Digital environments, connectivity and education: Time perception and management in the construction of young people's digital identity

Entornos digitales, conectividad y educación. Percepción y gestión del tiempo en la construcción de la identidad digital de la juventud

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Abstract:

This paper discusses the first results of the CONECT-ID project, which addresses young people's digital identities from the perspective of hyperconnectivity based on their perception of time in digital leisure. Its main objective is to analyse young people's time management and their hyper-connected perception of time. To do so, a qualitative study was performed using discussion groups with 130 participants organised in groups of respondents aged 12 to 16 and 16 to 18. Analysis was then performed using the NVivo software program. The results showed a difference in use and tools between the age groups. Both sets of groups claim to lose the concept of time, in particular the older ones. Younger respondents report having less availability of screens and more parental controls, while in contrast older ones state that they use the time management strategy less as self-regulation. School controls refer to students not being allowed to take mobile phones to school or use them there. It is apparent that the construction of young persons' identity is

rep

a continuum between different virtual spaces and times and face to face situations. Young people with less parental control over time management require more self-management and self-regulation mechanisms. The results found warrant focussing pedagogical discourse on designing and promoting quality educational actions that make it possible to go beyond setting limits. This can be achieved by working on establishing healthy interpersonal relationships, social and communication skills, and time management in a range of settings that provide lasting benefits beyond mere entertainment.

Keywords: digital technology, educational sciences, identity, leisure, qualitative analysis, time perception, youth.

Resumen:

En este trabajo se presentan los primeros resultados del proyecto CONECT-ID que aborda la identidad digital de la juventud, desde los enclaves de la hiperconectividad y en base a su percepción del tiempo en el ocio digital. El objetivo principal reside en analizar la gestión del tiempo y la percepción del tiempo hiperconectado de los jóvenes. Para ello, se ha realizado un estudio cualitativo aplicando la técnica de grupos de discusión con 130 participantes organizados en grupos de 12 a 16 años y de 16 a 18 años. Posteriormente, se ha realizado un análisis con el software NVivo. Los resultados hallados señalan una diferencia de usos y herramientas entre los grupos de edad establecidos. Ambos grupos afirman perder la concepción de temporalidad, especialmente en el caso de los mayores. Mientras los menores afirman tener menor disponibilidad y mayores controles parentales; los mayores asumen utilizar menos la estrategia de gestión de tiempos como autorregulación. Los controles escolares se remiten a no dejarles llevar ni utilizar el móvil. Se observa como la construcción identitaria del joven se configura como un continuo interferido por diferentes espacios y tiempos virtuales y presenciales. Los jóvenes que tienen un menor control parental en la gestión del tiempo requieren mayores mecanismos de autogestión y autorregulación. Los resultados hallados merecen centrar el discurso pedagógico en torno a diseñar y potenciar actuaciones educativas de calidad que les permitan ir más allá de marcarse límites, trabajando el establecimiento de relaciones interpersonales saludables, las habilidades sociales y comunicativas, así como la gestión de su tiempo en escenarios que les reporten beneficios duraderos por encima del mero entretenimiento.

Descriptores: conectividad, identidad, juventud, espacios de ocio, percepción del tiempo, entornos digitales.

1. State of the question

Discussion of time is nothing new, but it is always of interest. It centres our attention on one of the variables around which we narrate human life; the soil in which humankind grows, an essential dimension of the human being, an opportunity and fertile ground for our development, in which we are constricted but never determined. This non-determination makes it

an opportunity and starting point that we should know how to manage and educate.

To refer to time, we turn to various spatial metaphors that we extrapolate from our collective imagination (Safranski, 2017). We base our perception and notion of time on our comprehension of physical space (Blommaert & De Fina, 2016). But what happens when this space is a virtual one? What happens when nothing is delimited, but instead we find ourselves immersed in a reality without boundaries? What happens when we base our time perception on a porous space? How much is our identity changing because of the fact that the basic dimensions of identity —space and time— are being shifted into a hyperconnected reality where identity becomes liquid, instability is the ultimate representation of reality, the medium is ambivalent, the body is immaterial, and even the self acquires different forms of expression?

These questions are the foundation of the CONECT-ID[1] project, in which we study young people's digital identity by considering their hyperconnected enclaves on the basis of their perception of time in digital leisure. We focus on young people because it is they who experience for themselves the consequences, challenges, and risks of hyperconnectivity. Risks which are related to dependence on or abuse of technology and screens (Cloquell, 2015); consequences that include inequalities and new forms of social exclusion (Ricoy & Martínez-Carrera, 2020); and challenges that are directly related to factors of vulnerability in the development of young people's iden-

tities, associated with ways of externalising their self, the need to influence and be influenced, consumption of information that is not always filtered, etc. (Sanz Arazuri, Alonso Ruiz, Sáenz de Jubera Ocón, Ponce de León Elizondo, & Valdemoros San Emeterio, 2018; Valdemoros, Alonso, & Codina, 2018). A risk marked by a lack or otherwise of responsibility or ethical and/or critical sense (Ibáñez-Martín & Fuentes, 2015), supported, perhaps, by fragile autonomy in their personal and social development and time management that is sometimes irresponsible.

Here we present the first results of the research project mentioned above: a qualitative study, using discussion groups as an instrument to analyse time management and young people's perception of hyperconnected time. We consider a wide cross-section of young people, aged from 12 to 18 to understand the evolution of the phenomenon and how much the effects undergo evolution or involution during the process of development. There are hardly any responses to these effects at an educational level beyond the pedagogy of limits, associated in many cases with forbidding this connected time, perhaps because the discourse on these effects focusses on the excess and loss of the notion time when they are connected.

2. Theoretical framework and state of the question

There has been some research into online presence and time management (Livingstone, 2013; Loveless & Williamson, 2017; Serrano-Puche, 2013; Viñals, Abad,

& Aguilar, 2014), focussing primarily on the chronological or sequential presence of time, uses, moments, time bands (Boyd, 2014), but less on the other lived and experienced form, kairological time. In the young person's view, this connected time is generally appropriate, adequate, non-determined, and felt, and does not always correspond with the time that has passed. That instant, that occurrence, that place — the screen (computer, mobile phone, tablet, games console, etc.) — which for a moment becomes unique, which is not the now or the present, but rather the time that passes by (Case, 2016; Cruz, 2017).

