

Chapter # 7

DIGITAL CAPITAL AND SAFETY IN SOCIALIZATION PROCESS. AN ITALIAN CASE STUDY

Ida Cortoni

Department Planning Design Technology of Architecture, Sapienza University of Rome, Italy

ABSTRACT

The process of digital acceleration, which in the last few years of the pandemic crisis has affected formal socialization contexts such as schools and families, has led to a critical reflection on the new responsibilities and skills of the digital citizen, in order to preserve his autonomy in the management of virtual dynamics while respecting certain ethical principles at the basis of navigation. These principles underpin the implementation of a digital culture in which the use of devices is guided by a sense of responsibility and respect for otherness. The new digital skills of the citizen go beyond specific access techniques and focus mainly on conscious digital behaviour at the basis of safeguarding various forms of individual and social well-being. Through the illustration of the main results of a national survey promoted by Sapienza University of Rome in 2020, the paper intends to provide a reflection on the degree of diffusion of digital awareness among Italian adolescents and on the impact of school and family digital capital in the development and implementation of such skills.

Keywords: digital safety, social capital, digital capital, socialization, children.

1. INTRODUCTION

Digital capital and safety are the two key concepts that underlie the leitmotif of this essay, therefore, it is fundamental to define them scientifically.

In the social sciences, the term "digital capital" means both internal and intangible resources (such as digital skills) and external and material resources (such as technologies), available within a specific Bourdeisian field (or social space), such as school or family, used by individuals to achieve specific goals (Ragnedda, 2018; Ragnedda, Ruiu, & Addeo, 2019; Cortoni, 2020). This definition can take on different interpretations depending on the point of view from which it is analyzed.

From a microsocial perspective, digital capital recalls both the behaviors of individuals, who use different devices, and their cultural capital in terms of digital skills (Paino & Renzulli, 2012; Pitzalis, Porcu, De Feo, & Giamboni, 2016; Magaudda as cited in De Feo & Pitzalis, 2014). In this sense, one can attribute a specific dimension of digital capital to the human capital of the actors involved, recalling their innate, cultural and cognitive characteristics (the so-called internal and fundamental capabilities of Nussbaum, 2010) that individuals also mobilize when they act digitally and that contribute to defining the type and level of people's digital skills.

Moving on to a macrosocial perspective, digital capital expresses both the technological infrastructure and investments in digital education promoted and initiated by public and private institutions, to improve its production and distribution system.

To define, instead, the concept of safety, in accordance with the *European Framework for Developing and Understanding Digital Competence in Europe (DIGCOMP)* (Kluzer & Rissola, 2015), it refers to a specific area of digital competence redirecting both to the trust

and ability of citizens to protect their privacy and reputation online, and to the ability to use the Internet to protect themselves from various Web risks that may be related to the device, threaten the individual's physical, psychological, social and emotional well-being and harm the environment. To this end, the main safety descriptors identified by the European Commission are four: 1. Protecting devices, 2. Protecting personal data and privacy, 3. Protecting health and well-being and 4. Protecting the environment (DIGCOMP 2.0, 2015; DIGCOMP 2.1, 2017) (Vuorikari, Punie, Carratero, & Van den Brande, 2016; Redecker, 2017).

The reflection on these concepts has acquired, in recent years, a central role in the international sociological scientific debate especially if related to the structural and sociocultural transformations induced by the advent of the so-called "platform society" (Van Dijck, Poell, & de Waal, 2018). This term refers to the central role played by digital platforms¹ (1) in directing processes of production, marketing and use of tangible and intangible assets, with inevitable repercussions on the dynamics of socialization, on the processes of building individual and social identities, as well as on the construction of social, communicative and participatory relations of citizens (Van Dijck, 2013). In the current infrastructure ecosystem, data represent the trading and socio-economic bargaining goods, that is all that information, or intangible resources, generated by the actions and interactions of users in the Network, encoded and stored by the digital system through algorithms (datafication). Thus, a true and proper system of the cultural industry is born in which "the ethical economy", which guides the creation of online content by users, clashes with the "capitalist economy" proper to the profit of large corporations. The result is a process of commodification of culture (Canevacci, 2001) produced from below, whose surplus value is often made available to other economic subjects, with the often unaware consent of the same user, through the acceptance of the conditions of use of the platform (commodification).

Moreover, by using the data shared by users, the platforms are able to constantly control and monitor the processes of action and interaction of users (feedback) through digital surveillance mechanisms and the storage of multiple user information in digital systems (data surveillance) (Lupton, 2015).

The global health emergency linked to COVID-19 has induced many radical changes in the management of work, relational, social, economic and, above all, educational dynamics through digital devices such as strategies to contain the pandemic and social distancing. During the lockdown, in the short term, the digital platforms have helped face the emergency becoming the main space (virtual) of interaction, socialization and communication of citizens, as well as the management of public and private functions of companies, contributing to ensure continuity in the dynamics of production and work. In the medium term, however, they have highlighted a series of limitations related to datafication and commodification.

