

The Digital User of Social Networks: A Comparative, Transcultural and Intergenerational Study

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ABSTRACT

This article presents the results of a research study carried out in 2010 and 2011 on the evolution of the digital divide in two different cultural contexts: Europe and the United States of America. Using an Internet-based questionnaire parents and teenagers were surveyed regarding some variables related to their digital skills and their participation in social networks. Their answers were analyzed taking into account a range of factors such as age, gender and place of residence. The results highlight that there are significant differences between the United States of America and Europe regarding the presence of parents and teens on social networks, even though the generational digital divide decreases between minors and parents in both cultural contexts

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Introduction

The Internet has ushered in a new era and culture based on the access of information, the participation of users generating opinions, and the creation of social networks. It has constructed a new digital environment of relationships, profiles, and information, becoming a tool of communication and a space for leisure. Twenty-first-century children are digital natives who have learnt to multitask through the Internet and to manage multiple screens through information and communication technologies (ICTs) (Gurpegui, 2010). The parents, as digital immigrants, have opened a digital divide with respect to their children in the knowledge of computer applications and the use of ICTs. Internet, videogames, mobile phones, iPods, and cameras, among other digital tools, are commonly used by the children and perceived as inaccessible by the parents (UNESCO, 2010).

Teenagers voluntarily relinquish their personal information in order to join social networks on the Internet. Subsequently, they are surprised when their parents read their online comments. Also, communities and educational institutions are astonished by the personal information posted online by teens and their online activities outside of school. Beniger(1986) argues that the publication of personal information by teenagers and students have consequences. Beniger also states that mass media have gradually replaced interpersonal communication as a socializing force. In addition, social networks have become popular sites for youth culture to explore relations and share cultural events.

The idea that a new generation of students is entering the educational system has attracted recent attention from educators and government officials. The name 'digital natives' or 'net generation', attributed to these young people means that they have been immersed in technology all their lives, acquiring

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sophisticated technical skills and learning preferences in which traditional education is unprepared to cope. Some studies, however, question the stereotypical characterization of terms such as "digital natives." Thus, Bennett, Kevin, and Maton (2008) propose a debate on these terms not from empirical and theoretical approaches, but from academic and moral perspectives.

Digital Divide in Families

The new generations are capable of altering the natural order in the transmission of knowledge by teaching adults the use of specific technologies, to the surprise of their elders. The use of Windows' interfaces is as easy for the children as the mouse's double-click are difficult for the adults. Multiple, labyrinthine screens with global information are quickly understood by children while adults long for more logical, organized, lineal, and sequential information (Balaguer, 2006).

Various studies and research conducted in recent years show that there has been an increase in the gap of Internet usage and knowledge between parents and their children. Alberó's (2002) exploratory study on Internet use by Barcelona teens' (from 12 to 17 years old) shows that their parents have not integrated the use of the Internet into their daily routine. The majority of parents are not curious or interested in this technology. Contrary to their children, for many parents, the use of the Internet is work related. It is not related to their hobbies or associated with leisure. Few parents have taught their children how to navigate the Internet. The lack of time is one of the reasons for the parents' poor knowledge of the use of the Internet. However, there is other research that qualifies the digital divide between generations. Hasebrink, Livingstone and Haddon (2008) in a comparative study between 2005 and 2008 on Internet use in parents and children, point out that in most European countries, parents use the Internet more than their children. According to this study, in most countries, the proportion of parents online is higher than the proportion of children. The overall result seems to contradict the expectation that children are more likely to be online users than their parents' generation. This contradiction can be solved by looking at the age of the children: The higher likelihood for parents to use the internet is only based on parents with younger children.

