Digital media use on school civic engagement: A parallel mediation model

Medios digitales y participación cívica escolar: Un modelo de mediación paralela

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ABSTRACT

Despite the democratised access to digital media, there are still gaps in uses and opportunities according to age, sex, socioeconomic level, and location. In addition, the study about the use of digital media by children and adolescents has focused more on the risks than on the opportunities. This study analyses the relationship between different uses of digital media (socialisation, socio-political, and learning purposes), with school civic engagement. A sample of 524 students ($M_{age}=12$; 43.7% girls) from Santiago de Chile participated. Structural equation modelling with latent variables was used to test a parallel mediation model in which the use of socialisation in digital media is related to school civic engagement, through digital media use for socio political purposes and the digital media use for learning purposes. In addition, multigroup analysis by sex was tested. The main results showed that digital media use for socialisation has a positive effect on school civic engagement through the parallel mediation of digital media use for socio-political purposes and the digital media use for learning purposes. The multigroup analysis showed that mediation is significant in both boys and girls. The results have contributed to the expansion of knowledge about the opportunities of digital media on civic engagement in formal school contexts.

RESUMEN

A pesar de la democratización del acceso a los medios digitales, siguen existiendo brechas en los usos y oportunidades según edad, género, nivel socioeconómico y localización. Además, estudios sobre usos de medios digitales por parte de niños y adolescentes se han centrado más en riesgos que en oportunidades. Este estudio analiza la relación entre los usos de los medios digitales (socialización, sociopolíticos y aprendizaje), y el compromiso cívico escolar. Participó una muestra de 524 estudiantes ($M_{age}=12$; 43,7% niñas) en Santiago de Chile. Se utilizó un modelo de ecuaciones estructurales con variables latentes para probar un modelo de mediación paralelo en el que el uso de los medios digitales para la socialización se relaciona con el compromiso cívico escolar, a través del uso de los medios digitales con fines sociopolíticos y el uso de los medios digitales con fines de aprendizaje. Finalmente, se realizó un análisis multigrupo por sexo. Los resultados mostraron que el uso de medios digitales para la socialización tiene un efecto positivo en el compromiso cívico escolar a través de la mediación paralela del uso de los medios digitales con fines sociopolíticos y el uso de los medios digitales con fines de aprendizaje. El análisis multigrupo mostró que la mediación es significativa tanto en hombres como mujeres. Los resultados amplían el conocimiento sobre las oportunidades de los medios digitales para el compromiso cívico en contextos escolares.

KEYWORDS | PALABRAS CLAVE

Digital media, civic school engagement, digital citizenship, digital gender gap, adolescence, mediation model.
Medios digitales, participación cívica escolar, ciudadanía digital, brecha digital de género, adolescencia, mediación paralela.

1. Introduction

The Internet has become a bidirectional communication, providing a new paradigm for understanding human interaction (Saputra & Siddiq, 2020). Several researchers have considered the increasing digitization as a democratising potential (Zriba, 2019; Mossberger & Tolbert, 2010). According to the Survey We Are Social (2021), the world population for 2021 is 7,830 million people, of which 59.5% actively use the Internet. In Chile, the report indicates that 82.3% have internet access. These data reflect the boost given by the Covid pandemic to social digitisation, which brought all social practices to digital environments, requiring all citizens to acquire digital skills and highlighting socio-digital inequalities.

Access to and use of the Internet have not only brought new opportunities, but have also introduced new forms of civic participation which seek to respond to the new dynamics of the 21st century, making it necessary to redefine activism with digital democracy as the axis as it leads to citizens being concerned about their empowerment, thus expanding their participation (Gil-Moreno, 2017). Furthermore, this redefinition in the form of participation in the digital society has promoted research on the uses of the Internet as indicators of participation and opportunities for children and adolescents (Livingstone et al., 2018). These opportunities to participate in the digital society have been conceptualised under digital citizenship, which does not replace the concept of citizenship, nor is it a dimension, but rather a set of practices through which civic activities are carried out in digital environments.