A fundamental contribution to the discussion is given by the *accountability* of the citizen who, in exercising the rights of data protection within the new system of the cultural industry, generated by the *platform society*, has introduced the issue of *digital safety* into the contemporary public, political and scientific debate. *Digital safety* is digital competence in terms of user awareness, that the citizen must possess to understand the processes of datafication, personalization and commodification of information shared between companies or institutions and citizens online (Van Dijck et al., 2018). The issue becomes even more delicate if projected onto minors, hence some research questions that trigger our sociological

¹Digital platform means "a programmable digital architecture, designed to organize interactions between users... oriented to the systematic collection, algorithmic treatment, circulation and monetization of user data". (Van Dijck et al., 2018: p.27).

reflection: What is the digital safety degree of minors and what is the impact of the digital family and school capital in the maturation of such digital soft skills (Cortoni, & Lo Presti, 2018).

2. BACKGROUND AND RESEARCH DESIGN

A useful and relevant sociological reflection can be started from some scholarly contributions showing how the learning process of a minor is influenced by at least three main determinants that differentiate scholastic success: 1. social background; 2. school variables and 3. individual aspirations and orientations (Cherkaoui, 1979). Similarly, it is conceivable that the acquisition of digital skills for young people, such as safety, is related to the incidence of social, cultural, family and school capital on the stimulation of learning and the implementation of the skills of children (Coleman, 1966; Bourdieu, 1979; Gambetta, 1990; Cherkaoui, 1979).

The CENSIS report (2021) on the digitalization of Italians reveals data that confirm the directly proportional relationship that unites the sociocultural capital of the family and the school with the use of digital technologies. In this sense, it is possible to assume that the fragility of the digital capital of teachers and parents could be reflected onto young people, particularly with regard to the implementation of transversal digital skills, such as safety, which cannot be acquired experientially through the sole autonomous use of media.

Socialization agencies can make a decisive contribution, both materially and culturally, to provide minors with useful stimuli to the discovery of the technological world and especially to accompany them in the process of exploration by directing them to a critical reading of media content and a different fruitive awareness. Specifically, the school could intervene to reduce forms of socio-cultural inequality by favouring compensatory and supportive pedagogies, where family, cultural and material resources are lacking (Cherkaoui, 1979).

Reflecting also from a microsocial perspective, it is possible to observe how the influence of family and school social capital is reflected in the component of subjective motivation, which is at the basis of media use. In fact, the lack of transversal digital skills in teachers and parents often risks compromising the communicative effectiveness in the teaching/student (or child/parent) educational relationship, indirectly implementing demotivation, disinterest, boredom and passivity on the part of students (Capogna, Coccozza, & Cianfriglia, 2018).

The emotional involvement and the marked sensitivity towards the potential of digital media contribute to define the individual attitude, more or less proactive, when offered interactive services, influencing their perception and individual investment in terms of commitment and attention (these are further subjective variables that develop independently of the incidence of family and school capital and interrupt linear socialization, hinged in the *habitus* of Bourdieu).

In 2020, the Osservatorio Mediamonitor Minori of the University of Rome “La Sapienza” conducted a national quantitative survey on the dissemination of the competence of digital safety in a sample of 2708 Italian teenagers, from 37 upper secondary schools in 14 regions, and their families². Specifically, the survey focused on various social and cultural aspects by observing and analyzing, with a quantitative approach, digital and social capital:

²The sampling plan was factorial and typological and took two variables into account: a) the region of origin; b) the type of institution (high school or technical/vocational school). The draw was random, based on ministerial lists. In any case, the sample is not representative of the Italian adolescent population.

I. Cortoni

1. the schools involved, as per ownership of technological infrastructure, digital education services and investment, with possible repercussions on teaching methodologies in teacher classes;

2. adolescents, as per daily media behaviour and digital competence, with particular reference to the DIGCOMP safety area.

3. families, as per impact on the development of the safety of adolescents interviewed.

The survey was carried out from March to December 2020 through the online administration of 3 questionnaires (one for each target involved). In this essay, our focus will be mainly on the impact of school digital capital in the development of the safety area of digital competence of the sample of teenagers involved in the investigation.

3. DISCUSSION ON MAIN OUTCOMES

To answer the research questions posed in the first paragraph on the degree of dissemination of safety among Italian adolescents interviewed and the impact of school-related digital capital, we will start from the analysis of the digital school capital of the schools involved in the sample. The latter, in a macrosocial perspective, has been built after taking into account two main dimensions specific to schools of all levels: the technological infrastructure³ and the experimental training⁴. Therefore, through the construction of a typological index, we found 4 types of digital school capital:

1. the schools' typically highly limited digital capital with little investment in digital education and technology skills;

2. high digital capital of schools with a strong investment in both technological-digital and methodological-cultural dimensions;

3. infrastructural technological capital prevailing in schools with an imbalance on the infrastructural technological side;

4. experimental training capital prevailing in schools with an imbalance on the educational and experimental side (cf. table 1).