Use of screens by young people has led research to analyse the different selves (Torres, 2017) young people construct. "It is multiple, but integrated. You can have a sense of yourself without it being a unique one" (Turkle, 1997, p. 325). Young people's lives become mediated by screens. One aspect which is noted is that social media, video games, the places young people frequent are transversal and branched on the internet, meaning it is possible to construct different identities in an attempt to satisfy desires, provoke, influence, or simply achieve that which in traditional settings is not easy for them (Nilan & Feixa, 2014).

Academic literature does not discuss young people's identities but rather identity practices connected to new practices for the socialisation of young people that derive from the different social narratives and roles they manifest (Awan & Gauntlett, 2013; Georgakopoulou, 2017; Marlowe, Bartley, & Collins, 2017). The construction of their identity is based on how they present themselves and how they are judged, that is to say, constantly in comparison with others (Vansieleghem, Vlieghe, & Zahn, 2019). In other words, the internet makes it possible for young people's identities to be shaped with contributions from multiple digital identities in different fields of action. This shaping results in a sensation of liberty and autonomy based on socialisation and interconnection with others; the otherness of the self as the foundation of personal and collective identity (Brubaker & Cooper, 2000).

However, this is not autonomy as such; the literature has for years noted a certain symmetrical positioning in that technology forms part of young people's lives, it becomes their social space-time and, consequently, it is with them, becoming subjective (Pangrazio, 2019; Turkle, 2011; Turkle, Taggart, Kidd, & Dasté, 2006). It becomes a way to expand their autonomy as the basis of their socialisation and relationships. Young people are autonomous if the internet allows them to interact with other young people, enriching and sharing their interests, experiences, and ideas, creating co-narratives understood as interdependent and interrelated social dynamics (Beneito-Montagut, 2015; Georgakopoulou, 2017). Research largely argues for a model of autonomy derived from Vygotsky's thinking, basing it on a phylogenetic and interdependent link between young people and screens. Young people become embodied in technological settings (Wängqvist & Frisén, 2016).

This embodiment is not just individual but also social. Research emphasises

the good side of the internet and screens in that they offer young people a wide range of possible social relationships. They expand their options for building the relational self, as they complement and enrich face to face social relationships rather than replacing them. They favour the creation of a collective intelligence, triggering positive social recognition mechanisms (Malone & Bernstein, 2015). This is where the internet is of value for empowering young people and encouraging participation (Wängqvist & Frisén, 2016). It is a privileged social setting for young people (Sanz Arazuri et al., 2018).

Families' concerns about inclusion in social networks and the disconnection from the family sphere associated with it are another topic that has been studied, with an emphasis on the need to prepare the family to teach young people to have an understanding of how to act and be independently and responsibly with these technologies (Ruiz-Corbella & De Juanas-Oliva, 2013); some recent studies (Gündüz, 2017; Hodkinson, 2017; Valdemoros, Sanz, & Ponce de León, 2017) indicate a connection between low digital consumption in children and families with a closer emotional bond between family members, and so abuse of these tools could be prejudicial for family coexistence, supported by the idea that young people, on social networks, are concerned more with self-expression than self-reflection (Mace, 2020). There is also research that demystifies the ways young people conceal their online life from their families (Shin & Lwin, 2017).

In similarly positive terms, there is research that sees screens as the implementation of a technological ecosystem that is of interest for cognitive development and learning. The internet's potential as a creative and innovative setting that favours different forms of multiliteracy, creativity, and learning has been noted (Gee & Esteban-Guitart, 2019; Hou, Rashid, & Lee, 2017; Pérez Latorre, 2015; Scolari, 2016).

Nonetheless, there are data that suggest that this time is not always a positive one for young people, as a result of the culture of mere entertainment and pleasure (Muros, Aragón, & Bustos, 2013; Iqani & Schroeder, 2016). Most of these data are based on the immediacy of information, on young people publishing their private lives, and on extending free time to social life in general, where connectivity for the sake of connectivity is what takes precedence when filling time. These works conclude that individualism becomes intensified. A virtual culture where young people's main fears are boredom, disconnection, loneliness, and isolation (Fernández & Gutiérrez, 2017).

Among the risks, there are recent studies that analyse the negative socioemotional effects of abuse of social networks and online games (Vannucci, Simpson, Gagnon, & Ohannessian, 2020), and studies that focus on cyberbullying (Garmendia Larrañaga, Jiménez Iglesias, & Larrañaga Aizpuru, 2019) where it is noted that for young people technology and screens create liberty and creativity that are not always well understood, often becoming oppression and bullying (Garaigordobil &

Larrain, 2020), or even inequality (Rey, Quintana-Orts, Mérida-López, & Extremera, 2018). Other results relate to the risk of consolidating an ethic associated with a free culture where everything is accepted and anything goes, questioning concepts such as ownership or authority (Hu, Zhao, & Huang, 2015), sometimes finding young people who are immersed in processes of coming to terms with participation in life online, accepting risks, based on a practical rationality; the internet as an opportunity, without any previous reflection.

3. Methodology and research results

This research uses a qualitative design and is part of a participatory study (Tojar, 2006) with the aim of informing the design of quality educational interventions.

To this end, we propose the following research objectives:

1. To uncover young people's perception of temporal availability, use, and habits of technologies and networks.

2. To consider in depth the different time-management strategies reported

3. To determine whether there are differences between groups in the dimensions studied, taking participants' age as a reference point.

3.1. Instrument and analytical procedure

To approach young people's perceptions, opinions, and motivations regarding their use of technology and habits, we used the discussion group technique. The Research Group designed a semi-structured prior script in five formative workshops with the cooperation of nine experts from various areas (theory and history of education, research methods, sociology, and anthropology). This script included questions to cover with the participants relating to their perception and uses of free time and their digital profile and habits. To validate it, we held two discussion groups, one with participants aged 12-15 and another with participants aged 16-18.

