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Exploring the Role of Digital and Socio-civic Skills for Promoting Youth Participation and Digital Citizenship

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Abstract: The emergence of digital technologies and a more global and digital society has brought about the need to develop and educate in Digital Citizenship, as well as to study how youth are taught to participate and learn citizenship in a digital age. This paper aims to explore the role of digital and socio-civic skills development, as facilitators for youth participation and analyses the relationship between sociodemographic variables (sex, age, educational level, and political ideology) with the participatory profile of participants. This is a study with a quantitative methodology, where, based on non-probabilistic convenience sampling, 534 young people between 16 and 35 years old from Spain, completed an online questionnaire regarding the development of digital and socio-civic skills. The results indicate how a participant's participatory profile is related to other variables. In addition, significant differences are observed between the different participation profiles and digital and socio-civic skills, underlining that the development of digital and socio-civic skills are essential for educating in digital citizenship.

Keywords: *Digital citizenship, digital skills, education, socio-civic skills, youth participation.*

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Introduction

Understanding the role and importance of young people in conceptualizations of democracy is ongoing, both in citizenship education research and public debate (Lieberkind & Bruun, 2021). There are key themes in digital citizenship theorizations that are generally similar in notion (Chosn-Chelala, 2019). Such as Ribble's nine elements (2015) which include digital access, digital commerce, digital communication, digital literacy, digital etiquette, digital law, digital rights and responsibilities, digital health and wellness, and digital security. In turn, Pramanda et al. (2021) add that digital citizenship involves understanding and developing a sense of security when using the internet, knowing the internet, understanding how to find organize and create digital content, understanding how to play a role in increasing responsibility in intercultural interactions, and understanding the rights and obligations of using internet media. According to Ramírez Iñiguez (2016), educating for citizenship can be defined as a process by which people develop their capacities, skills, and knowledge in order to get involved in their social environment, participate in it and develop bonds of recognition with others, from anywhere in the world. All in all, education in digital citizenship teaches students how to be engaged, digital citizens (Hollandsworth et al., 2011) by promoting democratic and empowering practices mediated with digital technologies (Jones & Mitchell, 2016; Keating & Melis, 2017; Pramanda et al., 2021). Education plays an important role in enabling all children to acquire the skills they need as digital citizens to participate actively and responsibly in democratic society (Richardson & Milovidov, 2019). In their work, they also establish the following definition for Digital Citizenship:

The ability to engage competently and positively with digital technologies (creating, working, sharing, socializing, investigating, playing, communicating, and learning); as well as, participating actively and responsibly (values, skills, attitudes, knowledge and critical understanding) in communities at all levels (political, economic, social, cultural and intercultural). It is a process of being involved in all lifelong learning settings (formal, non-formal and informal) and defending human rights and dignity (Richardson & Milovidov, 2019, pp.11-12).

Consequently, there are crucial links between literacy, democracy, empowerment, and social participation in politics and everyday life (Ke & Xu, 2017). Drawing on the conclusions of Hennig Manzuoli et al. (2019), they establish three pillars

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of training required to exercise digital citizenship: 1) democratic knowledge and behaviours for citizen participation; 2) social skills that include communicative abilities, critical and axiological attitudes, creativity and finally, 3) digital literacy that include management and handling of information. In order to reduce the digital gap, researchers and educators must improve the development of digital and social skills. Moreover, a higher degree of digital inclusion must improve the capacity of society to meet the needs of access to digital services, along with digital literacy and equal opportunities (Cantabrana et al., 2015) by developing a solid digital literacy for citizens. Nevertheless, having said that, we must be cautious when handling information originated from the digital world. This is where, once again, the argument for digital and socio-civic skills development is put forward. Young people may have more fluency in handling digital devices and formats, but this is not synonymous with having a developed skillset for managing and evaluating the information, data and digital content and engaging socially or civically with issues. Education for 21st century society, in addition to offering equal access to information and digital resources, should prepare youth to be a functional, cultured, responsible and critical citizenry (Area Moreira, 2014) since knowledge is a necessary condition for the conscious exercise of individual freedom and for the full development of democracy.