Table 1.
Digital capital of the schools involved in the survey.

<i>Typological index</i>	<i>AV</i>	<i>%</i>
Highly limited digital capital	10	30,3
Predominantly infrastructural technological capital	5	15,2
Predominantly experimental training capital	8	24,2
High digital capital	10	30,3
Total	33	100,0
Missing	4	
Total	37	

³In order to define the infrastructural technological dimension of the digital capital of the schools involved in the survey, the following information was taken into account: the number of research laboratories present in the facility, the number of workstations in the laboratory and the type of Internet connection. Crossing these variables we obtained the index of infrastructure endowment of the school, sub sectioned into (1) medium high endowment, when both the presence of laboratories and of the stations are medium low, and (2) medium low endowment, when the school has a large number of laboratories with an equally large number of workstations.

⁴In order to define the experimental training dimension of digital capital, a typological index has been constructed, as a result of the combination of two additive indices, one linked to training, with which we mean the participation of schools and teachers in educational projects on digitalization, and one related to the experimentation on the adhesion of sampled schools to projects of school experimentation with digitalization, both detected in the last 5 years.

Schools with a high digital capital certainly employ technologies as a support for the smooth running of the school's administrative and teaching activities. Specifically, the most widely available media for almost all subjects are IWB, tablets and PCs.

But how do these infrastructural investments, together with the educational investments of the school, contribute to changing the routine activities of its main actors? Starting from the international framework of DigCompEdu⁵ (2017) on digital competences for educators, as a useful tool for reading and analyzing the process of translation of the two dimensions of digital capital in school educational practices of teachers, one can say that schools with high digital capital integrate these technologies for the improvement of some educational activities such as: a) the implementation of communication and exchange of experiences and materials between colleagues in the perspective of technological innovation with greater continuity than schools with other types of digital capital (teaching and learning area); b) for individual professional updating (professional engagement area); c) for updating and implementing materials and resources already available and present in the school context (digital resources area); d) for classroom teaching innovation with students (teaching and learning area), e) for the implementation of the interaction between students even outside the school context (professional engagement area), f) for the investment on the implementation of the digital skills of their students (facilitating learners' digital competence area) and finally g) to respond to specific issues (e.g. SLD) and differentiate student learning processes (empowering learners area).

In contrast, schools with unbalanced digital capital towards digital teacher training and experimentation seem to invest the most frequently acquired know-how in: a) innovative strategies to manage collaboration between student workgroups (teaching and learning area); b) the search for digital resources to be used for one's own lesson, taking into account the educational objectives (digital resources area); c) the design of tests and in the management of the data of student evaluations (e.g. through summary databases) and in the elaboration of judgements starting from predefined specific evaluation headings (assessment area). Finally, schools with a digital capital focused on the technological dimension of infrastructure seem to prefer activities oriented to: a) external communication with families, other schools and students (professional engagement area); b) the exchange of materials and experiences between colleagues (teaching and learning area); c) as well as in the updating of material and resources already available and present in the school context (digital resources area).

Secondly, to understand the level of safety among adolescents we interviewed, we have created 4 additive indices corresponding to each descriptor:

1. the device's protection index, which takes into account the variables of their habit of protecting their devices through access codes and antivirus systems, emphasizing the ways and the frequency with which they update the password, as well as the degree of password sharing with friends and relatives.

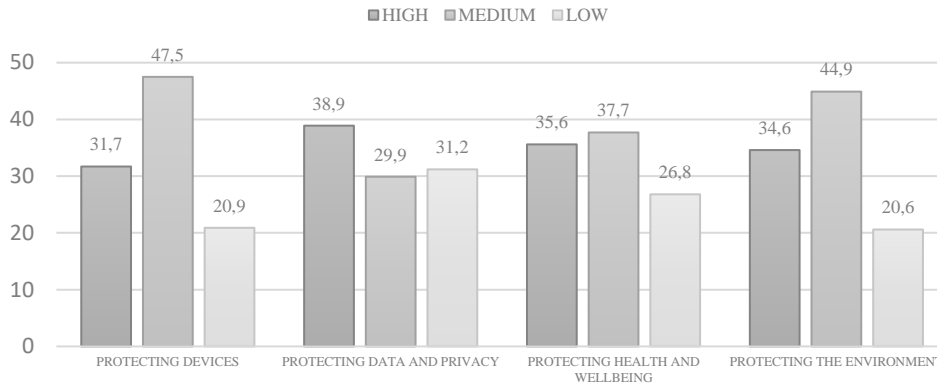
2. the data and privacy protection index, obtained by investigating both the way in which the terms and conditions of use are accepted, the degree of sharing of personal data and the type of activity carried out online.

3. the individual health and well-being protection index derived from specific physical, social, emotional or cognitive reactions encountered during or after the use of the media.