The selection of participants was carried out after receiving permission from the secondary schools, which were selected in accordance with accessibility criteria, and from the families of the young people, seeking the presence of rural (3) and urban (4) schools, state (7), state assisted (2), and private schools (1) from different autonomous regions. The meetings were moderated by pairs of experts who were involved in preparing the prior semi-structured script and in the process of preparing categories for the subsequent analysis of the content.

A total of 14 meetings were held which were recorded in audio format, transcribed, and entered for coding and subsequent analysis in the NVivo software program (V.12, research group licence) in accordance with a system of categories elaborated by 3 researchers through an inductive procedure, supported by the previous theoretical framework and which is shown in Graph 1 (Miles & Huberman, 1994).

GRAPH 1. Hierarchy chart of discussions by number of coded references[2].
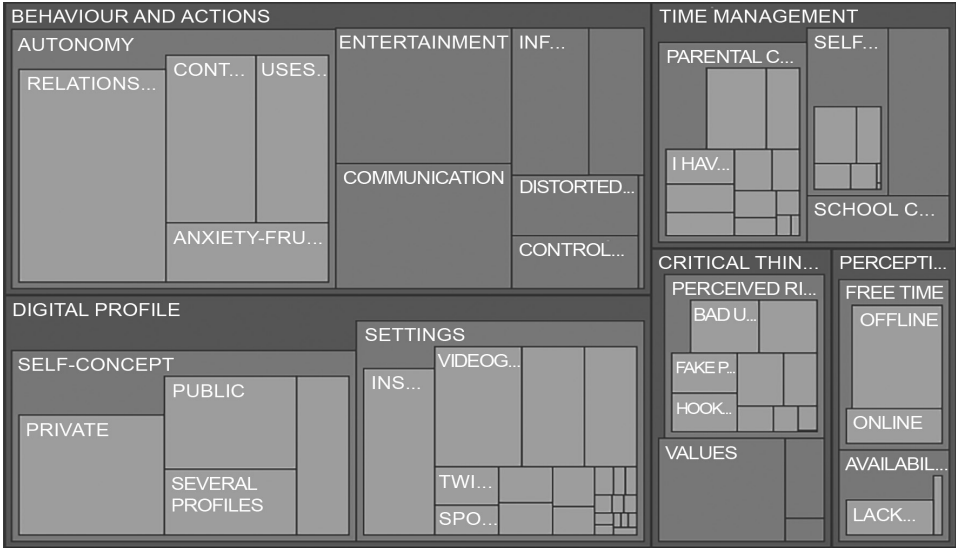
Words shortened in the graphic: RELATIONS... = relationships on networks; CONT… = content to be published; USES… = uses and habits; ANXIETY-FRU… = anxiety-frustration; INF... = information; DISTORTED... = distorted image; CONTROL… = controlling emotions; PARENTAL C... = parental controls; I HAV… = I have them on networks; SELF… = self-regulating; SCHOOL C... = school controls; INS... = Instagram; VIDEOG... = videogames; TWI… = Twitter; SPO… = Spotify; CRITICAL THIN… = critical thinking; PERCEIVED RI... = perceived risks; BAD U... = bad uses; FAKE P... = fake profiles; HOOK… = hooked; PERCEPTI... = perception of time; AVAILABIL... = availability; LACK... = lack of time.

Source: Own elaboration.

In line with the system of categories, 7270 references were recorded from the discussions that allude to behaviour and actions during leisure time, digital profile, and management and perception of leisure time. The coding process showed that 3229 of these references came from the six groups of participants aged 12-15 and 4041 were from the groups of people aged 16-18.

After coding the information in accordance with the system of categories established in advance, a discourse analysis based on 3 dimensions was used: digital profile, time perception, and time management (see Table 1), considering in depth the differences found in the two age groups established.

TABLE 1. Study dimensions and categories.

Dimensions	Categories
Digital profile	Virtual settings
Time perception	Free time
	Availability
Time management	Self-regulation
	Concept of time
	Anxiety-frustration
	Parental controls
	School controls

Fuente: Elaboración propia.

3.2. Participants

This study had 130 participants, organised into 14 groups of people aged 16 to 18 and 6 groups of people aged from 12 to 15. There was diversity with regards to the profile of the young people according to their studies (principally secondary education and baccalaureate), ownership of the participating schools (1 private school, 2 state-assisted schools, and 4 state schools), location (6 Spanish municipalities), gender (there was a 50-50 split in the sample of respondents), and educational level (see Table 2).

TABLE 2. Description of groups of participants.

| Group code	n	Age		Gender		Year		Location	Ownership of school
GBAR001	7	$\bar{x}$ Sx	17.57 .79	H M	6 1	1FP Básica	7	Barcelona	Private
GBAR002	8	$\bar{x}$ Sx	18.00 .00	H M	3 5	1FP	8	Barcelona	Private
GBU002	8	$\bar{x}$ Sx	15.00 1.07	H M	4 4	3ESO 4ESO	4 4	Burgos	State assisted
GBU001	8	$\bar{x}$ Sx	12.50 .53	H M	4 4	1ESO 2ESO	4 4	Burgos	State assisted
GMANZ001	8	$\bar{x}$ Sx	13.00 .93	H M	4 4	1ESO 2ESO 3ESO	3 2 3	Manzanares (Ciudad Real)	State
GMANZ002	12	$\bar{x}$ Sx	15.67 .65	H M	5 7	1BACH 4ESO	3 9	Manzanares (Ciudad Real)	State
GPLA001	16	$\bar{x}$ Sx	13.81 1.17	H M	9 7	ESO	16	Plasencia (Cáceres)	State
GPLA002	7	$\bar{x}$ Sx	17.57 .53	H M	4 3	1FP 2BACH	4 3	Plasencia (Cáceres)	State
GSA001	6	$\bar{x}$ Sx	13.83 .41	H M	4 2	1ESO 2ESO 3ESO	6	Salamanca	State and State Assisted
GSA002	8	$\bar{x}$ Sx	16.12 .83	H M	4 4	1BACH 4ESO	6 2	Salamanca	State and State Assisted
GSA003	10	$\bar{x}$ Sx	13.20 1.03	H M	5 5	1ESO 2ESO 3ESO	10	Peñaranda (Salamanca)	State
GSA004	11	$\bar{x}$ Sx	16.09 .8312	H M	4 7	1BACH 1FPB 4ESO	6 2 3	Peñaranda (Salamanca)	State
GSA005	11	$\bar{x}$ Sx	13.46 1.29	H M	4 7	1ESO 3ESO	6 5	Salamanca	State
GSA006	10	$\bar{x}$ Sx	16.30 .67	H M	5 5	1BACH 2BACH	10	Salamanca	State

Source: Own elaboration.