Therefore, it refers to the ability and use of ICTs to plan, organise, or carry out activities in the fields of social, political, economic, and academic-cultural citizenship (Mossberger et al., 2007; Yue et al., 2019; Runchina et al., 2022). Regarding the exercise of digital citizenship, since 2006, the Kids Online researchers have been studying the activities they developed on the Internet and the risks involved in digital environments, generating a typification of the types of communication where the more passive roles (the receiver of the content) are differentiated from the more active and interactive roles (participant and actor). On the other hand, understanding the uses of the Internet has identified risks associated to commercial, sexual, and aggressive activities, both at a personal and evaluative level (Livingstone & Haddon, 2009; Livingstone et al., 2018; Martin et al.,2018).

Studies on the opportunities of digitisation in children and adolescents are more limited than studies on the risks of Internet use (Vázquez-Barrio et al., 2020). In addition, for children and adolescents, digital media use can promote the development of feelings of competence in creating material and web pages, the generation of educational elements, health promotion and prevention, and support in academic achievements and goal-setting (Arab & Díaz, 2015). However, despite these opportunities, the use of these means often has a negative connotation since it carries risks such as unwanted exposure to violence, the creation of false profiles, cyberbullying, grooming, and addiction to the Internet, among others (Arab & Díaz, 2015).

Therefore, the current research seeks to contribute to empirical knowledge about the opportunities that participation in digital environments offers to children and adolescents. Furthermore, socioeconomic level, age, sex, geographic location (urban/rural), and digital skills are fundamental in differentiating factors (Sanders, 2020). In particular, the current study aims at analyzing the relationship between the use of digital media for socialisation (DSOC) and school civic engagement (CIVE), through the use of digital media for socio-political purposes (DPOL) and the use of digital media for learning purposes (DLEA). In addition, considering the digital gender gaps described by some authors (Sanders, 2020; Cabello & Claro, 2017a; Cabello et al., 2021; Masanet et al., 2021; Herranz et al., 2017), the moderating role of sex in the mediation model between DSOC and CIVE through DPOL and DLEA is analysed.

1.1. Types of digital media use by children and adolescents

Young people use digital media for different purposes. The instruments used by the international group of Global Kids Online (2022) in the dimension of activities (opportunities) and the different forms of participation of children and adolescents were grouped into uses for learning, community participation, socialisation[1], and civic participation. The learning subdimension alludes to the possibility of seeking information to acquire new knowledge either individually, through the consumption of educational content, or collaboratively, by sharing with others with the same interests (Garmendia et al., 2012; Jasso-Peña et al.,

2019). It also refers to the use of the Internet and social networks to carry out work, tasks and activities that occur in the educational environment, as well as to maintain contact with their teachers and classmates to solve doubts (Cabello & Claro, 2017a; Cabello et al., 2021; Laje & Gasel, 2019).

As for the sociability dimension, it refers to the new possibilities of bonding, socialising with others and maintaining face-to-face relationships, transcending spatial limitations, and favouring the identification and consolidation of groups with shared interests (Meikle, 2016; Runchina et al., 2022). On the other hand, the dimension of citizenship and community contemplates the extension and expansion of the possibilities of political participation through sharing one's experiences and consolidating a digital identity (Claro et al., 2021), where it becomes possible to create systems and relationships that support communities that share information dynamics about the events that afflict their local and global community, also questioning the role of digital technologies in daily life (Choi, 2016; Gleason & von-Gillern, 2018; Chen et al., 2021).

The motivations for citizen participation are those that, without adopting a political character, have the purpose of solving the problems of a community or group, while the social ones refer to the predisposition to engage in discussions on specific public issues and the need to obtain information, express opinions, and persuade others through informal political conversations.

