of teenagers are significantly associated with educational and professional achievement, and that girls have generally higher occupational aspirations than boys. Furthermore, there was an increase in education participation and in job aspirations in the later born cohort, especially in females; nonetheless, in this same cohort, education participation and job aspirations are more strongly influenced by social background than by cognitive ability. The same applies to participation in further education, suggesting persistent inequality in educational opportunities: women continue to opt for particular vocations, such as teaching and health professions, usually less paid than the more male-dominated careers.

Indeed, even though equal opportunities have assumed over the last twenty years a crucial relevance and a centrality deriving from the adoption of the *gender mainstreaming* perspective, stereotypes of role resist across countries (see, e.g., Ali & Gordon, 2018; Cavaletto, 2017; Powell, Dainty & Bagilhole, 2012; Koenig, Eagly, Mitchell & Ristikari, 2011). One of the most supported hypothesis is that the scarce presence of women in high-status and well paid careers is due to gender-role stereotyping of occupations. Children learn from a young age that jobs such as secretary or baby-sitter are done by females, while men are usually associated with professions like business executives or managers, because they are continually exposed to these stereotypes through television programs, children's books, movies and also in their everyday life (Banchefsky, Westfall, Park & Judd, 2016; Schoon & Eccles, 2014; Francis, 1998; Wood, 1994; Eccles, 1987).

In this direction, the adolescence seems to be a crucial phase where people form their opinion and expectations that lasts over time and education has always played a role to the preparation of young people for society (Goren & Yemini, 2017; Oxley & Morris, 2013; Veugelers, 2011).

Two other crucial factors affecting behaviours and the formation of the attitudes are cognitive knowledge and self-efficacy. According to Bandura, self-efficacy consists of the individuals' "judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (p. 391, 1986). It is considered to have a strong influence on individual choices, perseverance, efforts, and emotions related to the tasks.

According to Bandura, people's beliefs about their capabilities to exercise control over their own level of functioning and over events affect pervasively their lives. Efficacy beliefs influence in fact how people think, feel, motivate themselves, and behave; one of the core properties of human agency within the conceptual framework of social cognitive theory (Bandura, 2006; 1993) is exactly the capacity to regulate one's thoughts, emotions, motivation, and action through self-

reactive influence. Even the impact of SES on psychosocial functioning is mostly mediated through its effects on people's beliefs about their capacity to manage their life (Fernandez-Ballesteros *et al.*, 2002; Bandura *et al.*, 1996, 2001; Furstenberg *et al.*, 1999). Caprara and colleagues found that SES contributes indirectly through its influence on self-regulatory efficacy change, in affecting the grades (Caprara *et al.*, 2008).

Cohen, Vigoda and Samorly (2001) found that personal-psychological variables, included self-esteem and political efficacy, mediated the effect of socio-economic and cultural background on political participation.

In ICCS 2009 and 2016, both student citizenships self-efficacy and civic knowledge were positively associated with socio-economic and cultural status (Schulz *et al.*, 2016; 2010).

Studying how students form their opinion and beliefs about their future roles as citizens, their views about society, and in which way citizenship competencies develop in young people is one of the main goals of *The International Civic and Citizenship Study (ICCS)*. ICCS is a comparative research developed by the International Association for the Evaluation of Educational¹ and investigates how young people are prepared to undertake their roles as citizens. In 2016, 24² countries participated in ICCS and the project collected data from about 94,000 students attending eight-grade year of schooling clustered in 3,800 schools.

The acquisition of the civic skills is not merely the result of what the students have studied in books, but the complex ensemble of the different experiences that young people make at school, in the family, in the local community and in the extended social community. In fact, the aim of ICCS is to measure not only the students' civic knowledge but also their active social and political participation, their attitudes (e.g. towards democracy and citizenship and towards equal rights), and other non-cognitive dimensions³. Among these last dimensions, in ICCS a scale of *sense of citizenship self-efficacy* was developed.