These knowledge and skills are necessary and interdependent when creating a civic culture and, above all, they are decisive to increase the level of youth participation (Dias Fonseca & Potter, 2016) and even more so, in digital environments. Consequently, this work focuses on the development of digital and socio-civic skills as facilitators of participation since it not only understands the proper use of digital technologies; but also, the ethical management of information (Cabero et al., 2019; Van de Oudeweetering & Voogt, 2018) and the development of higher-order thinking skills (Lutzke et al., 2019) linked to empowerment for youth participation. These skills are becoming ever more necessary as the prevailing misinformation and fake news are becoming a concern in the use of social networks and is precipitating a crisis of democracy (Jang & Kim, 2018), since it has the possibility of influencing participation and other forms of citizenship. Fact that coincides with Van den Brande et al. (2016) who consider that digital skills imply the strategic, critical, and safe use of digital technologies in different contexts related to learning, leisure, work, and social participation. In addition, it underlines the importance of developing critical attitudes and defence against the multiple threats that also derive from the Internet and other digital information tools.

On the other hand, socio-civic skills integrate aspects related to empathy and mutual understanding, with coexistence and with the responsible exercise of democratic citizenship (Álvaro Martín & Rubio Núñez, 2016). In addition to the development of these skills, emphasis is once again placed on the set of knowledge, attitudes, and social and civic skills necessary for the management of coexistence, the control of emotions and the emotional response regarding to digital environments (Area Moreira, 2014). Likewise, it is necessary to continue insisting on the development of attitudes that allow maintaining positive and assertive social relationships that, in turn, will facilitate the civic exercise of active and critical citizenship. Thus, demonstrating the need for integrating a skills-based approach to digital citizenship themes within an updated civics curriculum and across disciplines. As well as addressing the disparity between digital citizenship ideals, wider environmental settings and student learning and practices (Chosn-Chelala, 2019).

This draws on the existing literature on skills development and capacity building for digital citizenship empowerment in young people. It follows the Council of Europe's model for digital skills development as a path towards digital citizenship (Richardson & Milovidov, 2019), while also considering the learning process provided not only from formal education but also non-formal setting like volunteering or participating in a political or social organisation. In the era of digital citizenship, efforts to respond to changes in the digital and global society such lay with revitalizing citizenship education and preparing students to be competent in economic and work productivity, digital and global security, and in digital media. These factors are very crucial for the sustainability of democracy (Pramanda et al., 2021). With the development of this skill, emphasis is once again placed on the set of knowledge, attitudes, and social and civic skills necessary for the management of coexistence, the control of emotions and the emotional response. Likewise, it is used to develop attitudes that allow maintaining positive and assertive social relationships that once will facilitate the civic exercise of an active and critical citizenship and a sense of democracy, freedom, responsibility, respect, or solidarity.

Regarding youth civic and political engagement, the literature categorizes two types of youth (Livingstone, 2008); On the one hand, a precarious majority, disconnected from the information society and detached from the governmental institutions and services. There are even those who add a lack of commitment and political involvement by young people to this group, and who would also characterize them as politically discouraged and apathetic in terms of citizen participation. However, on the other hand, there are studies (Castells, 2012; Lobera & Rubio, 2015; Lüküslü & Walther, 2020) that maintain that youth prefer to use other forms and participation and therefore, they are not apathetic or alien to civic engagement, but they think that the traditional ways of participation do not respond to their concerns, ideas, and way of bringing about change.

These are also the conclusions of the Flash Eurobarometer on Youth carried out in 2017 (EURODYCE, 2017) which shows that 64% of young people declare that they have participated in previous political elections and more than half (53%) of European youth affirm that they have participated in actions of social and civic participation. In fact, it also points out that young people are involved in different political activities, favouring alternative forms of participation. In other words, researchers are currently witnessing young people around the world engaging in political issues and giving new life to contemporary political agendas (Lieberkind & Bruun, 2021) in their own way and using a variety of mediums and

gain agency, autonomy, inclusion in decision-making and assuming certain responsibilities that foster the empowerment of a young person to participate actively (Shier, 2001) as well as taking into account other factors, such as the environment and context, motivation and certain conditioners of participation, such as how young people are perceived as political actors (Cahill & Dadvand, 2018). In some cases, they are visible through multi-activism in different types of organisations; others in via online forums and even those who do not engage with their community (Checkoway, 2011).