The current generation of children and adolescents is the first one that has been educated in the digital society (Tapscott, 1998). A report (Feixa, González, Martínezy, & Porzio, 2002) sponsored by the *Observatori de la Infancia i les Famílies* of Barcelona, which combines statistical data and focus groups, concludes that teens and youngsters use new technologies to a greater extent than adults. During 2000, between 23% and 32% of Spanish youths (from 14 to 22 years old) used the Internet. Within this group, the largest percentage of users was among boys from 17 to 22 years old, and the smallest percentage of users was among girls between 14 and 16 years old. Adults' use of the Internet was much lower, particularly among women. Adult mothers between 35 and 55 years old only used the Internet in 7% of the cases, while the percentage for men was about 16%. Men and boys used the Internet more and did so more often. For boys as well as girls between 14 and 22 years old, there was a progressive increase in the percentage of Internet users and the frequency of its use. The location from where they access the Internet also varied: Up to 19 years old, teens accessed the Internet from home; from 20 to 22 years old, the main access is the university; and adults accessed it from home as well as work.

Nearly all Spanish teens have connected to the Internet at some point, while a great majority of them do so regularly. Similarly, most of them learnt to use the Internet in informal contexts (i.e., not related to formal education) while connecting to it from home, a location without any type of usage restriction. Within this context, the Internet is essentially leisure space for Spanish youngsters. Moreover, girls are more proactive in exploring and using the Internet's technical features, tools, and applications. Regarding the use of online social networks, one-third of the Spanish youngsters did not use any social network, blog, or photoblog (e.g., Fotolog). Among those who used them in Spain as a whole, the tools and services most used are, by order of importance, Tuenti and Fotolog. In Catalonia, however, the most used services are, by order of importance, Fotolog and Facebook. In addition, girls are shown to be more proactive in the use of social networks and photoblogs (Aranda, Sánchez-Navarro, & Taberner, 2009).

However, there is a great difference between what parents believe regarding the quantity of time that their children spend online and the real time indicated by their children. According to the data shown by the

Norton Online Family Report (Foresight, 2010), which examines 9,800 Internet users (adults, and children between 8 and 17 years old) in 11 countries—Australia, Brazil, Canada, China, France, Germany, India, Italy, Sweden, the United Kingdom, and United States—in the US, 6 out of 10 adults think that parents should have total control over what children do online. In Italy, on the contrary, parents think that they must authorize their children to make the correct decisions by themselves. One of the main conclusions of the report is the parents' lack of knowledge regarding the impact of the negative online incidents experienced by their children. Nearly two-thirds of the children had had negative online experiences, while only 45% of the parents have been aware of it.

In a similar study on minors' experiences and practices and their use, risky or not, of the Internet and new online technologies in Europe, Garmendia, Garitaonandia, Martínez, and Casado (2011) state that 59% of Spanish minors, between 9 and 16 years old, use online social networks. Taking into account that in Spain the legal age to register for online social networks is 14, nearly 40% of minors between 9 and 13 years old have a profile on a social network. Regarding the information that minors post on their social network profiles, they are cautious about adding private information such as their address or phone number. In Europe, 14% of minors post that content, while in Spain only 9% do. Sixty-seven percent of Spanish minors who use social networks have a private profile, so only their friends can see them. This percentage is higher than the European average (43%), which tells us about how conscientious Spanish minors are regarding online privacy. Only 14% of Spanish minors affirm having a public profile in comparison to 26% of European minors. Regarding the risks of contacting unknown people through social networks, 19% of Spanish minors (25% of European minors) state that they keep in contact with people that they met online.

Livingstone, Haddon, Görzig, and Ólafsson's (2010) study shows that in Italy the average age of accessing the Internet for the first time is 10 years old, while in the northern European countries, the age is between 7 and 8 years old. Children from some of the Baltic countries (25% in Estonia and 24% in Lithuania), followed by the UK, Ireland, and Portugal (5% each), Italy (4%), and Turkey (3%), are most likely to have met in person somebody who they initially met on the Internet. The majority of Spanish minors (67%) state that the people that they met in person after meeting them online were part of their social circle—a friend or family member of someone they knew in person. Nevertheless, 41% of Spanish minors say that they have met somebody in person that they met for the first time on the Internet. Initial studies conducted in the US indicate that adults, particularly parents, are not accepted as friends on social networks. In general, parents are not welcome. The reasons for that are related to shame, social norms, and concerns about parents. Underlying these reasons are different notions of private and public. Students do not seem to be able to discern between the two different spheres: the "public" and the one that shows the social individual in the private sphere (West, Lewis & Currie, 2009).