Furthermore, ICCS measured several students' attitudes, such as the levels of endorsement of gender equality in their own country. The results showed that female students, students with higher levels of interest in political and social issues, and students with higher levels of civic knowledge were the students most likely to endorse gender equality (Schulz *et al.*, 2017).

Given the importance, emerged from the previous literature, of social background variables for students' attitudes and choices, the wish is for educational and learning to play a role in mitigating this effect, and hence giving an opportunity to policy makers to concretely intervene on this issue.

Based on that, the aim of the study was to explore the following:

¹ The International Association for the Evaluation of Educational (IEA) is an international cooperative of national research institutions, government research agencies, scholars and analysts working to evaluate, understand and improve education worldwide. Since 1958, the IEA has measured students' mastery of subjects such as mathematics, science, and reading; conducted assessments on civic and citizenship education; investigated students' computer and information literacy; and researched early childhood and teacher education.

² Belgium (Flemish), Bulgaria, Chile, Chinese Taipei, Colombia, Croatia, Denmark, Dominican Republic, Estonia, Finland, Hong Kong SAR, Italy, Korea, Republic of, Latvia, Lithuania, Malta, Mexico, Netherlands, Norway, Peru, Russian Federation, Slovenia, Sweden. Moreover plus North Rhine-Westphalia as benchmarking participant.

³ Beside the cognitive test and students questionnaire, since the teaching of civic education and citizenship involves transversely the teaching of all the school disciplines and is also conveyed by the whole school context, 15 teachers of 8th year of schooling, from participating schools, were selected regardless of the subject taught and the class, and they answered to a teacher questionnaire. Moreover, principals of sampled schools fill on "school questionnaire" (Schulz *et al.*, 2017).

1. Whether civic knowledge and civic self-efficacy were associated with students' attitudes towards gender equality in European countries participating in ICCS 2016.
2. Whether civic skills work as mediator factor in the relation between SES and students' attitudes towards gender equality. The hypothesis specifically states that part of the SES effects on students' attitudes towards gender equality depends on its influence on civic skills.

1. Method

Participants

The analyses were conducted on European students who took part in ICCS 2016. ICCS used a two-stage sampling design (for a detailed description, see Schulz et al., 2016). The overall sample consisted of 51,337 students from all European participating countries⁴, clustered in 2,128 schools.

Cases with missing values in one or more explanatory variables were excluded from the analyses. The overall sample was composed by 49,423.

Measures

Socio economic status (SES). Since several studies in literature evidenced the different impact of the cultural and socio-economic indicators on academic outcomes (Myrberg, & Rosén, 2006; Turmo, 2004), instead of a single comprehensive measure of SES, three separate indicators of SES were used:

1. Parents' highest educational level,
2. Parents' highest occupational status, and
3. Home literacy environment (the number of books at home).

Immigrant background. Based on parents' answers, a new variable was created identifying native students (students born in the country of test or with at least one parent born in the country of test, code 0) and non-native students (students not born in the country of test or born in the country of test, but with both parents born in another country, code 1).

Civic knowledge is a key outcome of civic and citizenship education programs and refers to the application of civic and citizenship cognitive processes to the civic and citizenship contents. This broad term denotes knowing, understanding and reasoning on the four ICCS content domains: 1) civic society and systems; 2) civic principles; 3) civic participation and 4) civic identities (Schulz et al., 2008). Civic knowledge is fundamental to effective civic participation. The overall scale was based on 88 items, reflects students' knowledge and understanding of civic issues. The international average centre point (fixed on ICCS 2009) is 500.

Students' sense of citizenship self-efficacy reflects their self-confidence in active citizenship behaviour. ICCS distinguishes between the political internal efficacy (the self-concept regarding the political participation and the capacity to act politically) and the citizenship self-efficacy as well as the students' self-confidence to undertake specific tasks in the area of civic participation. In the ICCS 2016 students answered to seven questions regarding their self-efficacy to do different activities such as "Argue your point of view about a controversial political or social issue". Using IRT partial credit scaling, student responses were placed on a scale with mean scale score of 50 across all countries and standard deviation of 10.