4. the environmental protection index on how technologies are disposed of and the characteristics considered important during the purchase and use of a device.

⁵DigCompEdu structures and summarizes the professional life of teachers into 6 main areas of competence (or moments of use): 1. Professional engagement; 2. Digital resources; 3. Teaching and learning; 4. assessment; 5. Empowering learners; 6. Facilitating learner's digital competence. For each, DigCompEdu identifies descriptors of digital competence to be analyzed in research perspective and aimed at profiling specific skills.

Figure 1.
Safety indices of Italian students involved in the survey (val.%).



When analyzing the data, it can be noted that the lower values of safety are mainly manifested in data and privacy protection and the protection of individual well-being. Specifically, 31.2% of the students seem to have a low data and privacy protection index. This figure is more widespread among students who come from families with a low cultural capital and are professional institute seniors in the regions of southern Italy. While 26.8% of students have a low awareness of individual well-being. These students also have a low family cultural capital and attend mainly the first classes of technical professional institutes in the regions of northern Italy.

Compared to the other two digital safety descriptors, only about 21% of respondents have a low safety level: as per device protection, such students have a low family cultural capital and are high school freshmen in the regions of northern Italy; in the second case on environmental protection, students with a low level of safety possess a medium-high cultural capital and are technical professional institute freshmen in the regions of northern Italy.

We cross-referenced the data of the school digital capital with the safety indices of the interviewed students, in order to verify the impact of schools on the development of this *digital soft skill*. It can be noted that the low index on data and privacy protection together with that on device protection are more widespread especially in schools with limited digital capital, or in those schools where there is very little investment in digital education and infrastructure.

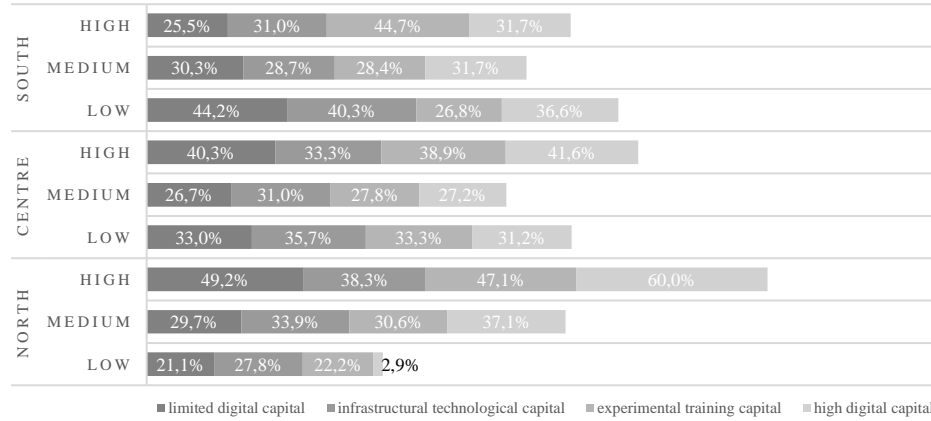
On the other hand, schools with digital capital directed towards training and experimentation seem to be positively making an impact especially on the development of a high safety with respect to environmental protection and the protection of the individual well-being of students (cf. table 2).

Table 2.
The influence of digital capital on student safety

		Digital capital of school				Total
		Highly limited digital capital	Predominantly infrastructural technological capital	Predominantly experimental training capital	High digital capital	
Protecting the environment	high	33,9%	34,3%	38,2%	29,7%	35%
	medium	44,4%	44,8%	46,1%	45,4%	45,2%
	low	21,7%	21%	15,7%	24,9%	19,9%
total		100%	100%	100%	100%	100%
Protecting personal data and privacy	low	35,7%	32,5%	25,9%	28,1%	30,9%
	medium	29,3%	31,9%	29,3%	29,3%	30,1%
	high	35%	35,5%	44,8%	42,6%	38,9%
total		100%	100%	100%	100%	100%
Protecting devices	high	30,2%	31,8%	33,3%	32,1%	31,9%
	medium	48,4%	46,3%	47,9%	47,8%	47,5%
	low	21,4%	21,9%	18,8%	20,1%	20,6%
total		100%	100%	100%	100%	100%
Protecting health and well-being	high	34,1%	34,4%	39,5%	30,5%	35,5%
	medium	39,8%	38,6%	36,1%	37,3%	38,1%
	low	26,2%	27%	24,4,8%	32,1%	26,4%
total		100%	100%	100%	100%	100%