More than half (55%) of North American youngsters (from 12 to 17 years old) use social networks (Lenhart & Madden, 2008), particularly girls. For girls, social networks are the main spaces to strengthen already established friendships. For boys, the networks offer opportunities to flirt and make new friends. Eighty-one percent of North American parents and 79% of teens connected to social networks indicate that teens are not careful enough about giving away their personal information on the Internet. However, the parents of the youngest teens are most likely to pay attention to the disclosure of personal data (Lenhart, 2005).

Following the aforementioned research, we intend to learn to what degree social networks are changing the relationship between parents and their children. We have observed how an increasing number of children start using the Internet and social networks at a younger age, and might be exposed to new problems regarding the incorrect use of those online tools. Holloway, Green and Livingstone (2013) empathize that "*the one thing we know for sure about 0-8 year olds' internet use is that children in this age group are increasingly going online*" (p.25).

Therefore, many parents did not know what to do in these situations. In these cases it could be worst; it is when their sons and daughters thought that they could handle the Internet resources better than their parents. So, sometimes the family cannot manage to resolve the problems, and they are forced to ask for help or leave the problem without any solution. Duerager and Livingstone (2012) state as follows;

Nearly half of European children go online in their bedroom, and one third go online on a mobile phone or handheld device. Given the rise of privatized and mobile access, it is difficult for parents to closely regulate their children's safety (p.1).

In addition, teachers and educators are worried about how solve some problems like cyber-bullying, sexting, grooming and other risk of bad Internet uses by teenagers.

The specific objectives in this study are:

1. To verify the intergenerational and gender digital divides in the studied contexts.
2. To understand the use and presence of social networks between parents and their children in relation to their cultural background.
3. To learn the similarities and differences among the different ages groups and cultural contexts of teen users of social networks and their parents.
4. To compare the results of the previous studies on digital social networks users for the past two years.
5. To detect the existence of possible differences in use between people of different genders.

Method

This research is an ex post facto, descriptive-correlational, and cross-cultural study. It analyzes some indicators of the profiles of social networks users in a cross-cultural sample of teens between 12 and 17 years old.

Participants

The total sample is 432 individuals distributed in two different cultural contexts: within the European context (N=204), the Spanish State (N=167; the Basque Country and Catalonia), and Italy (N=37 Urbino-Ravena); and the USA (Reno, Nevada and Elko, Nevada, N=228). The percentage of gender is balanced in all cities: 196 men and 236 women. In both contexts, the Western USA (Nevada) and in Southern Europe (Basque Country, Catalonia in Spain and Urbino-Ravena in Italy), the percentages of men are 45% and 46%, respectively. For women, the percentages are 55% and 54%, respectively.

The sample was obtained by convenience and takes into account the following criteria: age, course, and type of educational center. The students were recruited from the first year of middle school to the second year of high school. The study was carried out in two or more centers—public and/or private or with different socio-economic levels, without being on opposite extremes—for each sub-sample. The nine schools from which data have been collected are located in the Basque Country (3 public and 2 private in the province of Gipuzkoa); Catalonia (1 private center); Italy (1 public center in Urbino and 1 private center in Ravenna); and the US (2 private centers: 1 in Reno and the other in Elko). Socio-economic level and center type (public-private) variables have been controlled in every analysis conducted. Data was collected from fathers/mothers and students.