Methodology

Research Design

This study uses a quantitative methodology based on the application of a questionnaire that measures the development of digital and socio-civic skills (DIGISOC). With this, the objective of this study is to evaluate the relationship between young people's participatory profile and other sociodemographic variables, as well as to explore the relationship between participatory profiles and digital and socio-civic skills to understand how they can promote digital citizenship education and encourage youth participation. The following hypotheses were formulated:

- H1: The participatory profile is related to sex, age, educational level, and political ideology.
- H2: People who participate in political and social organisations will have a higher level of digital skills than the rest of the participatory profiles.
- H3: People who participate in political and social organisations will have a higher level of socio-civic skills than the rest of the participatory profiles.

Sample and Data Collection

This study uses non-probabilistic convenience sampling by contacting key people from educational centres, universities and with the support of territorial youth organisations and councils. The study sample consists of 534 participants from Spain, of which 72.6% are women, 27.1% are men and 0.3% identify as non-binary. Regarding age, 33.7% of participants are between 16 and 19 years old, 41.9% between 20 and 24 years old, 14.4% between 25 and 29 years old and 9.9% between 30 and 35 years old. Finally, out of the participatory profile of participants, 7.8% of people indicate participating in political and social organisations, 15.5% participate in only social organisations, 2.6% participate in political organisations. Meanwhile, 44.4% of the sample indicate that they do not participate, but they are interested in social and political organisations and finally, 29.8% say they do not participate nor show interest in any social or political organisation.

The data collection instrument was an online questionnaire with strong scientific guarantees that measures the development of digital and socio-civic skills (DIGISOC) (Peart et al., 2020). The questionnaire was applied through the Internet using the Microsoft Office Forms platform, obtaining the informed consent of all participants. The instrument was created by conducting an extensive literature review, then it was subjected to a content and construct validation process by consulting a group of experts and via Confirmatory Factor Analysis (C.F.A.) with a pilot sample of 215 participants.

The definitive version of the instrument consists of seven sociodemographic questions that relate to sex, age, educational level, employment situation, sexual orientation, political ideology, and participatory profile, as well as 59 items based on a 5-point Likert-type scale where 1 represents "never" and 5 "always", grouped in two dimensions and eleven sub-dimensions (Table 1).

Table 1. DIGISOC Questionnaire (Peart et al., 2020)

Dimensions	Sub-dimensions	Items
Sociodemographic variables	What sex are you?	7
	What age are you?	
	What educational level have you completed?	
	What is your employment situation?	
	When we talk about politics, normally we use expressions like "left" and "right". Where do you find yourself?	
	Normally you feel physical and/or emotional attraction...	
	What is your level of participation?	
Digital Skills	Management and use of information and data.	8
	Communication skills	4
	Digital content creation	3
	Management and security of information and digital content	6
	Ethics and digital responsibility	5

Table 1. Continued

Dimensions	Sub-dimensions	Items
Socio-civic skills	Social and political behaviours and attitudes	11
	Digital empathy	7
	Social and digital engagement	5
	Critical thinking	4
	Democratic attitudes	3
	Prosocial behaviour	3

For more information see Peart et al., (2020)

Finally, the internal consistency of the questionnaire and the two dimensions (digital and socio-civic skills), was analysed by using Cronbach's alpha for both dimensions: digital skills ($\alpha=0.906$) and socio-civic skills ($\alpha=0.902$).

Data Analysis

The data was collected with the DIGISOC questionnaire and was analysed using SPSS (v.26). Before statistically testing the research hypotheses, tests were performed to decide whether to use a parametric or non-parametric statistical test (Cubo Delgado et al., 2011). Tests were used to contrast the normal distribution and randomness of the data series. Due to the nature of the variables and the contrasted models, non-parametric tests were applied. All data collected has been stored securely and informed consent was obtained from all participants.

Results

Results Of Hypothesis (H1) Regarding Participatory Profile Dependency on Sociodemographic Variables.

The working hypothesis (H1) stated that participant's participatory profile is dependent on other variables such as sex, age, educational level, and political ideology. Considering the results indicated in Table 2, the null hypothesis is rejected in all cases as the results confirm a dependency between the participatory profile and all sociodemographic variables: sex ($p= .001$), age ($p=.000$), educational level ($p=.000$), and political ideology ($p=.000$).