With respect to this first framework, if we were to consider the territorial variable and focus the analysis within the Italian geographical areas, we could see relational differences attributable to the impact of additional school-unrelated, socio-cultural variables on the development of digital safety skills of young people. From a methodological point of view, in order to carry out these studies, we have implemented multivariate analyses in which we have isolated the relationship between the safety indices of the sampled adolescents and the school digital capital within three Italian macro-geographical areas (North, Central and South). An analysis of the results showed that schools with limited or unbalanced digital capital on infrastructure technology endowment have a particularly significant relationship with the development of a low index of data protection and privacy, this relationship is particularly evident in schools in southern Italy, in which there is also a significant relationship between a high index of data protection in students and the attendance of schools with a strong investment in digital training. In the areas of central and northern Italy, however, while on the one hand there remains the significant relationship between low safety index and schools equipped from the technological point of view and between high safety index and high school digital capital (for example, in northern schools with high digital capital, the number of students in the sample with a low safety level is close to 0), on the other, one can also notice that a high index on data protection is also present in some schools in northern Italy with a very limited digital capital. In this sense, we can assume that a good percentage of students acquire awareness of data protection outside the school context (e.g. in the family, through peers, and other territorial agencies), that play a compensatory role wherever school fails to arrive and to guarantee a support service (cf. *Figure 2*).

Figure 2.
Protecting personal data and privacy – Digital safety index of Italian students and digital capital of schools (2022).



The indices of protection of individual and environmental well-being seem to be particularly high and significant (39% in the first case and 38.3% in the second case) in schools that declare a strong investment in media and communication training/experimentation regardless of their geographical area; similarly, in schools with a strong investment in technology or with a low digital capital, the index level on psychological and physical well-being is medium and that of environmental well-being is low.

In addition, the impact of the high digital capital of schools on the development of safety on personal protection is particularly evident mainly in the regions of southern Italy, while in the center and in the north there seems to be an inverse relationship between the school digital capital and the safety level on the protection of psychophysical well-being. In this sense, a greater investment by the school on the diffusion of digital soft skills in students in the regions of northern Italy is desirable (Cortoni, & Lo Presti, 2018) (cf. Figure 3).

Figure 3.
Protecting health and wellbeing – digital safety index of Italian students and digital capital of schools (2022).

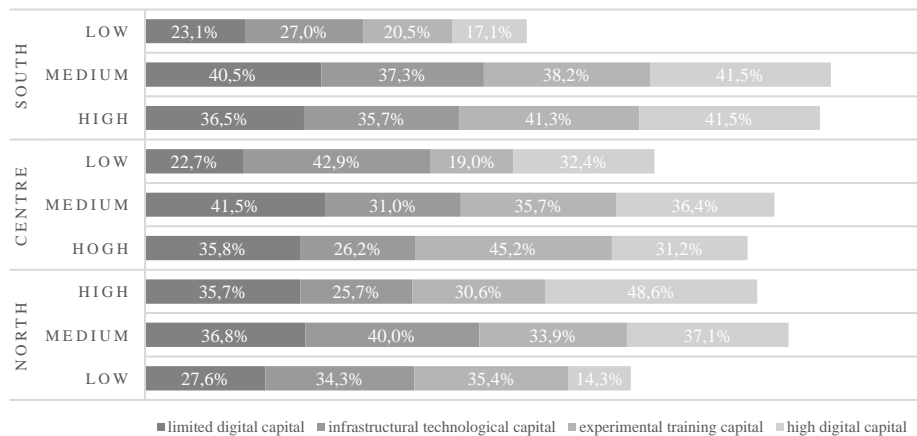
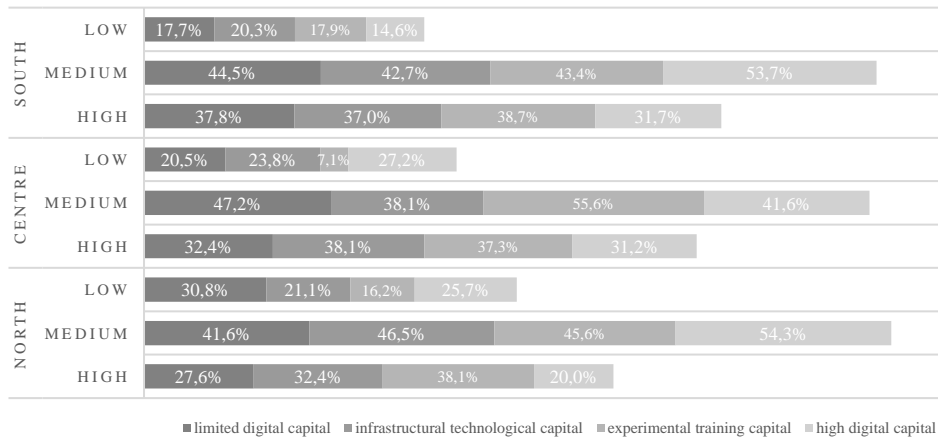
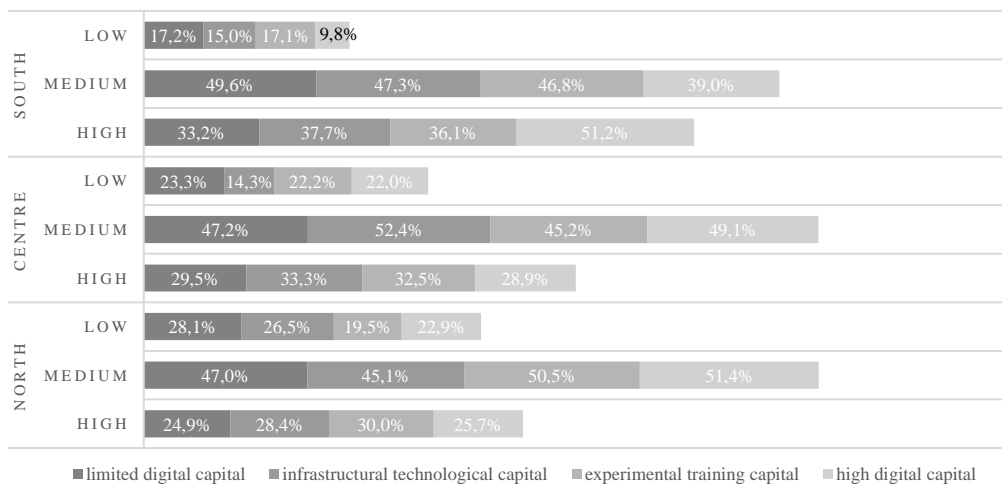