Variables and Instruments of Measure

The instrument used to collect the profile and/or digital user is the Questionnaire of Social Networks, and it was designed by a research team of the University of the Basque Country. After the pilot test ended, the survey was modified and simplified. The final questionnaire has 4 initial questions that collect the following data: age, gender, educational center, and information about the family. In addition, the survey presents 23 items that were divided into 4 fields of study: Internet and e-mail; Internet applications (blogs, chat, etc.); social networks; and mobile phones. The validity and reliability of the questionnaire has been supported by .822 alfacronbach.

The questions were selected with the intention of providing values on the use and knowledge of different Internet applications, social networks, and even mobile phone applications. Seven variables (1. Have an e-mail account; 2. Daily use of the Internet; 3. Chat participation; 4. Have a blog; 5. Be on social networks; 6. Do Internet downloads; and 7. Use own mobile phone) were grouped in a composite variable

called “Digital User.” In this regard, we consider a person to be a “heavy digital user” if the person answers affirmatively to most of the 7 dichotomous variables. The reliability of the composite variable results in .57 in Cronbach’s alpha. This variable will be compared with others in order to achieve the research objectives identified at the beginning of the investigation.

Procedure

In order to collect the data, the survey was translated into Catalan, Basque, English, and Italian. At a later stage, a pilot test was conducted with a class in order to test the comprehension of the instrument before the final test.

The majority of the participants responded to the online version of the questionnaire, although there were some that completed the paper version. The participants were fathers/mothers and minors who had their parents’ or guardians’ consent. The survey – on paper or online – lasted for 20 to 25 minutes.

Regarding the analysis of the data, we used the SPSS program. In addition, we carried out different types of descriptive and inferential analyses depending on the type of variable being studied, such as median comparative tests (One way Anova) and Chi-square analysis. These analyses have allowed us to learn about the presence of differences in the variables according to different factors; to test the meaning of them; and to know the size of the effect, that’s to say, the magnitude of such differences.

Results

First of all, we will begin by showing general data on the possible differences among users by gender, territory, and age. Later on, we will present more specific data where other variables come into play and where social networks acquire more prominence.

Digital User and Gender

In order to infer differences among users regarding gender, we carried out a comparison of means as shown in Table 1.

Table1. Descriptive analysis of the assessment of digital users according to the gender of the participants in the simple.

Digital User	N	M	Sd	Se	95% confidence interval for the average		Min	Max	F	Sig.	Eta ²
					Limit inf.	Limit supe.					
Male	196	4.183	1.5613	.1115	3.9637	4.4036	0	7			
Female	236	4.339	1.4830	.0965	4.1488	4.5292	0	7	1.119	.291	.003
Total	432	4.268	1.5192	.0731	4.1248	4.4122	0	7			

There are no significant differences between men and women. The women have a mean (M)of 4.339 in comparison with men who have a mean of 4.183 out of 7.

After analyzing the contexts, we do not observe important differences in the use of digital applications by gender (see Table 2).

Table 2. Descriptive analysis of the assessment of digital users according to the participants' gender by context in the sample.

Digital User	Western USA Context N	Western USA Context Mean M	Southern EUROPE Context N	Southern EUROPE Context Mean M
Male	102	4.6569	94	3.6702
Female	126	4.7540	110	3.8636
Total	228	4.7105	204	3.7745

Digital User and Place of Residence or Context

Another factor that we analyzed was the place of residence. Although the participants' schools belong to quite diverse cities and situations, we grouped them into two unique contexts that were balanced in relation to the number of subjects in order to compare the differences between them. The first group is made up of the schools and the participants from the Western USA and the second one by the those in Southern Europe. The results are shown in Table 3.

Table 3. Descriptive analysis of the assessment of digital users according to the participants' place of residence.