Table 2. Chi-Squared Test Regarding Participatory Profiles and Sociodemographic Variables

	Sex	Age	Education level	Political Ideology
Chi squared	26.084	39.259	67.931	95.172
df	8	12	28	32
Contingency coefficient value	.216	.262	.336	.389
Cramer's V	.156	.157	.178	.221
Sig.	.001	.000	.000	.000

Results Of Hypothesis (H2) Regarding Participant's Participation Profile And The Digital Skills Dimension And Sub-Dimensions.

Table 3. Descriptive Analysis: Participation Profile, Digital Skills and Subdimensions

Dimensions	Participation profile	N	Mean	Std. Deviation
Digital Skills	Participation in political and social organisations	31	4.284	.490
	Participation in social organisations	80	4.043	.574
	Participation in political organisations	15	4.067	.619
	No participation, but interested in political and social organisations	232	3.988	.469
	No participation, nor interested in political and social organisations	176	3.905	.542
Management and use of information and data	Participation in political and social organisations	31	4.391	.467
	Participation in social organisations	80	4.126	.703
	Participation in political organisations	15	3.952	.523
	No participation, but interested in political and social organisations	232	4.014	.672
	No participation, nor interested in political and social organisations	176	3.857	.693

Table 3. Continued

Dimensions	Participation profile	N	Mean	Std. Deviation
Communication skills	Participation in political and social organisations	31	4.475	.467
	Participation in social organisations	80	4.131	.703
	Participation in political organisations	15	4.333	.523
	No participation, but interested in political and social organisations	232	4.084	.672
	No participation, nor interested in political and social organisations	176	3.914	.693
Digital Content Creation	Participation in political and social organisations	31	4.096	1.047
	Participation in social organisations	80	3.916	.970
	Participation in political organisations	15	3.977	1.178
	No participation, but interested in political and social organisations	232	3.852	.921
	No participation, nor interested in political and social organisations	176	3.842	.949
Management and Security of Information and Digital Content	Participation in political and social organisations	31	4.311	.100
	Participation in social organisations	80	3.983	.082
	Participation in political organisations	15	4.022	.190
	No participation, but interested in political and social organisations	232	3.997	.004
	No participation, nor interested in political and social organisations	176	3.944	.052
Ethics and digital responsibility	Participation in political and social organisations	31	4.148	.120
	Participation in social organisations	80	4.060	.083
	Participation in political organisations	15	4.053	.177
	No participation, but interested in political and social organisations	232	3.992	.044
	No participation, nor interested in political and social organisations	176	3.966	.051

The working hypothesis (H2) stated that people who participate in political and social organisations will have a higher level of digital skills than the rest of the participatory profiles. The results were analysed using Kruskal-Wallis H test to determine if there are statistically significant differences between the participation profiles (Cubo Delgado et al., 2011). Considering the results indicated below in Table 4 and Table 5, the null hypothesis is partially rejected. In the sub-dimensions in which the null hypothesis has been rejected, a post hoc analysis was performed to identify statistically significant differences between which participation profiles groups.

Table 4. Kruskal-Wallis H Test: Participant's Participation Profile, Digital Skills and Sub-Dimensions

Dimension: Digital Skills					
Kruskal Wallis- H	16.079				
df	4				
Sig.	.003				
Sub-dimensions of Digital Skills					
	Subdim. 1. Management and use of information and data.	Subdim. 2. Communication skills	Subdim. 3. Digital content creation	Subdim. 4. Management and security of information and digital content	Subdim. 5. Ethics and Digital responsibility
Kruskal Wallis- H	28.819	25.712	4.594	8.144	3.384
df	4	4	4	4	4
Sig.	.000	.000	.332	.086	.496

Upon finding significant values, a post hoc analysis (Table 5) is carried out where significant differences are observed between the groups of the dimension: digital skills ($p=.000$) and the sub-dimensions: *Management and use of information and data* ($p=.000$) and *communication skills* ($p=.000$).