Figure 4.
Protecting the environment – digital safety index of Italian students and digital capital of schools (2022).



Finally, compared to the safety index on device protection, if schools with a highly limited digital capital do not contribute to the spread of greater digital awareness, the main contributing factor to a greater diffusion of this competence is above all investment on digital training ("Prevalent experimental training capital") in the central-northern areas and, in some cases, in the high digital capital (in the southern areas) (cf. *Figure 5*).

Figure 5.
Protecting devices – digital safety index of Italian students and digital capital of schools (2022)



Relationship between school and family digital capital on student safety

In order to analyze and deepen the relationship between school and family digital capital, we focused mainly on schools with high capital and with highly limited digital

capital. In both cases we analyzed the relationship between the digital capital of students and their families through bivariate statistical analyses (cf. table 3).

Table 3.
Relationship between safety indices of students and parents in schools with high digital capital.

Schools with high digital capital						
Safety index of protecting device for parents						
		High	Medium	Low	Total	
Safety Index of Protecting devices for students	High	count	6	1	4	11
		%	37,5%	10,0%	36,4%	29,7%
	Medium	count	8	7	5	20
		%	50,0%	70,0%	45,5%	54,1%
	Low	count	2	2	2	6
		%	12,5%	20,0%	18,2%	16,2%
Total		count	16	10	11	37
		%	100,0%	100,0%	100,0%	100,0%
Safety index of protecting personal data and privacy for parents						
		Low	Medium	High	Total	
Safety index of protecting personal data and privacy for students	Low	count	9	13	2	24
		%	31,0%	25,5%	12,5%	25,0%
	Medium	count	9	17	2	28
		%	31,0%	33,3%	12,5%	29,2%
	High	count	11	21	12	44
		%	37,9%	41,2%	75,0%	45,8%
Total		count	29	51	16	96
		%	100,0%	100,0%	100,0%	100,0%
Safety index of Protecting health and well-being for parents						
		High	Medium	Low	Total	
Safety index of Protecting health and well-being for students	High	count	13	8	11	32
		%	33,3%	26,7%	40,7%	33,3%
	Medium	count	14	10	10	34
		%	35,9%	33,3%	37,0%	35,4%
	Low	count	12	12	6	30
		%	30,8%	40,0%	22,2%	31,3%
Total		count	39	30	27	96
		%	100,0%	100,0%	100,0%	100,0%

From the general analysis of the results, within schools with high digital capital, it has been found that there is a direct relationship between the level of digital competence of students and their parents compared to the 4 safety indices described above (protection of the device; protection of data and privacy, protection of personal physical and psychological well-being...). However, it can be observed that students from schools with high digital capital have a high level of safety related to device protection and protection of psychological and physical well-being, even when they come from families with a low level of safety. This data suggests the impact that the school with high digital capital can have on students with low family digital capital.

This hypothesis is reinforced by the data implying that, in schools with very limited digital capital (cf. tab.4), the influence of digital family skills appears to be stronger. In this sense, there is a direct relationship between the development of safety indices in students and the safety indices of their parents. In other words, students with a high safety index, especially regarding the protection of devices and data, seem to come from families with a high level

of safety and vice versa. Regarding the index on the protection of individual well-being, however, neither the digital school capital nor the family capital seems to affect the development of the skills of the respondents. In fact, more than 60% of students with a high average safety level come from families with a low average digital competence level. This result suggests that the development of transversal competence linked to individual well-being is attributable to other socio-cultural variables, not necessarily linked to the media.