Digital User Context	N	M	SD	SE	95% confidence interval for the average		Min	Max	F	Sig.	Eta ²
					Limit inf.	Limit supe.					
Western USA	228	4.710	1.4187	.0939	4.5254	4.8957	0	7			
Southern Europe	204	3.774	1.4783	.1035	3.5704	3.9786	0	7	45.042	.000	.095
Total	432	4.268	1.5192	.0731	4.1248	4.4122	0	7			

We observe significant differences regarding the means obtained in the variable "Digital User," which includes the use and knowledge of Internet services. For instance, Western USA participants present a higher mean of 4.71 than Southern Europeans 3.77, the highest possible being 7. Later on, in the 5th section of the paper, we will come back to this issue and will present the simple variables that shaped the "Digital User" variable, which will explain these significant differences.

Digital User and Differences between Age Groups

Regarding age, we identify quite interesting results, which offer clues on the nature, existence, or inexistence of digital divides between generations, as well as the use and knowledge of these technologies.

Table 4 shows the main differences between the diverse age groups. Among the students, the age group with the highest digital use is between 13 and 15 years old (mean 4.724). In the case of families, those between 30 and 40 years old (within this group is the youngest sub-group) present the highest mean, 3.960. Although a priori we may think that there is a considerable difference on the use between these groups, this is not the main difference found.

That's to say, the highest distance in the theoretical digital divide is not between teens and their parents but between students from 10 to 12 years old, with the lowest mean (2.666), and teens from 13 to 15 years old

(mean 4.724). This fact clearly questions the notion of young people as “digital natives” according to Prensky (2001) in comparison to “digital immigrants” (fathers and mothers).

Furthermore, in this hypothetical digital divide, there should be a great difference between young people and older adults. However, the findings of our study evidence a much lower difference when comparing the mean of all students’ age groups with the mean of parents. The students’ mean is 4.028, while the mean of the parents is 3.762.

Table 4. Descriptive analysis of the assessment of digital users according to the age group of the participants.

Digital User Age Group	N	M	SD	SE	95% confidence interval for the average		Min	Max	F	Sig.	Eta ²
					Limit inf.	Limit super.					
10-12	42	2.666	1.0744	.1657	2.3318	3.0015	0	5			
13-15	178	4.724	1.6147	.1210	4.4859	4.9636	0	7			
16-18	82	4.695	1.0851	.1198	4.4567	4.9336	2	7			
Average 14.4	302	4.028	1.258	0.136	3.758	4.300	0.66	6.33			
30-40	25	3.960	1.2741	.2548	3.4341	4.4859	2	6	18.921	.000	.182
41-50	95	3.926	1.2902	.1323	3.6635	4.1892	1	6			
51-70	10	3.400	1.2649	.4000	2.4951	4.3049	1	5			
Average 44.2	130	3.762	1.2764	0.262	3.1975	4.3266	1.33	5.66			
Total	432	4.268	1.5192	.0731	4.1248	4.4122	0	7			

Moreover, we cannot ignore the existence of considerable differences among certain age groups. For this reason, we present the results of the analysis of homogeneous sub-groups done by using the test TukeyB^{a,b}(see Table 5).

Table 5. Groups’ medians in homogeneous sub-groups

Digital User	Age groups	N	Subset for alpha = 0.05		
			1	2	3
Tukey B ^{a,b}	Age(10-12)	42	2.6667		
	Age(51-70)	10	3.4000	3.4000	
	Age(41-50)	95		3.9263	3.9263
	Age(30-40)	25		3.9600	3.9600
	Age(16-18)	82			4.6951
	Age(13-15)	178			4.7247

a. Use the sample size of the harmonic mean = 31,226; b. The size of the groups is not identical. The harmonic mean of the sizes of the groups will be used. Type I error levels are not guaranteed.

Table 5 has been divided into 3 blocks. In the first block, we find the youngest students (from 10 to 12 years old), who have the lowest mean, together with a good percentage of the oldest fathers and mothers (from 51 to 70 years old). In the second block, we find nearly all fathers and mothers between 30 and 51 years old and some parents between 51 and 70 years old. They have the intermediate values. Finally, in the third

block, we find the highest mean, which belongs to young people between 13 and 18 years old and some fathers and mothers between 41 and 50 years old.