Table 5. Post Hoc Analysis: Participation Profile, Digital Skills and Subdimensions

Dimension	Participation profile 1	Participation profile 2	Sig.
Digital Skills	Participation in political and social organisations	No participation, but interested in political and social organisations	.023
		Non-participation and no interest	.002
Sub-dimensions	Participation profile 1	Participation profile 2	Sig.
Management and use of information and data	Participation in political and social organisations	No participation, but interested in political and social organisations	.006
		Non-participation and no interest	.000
		Participation in social organisations	.006
	No participation, but interested in political and social organisations	Non-participation and no interest	.056
Communication skills	Participation in political and social organisations	No participation, but interested in political and social organisations	.020
		Non-participation and no interest	.000

When interpreting the data from the post hoc analysis (Table 5), the null hypothesis is partially rejected for the digital skills dimension regarding the relationship between people who participate in political and social organisations with those who do not participate but show interest ($p=.023$) and those who neither participate nor show interest ($p=.002$). Likewise, the null hypothesis related to the subdimension *Management and use of information and data* and the subdimension of *communication skills* is rejected in the cases described in Table 4 and 5.

However, the descriptive analysis (Table 3) of the results shows that there is a positive tendency favouring people who participate in political and social organisations that the rest of the profiles. They also point out that, in most cases, people who participate, tend to have a higher level of skills that the profiles that do not participate.

Results of hypothesis (H3) regarding participant's participation profile and the socio-civic skills dimension and sub-dimensions.

Table 6. Descriptive analysis: Participation profile, socio-civic skills and subdimensions

Dimension	Participation profile	N	Mean	Std. Deviation
Socio-civic skills	Participation in political and social organisations	31	4.453	.313
	Participation in social organisations	80	4.194	.441
	Participation in political organisations	15	4.202	.381
	No participation, but interested in political and social organisations	232	4.083	.417
	No participation, nor interested in political and social organisations	176	3.916	.406
Social and political behaviours and attitudes	Participation in political and social organisations	31	4.290	.608
	Participation in social organisations	80	3.248	.797
	Participation in political organisations	15	3.442	.956
	No participation, but interested in political and social organisations	232	3.027	.744
	No participation, nor interested in political and social organisations	176	2.437	.607
Digital empathy	Participation in political and social organisations	31	4.445	.077
	Participation in social organisations	80	4.407	.052
	Participation in political organisations	15	4.500	.097
	No participation, but interested in political and social organisations	232	4.437	.030
	No participation, nor interested in political and social organisations	176	4.420	.037
Social and digital engagement	Participation in political and social organisations	31	4.490	.446
	Participation in social organisations	80	4.435	.563
	Participation in political organisations	15	4.320	.439
	No participation, but interested in political and social organisations	232	4.274	.573
	No participation, nor interested in political and social organisations	176	4.235	.574
Critical thinking	Participation in political and social organisations	31	4.298	.600
	Participation in social organisations	80	4.071	.806
	Participation in political organisations	15	4.083	.548
	No participation, but interested in political and social organisations	232	3.959	.688
	No participation, nor interested in political and social organisations	176	3.801	.709

Table 6. Continued

Dimension	Participation profile	N	Mean	Std. Deviation
Democratic attitudes	Participation in political and social organisations	31	4.548	.085
	Participation in social organisations	80	4.487	.064
	Participation in political organisations	15	4.466	.141
	No participation, but interested in political and social organisations	232	4.425	.037
	No participation, nor interested in political and social organisations	176	4.325	.048
Prosocial behaviour	Participation in political and social organisations	31	4.634	.337
	Participation in social organisations	80	4.516	.595
	Participation in political organisations	15	4.400	.507
	No participation, but interested in political and social organisations	232	4.376	.534
	No participation, nor interested in political and social organisations	176	4.276	.546

The working hypothesis (H3) stated that people who participate in political or social organisations will have a higher level of socio-civic skills than the rest of the participatory profiles. The results were analysed using Kruskal-Wallis H test to determine if there are statistically significant differences between the participation profiles (Cubo Delgado et al., 2011). Considering the results indicated in Table 7 and Table 8, the null hypothesis is partially rejected. In the sub-dimensions in which the null hypothesis has been rejected, a post hoc analysis was performed to identify statistically significant differences between the participation profile groups.