4. Results and discussion

4.1. Virtual settings and digital profile

In the analysis of digital profiles, taking the settings and spaces where young people act and interact as the variable, it is apparent that social media networks and multimedia entertainment channels and platforms are the spaces where they are mainly present (see Graph 2).

GRAPH 2. Apps mentioned in discussions.
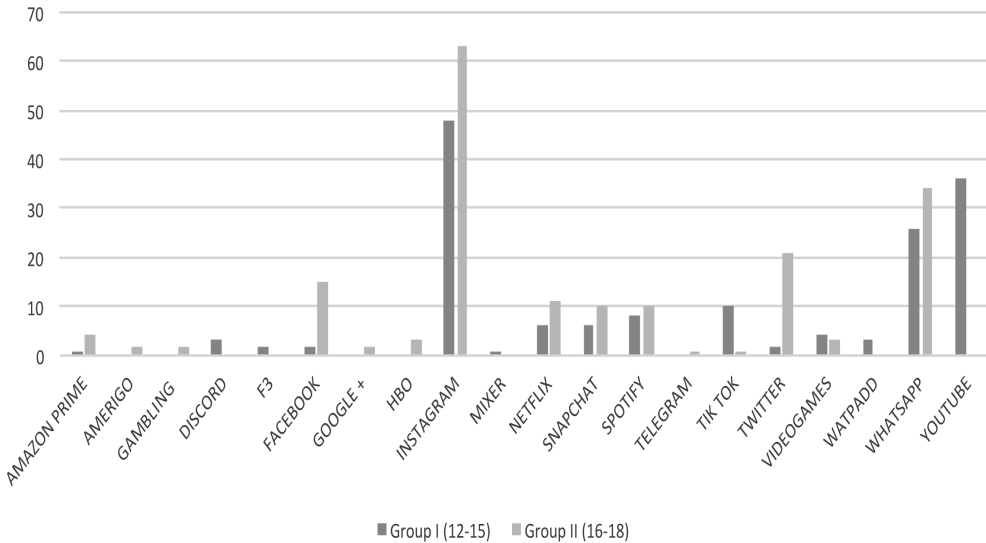
Source: Own elaboration.

In the investigation into the behaviour they display and what they look for in these apps and networks, young people show that they seek to communicate with their peer group and share personal information, such as posting large numbers of photographs, principally on Instagram and WhatsApp. This provides them with entertainment, displaying their tastes and interests or the main leisure activities they practice offline (travel, sporting events, and going to parties in the case of the older ones), aspects identified in other pieces of research (Sanz Arazuri et al., 2018). As a result of the social desirability effect, they state that they generally appear just as they are in the virtual setting, but digging a little deeper, they admit to using filters that enable them to give a better image of themselves, as this participant states:

> Because you want your profile to be like … when you visit it you say … wow, there are cool photos here. You want it to give the impression that you look good. (Part_3_GSA003_PEÑARANDA).

They use strategies to show their different selves or part of theirself, report-

ing that in one social network that have various profiles, a "public" one with less screening of followers and a so-called "private" one where they share information with people they regard as closer, excluding their parents.

> I have my public account and my private one, but because the idea with the public one is that I have lots of followers so anyone can follow me, and the other one is more for my friends, closer friends, so I post more things there, more of my things. (Part_1_GBAR002).

Social networks are at the forefront of the favoured virtual settings, as already shown by other research on the same area (Ibrahim, Wang, & Bourne, 2017; Ruiz-Corbella & De Juanas-Oliva, 2013) where young people are uninhibited to a greater or lesser extent depending on their perceived sensation of control (Ricoy & Martínez-Carrera, 2020). This virtual setting becomes an opportunity for exploring and constructing their identity —or identities— as they reflect their concerns and satisfy desires (Yau & Reich, 2019) fundamentally in their relational interchange with their peer group. Nonetheless, the fact that they restrict the virtual space is the product of the training about risks and dangers associated with the network that they have received.

The informants report that they use YouTube for entertainment and to find information, which they say they cannot find in other spaces, such as school or their families, and also to solve day-to-day problems, for which they turn to the famous tutorials. The 12-15 groups report that

they prefer mobile apps such as TikTok or using videogames through games consoles or on smartphones. The 16-18 group make more specific use of networks such as Twitter to share information they regard as interesting or relevant and they use streaming services to a greater extent to watch series and films in their free time.

It is apparent that they know how to choose and select spaces and times depending on whether they want to communicate, entertain themselves, or inform themselves. As they get older, they change and vary in channel and select in a more discerning (subjective) way the ones that give them a greater or lesser benefit and the older students are more analytical with the information they share (Solé, 2019).

4.2. Perception and uses of free time

To find out how young people perceive their free time, the discussions focussed on their temporal valuation of the uses of their free time offline and online and on their self-perceived availability. Table 3 shows the total number of references coded relating to the analysis variables, as well as the comparative percentages between groups:

It was found that younger respondents (12-15) do more planned offline activities — normally agreed with their families — such as sport or tasks relating to music. They say that these spaces fundamentally provide new learning, an opportunity to relate with other adolescents of their age, and entertainment. They are also spaces for interrelating that they continue afterwards in a virtual setting on so-

TABLE 3. Coded references in availability and time perception.

Category	Groups I (12-15)		Groups II (16-18)	
	References	%	References	%
Time perception	125	52.51%	105	47.49%
Availability	63	66.03%	17	33.97%
Excess time	5	31.94%	3	68.06%
Lack of time	35	69.99%	9	30.01%
Free time	61	38.86%	91	61.14%
Offline	45	43.74%	65	56.26%
Online	18	32.05%	22	67.95%

Source: Own elaboration.

cial networks where they carry on sharing their interests by sharing information or photographs (in WhatsApp groups or on Facebook or Instagram). They spend their online time communicating with their peers. They also state that they spend time on games connected online with friends with whom they continue to interact.