⁴ Belgium (Flemish), Bulgaria, Croatia, Denmark, Estonia, Finland, Italy, Latvia, Lithuania, Malta, Netherlands, Norway, Slovenia, Sweden.

Students' attitudes towards gender equality. Students gave their agreement to six statements: “Men and women should get equal pay when they are doing the same jobs”, “Men and women should have equal opportunities to take part in government”, “Men and women should have the same rights in every way”; “Women should stay out of politics”; “When there are not many jobs available, men should have more right to a job than a women”, “Men are better qualified to be political leaders than women”. Using IRT partial credit scaling, student responses were placed on a scale with mean scale score of 50 across all countries and standard deviation of 10.

Data analysis

The descriptive analyses and Pearson correlation coefficients by countries were conducted using the software IEA IDB Analyzer⁵.

A structural equation modeling assessed the effects of socio-economic and cultural background and civic knowledge and civic self-efficacy on Students' endorsement of gender equality, by means of MPLUS. Gender and immigrant background were used as control variables. Civic knowledge and civic self-efficacy were used as a mediator variables.

2. Results

Descriptive statistics

The table 1 (Tab. 1) shows the descriptive statistics for attitudes towards gender equality. Starting from the scale score computed at international level, we standardized the scores so that 50 represent the mean score of European countries analysed in this study, with a standard deviation of 10.

Tab. 1 - Descriptive statistics of perception of gender equality overall and by gender across countries

	<i>Overall</i>		<i>Males</i>		<i>Females</i>	
	<i>Mean</i>	<i>(s.e.)</i>	<i>Mean</i>	<i>(s.e.)</i>	<i>Mean</i>	<i>(s.e.)</i>
Belgium (Flemish)	51	(0.29)	49	(0.29)	53	(0.42)
Bulgaria	43	(0.27)	40	(0.26)	46	(0.39)
Croatia	50	(0.29)	46	(0.38)	54	(0.29)
Denmark	53	(0.22)	50	(0.32)	56	(0.18)
Estonia	47	(0.34)	45	(0.36)	50	(0.40)
Finland	51	(0.21)	48	(0.34)	56	(0.20)
Italy	50	(0.24)	47	(0.28)	53	(0.29)
Latvia	43	(0.23)	41	(0.33)	45	(0.33)
Lithuania	45	(0.26)	43	(0.33)	48	(0.36)
Malta	50	(0.20)	46	(0.30)	54	(0.25)
Netherlands	49	(0.37)	45	(0.41)	52	(0.43)
Norway	54	(0.17)	50	(0.26)	57	(0.15)
Slovenia	49	(0.26)	46	(0.36)	53	(0.30)
Sweden	54	(0.25)	51	(0.43)	58	(0.22)
All countries	50	(0.07)	46	(0.09)	52	(0.08)

⁵ The IDB Analyzer allows handling complex sample designs, using plausible value methodology and calculating correct standard errors when conducting analysis with large-scale surveys (IEA, 2012).

Concerning attitudes towards gender equality, Sweden has the highest average score, on the other hand Bulgaria recorded the lowest scores. The variation between country who reported the highest of equal rights and countries who reported the lowest level of equal rights is 11 point, that is about one standard deviation.

In all countries, female students tended to hold more positive attitudes than males toward gender equal rights: on average, there was a difference of about six score points between the two groups.

To verify the relation between dependent variable and independent variables considered in this study, a Pearson correlation was computed. The results are presented in Tab. 2.

Tab. 2 - Association with students' attitudes towards gender equality (Pearson correlation coefficients)