This expansion of possibilities has given rise to new forms of participation, thus increasing the growing interest of young people in politics and social participation, actively engaging with specific issues through innovative activities carried out through social networks, which have both an informative and discursive function that allows them to connect with each other, express and share their views, emotions, and identities (Emejulu & Mcgregor, 2019; Jost et al., 2018; Kim & Yang, 2016). These new spaces of socialisation facilitate individuals to increase their capabilities to achieve their personal goals through collective activities (Consalvo & Ess, 2011), these can trigger actions that have been characterised as digital activism, that is, ways in which citizens use digital environments to influence social and political change, in addition to giving a voice to groups usually marginalised in the traditional media (Lozano & Fernandez, 2020).

The new political interests of young people respond to a generational change since they have grown up with digital media. They are especially attracted to these collective experiences that revolve around social identity, empowering them to express their feelings and opinions through new forms of political communication (Dennis, 2018). Therefore, when studying the forms of citizen participation, generational changes must be considered, adding key factors such as managing a profile on social networks or participating in online debates and discussions (Holt et al., 2013; Pangrazio & Cardozo-Gaibisso, 2020).

1.2. Citizenship participation in a digital society

Our interest in digital participation is motivated by the possibilities offered by the new digital environments, especially social networks, establishing a participatory culture characterised by peer-to-peer participation, highly interactive, based on horizontality and independence from traditional institutions (Jenkins et al., 2009). It is in this participatory culture in social networks where adolescents engage, collaborate, and create content, while connecting with a wide range of people who share their interests (Kahne & Bowyer, 2019).

It is because of the participatory culture that citizen participation in digital environments must be contemplated by education, which has the challenge of providing students with the necessary preparation for leading a responsible life in a knowledge society and guidance for the improvement of human conditions as the foundation of democracy and social justice (Luengo-Kanacri & Jiménez-Moya, 2017). In addition, it should provide young people with skills that allow them to adopt an active and critical role in the face of multimedia texts and multimodal media services, thus allowing them to be part of the information society (Dias-Fonseca & Potter, 2016; Fuentes & Belando-Montoro, 2022).

Luengo-Kanacri et al. (2021) emphasise that the role of the school should not be considered in a general way, but should allow for the specific mechanisms through which school dynamics operate in relation to individual differences in order to ensure greater civic engagement among young people. In this sense, Fernández-Prado et al. (2021) conclude that individual integration in civic action cannot be sustained only in the face-to-face or online environment but must be complemented by strong participation

in both environments in order to foster sustained engagement over time, impacting both individuals and their communities. Also, there is evidence that informal digital participation is indeed positively correlated with offline civic participation inside and outside school contexts (Días-Fonseca, 2019; Manca et al., 2021), becoming an important factor to explain mechanisms of involvement, agency, and participation in adolescents.

Gleason and von-Gillern (2018) conducted a study which proposed that digital media provide an entertaining and engaging way for young people to learn about their citizenship and civic education, while reducing barriers to participation. The use of social networks is a new way in which young people can develop their digital citizenship skills through the exchange, production, and debate of information related to politics. Through the empirical findings, they found various activities of young people both in digital environments and outside of these, ranging from participating through Twitter about political protests that are taking place live, to participating in community service projects and generating awareness and support for equitable school funding.

1.3. Digital gender gaps

In the interest of analysing public policies around digital inclusion in Chile, we define and typify the gaps in access (first-order gap), uses (second-order gap), opportunities, and rights (Cabello & Claro, 2017b). They highlighted that governmental actions have focused on access and individual connection where access is related to opportunities from the belief that its use brings benefits, without considering the persistent and systematic differences between different groups and individuals of different origins (Helsper, 2021). Regarding gender differences, they found that girls spend more time online than boys, and use the Internet more for academic purposes, while boys do it more for entertainment purposes such as playing online (Cabello & Claro, 2017a; Cabello et al., 2021).

The above reinforce gender roles and stereotypes, limiting the use by women to communicative purposes and men relating more to technology skills (Masanet et al., 2021). These differences have led to conceptualising the term digital gender gap, whose purpose is to measure the delay of women in Internet use, identifying the barriers that limit the benefits of participating in the digital society (Herranz et al., 2017; de-Andrés-del-Campo et al., 2020). The importance of typifying the differences in uses between men and women lies in the fact that the different sources of the gender gap do not act in isolation, but interact with each other, accumulating impediments in the access to ICTs for certain citizens.