Table 7. Kruskal-Wallis H Test: Participant's Participation Profile, Socio-Civic Skills, And Sub-Dimensions

Dimension: Socio-civic skills						
H – Kruskal Wallis	58.891					
df	4					
Sig.	.000					
Sub-dimensions of Socio-civic Skills						
	Subdim. 1. Social and political behaviours and attitudes	Subdim. 2. Digital empathy	Subdim. 3. Social and digital engagement	Subdim. 4. Critical thinking	Subdim. 5. Democratic attitudes	Subdim. 6. Prosocial behaviour
H – Kruskal Wallis	143.449	.444	11.774	20.675	5.632	22.037
df	4	4	4	4	4	4
Sig.	.000	.979	.019	.000	.228	.000

Upon finding significant values, a post hoc analysis (Table 7 and Table 8) is carried out where significant differences are observed between the groups of the dimension: socio-civic skills ($p=.000$) and the sub-dimensions: *Social and political behaviours and attitudes* ($p=.000$), *social and digital engagement* ($p=.019$), *Critical thinking* ($p=.000$), and *prosocial behaviour* ($p=.000$).

Table 8. Post Hoc Analysis: Participation Profile, Socio-Civic Skills and Subdimensions

Dimension	Participation profile 1	Participation profile 2	Sig.
Socio-civic skills		Participation in social organisations	.025
	Participation in political and social organisations	No participation, but interested in political and social organisations	.000
		Non-participation and no interest	.000
	Participation in social organisations	Non-participation and no interest	.000
	No participation, but interested in political and social organisations	Non-participation and no interest	.001

Table 8. Continued

Sub-dimensions	Participation profile 1	Participation profile 2	Sig.
Social and political behaviours and attitudes	Participation in political and social organisations	Participation in social organisations	.000
		Participation in political organisations	.002
		No participation, but interested in political and social organisations	.000
		Non-participation and no interest	.000
		Participation in social organisations	.000
		Participation in political organisation	.000
Social and digital engagement	Participation in social organisations	No participation and no interest	.002
		Non-participation and no interest	.003
Critical thinking	Participation in political and social organisations	Non-participation and no interest	.037
		Participation in social organisations	.006
Prosocial behaviour	Participation in political and social organisations	Non-participation and no interest	.009
		Participation in social organisations	

When interpreting the data from the post hoc analysis (Table 8), we proceed to partially reject the null hypothesis for the socio-civic skills dimension regarding the relationship between people who participate in political and social organisations and several other participation profiles, such as participation in social organisations ($p=.000$), not participating but declaring interest in political or social organisations ($p=.000$) and those who do not participate nor interest ($p=.000$). Likewise, the null hypothesis is rejected in the previous cases (Table 7) since significant differences are observed between the different participatory profiles in relation to the socio-civic skills dimension and the sub-dimensions: *socio-political skills and behaviours*, *social and digital engagement*, *critical thinking*, and *prosocial behaviour*. The rest of the profiles and subdimensions do not present significant differences. However, the descriptive analysis (Table 6) of the results shows that there is a positive tendency favouring people who participate in political and social organisations that the rest of the profiles. They also point out that, in most cases, people who participate, tend to have a higher level of skills that the profiles that do not participate.

Discussion

This paper wanted to explore the role of digital and socio-civic skills as facilitating skills for youth participation and thus, analyse the relationship between sociodemographic variables (sex, age, educational level, and political ideology), with the participatory profile of young people. The results point out that there is a significant dependence between the participatory profile. However, the value of the contingency coefficient, determining the strength of the relationship between the participation profile and all sociodemographic variables is low. Consequently, the results partially coincide with previous studies (Burr et al., 2020; Hatlevik et al., 2015) that confirm how educational attainment and age are core factors that influence online participation. In addition, other research (Colloca, 2018) adds that social divides such as economic status and people from disadvantaged backgrounds tend to have more negative civic attitudes. Furthermore, drawing on the conclusions of Cahill and Dadvand (2018), young people participate actively based upon the motivation and the purpose for getting engaged. These authors state that when researching youth participation there are other factors, such as the environment and context, motivation, and certain conditioners of participation, all of which can be overcome and compensated accordingly. From an educational perspective, effective citizenship education is crucial to addressing this concern (Janmaat & Hoskins, 2021). In this sense, education plays an important role in enabling all children to acquire the skills they need as citizens to participate actively and responsibly in democratic society (Richardson & Milovidov, 2019), and acts as a promotor for social and political engagement and adult citizenship. Janmaat and Hoskins (2021) highlight the current difficulties to developing citizenship (either traditional or digital) in national curriculum, they speak of citizenship education having a low priority status, being subject to nationalistic agendas, and there being a lack of robust evidence. Other difficulties facing practitioners in this field is how to maintain pace with, and respond positively to, changes unfolding in contemporary societies. In this sense, taking under consideration the current digital and global society and including the lack of a digital and global perspective as a hinderance to citizenship education.