In the 12-15 groups, we can see that online and offline activities alike form the core of the construction of their social identity, the part in which they seek identification and acquire commitment (Velásquez, 2007) with different groups, which continuously shape shared values and behavioural norms. In the hyperconnected digital era, this group identification and commitment is consolidated by spending time in virtual spaces through publications linked to their leisure preferences (Almansa, Fonseca, & Castillo, 2013).

The older groups of participants (16-18) said that they have free time, except in school assessment periods. Although they do carry out offline activities (sport, going out with friends), they state that they spend a large part of their free time on online activities. The virtual part is with them in their daily life, with connectivity being vital for instantly sharing the activities they are doing, for example, through Instagram and its stories — short posts with a maximum duration of 24 hours. This need makes leisure into something interstitial, as Igarza notes (2009) because it makes daily activities fluctuate with short waiting times or movements, creating "temporal bubbles" (Fernández & Gutiérrez, 2017) in which the young person stops being in the here and now to instead be online, conditioned by the desire to exhibit and the demand to share.

They use their free time to share information — personal information and other information they regard as important — but they also say that using technology, social networks, and mobile apps allows them to disconnect. One crucial aspect that young people in this age bracket (16-18) report is that in their free time they need to "disconnect connected". This enables them to escape from other concerns like studying, spending time with their

family, or doing other leisure activities that do not require technology, but in this disconnection they choose to be in contact with others.

They perceive that they need this time as viewing social media when they have "a bit of time" has become a "habit", but they also mention boredom as a conditioning factor for their use — sometimes abuse, they note — of the virtual world, something that coincides with what is found in other research such as that of Morduchowicz, Marcon, Sylvestre, & Ballestrini (2012), which concludes that the internet and social media prevent boredom.

> I mean, we are used to grabbing the phone to kill time when we are bored. (Part_3_GSA004 _PEÑARANDA).

However, there is also a third argument in which adolescents state that the virtual world is "comfortable" as they can carry out multiple activities and tasks from a single space and at the same time. One example of this is the argument made by the following respondent:

> I think that rather than being because of boredom, it's because you have everything there, isn't it? So, you don't have to get up to look at anything, you don't have to think that I have to go and play padel and I have to put on all the kit … if you like padel you go to YouTube and you can watch it as much as you like all afternoon, I think it's a question of ease more than a question of boredom to be honest. (Part_2_ GBAR002).

Likewise, they feel that having unused virtual time, which does not benefit them

and makes them feel like they have wasted the time:

> I've thought that a lot, when you are with your phone, and you think: why? (laughter). To see people there, smiling. (Part_4_GSA002).

4.3. Managing free time online

To examine time management, we focussed on the external controls imposed by the respondents' families or schools, self-regulation strategies, and perception of time when online. Management of free time depends on the degree of autonomy. It is apparent that the 12-15 group depends more on parental control when deciding on what activities they want to do in their free time and on control in time management and use of technology and the internet. As the respondents' age increases, parents allow them more autonomy and decision-making capacity for managing their time. However, the young people themselves report that it is their families' lack of knowledge that results in this trust in self-management:

> We were born at a time when everything uses technology and so we know how it works, our parents, for example, they don't know how Instagram works. (Part_7_GMANZ002).

The most widely used parental strategies (see Graph 3) relate to: 1) 12-15 groups: organisation of time and checking networks and apps they use on their smartphones and other devices; and 2) 16-18 groups: taking devices away when they use them in excess — the parents' subjective view — or they do not comply with their responsibilities at school or at home.

GRAPH 3. Parental strategies identified in management and use of technology.
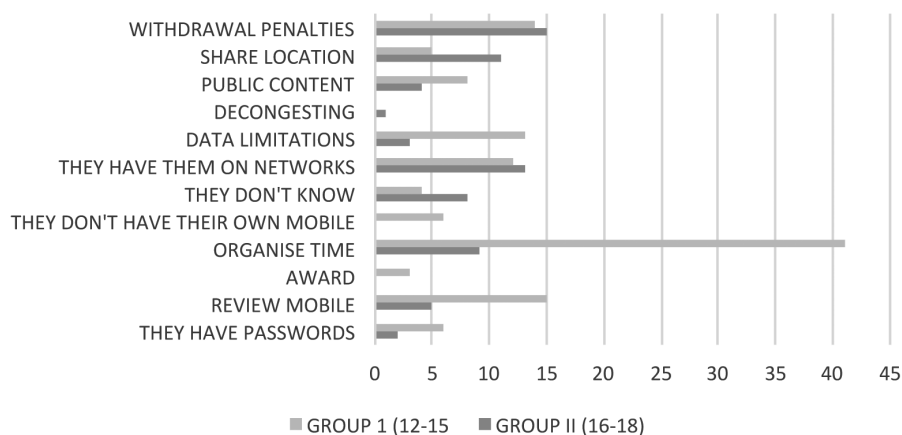
Source: Own elaboration.

They coincide in understanding the importance of organisation of time as they state that they are not always able to control themselves and they lose the notion of how many hours they spend, but they do not agree to the same extent with their families checking their devices.

> Well, I feel bad, angry, not because they have taken it off me, but because they see everything I'm doing or that I have, they read all of it. (Part_4_ GPLA001).

Young people regard their virtual spaces as a private intimate space where parental control has no place, even though the information they share can be viewed by hundreds of people. Managing their information and deciding whether or not to share it belongs to them. This is what is known as *the exploration phase* in the shaping of identity (Tesouro, Palomanes, Bonachera, & Martínez, 2013) which favours the development of active and mature statuses. This requires young people to feel that they can man-age not only times and spaces but also how they use them, even though they might sometimes make errors because of a lack of information, imprudence, or immaturity. Madden et al. (2013) call this augmented intimacy, where young people share their lives with friends and acquaintances while excluding their close family environment as they regard it as a space where only peers can intervene, a space that becomes excessively large and diffuse despite their belief in absolute control. And they manage their time so they have moments in which, through virtual spaces, they consolidate their validation and social integration, clarify their feelings, thoughts, and emotions, and test their capacity for self-expression (Morduchowicz et al., 2012).