Therefore, it is essential to analyse the types of digital participation (learning, socialisation, and socio-political) and their relationship with the school civic engagement of children and adolescents, by paying special attention to the differences between boys and girls. From a rights and inclusive development approach, where digital environments represent new areas of concern, it is important to safeguard the principles of equality and non-discrimination (Rotondi et al., 2020). This study will provide empirical evidence of the concept of the digital gender gap in specific domains of digital participation (learning, socialisation, and socio-political) and consider its relationship with school civic engagement.

1.4. The present study

Considering previous studies that relate the use of digital media to school civic engagement (Literat et al., 2018) and that the most frequent use of digital media by adolescents is to socialise with others (Cabello & Claro, 2017a; Cabello et al., 2021), this study aimed to explain the relationship between the use of digital media for socialisation (DSOC) and school civic engagement (CIVE). More specifically, a model was tested where the digital media used for learning and for socio-political purposes acted as parallel mediators of this relationship. In other words, we hypothesised that a higher use for socialising (e.g., communicating by video call with friends) leads to a higher use for learning (e.g., searching for information or learning new things) and socio-political (e.g., discussing politics on social media) purposes, which, in turn, predict increased civic engagement at school.

In addition, considering the digital gender gaps described by some authors (e.g., Sanders, 2020; Cabello & Claro, 2017a; Cabello et al., 2021; Masanet et al., 2021; Herranz et al., 2017), the moderating role of sex in the mediation model between DSOC and CIVE through DPOL and DLEA was analysed.

We believe that this objective, in addition to providing empirical evidence, can contribute to the design of public policies in school contexts.

2. Methods

2.1. Participants and procedure

This study was carried out in four schools (both public and subsidised) in the city of Santiago de Chile (two classrooms per school). The sample consisted of N=524 students between 11 and 15 years old (M=12 years old, SD=1.11), of which 275 were boys (52.5%) and 229 were girls (43.7%), and 20 of them did not report their gender (3.8%). Likewise, 413 students (78.8%) considered themselves Chilean and 79 (15.1%) were immigrants. The data was extracted from the wave 1 of a longitudinal project, ProCiviCo (Luengo-Kanacri et al., 2020), which is a school-based intervention aimed at promoting prosocial behaviour and civic participation for social cohesion. In this study the data prior to the intervention carried out was used.

Regarding the recruitment of the schools, they were identified in the city of Santiago, and the project was presented to the School Council and the teachers' assembly for approval. Once the alliance with the schools was established, the students and their respective parents were contacted, who gave their consent to participate after receiving all the necessary information about the project. Data were collected through a face-to-face questionnaire, which was subsequently coded for data analysis. During data collection, a member of the research team and a schoolteacher accompanied the students to answer questions about it. This project was approved by the ethics committee of the Pontificia Universidad Católica de Chile, safeguarding all ethical standards.

2.2. Measures

2.2.1. School Civic Engagement (CIVE)

To assess student's civic engagement, three items from the Civic Engagement Scale were used (See appendix). This scale is adapted from the International Study of Civic and Citizenship Education (Torney-Purta et al., 2008a; Torney-Purta et al., 2008b). The response options range from 1 (Never/Almost never) to 7 (Always). Examples of items are "You participated in activities organised by the school or the students, outside school hours (...)", "You participated in campaigns to raise money and donations". Cronbach's alpha=.672.

2.2.2. Activities (opportunities) of digital media use

To assess the use of digital media by adolescents, some items of the activities (opportunities) dimension in relation to civic participation, social relationships and learning were used from the adaptation made by Cabello et al. (2018) of the Global Kids Online instrument (2022). Response options range from 1 (Never/Almost never) to 7 (Always). Three dimensions were assessed as follows.