*Table 4.
Relationship between safety indices of students and parents in schools with highly limited digital capital.*

Schools with highly limited digital capital						
Safety Index of Protecting devices for parents						
			High	Medium	Low	Total
Safety Index of Protecting devices for students	High	count	15	16	10	41
		%	30,0%	28,1%	24,4%	27,7%
	Medium	count	27	34	20	81
		%	54,0%	59,6%	48,8%	54,7%
	Low	count	8	7	11	26
		%	16,0%	12,3%	26,8%	17,6%
Total	count	50	57	41	148	
	%	100,0%	100,0%	100,0%	100,0%	
Safety index of protecting personal data and privacy for parents						
			Low	Medium	high	Total
Safety index of protecting personal data and privacy for students	Low	count	47	56	28	131
		%	45,6%	30,9%	36,4%	36,3%
	Medium	count	32	58	18	108
		%	31,1%	32,0%	23,4%	29,9%
	High	count	24	67	31	122
		%	23,3%	37,0%	40,3%	33,8%
Total	count	103	181	77	361	
	%	100,0%	100,0%	100,0%	100,0%	
Safety index of Protecting health and well-being for parents						
			High	Medium	Low	Total
Safety index of Protecting health and well-being for students	High	count	28	49	33	110
		%	22,8%	37,4%	30,8%	30,5%
	Medium	count	56	46	40	142
		%	45,5%	35,1%	37,4%	39,3%
	Low	count	39	36	34	109
		%	31,7%	27,5%	31,8%	30,2%
Total	count	123	131	107	361	
	%	100,0%	100,0%	100,0%	100,0%	

4. CONCLUSION

After the analysis of the research data, two main theoretical considerations emerge in response to the research questions illustrated in the first paragraph of this essay.

The first one concerns the digital capital of schools: schools with a high digital capital and, specifically, with strong investments in training and experimentation in the digital field, are those that are more oriented towards a process of inclusion of technologies both in the school context and in teaching and learning practices in terms of methodological innovation. Also, the implementation of resources for improving teaching performance and stimulating

student learning generates a process of inclusion of Digital Education in schools, not only instrumentally but also and above all methodologically.

Schools with high digital capital or investing in the educational dimension of digital capital have a significant impact on the development of their students' digital safety indices. Of course, schools are socialization agencies that build networks of collaborations and exchanges with the territory, which benefit from the infrastructure and services of the surrounding social context and reflect the socio-cultural basis shared in the surrounding area and with the families frequenting the schools. In this sense, the relationship between the development of school digital capital and that of the student's digital competence cannot be considered exclusive but reflects other sociocultural variables that revolve around the formal and informal socialization process of the students themselves. The analysis of the results shows, for example, that schools with a low digital capital in the regions of Northern Italy (i.e. those regions that have a higher level of economic development and therefore a higher level of socio-cultural territorial well-being than the regions of central and southern Italy) are able to ensure the introduction of a high level of safety in students, by virtue of the network they build with the territory and the mutual socio-cultural stimulation that they are able to guarantee to their students.

In addition to this, the contribution of digital family capital is able to intervene on the implementation of students' digital skills, especially when the school does not have adequate material and educational tools to supply to this function. The analysis of the results shows that there is a direct relationship between the digital skills of parents and students regardless of the school digital capital. However, schools with high digital capital seem to be more effective in implementing students' digital skills in those family situations where parental safety skills are particularly limited.

From the framework that has just been identified, it emerges that schools and families, as formal socialization agencies, are central to the development of learning and to the strengthening of their transversal skills and are able to ensure the implementation of the digital skills of young people also playing a role of mutual support and compensatory intervention. This is deemed especially true when one of the two agencies seems to manifest gaps in digital capital or sociocultural type. The collaboration between school and family, but also other agencies of territorial socialization, within an ecological perspective of the media (Postman, 1970; Granata, 2015) therefore seems to emerge as a key strategy to ensure the systematic dissemination of students' digital safety skills.

The data also show that the exclusive investment on the technological dimension of digital capital, without a focus on the cultural capital of digital resources, is particularly functional only to improve communication processes towards the external context, as well as updating resources for school management.

This information is inevitably reflected in the development of the safety of school actors, including students themselves. In particular, schools with low investments in digital capital contribute less to the development of safety, especially relating to data, privacy and device protection. The results of the research also show how the educational component linked to the literacy of school actors in the field of digital capital in schools is a fundamental aspect on which to invest in the future for the implementation of these skills in students.

This investment process becomes strategic and compensatory especially knowing that a low safety index is often linked to a family context with an equally low socio-cultural capital as well as, mainly, the attendance of technical professional institutes. For this reason, the competence of digital safety is considered a *digital soft skill* or a competence that cannot be learned by citizens through simple media experience, but through a path of digital literacy in educational contexts such as school or family; this aspect, however, is still poorly structured in the Italian government system towards secondary schools.