Of the 53 references to control at school recorded, a slightly higher percentage of references to the existence of restrictions is apparent in the younger groups (53.23% compared with 46.18%

from the older groups). These controls focus on not allowing students to carry devices in the school without an express request by a teacher. Management of "school free time" is determined by the rules of the school and young people report that they adapt to them. They also consider that at certain moments they prefer this external management of their time, as they recognise that:

> I also think that if you always have your phone, you will be more reliant on it. And if they take it off you, it's like you are freer. Without having to have your phone here and thinking I've got a message or I'm going to do this … It's better without your phone. (Part_4_ GPLA002).

A higher proportion of coded information can be seen in the loss of concept of time in the 16-18 group compared with the 12-15 group (67.73% compared with 32.27%). Therefore, it is the older groups of respondents who report using self-regulation strategies since they are subject to less external control and have more autonomy in managing their free time (in percentage terms, they referred to this more in the discussion than the younger groups). When studying in depth the strategies proposed, we found (see Graph 4) that the strategies they use most are: setting themselves times for being online or looking for another tool and even hiding the device so that they do not have immediate access.

GRAPH 4. Self-regulation strategies identified by young people.
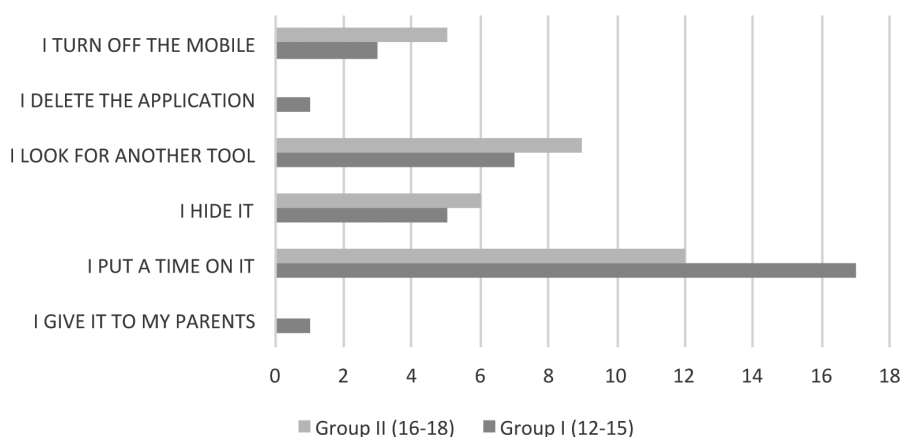
Source: Own elaboration.

In the *temporality dimension* category, we found that being connected causes them to lose the concept of time and this results in negative feelings as they perceive the loss of control in the use they make during this time they spend connected. Consequently, we find comments from young people like the following:

> Suddenly you get an alert and you think 'I'm not going to look at it' but you start thinking 'who will it be, okay, I'll look at it, I'm going to look at it'. So you look at

it and then from that person you go to stories and people have updated their stories and then I lose myself there, and then ... (Part_6_ GBU002).

It's like two hours go by and you say 'well, I want more' and that's how it is all the time and I spend a whole afternoon and I'm with my phone all the time. (Part_5_ GSA005).

This creates uncertainty and makes them reflect on the decisions they have taken during this time relating to gains and losses of their own time, learning, and opportunities to do other activities. It is important in the construction of young people that they ask themselves questions about good or bad management as this will enable them to take decisions based, normally, on their consequences such as low school performance.

5. Conclusions and outlook

This preliminary phase of the CONECT-ID study has found several results that support focussing pedagogical discussion on designing and encouraging quality educational interventions. Firstly, young people's identity construction forms a continuum affected by different spaces and times, both virtual and face-to-face. Adolescents report finding a micro-space of individuality-collectivity in the internet which is apparently innocuous for them and where they feel the liberty they do not always perceive in other spaces with more tangible external control. They make their free time a time for interaction, exchange, generation, and production of information which they regard as their property where

they alone set the rules of the game. And while it is true that young people need individual spaces where they can experiment and explore their abilities, virtues, and even defects, their education must provide them with tools that foster their capacity to discern, accept, value, and make decisions regarding what will bring them an adequate personal and social development, in terms of liberty, responsibility, critical thinking, autonomy, and self-management, and foster their capacity to identify things that can harm them as a consequence of a loss of autonomy and dependent and irresponsible use of technology, delegation of academic tasks and other individual and collective activities offline or confidence in channels and users that turns them into victims of deception, among other aspects. It is vital to pay attention to young people's communicative capacity to generate and share information and interact with others — whom they might or might not know — through a variety of channels and platforms. Educational agents should take this aspect into account, using this communicative potential to work on acquiring assertive and empathetic communication skills, as a foundation for establishing healthy social relationships.

Secondly, it has been shown that young people who have less parental control of their time management need stronger self-management and self-regulation mechanisms. They work with strategies of time management by trial and error, but they report that the appeal of the internet clouds their reasoning despite them being aware that they have other obligations to fulfil. Pedagogy should support

practices that allow them to go further than setting limits and show them what they can manage their time for in settings that provide them with lasting benefit beyond mere entertainment. We have found that they spend a large proportion of their time viewing profiles and stories of people who they share their lives with on social media or communication channels such as YouTube, including anonymous people and famous influencers. We should consider young people's tastes in order to foster their capacity for criticism and self-criticism. We must enable physical and virtual spaces and times where they can reflect on prosocial values that they identify in other profiles, and we should teach them that they can select content that allows them to show an optimal version of their self. Furthermore, interventions must be designed for working socio-educationally with them on establishing healthy interpersonal relationships and on putting in place social and communicative skills that enable them to have better social development. This will offer us the chance to create a body of citizens — also virtual — who are better able to put democratic values into practice.