Country	Highest parental educational level	Highest parental occupational status	Home literacy resources	Immigrant background	Students' sense of citizenship self-efficacy	Civic knowledge
Belgium (Flemish)	0.17	0.16	0.18	-0.13	0.07	0.45
Bulgaria	0.25	0.23	0.31	-	0.08	0.55
Croatia	0.07	0.10	0.15	0.01	0.14	0.45
Denmark	0.13	0.14	0.20	-0.10	0.15	0.41
Estonia	0.10	0.17	0.22	-0.13	0.18	0.51
Finland	0.09	0.12	0.15	-0.05	0.12	0.47
Italy	0.12	0.19	0.23	-0.08	0.18	0.51
Latvia	0.16	0.16	0.19	-0.10	0.09	0.45
Lithuania	0.17	0.17	0.20	-0.02	0.12	0.53
Malta	0.06	0.16	0.19	n.s.	0.06	0.55
Netherlands	0.18	0.19	0.16	-0.06	0.05	0.43
Norway	0.09	0.10	0.19	-0.10	0.10	0.45
Slovenia	0.07	0.12	0.18	-0.08	0.10	0.44
Sweden	0.10	0.12	0.20	-0.13	0.08	0.46

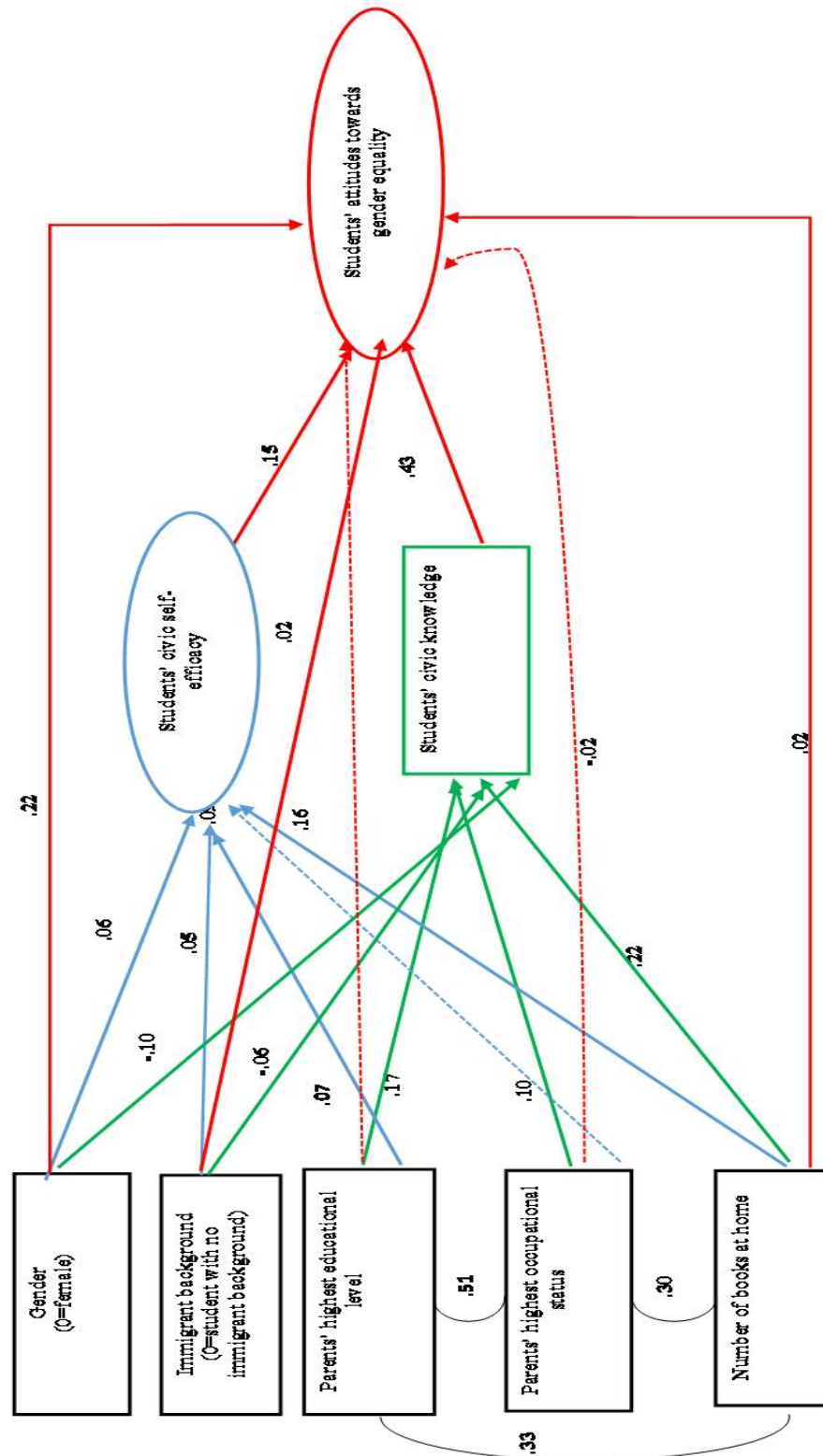
Correlations equal or above .10 are displayed in bold