The results provide information on digital and socio-civic skills development and on how they can influence levels of social and political engagement. The Kruskal-Wallis's H results show significant differences between those young people

who actively participate in social and political organisations regarding other types of participation and even, those who do not participate, and digital and socio-civic skills.

Regarding the relationship between participatory profiles and digital skills, the results highlight significant differences between people who participate in political and social organisations with those who do not participate. Specifically, regarding the management and use of information and data and communication skills, the results show a general positive tendency towards higher participation profiles. Therefore, this suggests that when participating in political and social organisations, young people gain agency and skills in managing and using information. However, this is not the case for young people who participate in political organisations. This could be due to the organisational structure or the dynamics of information sharing and decision-making. In other words, young people who participate in political and social organisations have greater digital skills in terms of the management and use of information and data and communication skills, compared to people that do not participate. This suggests that digital technologies are tools for facilitating communication and citizen participation, in addition to advocating the educational value of being an active volunteer or member of a social or political organisation. In other words, digital technologies and social media are tools for communicating, facilitating invitations to participate, and getting involved with social and political issues, making messages, digital content, posts, and comments accessible for larger and wider groups (Maher & Earl, 2019). Digital Citizenship curriculum and teaching activities could be designed to develop these skills as a prelude to promoting civic engagement.

Regarding the relationship between participatory profiles and socio-civic skills, there are significant differences between people who participate in political and social organisations and those who only participate in social organisations ($p=.025$) as well as those who do not participate but declare an interest in some social or political organisations ($p=.000$); and those who do not ($p=.000$). Once again, the results highlight that social and political participation contribute to the development of said skills. This is also consistent in the following sub-dimensions of socio-civic skills: *Social and political behaviours and attitudes, social and digital engagement, critical thinking, and prosocial behaviour.*

On the one hand, the development of socio-political skills and behaviours, which includes actions such as searching for information and news about political and social current affairs, being part of groups on social networks that deal with political and social issues, as well as making use of digital technologies to exercise citizenship, is demonstrably higher in active participation profiles. Significant differences can be found between those who participate in political and social organisations and all other participation profiles: social ($p=.000$), political ($p=.002$) as well as with participants who do not participate but have an interest ($p=.000$) and those who do not have any interest ($p=.000$). On the other hand, regarding critical thinking there are also significant differences between those who participate in social and political organisations and only social organisations with participants who do not participate but share an interest in their activities ($p=.003$ and $p=.037$, respectively). Therefore, as stated previously with digital skills development, the need arises to promote the development of digital skills, with special emphasis on information literacy and the development of evaluative and critical skills of young people. Also, a possible interpretation of the results show that political and social participation promotes the search, access, identification, analysis and evaluation of information and data (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2011). Finally, regarding prosocial behaviour, the descriptive and statistical data shows there are significant differences between young people who do not participate but declare an interest with those who participate in political and social organisations ($p=.006$) and with those who only participate in social organisations ($p=.009$), positively favouring higher participation profiles. This sub-dimension measures among other aspects, the ability to criticize and reject any type of violent behaviour; a fact that takes on special relevance given the latest political events around the world, such is the case in the United States, with the use of Twitter and the uprising at the Capitol. The development of socio-civic skills, and this sub-dimension specifically, is centred on putting civic and social values, such as respect, solidarity, or a sense of collective responsibility into effect. As well as promoting non-violent behaviours and attitudes promoting a culture of peace, dialogue, and active listening (Morales Lozano et al., 2011).