One limitation of this study that we should note is the data collection method, as the self-reporting nature of the discussion groups could result in biases; nonetheless, this is an appropriate technique that has enabled us to approach the beliefs and opinions of the key informants, giving them the opportunity to reflect on something that is of interest for the educational community. On the other hand, we should also note that, while we could allude to the limited character of the sample, this study is part of a preliminary phase of a longitudinal mixed study (Boczkowski, Mitchelstein, & Matassi, 2018; Fernández & Gutiérrez, 2017; Montiel & Agustina, 2019; Torres, 2017; Vannucci et al., 2020) which will enable us to continue examining in greater depth the analysis of these first results and making recommendations for educational policies and practices.

Notes

[1] "CONECT-ID. Young people's hyperconnected identity and their time perception in digital leisure". Spanish Ministry of Science, Innovation, and Universities. Reference: PGC2018-097884-B-I00. (2019-2022). Some results also relate to the "Digital identities in hyperconnected young people: challenges for the family, social, and school context" research project. Regional Government of Castillla y Leon. Reference: SA038G19 (2018-2021). PI José Manuel Muñoz Rodríguez.

[2] Hierarchy chart from NVivo showing the weight of the content of the categories after analysis of the discussion in the five research dimensions of the project: digital profile, behaviour and actions, settings, time management, time perception, and critical thinking.

References

Almansa, A., Fonseca, O., & Castillo, A. (2013). Redes sociales y jóvenes. Uso de Facebook en la juventud colombiana y española. *Comunicar, 40* (20), 127-135.

Awan, F., & Gauntlett, D. (2013). Young People's Uses and Understandings of Online Social Networks in Their Everyday Lives. *Young, 21* (2), 111-132.

Beneito-Montagut, R. (2015). Encounters on the Social Web: Everyday Life and Emotions Online. *Sociological Perspectives, 58* (4), 537-553.

Blommaert, J., & De Fina, A. (2016). Chronotopic Identities. On the Timespace Organization of Who We Are. In A. de Fina, J. Wegner, & D. Ikizoglu (Eds.), *Diversity and Super-Diversity. Sociocultural Linguistic Perspectives* (pp. 1-15). Washington: Georgetown University Press.

Boczkowski, P. J., Mitchelstein, E., & Matassi, M. (2018). News comes across when I'm in a mo-

ment of leisure: Understanding the practices of incidental news consumption on social media. *New Media and Society, 20* (10), 3523-3539.

Boyd, D. (2014). *It's Complicated: The Social Lives of Networked Teens*. New Haven and London: Yale University Press.

Brubaker, R., & Cooper, F. (2000). Beyond "Identity". *Theory and Society, 29* (1), 1-47.

Case, A. (2016). *Calm Technology: Principles and Patterns for Non-Intrusive Design*. Sebastopol: O'Reilly.

Cloquell, A. (2015). Usos sociales de Internet entre los adolescentes españoles. *Revista Sobre la Infancia y la Adolescencia, 8* (1), 1-14.

Cruz, M. (2017). *Ser sin tiempo*. Barcelona: Herder.

Fernández, E., & Gutiérrez, J. M. (2017). La socialización de los jóvenes interconectados: experimentando la identidad en la sociedad aumentada. *Profesorado. Revista de Curriculum y Formación del Profesorado, 21* (2), 171-190.

Garaigordobil, M., & Larrain, E. (2020). Bullying and cyberbullying in LGBT adolescents: Prevalence and effects on mental health. *Comunicar, 62* (1), 79-90.

Garmendia Larrañaga, M., Jiménez Iglesias., E., & Larrañaga Aizpuru, N. (2019). Bullying y ciberbullying: victimización, acoso y daño. Necesidad de intervenir en el entorno escolar | *Bullying and cyberbullying: victimisation, harassment, and harm. The need to intervene in the educational centre*. r**evista española de pedagogía**, 77 (273), 295-312. doi: https://doi.org/10.22550/REP77-2-2019-08

Gee, J., & Esteban-Guitart, M. (2019). Designing for deep learning in the context of digital and social media. *Comunicar, 58* (1), 09-17.

Georgakopoulou, A. (2017). Sharing the moment as small stories: The interplay between practices & amp; affordances in the social media-curation of lives. *Narrative Inquiry, 27* (2), 311-333.

Gündüz, U. (2017). The Effect of Social Media on Identity Construction. *Mediterranean Journal of Social Sciences, 8* (5), 85-92.

Hodkinson, P. (2017). Bedrooms and beyond: Youth, identity and privacy on social network sites. *New Media & Society, 19* (2), 272-288.

Hou, J., Rashid, J., & Lee, K. (2017). Cognitive map or medium materiality? Reading on paper and screen. *Computers in Human Behavior, 67* (1), 84-94.

Hu, C., Zhao, H., & Huang, J. (2015). Achieving self-congruency? Examining why individuals reconstruct their virtual identity in communities of interest established within social networks platforms. *Computers in Human Behavior, 50* (1), 465-475.

Ibáñez-Martín, J. A., & Fuentes, J. L. (2015). Una reflexión plural sobre el aprendizaje ético-cívico mediado tecnológicamente. *Teoría de la Educación. Revista Interuniversitaria, 27* (1), 25-32.

Ibrahim, N. F., Wang, X., & Bourne, H. (2017). Exploring the effect of user engagement in online brand communities: Evidence from Twitter. *Computers in Human Behavior, 72* (1), 321-338.

Igarza, R. (2009). *Burbujas de ocio. Nuevas formas de consumo cultural*. Buenos Aires: La Crujía.

Iqani, M., & Schroeder, J. E. (2016). #selfie: digital self-portraits as commodity form and consumption practice. *Consumption Markets & Culture, 19* (5), 405-415. doi: https://doi.org/10.1080/10253866.2015.1116784

Livingstone, S. (2013). *Children and the internet*. London: Polity.

Loveless A., & Williamson, B. (2017). *Nuevas identidades de aprendizaje en la era digital*. Madrid: Narcea.

Mace, R. (2020). Reframing the ordinary: cyberspace and education. *Teoría de la Educación. Revista Interuniversitaria, 32* (2), 109-129.

Madden, M., Lenhart, A., Cortesi, S., Gasser, U., Duggan M., Smith, A., & Beaton, M. (2013). Teens, Social Media, and Privacy. *Pew Research Center's Internet & American Life Project, 21* (1), 2-86.

Malone, T. W., & Bernstein, M. S. (2015). *Handbook of Collective Intelligence*. Cambridge, MA: MIT Press.