2.2.2.1. Socio-Political Dimension (DPOL) Four items were used to evaluate the creation of community relationships that share information dynamics about the events that affect society (See appendix). An example of the items is "Have you discussed political or social issues with other people online?". Cronbach's alpha=.672.

2.2.2.2. Learning Dimension (DLEA) Two items measured the possibility of seeking information to acquire new knowledge, using the Internet to carry out work and tasks (See appendix). An example of an item is "Have you learned something new by searching online?". Pearson's correlation=.342 p<.001.

2.2.2.3. Socialisation Dimension (DSOC) Two items measured the new possibilities of relating and socialising with others, transcending spatial limitations, and favouring the identification and consolidation of groups with shared interests (See appendix). An example of this scale is "Have you talked to family or friends who live further away using Skype?". Pearson's correlation=.672. p<.001.

3. Analysis and findings

For the descriptive and correlation analysis, we used the SPSS 25 software. The parallel mediation model where the use of digital media predicts civic school engagement was tested by structural equations modelling using MPLUS 8.3 software (Muthén & Muthén, 2017). This multivariate technique uses a conceptual model, path diagram and system of linked regression-style equations to capture complex and dynamic relationships within a web of observed and unobserved variables (Gunzler et al., 2013).

Maximum Likelihood (ML) was used as the estimation method. The following criteria were used to determine an acceptable model fit: A Root Mean Square Error of Approximation (RMSEA) ≤ 0.06, Comparative Fit Index (CFI) ≥ 0.95, Tucker-Lewis Index (TLI) ≥ 0.95, Standardised Residual Mean Square (SRMR) ≤ 0.08 indicating a good fit (Hu & Bentler, 1998).

In the model, variables were defined as latent variables (e.i., constructs or factors, which synthesise the items measured). Before testing the direct and indirect relationships, the measurement model was tested, that is, ensuring that the factorial structure was adequate. The bias-correction (BC) bootstrap approach was used to determine the significance of indirect effects (95% CI) through 5,000 resamples.

4. Results

4.1. Descriptive statistics and correlation

Table 1 shows the descriptive statistics and the correlations between variables of models. Civic school engagement was positively related to the socialisation dimension (r=0.22, p<0.01), to socio-political dimension (r=0.353, p<0.01) and learning dimension (r=0.26, p <0.01) of digital media use. In other words, adolescents with the highest digital media use for the purposes analysed show higher civic school engagement.

Regarding control variables, gender (2=girls) was negatively associated to socialisation dimension (r=-.13, p<0.01), socio-political dimension (r=-.13, p<0.01). This means that females use digital media less for these purposes than males. Also, the higher the mother's educational level, the more adolescents use digital media for socialisation (r=.10, p<0.05) and for learning purposes (r=.16, p<0.01).

| Table 1. Descriptive statistics and correlations								
Variables	M	SD	1	2	3	4	5	6
1. Gender (girls)								
2. Mother's education level	2.45	.50	-.08					
3. Age	12.27	1.11	-.02	-.14**				
4. School civic engagement	2.21	.62	-.08	.04	.01			
5. Socialisation dimension	2.53	.99	-.13**	.10*	.02	.22**		
6. Socio-political dimension	1.49	1.16	-.13**	.02	.21**	.35**	.29**	
7. Learning dimension	3.64	.82	-.01	16**	-.10*	.26**	.26**	.11*

Note. 1 boy=1, girl=2.2 *p<0.05. ** p<0.01.

4.2. Measurement model

Four latent variables were included in the model: school civic engagement, digital socio-political participation, digital sociability, and digital learning. A Confirmatory Factor Analysis was conducted to analyse the measurement model. The factor loadings of all items towards their respective constructs were significant (p<0.001), indicating the one-dimensionality of each latent variable analysed. The fit indices of the measurement model were satisfactory (RMSEA=.040 [90% CI=.024, .055], CFI=0.979, TLI=.969, SRMR=.033) Chi X^2=68.32 P-Value=.0018.