Across countries, almost all variables are significantly associated with students' attitudes towards gender equality at $p < .01$. Nonetheless, according to Cohen's recommendation (1988), for large samples significant correlation below 0.10 should be considered negligible, while a coefficient equal or above .10 indicates at least as small effect.

Path analysis

A structural equation model (SEM) was utilized to perform a path analysis in order to test a hierarchical model (Fig. 1). Cases were weighted by senate weight: each country contributed the same to the comparison, regardless of the size of the population.

Fig. 1 - Relationships between gender, immigrant background, socio economic status, civic knowledge, civic self-efficacy and student perception of gender equality – Whole countries



R^2 Attitudes towards gender equality = 0.31, $p < 0.01$; RMSEA = 0.03; CFI = 0.98.
 [Measurement errors and parcels are not depicted. Direct effect coefficient are displayed.]

To keep Figure 1 more readable, measurement errors and parcels considered in this investigation are not depicted.

This model had good indices according to recommended cut-off values (Byrne, 2001): RMSEA=0.03 and CFI=0.97 and explained 32% of the variance.

As it can be seen in Fig. 1, the attitudes towards equal rights for female was predicted by all factors considered in the path model, excepted the highest level of parents education and the highest level of parents occupational status. Female students and students with an immigrant background have better attitudes towards gender equality than male and native colleagues. The best predictor of student attitudes towards gender equality is civic knowledge, that also partially reinforced the effects of gender, immigrant background and number of book at home.

Considering the great influence of globalization on attitudes towards gender equality, we used the KOF Index of Globalization to cluster countries who participated in ICCS 2016⁶ and to verify if these effectively moderate the relationship between socio-economic and cultural indices, immigrant background, gender, civic knowledge and civic self-efficacy on attitudes toward gender equality (Tab. 3).

Tab. - Direct effects: beta coefficients of independent variables

Determinants		Gender equality		
		All countries ($R^2=.32$)	Countries in the first decile of KOF ($R^2=.30$)	Countries below the first decile of KOF ($R^2=.35$)
Civic knowledge	Gender	-.10	-.12	-.18
	Immigrant background	-.06	-.13	-.03
	Highest parental educational level	.10	.14	.08
	Highest parental occupational status	.17	.18	.04
	Number of books at home	.22	.19	.12
Civic self-efficacy	Gender	-.06	n.s.	-.03
	Immigrant background	.05	.09	n.s.
	Highest parental educational level	n.s.	n.s.	n.s.
	Highest parental occupational status	.07	.09	.04
	Number of books at home	.16	.16	.12
Attitudes towards gender equality	Gender (0=male)	-.22	-.27	-.20
	Immigrant background	.02	n.s.	n.s.
	Highest parental educational level	n.s.	.05	-.05
	Highest parental occupational status	n.s.	n.s.	.03
	Number of books at home	.02	n.s.	.02
	Civic knowledge	.43	.40	.48
	Civic self-efficacy	.15	.11	.16

⁶ Countries of first 10 percentiles of index: Denmark, Finland, Italy, Netherlands, Norway, Sweden, Belgium (Flemish). Countries below the 10 percentiles of index: Bulgaria, Croatia, Estonia, Latvia, Lithuania, Malta, Slovenia.