Consequently, despite the fact that there are differences between the age groups of participants, those are not as evident as predicted in previous studies presented in the first part of this article, and they are not only related to the generational gap between minors and their parents. It is from 12 years up to the age of 18 when there is a significant increase in the use of digital applications. From 19 up to the age close to retirement, there is a slow and progressive decrease of the use of digital services. In short, the lowest use of digital applications is related to our youngest and oldest samples of participants, the teen years being the highest peak in the use of digital applications.

Social Networks, Age, and Differences between Users

In this section, we would like to go farther in the analysis by studying the participation of users on social networks with respect to age. In Table 6, we present the age groups between 10 to 70 years old, despite knowing that many children under the age of 13 and people older than 51 are sub-groups that have fewer numbers of digital users.

Table 6. Descriptive analysis of the presence on social networks by age group.

Are you on any social network?		Age groups						Total	Chi-square	Sig.
		Age (10-12)	Age (13-15)	Age (16-18)	Age (30-40)	Age (41-50)	Age (51-70)			
No	N	38	39	5	13	57	6	158	129.341	.000
	%	90.5%	21.9%	6.1%	52.0%	60.0%	60.0%	36.6%		
Yes	N	4	139	77	12	38	4	274		
	%	9.5%	78.1%	93.9%	48.0%	40.0%	40.0%	63.4%		
Total	N	42	178	82	25	95	10	432		
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

Table 6 shows the significant differences between groups, depending on the age of participants, regarding their presence on social networks. Within the students' groups, the age group with the highest presence on social networks is the one between 16 and 18 years old (93.9%), followed by the one between 13 and 15 years old (78.1%). The lowest percentage belongs to the age group under 13 years old (9.5%).

Within the parents' groups, the age group with the highest presence on social networks is the one between 30 and 40 years old (48%), followed by ones between 41 to 50 years old and older than 51.

If we group the values of the students together, as well as the values of the parents together, the differences regarding the presence on social networks are evident: 86% of young people (excluding those under 13 years old) and 42.6% of mothers and fathers have a presence on social networks.

We present the results of the analysis of homogeneous sub-groups, done by using the test TukeyB^{a,b}, in order to evidence this digital divide between students and their families (see Table 7).

As a result of the test (see Table 7), those present on online social networks are divided into 3 blocks according to age group. In the first sub-group, we find students under 12 years old whose participation on social networks is quite low. In the second sub-group, we find fathers and mothers between 30 and 40, 41 and 50, and older than 51 years old. In the third sub-group, there are students between 13 and 15 and 16 and 18 years old. The results evidence the existence of an important digital divide regarding the social network presence of teens (from 12 to 18 years old) in comparison to fathers and mothers.

Table 7. Groups mean in homogeneous sub-groups: a. Use the sample size of the harmonic median = 31,226; b. The size of the groups is not identical. The harmonic mean of the sizes of the groups will be used. Type I error levels are not guaranteed.

TukeyB ^{a,b}	N	Subset for alpha = 0.05		
		1	2	3
Age(10-12)	42	.10		
Age(41-50)	95		.40	
Age(51-70)	10		.40	
Age(30-40)	25		.48	
Age(13-15)	178			.78
Age(16-18)	82			.94

Differences in the Presence of Social Networks and the Regular Use of Online Chats According to the Participants' Place of Residence

After demonstrating that there are significant differences regarding the variable “digital user” between the Southern European context and Americans from the Western USA (see the second section of the result “digital user and place of residence or context”), we analyzed the 7 dichotomous variables to find out where those differences take place. The most significant differences are found in 2 of the 7 variables: “the presence on social networks” and “the regular use of online chats.”

Table 8. Percentage of presence on social networks by place of residence and type of user (students and parents).