Therefore, there is a need to start looking at digital and social skills as key catalysts for closing the digital divide and social exclusions in society. They can be perceived as promoters for engagement and active social participation as well as key tools for transforming societies in terms of social justice, equity, and human rights. However, a more critical view on the results of this paper points towards non-formal and informal educational settings having more of an impact on digital citizenship than formal education. Thus, the existing curriculum in schools is insufficient not only for educating in digital literacy but in promoting citizenship and global understanding too. Furthermore, other research evidence (Burton et al., 2015; Gleason & von Gillern, 2018; Martin et al., 2019; Pusey & Sadera, 2012) adds that teachers are insufficiently prepared to provide lessons or serve as role models for digital citizenship (Dedebali & Dasdemir, 2019) but are becoming increasingly aware of its importance (Hollandsworth et al., 2011). When educating youth in digital citizenship we also need to consider a more open-minded learning process provided not only from formal education but also non-formal and informal settings and how all contribute simultaneously to capacity building. The quality of formal and non-formal education is crucial in building capacities to deal with disinformation and other threats, like civic deficits, to democratic societies (King, 2019). In other words, a key determinant of democratic awareness is thinking critically about information and knowledge (Cho et al., 2017). This can only be achieved by creating a wider enabling environment.

Conclusion

The development of digital and socio-civic skills promotes digital citizenship education. Schools, by focusing on the skills development of students, have the potential to cultivate a generation that is informed, critical and aware of their social and civic responsibility in a global and digital society. In turn, this can also be fostered within non-formal educational settings such as NGO's and youth organisations. The promotion and incorporation of new ways of participation from and within schools can facilitate the creation of a culture of participation which is essential for safeguarding the values of global citizenship and democratic societies. Meaningful youth participation implies participating in equal conditions between adults and young people. Among the proposals to conceptualize youth participation, the importance of establishing a favourable environment to empower youth and help them gain further agency (Dabbagh & Castaneda, 2020). This can include educational actions via digital and socio-civic skills development. It is not only necessary to alleviate the possible social and digital gaps in access to digital spaces and the exercise of citizenship (Soengas Pérez & Assif, 2017), but also it is necessary to attend to the strengthening of capacities such as digital and socio-civic skills and other factors that can act as inhibitors of participation. In other words, the development of digital and socio-civic skills is essential in the exercise of digital citizenship and, therefore, in citizen and youth participation. Specifically, in the exercise of citizenship and activism in social and political organisations, although the role of informal learning in the development of skills that enhances participation is a resource, still unexploited (Panke & Stephens, 2018). Learning *to* participate and learning *through* participating are key aspects that are drawn from the results of this paper.

Recommendations

The data shows that participating in one or several organisations encourages further development of the core aspects of digital and socio-civic skills. These results can help European and national policymakers to shape the skills development of youth in both formal and non-formal educational settings. Furthermore, more teacher training is needed on digital citizenship as issues regarding digital citizenship education like who teaches it, when, and how it is delivered and assessed, are still yet to be met with robust evidence and support. Additional research should explore educational processes as an important part in the development of the necessary skills to change the existing exclusion, inequality, and social injustice. Educating youth on these topics and developing active citizens can be defined as a process through which people develop their abilities, skills, and knowledge in order to get involved in their social environment, participate in it and develop recognition links with others from anywhere in the world (Ramírez Iñiguez, 2016). Thus, digital citizenship needs to rapidly become a priority for formal and non-formal education institutions (Dias Fonseca & Potter, 2016; Hennig Manzuoli et al., 2019; Sanabria Mesa & Cepeda Romero, 2016) and for researchers. Moreover, a higher degree of digital inclusion must improve the capacity of society to meet the needs of access to digital services, along with digital literacy and equal opportunities (Cantabrana et al., 2015) by developing a solid digital literacy for citizens.

Limitations

This study provides an exploratory and descriptive analysis of quantitative data regarding how participation related to skills development. However, it does not analyse what factors help and hinder skills development nor does it explore participation from a young person's perspective or delve into how to develop digital citizenship in the classroom. Further research will address these issues as well as researching into how to shape a skills-based curriculum and how to teach digital citizenship education.

Authorship Contribution Statement

Peart: concept and design, data acquisition, data analysis / interpretation, drafting manuscript, statistical analysis. Cubo-Delgado: drafting manuscript, critical revision of manuscript, statistical analysis, supervision, final approval. Gutiérrez-Esteban: drafting manuscript, critical revision of manuscript, statistical analysis, supervision, final approval.

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