4.3. Structural model

We also analysed a mediation model with MPlus to identify the indirect effect from DSOC to CIVE through the parallel mediation DPOL and DLEA. In addition, we controlled some covariables: gender, age, and mother's educational level.
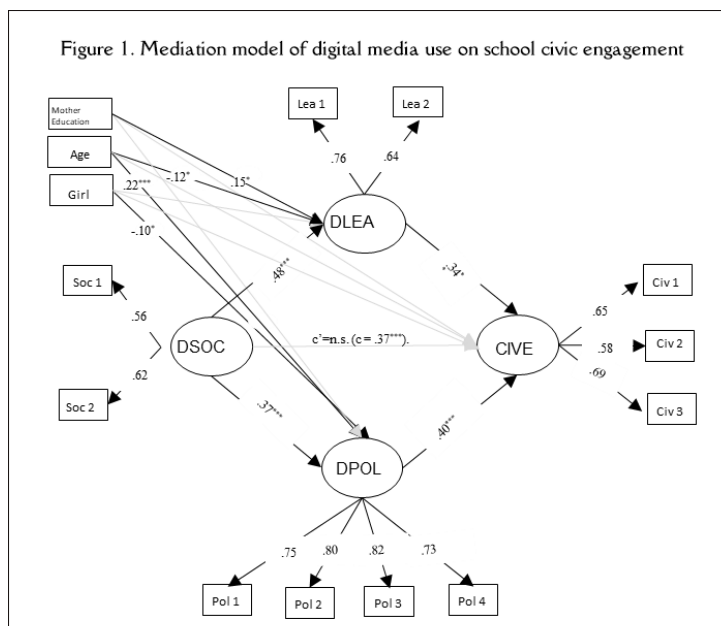
Figure 1. Mediation model of digital media use on school civic engagement

Note. C=Total effect; c'=Direct effect. DSOC=Digital media use for Socialisation purposes. DLEA=Digital media use for Learning purposes. DPOL=Digital media use for Socio-political purposes. CIVE=School Civic Engagement.

Once the measurement model was verified, the effect of digital media uses for socialisation (DSOC) on school civic engagement (CIVE) was examined through the parallel mediation of digital media use for socio political purposes (DPOL) and digital media use for learning purposes (DLEA). In addition, the effects of gender, age, and mother's education level were controlled. Altogether, the structural model showed a good fit (RMSEA [90% CI]=.033 [.019, .046], CFI=0.977, TLI=.968, SRMR=.040; Chi^2=95.767 p-value r=.0049). Figure 1 shows the influencing paths in detail. The higher use of digital media to socialise is associated with higher use for socio-political and learning purposes, which, in turn, lead to high civic engagement at school. Regarding the control variables, age had a significant and positive effect on DPOL (β=.22; p<.001) and a negative effect on DLEA (β=-.12; p<.05). Gender shows a negative effect on DPOL, (β=-.10; p<.05) that is, girls use digital media less than boys for socio political purposes. The mother's educational level positively affects DLEA (β=0.128; p<.05), that is, adolescents whose mothers have a higher educational level use more digital media for learning.
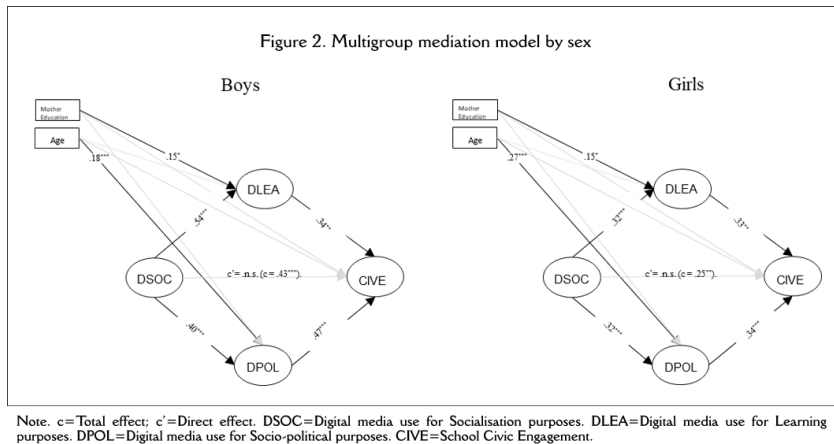
4.4. Indirect effect