Are you on any social network?			Context		Total	Chi-square	Sig.
	Western USA	Southern Europe	Person				
Students	No	N	33	18	51	.003	.954
		%	18.9%	19.1%	19,0%		
	Yes	N	142	76	218		
		%	81.1%	80.9%	81,0%		
Total Students		N	175	94	269		
		%	100.0%	100.0%	100.0%		
Parents	No	N	19	57	76	18.841	.000
		%	35.8%	74.0%	58,5%		
	Yes	N	34	20	54		
		%	64.2%	26.0%	41,5%		
Total Parents		N	53	77	130		
		%	100.0%	100.0%	100.0%		

Table 8 shows that there are no significant differences between students from 13 to 18 years old in the Western USA and Southern Europe. Nearly 81% of students, in the aforementioned age group, from the context of USA and Europe are present on social networks. In the case of the fathers and mothers (from 30 to 70 years old), the differences are significant in the studied context schools, because the 64% of Western USA parents have a presence on social networks, while only 26% of Southern European parents are online.

That’s to say, the Western USA digital generational gap context is lower than the Southern European context regarding the presence on online social networks. In the West of USA context, the difference in percentage between fathers/mothers (81.1%) and teens (64.2%) registered on social networks is 16.9; while in South of Europe, it is 54.9% (80.9% of parents and 26.0% of teens).

Another interesting fact is found in the total percentage of users, regardless of territory, age, and type of user (fathers/mothers and students), who are registered on social networks. According to our sample, in the

Western USA, 77.19% (176 out of 228 participants) are registered, while in Southern Europe, only 56.14% (96 out of 171) belong to a social online network.

In relation to the regular use of chat applications, we also observe considerable differences in its use, depending on the place of residence (the West USA or South Europe context) and the type of user (parents and children).

Table 9. Percentages of regular use of chat applications by place of residence and type of user (students and parents).

Do you regularly use any "chat" application to talk over the Internet?			Context		Total	Chi-square Person	Sig.
			Western USA	Southern Europe			
Students	No	N	57	64	121	31.185	.000
		%	32.6%	68.1%	45.0%		
	Yes	N	118	30	148		
		%	55.0%	31.9%	67.4%		
Total Students		N	175	94	269		
		%	100.0%	100.0%	100.0%		
Parents	No	N	37	63	100	2.549	.110
		%	69.8%	81.8%	76.9%		
	Yes	N	16	14	30		
		%	30.2%	18.2%	23.1%		
Total Parents		N	53	77	130		
		%	100.0%	100.0%	100.0%		

Table 9 shows how students in both Western USA and Southern Europe regularly use chat applications and do so twice as much as their parents. Fifty-five percent of Western USA students use online chats, while 31.9% of their South European counterparts also use it. Despite the fact that the test Chi-square has not found any significant difference among the parents' group, 30% of West context of USA fathers and mothers use online chats, while only 18% of Southern European parents use it. In short, the majority of the West of USA participants in the study regularly use chat applications to communicate, in comparison with a minority of participants from South of Europe context.

In the analysis of both variables "being on a social network" and "using the chat application," we have discarded the age variable as a possible reason for the aforementioned differences. The average age of the Western USA parent is 43.6, while the average age of the Southern European parent is 45.5.

Relationship between Digital Users and the Presence on Social Networks

In this section, we are presenting the results of crossing the variables of the participants' digital-user level and their presence on social networks. Our intention is to know whether those who participate on social networks are advanced digital users.

Table 10: Descriptive analysis of the assessment of digital users according to their presence on social networks.

Are you on a social network?	N	M	SD	SE	95% confidence interval for the average		Min	Max	F	Sig.	Eta ²
					Limit inf.	Limit sup.					
No	158	2.930	1.1950	.0950	2.7426	3.1182	0	6			
Yes	274	5.040	1.0903	.0658	4.9105	5.1698	2	7	349.505	.000	.448
Total	432	4.268	1.5192	.0731	4.1248	4.4122	0	7			

As shown in Table 10, those who have a presence on social networks use digital services and technologies more (value of 5.04 over 7) than those who are not using social networks, whose digital use is considerably lower (2.93 over 7).