REFERENCES

- Bourdieu, P. (1979). *La Distinction. Critique sociale du jugement* [The Distinction. Social Criticism of Judgement]. Paris: Editions de Minuit
- Canevacci, M. (2001). *Antropologia della comunicazione visuale. Feticci, merci, pubblicità, cinema, corpi, videoscape* [Anthropology of visual communication. Fetishes, commodities, advertising, cinema, bodies, videoscape]. Milano: Meltemi
- Capogna, S., Cocozza, A., & Cianfriglia, L. (2018). *Le sfide della scuola nell'era digitale. una ricerca sulle competenze digitali dei docenti* [The challenges of schooling in the digital age. a survey of teachers' digital skills]. Roma: Eurilink.
- Cherkaoui, M. (1979). *Les paradoxes de la réussite scolaire: sociologie compare des systèmes d'enseignement* [The paradoxes of educational success: a comparative sociology of educational systems]. Paris: Presses Universitaires de France.
- Coleman, J. S. (1966). *Equality of educational opportunity*. Washington: US Government Printing Office.
- Cortoni, I. (2020). *Le competenze digitali nella scuola. Un'indagine dell'Osservatorio Mediamonitor minori della Sapienza di Roma* [Digital skills in schools. A survey by the Mediamonitor Minor Observatory of the Sapienza University of Rome]. Roma: Carocci
- Cortoni, I., & Lo Presti, V. (2018). *Digital Literacy e capitale sociale. Una metodologia specifica per la valutazione delle competenze* [Digital Literacy and Social Capital. A specific methodology for competence assessment]. Milano: FrancoAngeli
- CENSIS (2021). *55 rapporto CENSIS sulla situazione sociale del Paese* [55th CENSIS report on the social situation of the country]. Retrieved from <https://www.censis.it/rapporto-annuale/55%20-rapporto-sulla-situazione-sociale-del-paese2021>
- De Feo, A., & Pitzalis, M. (a cura di) (2014). *Produzione, riproduzione e distinzione. Studiare il mondo sociale con (e dopo) Bourdieu* [Production, reproduction and distinction. Studying the social world with (and after) Bourdieu]. Napoli: CUEC
- Gambetta, D. (1987). *Were they pushed or did they jump? Individual decision mechanisms in education*. Cambridge: Cambridge University press.
- Granata, P. (2015). *Ecologia dei media. Protagonisti, scuole, concetti chiave* [Media ecology. Protagonists, schools, key concepts]. Milano: FrancoAngeli.
- Kluzer, S., & Rissola, G. (2015). *Guidelines on adoption of DIGCOMP*. Luxembourg: European Commission.
- Lupton, D. (2015). *Digital Sociology*. London: Routledge Pearson Education.
- Nussbaum, M. (2010). *Creating Capabilities*. Harvard: Belknap Press.
- Paino, M., & Renzulli, L. A. (2012). Digital Dimension of cultural Capital: The (In)visible advantages for students who exhibit computer skills. *Sociology of Education*, 86(2), 124-138.
- Pitzalis M., Porcu, M., De Feo, A., & Giamboni, F. (2016). *Innovare a scuola. Insegnanti, studenti e tecnologie digitali* [Innovating at school. Teachers, students and digital technologies]. Bologna: Il Mulino.
- Postman, N. (1979). *Teaching as a conserving activity*. New York: Delacorte Press
- Ragnedda, M. (2018). Conceptualizing digital capital. *Telematics and Informatics*, 35(8). 2366–2375.
- Ragnedda, M., Ruiu, M. L., & Addeo, F. (2019). Measuring Digital Capital: An empirical investigation. *New media and Society*. 22(5) 793-816. <https://doi.org/10.1177/1461444819869604>
- Redecker, C. (2017). *European Framework for the Digital Competence of Educators: DigCompEdu*. Luxembourg: Publications Office of the European Union.
- Van Dijck, J., Poell, T., & de Waal, M. (2018). *The Platform Society. public Values in a connective world*. New York: Oxford University.
- Van Dijck, J. (2013). *The culture of connectivity: a critical history of social media*. Oxford University press.
- Vuorikari, R., Punie, Y., Carratero, S., & Van den Brande, L. (2016). *Digcomp 2.0. The digital competence framework for citizens. Update phase 1: the conceptual reference model*. Luxembourg: Publication Office of the European Union. <https://doi.org/10.2791/11517>

I. Cortoni

AUTHOR INFORMATION

Full name: Ida Cortoni

Institutional affiliation: Dipartimento di Pianificazione, Design, Tecnologia dell'Architettura, Sapienza Università di Roma

Institutional address: via Flaminia 70 00196 Roma

Short biographical sketch: Text here (150 words maximum)

Ida Cortoni, PhD, is Associate Professor in *Sociology of cultural and communication processes* in Sapienza University of Rome, where is scientific referent of the Observatory Mediamonitor Minori and member of Digizen srl, Sapienza spin off. Ida Cortoni is professor in *Digital Education Studio* and *Image and Storytelling analysis studio* in the Faculty of Architecture. Ida Cortoni organizes training course for teachers and coordinates national and international researches and experimentations in Digital Literacy, Digital education, digital competences and social capital.