In the model with all countries, attitudes towards gender equality was found to be strongly and positively associated with the civic knowledge ($\beta=.43$, $p < 0.01$), civic self-efficacy ($\beta=.15$, $p<0.01$)and with female gender. The associations between attitudes toward gender equality and immigrant background and number of book at home are significant.

Tab. 4 - Direct, indirect and total effects

<i>All countries</i>					
<i>Determinants</i>	<i>Direct</i>	<i>Casual effects</i>		<i>Total</i>	
		<i>Indirect</i>			
		<i>Civic knowledge</i>	<i>Civic self-efficacy</i>		
Attitudes towards gender equality as dependent variable	Gender	-.22	-.05	n.s.	-.28
	Immigrant background	.02	-0.2	n.s.	n.s.
	Highest parental educational level	n.s.	.04	n.s.	.04
	Highest parental occupational status	n.s.	.07	.01	.09
	Number of books	.02	.10	.02	.12
<i>The first ten countries based on KOF classification</i>					
Attitudes towards gender equality as dependent	Gender	-.27	-.05	-	-.32
	Immigrant background	n.s.	-.05	.01	-.05
	Highest parental educational level	.05	.06	n.s.	.11
	Highest parental occupational status	n.s.	.07	.01	.09
	Number of books	n.s.	.08	0.02	.09
<i>Countries below the first ten percentiles of KOF classification</i>					
Attitudes towards gender equality as dependent	Gender	-.20	-.09	n.s.	-.29
	Immigrant background	-	-	-	n.s.
	Highest parental educational level	-0.05	0.04	n.s.	-0.01
	Highest parental occupational status	.03	.11	n.s.	.13
	Number of books	.02	.09	.02	.14

Female students, students with higher level of civic knowledge and with higher level of civic self-efficacy have more positive attitudes towards gender equality. Regarding the SES factors (indicators), neither highest parents’ educational level nor highest parents’ occupational status are associate with attitudes towards gender equality. Moreover, the number of book at home seemed to not influenced the attitudes toward gender equality as well as immigrant background: the association is statistically significant but negligible.

The correlation between students’ attitudes towards gender and immigrant background, gender of students, number of books at home on one hand, and between students’ attitudes towards gender equality and civic knowledge and students’ civic self-efficacy constitutes sufficient justification for studying mediation effects. The parameters required to assess mediation are summarized in Table 4, and expressed by standardized loadings. With regards to statistical mediation, the crucial parameters to consider were estimates of the indirect effects. Indeed, the significance of the indirect effects is the unique requirement for mediation to be established (Zhao *et al.*, 2010; Iacobucci *et al.*, 2007). The Table 4 illustrates the me-

mediation effect of civic knowledge and civic self-efficacy between socio-economic and cultural indices, gender, immigrant background and attitudes towards female. The data are presented divided in three groups: overall students, students from more globalized countries and students from less globalized countries.

The results presented in Table 4 evidenced the positive and significant effects of students' civic knowledge mediating the relationship between socio-economic and cultural indices and students' attitudes towards gender equality. More in details (depth) the civic knowledge mediated largely (extensively) the relation between the number of books at home in all three sub-groups, that is the effect of number of books at home is indirectly associated with attitudes toward gender equality, and partially the relation between gender and attitudes towards gender equality. That means the number of books at home (that is: the cultural capital of their family) is not directly associated with attitudes towards gender equality, but the number of books at home is associated with civic knowledge which is associated in turn with students' attitudes towards gender equality. Students with the same number of book at home have more positive attitudes towards gender equality if they have a higher civic knowledge.

Moreover, in both two groups based on KOF classification, civic knowledge largely mediated the relation between highest parents' educational level and students' attitudes gender equality: students with the parents with the same level of occupational status have more positive attitudes towards gender equality if they have a higher civic knowledge.

These results evidenced the role of civic knowledge as mediating effects of different indexes of socio-economic status.

On the contrary, the civic self-efficacy did not seem to have an impact as mediator factor.

3. Discussion

The main aim of this study is to verify the relationships between civic knowledge and civic self-efficacy with students' attitudes towards gender equality in European countries that participated in ICCS 2016. The model was successful in explaining the attitudes towards gender equality: the predicted model showed a good fit to the data with a 32% of the variance explained.