Conclusions

In general, the so-called generational digital divide decreases between minors and parents in both contexts (in the Western USA context as well as in the Southern European context).

Despite the fact that there are differences between the age groups, those are not as clear-cut as previously argued by Prensky (2001)—young people are considered “digital natives” and parents are defined as “digital immigrants.” However, Corrin, Bennett and Lockyer (2010) stated that web-generation pupils’ use of the social Web’s learning technologies was quiet poor. In our case study, it is over the age of 12 when there is a significant increase in the use of digital applications, and this continues up to the age of 18. After the age of 18, there is a slow and constant decrease. That’s to say, the lowest use of digital services is found in the earliest stage of life (from 0 to 11 years old) as well in the latest stage of life (beyond 70 years old), the teen years being the zenith of the use of digital applications. The fact that the digital divide is higher in the eldest group had been reported in other studies (Vicente & López 2011). However, fathers and mothers are increasingly using digital technologies. Particularly, the youngest parents are the ones who use those technologies the most. Consequently, the trend would be a steady reduction of the digital divide for the foreseeable future. This does not mean that currently there are no differences in relation to specific Internet services.

There are Differences in Relation to the Age Groups of Social Network Users.

The number of users of social networks under 13 years old is constantly increasing, although the legal age to join most of the social networks is over 13. It is about that age when there is a significant increase in the number of social network users. This trend is evidenced by comparing our research with previous studies (e.g., Lenhart and Madden, 2008), where 55% of North American teens (between 12 and 17 years old) used social networks. In our study (for 2011), the percentage goes up to 78% for teens between 13 and 15 years old—i.e., 3 in every 4. The percentage increases up to 94% for teens between 16 and 18 years old. Nevertheless, we observe a significant difference when comparing the results obtained for mothers and fathers. Forty-eight percent and 40% of the parents use social networks in the age groups of 30 to 40 and of 41 to 50 years old, respectively. This difference increases in the case of Southern European mothers: 26% of Southern European mothers are on social networks compared to 64% of Western of USA mothers.

There are no significant differences between digital users in relation to gender, neither in the Western USA, nor in Southern Europe.

Taking into account our sample and the studied contexts, we have not found any significant differences between men and women. We can only highlight the fact that Western USA and Southern European women obtain a higher mean than men in the use of digital applications.

There are significant differences between the Western USA context and the second Southern European context regarding the presence of parents and teens on social networks.

In general, the Western USA participants obtain higher scores in all variables, but not all of them can be considered meaningful, as the established limit of significance is 0.05. One of the clearest cases in which the difference can be seen is in the presence on social networks. In the Western US, slightly more than half of the parents belong to a social network, in comparison to 81.1% of their teens. But, in Southern Europe, only 26% of the parents are registered to an online social network. Consequently, there are significant differences between the Western US and Southern Europeans regarding the presence of parents and teens on social networks, those differences being more pronounced in Southern Europe.

In the near future, there is a need to study the consequences resulting from the parents’ absence on online social networks, which could lead to a better use of the Internet and the prevention of potential risks for their teens, particularly for children under 13 years old. In this regard, as Garmendia, Garitaonandia,

Martínez, and Casado (2011) points out, 40% of minors between 9 and 13 years old have a profile on social networks, despite the fact that, as we have said earlier, the minimum legal age is 13 or 14 years old.

There are important differences between the Western US context and the Southern European context regarding the use of synchronous communication when comparing teens to their parents.

The use of different synchronous communication systems, such as online chats, is more extended in the Western US than in Southern Europe—the former nearly doubles the latter in use. This difference is also present in the teens' and parents' groups. The regular use of this service by the youngest members of both groups is double that of their parents. In short, as with the participation on social networks, there is a significant generational (parents/teens) and contextual (West USA/ South Europe) difference in relation to synchronous communication.

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