Marlowe, J., Bartley, A., & Collins, F. (2017). Digital Belongings: The Intersections of Social Cohesion, Connectivity and Digital Media. *Ethnicities, 17* (1), 85-102.

Miles, M., & Huberman, A. (1994). *Qualitative Data Analysis*. London: SAGE Publications.

Montiel, I. y Agustina, J. R. (2019). Retos educativos ante los riesgos emergentes en el ciberespacio: claves para una adecuada prevención de la cibervictimización en menores | *Educational challenges of emerging risks in cyberspace: foundations of an appropriate strategy for preventing online child victimisation*. **revista**

española de pedagogía, 77 (273), 277-294. doi: https://doi.org/10.22550/REP77-2-2019-03

Morduchowicz, R., Marcon, A., Sylvestre, V., & Ballestrini, F. (2012). *Los adolescentes y las redes sociales. La construcción de la identidad juvenil en Internet*. Buenos Aires: Fondo de Cultura Económica.

Muros, B., Aragón, Y., & Bustos, A. (2013). La ocupación del tiempo libre de jóvenes en el uso de videojuegos y redes. *Comunicar, 40* (1), 31-39.

Nilan, P., & Feixa, C. (2014). ¿Una juventud global? identidades híbridas, mundos plurales. *Educación Social, 43* (1), 75-89.

Pangrazio, L. (2019). Technologically situated: the tacit rules of platform participation. *Journal of Youth Studies, 22* (10), 1308-1326.

Pérez Latorre, O. (2015). The Social Discourse of Video Games analysis Model and Case Study: GTA IV. *Games and Culture, 10* (5), 415-437.

Rey, L., Quintana-Orts, C., Mérida-López, S., & Extremera, N. (2018). Emotional intelligence and peer cybervictimization in adolescents: Gender as moderator. *Comunicar, 56* (1), 9-18.

Ricoy, M. C., & Martínez-Carrera, S. (2020). El uso informal del smartphone en adolescentes de centros de protección: un reto para promover la intervención socioeducativa. *Educación XX1, 23* (1), 459-482.

Ruiz-Corbella, M., & De Juanas-Oliva, A. (2013). Redes sociales, identidad y adolescencia: nuevos retos educativos para la familia. *ESE: Estudios sobre educación, 25* (1), 95-113.

Safranski, R. (2017). *Tiempo. La dimensión temporal y el arte de vivir*. Barcelona: Tusquets Editores.

Sanz Arazuri, E., Alonso Ruiz, R. A., Sáenz de Jubera Ocón, M., Ponce de León Elizondo, A., & Valdemoros San Emeterio, M. A. (2018). Ocio, redes sociales y estudiantes españoles. *Educación XX1, 21* (2), 59-78.

Scolari, C. (2016). Alfabetismo transmedia. Estrategias de aprendizaje informal y competencias mediáticas en la nueva ecología de la comunicación. *Telos, 103* (1), 13-23.

Serrano-Puche, J. (2013). Vidas conectadas: tecnología digital, interacción social e identidad. *Historia y Comunicación Social, 18* (1), 353-364.

Shin, W., & Lwin, M. O. (2017). How Does 'Talking about the Internet with Others' Affect Teenagers' Experience of Online Risks? The Role of Active Mediation by Parents, Peers and School Teachers. *New Media & Society 19* (7), 1109-1126.

Solé, J. (2019). El cambio educativo ante la innovación tecnológica, la pedagogía de las competencias y el discurso de la educación emocional. Una mirada crítica. *Teoría de la educación. Revista Interuniversitaria, 32* (1), 101-121.

Tesouro, M., Palomanes, M. L., Bonachera, F., & Martínez, L. (2013). Estudio sobre el desarrollo de la identidad en la adolescencia. *Tendencias pedagógicas, 21* (1), 211-224.

Tojar, J. C. (2006). *Investigación cualitativa. Comprender y actuar*. Madrid: La Muralla.

Torres, C. (2017). Narrativas Mediáticas: La representación virtual del yo en los jóvenes. *Realidad: Revista De Ciencias Sociales Y Humanidades*, *147* (1), 153-168.

Turkle, S. (1997*). La vida en la pantalla: la construcción de la identidad en la era de Internet*. Barcelona: Paidós.

Turkle, S. (2011). *Alone together. Why We Expect More from Technology and Less from Each Other*. New York: Basic Books.

Turkle, S., Taggart, W., Kidd, C., & Dasté, O. (2006). Relational Artifacts with Children and Elders: The Complexities of Cybercompanionshi. *Connection Science, 18* (4), 347-361.

Valdemoros, M. A., Alonso, R. A., & Codina, N. (2018). Actividades de ocio y su presencia en las redes sociales en jóvenes potencialmente vulnerables. *Pedagogía Social. Revista Interuniversitaria, 31* (1), 71-80.

Valdemoros, M. A., Sanz, E. & Ponce de León, A. (2017). Ocio digital y ambiente familiar en estudiantes de Educación Postobligatoria. *Comunicar, 50* (25), 99-108.

Vannucci, A., Simpson, E. J., Gagnon, S., & Ohannessian, C. M. (2020). Social media use and risky behaviors in adolescents: A meta-analysis. *Journal of Adolescence, 79* (1), 258-274.

Vansieleghem, N., Vlieghe, J., & Zahn, M. (2019). *Possibilities and Transformations in Technology*. London and New York: Routledge.

Velásquez, A. (2007). Lenguaje e identidad en los adolescentes de hoy. *El Ágora USB, 7* (1), 85-107.

Viñals, A., Abad, M., & Aguilar, E. (2014). Jóvenes conectados: Una aproximación al ocio digital de

los jóvenes españoles. *Communication Papers, 4* (3), 52-68.

Wängqvist, M., & Frisén, A. (2016). Who am I OnLine? Understanding the meaning of OnLine Contexts for Identity Development. *Adolescent Research Review, 1* (2), 139-152.

Yau, J. C., & Reich, S. M. (2019). It's just a lot of work: Adolescents' self presentation norms and practices on Facebook and Instagram. *Journal of Research on Adolescence, 29 (*1), 196-209.

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