Table 2 shows the parallel mediation effects of DLEA and DPOL on the relationship between DSOC and CIVE. DLEA significantly mediated the relationship between DSOC and CIVE (95% CI=[.082,.314]). Similarly, DPOL mediated the relationship between DSOC and CIVE (95% CI=[.076, .238]). The direct effect between DSOC and CIVE in the model is not significant, indicating a total mediation of DLEA and DPOL. In other words, adolescents who socialise through digital media have a higher school civic engagement because they use digital media more for socio-political and learning purposes.

Table 2. Indirect effect of digital communication on civic engagement			
Model pathways	Point estimated	BC bootstrap 95% CI	
		Lower	Upper
Total	.372[a]	.221	.523
Total Indirect	.305[a]	.194	.476
DSOC → DLEA → CIVE	.160[a]	.082	.314
DSOC → DPOL→ CIVE	.145[a]	.076	.238
Direct effect DSOC → CIVE	.066	-.165	.288

Note. DSOC= Digital media use for Socialisation purposes. DLEA= Digital media use for Learning purposes. DPOL= Digital media use for Socio-political purposes. CIVE= School Civic Engagement. BC= Bias-corrected bootstrap. Confidence interval was constructed with 5000 resamples. [a] =The 95% confidence interval does not overlap with zero.

4.5. Gender multigroup

A multigroup analysis was used to explore gender differences in the parallel mediation model. The model with all invariant paths between groups showed a good fit (RMSEA [90% CI]=.037 [.020, .051], CFI=0.969, TLI=.964, SRMR=.055; Chi2=173.929 p-value=.0072). Figure 2 shows the influencing paths in detail.

Figure 2. Multigroup mediation model by sex

Note. c=Total effect; c'=Direct effect. DSOC=Digital media use for Socialisation purposes. DLEA=Digital media use for Learning purposes. DPOL=Digital media use for Socio-political purposes. CIVE=School Civic Engagement.

The indirect effects of DSOC on CIVE through DLEA and DPOL were significant in both girls and boys. However, as shown in Table 3, the effect sizes varied between girls and boys.

Table 3. Gender differences. Indirect effect of digital communication on civic engagement						
	Boys			Girls		
Model pathways	Point estimated	BC bootstrap 95% CI		Point estimated	BC bootstrap 95% CI	
		Lower	Upper		Lower	Upper
Total	.430[a]	.244	.615	.248[a]	.107	.390
Total Indirect	.371[a]	.208	.534	.215[a]	.100	.329
DSOC → DLEA → CIVE	.182[a]	.061	.303	.105[a]	.020	.190
DSOC → DPOL → CIVE	.181[a]	.088	.290	.109[a]	.050	.168
Direct effect DSOC → CIVE	.059	-.191	.309	.034	-.120	.188

Note. DSOC=Digital media use for Socialisation purposes. DLEA=Digital media use for Learning purposes. DPOL=Digital media use for Socio-political purposes. CIVE=School Civic Engagement. BC=Bias-corrected bootstrap. A confidence interval was constructed with 5,000 resamples. [a]=The 95% confidence interval does not overlap with zero.

5. Discussion and conclusions

This study aimed at explaining the relationship between the use of digital media for socialisation (very frequent among adolescents) and school civic engagement, through the mediation of other uses (for learning or for socio-political purposes). The hypothetical model that we have proposed in order to explain this relationship has shown that it is plausible that socialising through digital media is not directly related to school civic engagement, but rather indirectly, through the effect it has on the uses for learning (e.g, looking up information or learning new things) and for socio-political purposes (eg, talking about politics on social media).