The results evidenced a strong relation in function of students' gender: female students have more positive attitudes towards gender equality than male students in all countries (see, Mendez & Crawford, 2002; Parry, 1983).

Furthermore, students civic knowledge was the strong factor associated with attitudes towards gender equality: students from all countries with higher level of civicknowledge reported more positive attitudes towards gender equality.

Immigrant background is weakly associated with attitudes towards gender (see, Janmaat, 2013); for the first ten countries based on KOF classification, the effect is mediated by civic knowledge.

Context factors, which reflect the availability/non availability of economic, social and cultural resources within the family, seemed not to play a relevant role in determining students' gender attitudes (e.g. Schulz *et al.*, 2016; Schulz *et al.*, 2010), and the relation between indices of SES and students' attitudes towards gender is largely mediated by civic knowledge, as evidenced by the significant indirect effects observed in the SEM analysis.

In interpreting our results some limitations should be considered. First of all, the study is based only on one year of school. This means that generalizations to other grades should be taken with some degree of caution. Further studies, with other data referred to different school levels, are needed to determine the extent of the civic knowledge on forming attitudes towards human rights. Longitudinal study could also enrich this evidence by exploring whether teenage attitudes towards gender equality is able to predict the future actual behaviour towards gender equality. Furthermore in addition of a measure of attitudes, a measure of perception of gender inequality would be needed (Hoskins & Janmaat, 2014).

Notwithstanding these limitations, this study seems to indicate that civic knowledge should be considered one aspect to investigate in depth for a thorough understanding of how school communities could operate to mitigate the effect of socio-economic and cultural differences on students' attitudes.

Learning how gender ideology is socially constructed can help scholars understand, for example, boys' and girls' choices concerning education and occupations, and how individuals deal with their family lives. These individual decisions have remarkable implications for society, making crucial the collection of further data from nationally representative samples. A better understanding of the conceptual basis of the construction of gender attitudes is also necessary (Davis & Greenstein, 2009). Most researchers in fact have claimed the importance of factors such as education and social status, but the connections and processes involved are far from being fully clarified (e.g., Davis & Greenstein, 2009).

Attitudes are indeed one of the acknowledged factors causing the behavioural intent, which in turn is a good predictor of the actual behaviour, although not sufficient in itself (Ajzen & Fishbein, 1980) and different studies found that attitudes and civic knowledge are associated with civic behaviour (Castillo, Miranda, Bonhomme, Cox & Bascopé; 2015; Cohen & Chaffee, 2013).

Furthermore, there is evidence that the effect of socio-economic and cultural status can be mitigated by individual variables (e.g., self-efficacy and civic knowledge), and that these variables are associated with democratic attitudes and civic participation (Schulz *et al.*, 2016; Schulz *et al.*, 2010; Caprara *et al.*, 2008; Fernandez-Ballesteros *et al.*, 2002; Cohen, Vigoda & Samorly, 2001; Bandura *et al.*, 1996, 2001; Furstenberg *et al.*, 1999).

Civic competences are generally seen as critical for democracy and social cohesion. One of the challenges for school systems, in this scenario, is to prepare students to become citizens able to take advantage of opportunities derived from the globalized world and fostering civic competences (Torney-Purta, 2002). This is acknowledged also by the Council of Europe, which in 2011 stated that Education has a relevant role in promoting, among other things, democracy and human rights.

According to the literature (Schoon & Polek, 2011; Tinklin *et al.*, 2005;) the attitudes toward gender equality have an impact on the future life (career, education) of young people, and this study seems to show that education could play a role in forming these attitudes, by means of improving students' civic knowledge at school.

In fact, even though the school is not the only place where children learn these competences, it is the structured setting in which they spend most of the time from 6 to 17 years of age, and hence teachers and principals hold at least part of the responsibility in influencing students' civic knowledge, attitudes, and behaviours. In other words, they play a crucial role in making youngsters democratic citizens.

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