Despite the risks that the use of digital media by children and adolescents may represent (Arab & Díaz, 2015), the results of this study show the potential of the use of digital media in the development and exercise of citizenship in school contexts. A high correlation between the uses of digital media for different purposes (socio-political, socialisation, and learning) is confirmed. In addition, this parallel mediation model was found to be significant in both boys and girls, although the mediation effect size is higher in boys. The use of digital media for learning and socio-political purposes was directly related to school civic engagement; however, within the model, the use of digital media to socialise was not directly related. Considering that adolescents use digital media more frequently to socialise through social network platforms (Cabello & Claro, 2017a; Cabello et al., 2021; De-la-Torre & Fourcade, 2012), we proposed a model where the use to socialise indirectly influences the school civic engagement through socio-political and learning uses. Similarly, results showed that digital media use for learning also mediates the relationship between the use for socialisation and school civic engagement. In this sense, when students use digital platforms to

socialise, to learn new knowledge and skills, or to do homework, it also predicts higher levels of school civic engagement.

The increase in telecommunications infrastructure (ICT) and the proliferation of cell phones have made evident the disparities in the way people use and take advantage of these technologies (Helsper, 2017; Helsper, 2021). Thus, the benefits of ICT use depend not only on access but also on people's individual, social, and cultural characteristics to take advantage of the opportunities available in digital environments. One of the challenges of studying the digital gap is its overlap with other forms of inequality (Herranz et al., 2017), such as gender or immigration status. The results are related to the meta-analysis of young People, Digital Media, and Engagement (Boulianne & Theocharis, 2020), which found that the way in which adolescents use online digital media has consequences for civic engagement outside (for example volunteering, participating, or protesting) and these positive impacts depend on political uses of digital media such as discussing politics online, reading or following political news, or blogging. The division by gender shows us that the use of digital media for socio-political and learning purposes as mediation mechanisms works in the same way in boys and girls. However, the strength of the relationships between the different uses of digital media and school civic engagement is stronger in boys than in girls. This is consistent with previous research that has found that men are more involved in digital content creation activities and are more related to technology, which favours a greater acquisition of digital skills compared to women (Masanet et al., 2021). Likewise, it evidences the gender gaps in the use of digital media, which could, in turn, be reflected in the difference in school civic engagement between boys and girls (Rotondi et al., 2020). One of the plausible limitations of this study, is the number of immigrant participants, which although it is not insignificant (15.1% of the total sample), we consider that they do not represent a sufficient sample to carry out comparative analyses, so it would be interesting to delve into how migratory status is related to the digital gap of the second order. Based on the above, we hope that this study can encourage future research considering the context of the pandemic and perform statistical analyses with a representative sample of migrant children, in order to explore the uses given to digital environments, in the new global context and the influence of intersectionality in this area. In addition, we are aware that these data were collected in only one country, Chile, so it would be interesting to strengthen this evidence in other places. Although structural equation modelling has shown that causal relationships are plausible (the model has shown a good fit), we do not rule out that other alternative models are also plausible, considering that the design was cross-sectional. It would be pertinent to test the model in future longitudinal studies or to compare different alternative models.

Finally, as future considerations and in terms of the contribution to the development of public politics, we believe it is relevant for educational institutions to reflect on the challenges that the digital society brings to the teaching-learning process. The school could serve as a mediator so that the daily use that adolescents make of digital media translates into civic actions, taking advantage of the enormous potential that digital media offer in learning processes and also in connection with social and political causes.

Notes

[1]This dimension was renamed as "Socialisation" due to the factor analysis carried out later, according to the theoretical label of Meikle (2016).

Authors' Contribution

Idea, C.C., J.R., P.L; Literature review (state of the art), R.F., C.C., J.R; Methodology, C.C., P.L., J.R; Data analysis, C.C., J.R., M.G.P; Results, M.G.P., C.C., J.R; Discussion and conclusions, C.C., J.R., R.F., M.G.P; Writing (original draft), C.C., J.R., R.F., M.G.P, P.L; Final revisions, C.C., J.R., R.F., M.G.P, P.L; Project design and sponsorship, P.L.

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