The family digital divide: self-taught adolescents and difficulties in parental control

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Abstract: Those born in the digital age tend to possess self-taught literacy in the use of social media; such instruments become natural extensions of young people’s relational, social and educational context. Their parents, instead, appear to assume the role of passive spectators in the digital lives of their children; they are too remote from the new technologies for adolescents to imagine them as being guiding or protective figures in online activity. Within this frame we see emerging what we might call a “Family digital divide”, in which young people socialize among themselves online, while parents have difficulty in enacting strategies of virtual sharing and control, despite the clear urgency of “digital mediation” within the family environment.

Key words: Adolescents, Parents, Family Relationship, New Media, Digital Divide

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Introduction

Computers, tablets, smartphones, the Internet and social networks are becoming more and more widespread within our society: they mark the passage of time, they define relationships, they provide information and learning opportunities, to the point of representing a real space offering possibilities for personal and career achievement. The media, therefore, are no longer mere “instruments”; instead, they are extensions of our selves and an extension of our territories of relationship; they are a fundamental element in our relation to the world and to others (Giaccardi, 2012).

Within this panorama, we find an important link between such “extensions” and the so-called “digital natives”, i.e., the generations born between the end of the 1990s and today: those who were born and have grown up alongside the Internet and the new technologies.

A number of studies during the last decade have analyzed the journey defined by Ferri (2011) as the passage from being “Sons of Gutenberg” to embracing the state of “Homo digitalis”.

Such research (Buckingham and Willet 2006; Eurobaromenter 2006, 2008; Mantovani and Ferri 2008; Tapscott 2008; Pew Internet in American Life Project 2009; EU Kids Online 2011; Censis 2011) show that for today’s adolescents, virtual reality, which has existed since their earliest stages of growth, creates a natural space in which to gain information and maintain or create relationships: the World Wide Web has come to play an essential role in children’s and young people’s construction of identity, helping to trace the outlines of their “self”, their relationships, and their activity in general.

In considering the most recent studies, we see that 60% of European young people between the ages of 9 and 16 go online every day, or nearly so; in any case, 93% admit to doing so at least once a week, while the average time of daily online connection amounts to 88 minutes (EU Kids Online, 2011). The percentage is even higher in Italy, where 85% of young people between 14 and 19 use Internet regularly (Censis, 2011).
Online, adolescents carry out numerous activities associated with daily life, such as obtaining information in order to complete school assignments, playing games, watching videos and listening to music, planning activities with friends and, of course, communicating. Many of these activities contribute toward digital literacy and competency, since the great variety of online activities itself fosters the acquisition of instruments allowing individuals to use the Web with greater awareness and safety (Mascheroni, 2011). However, the risks connected to Web use remain one of the main topics of discussion regarding young people. Such risks may involve pedophilia, pedopornography and bullying, contact with improper or violent content, and even dependency.

We must also consider other types of behavior which, though less dangerous, are more frequent, and may jeopardize privacy for oneself and others. In such online conduct, the public dimension of information -even intimate information- predominates, while the user may betray a lack of critical discernment and reflection.

At this point, we clearly discern the ambivalence characterizing digital communication tools. On one hand they are educational, relational, constructive instruments in developing new competencies which foster interchange and communication. On the other, they are complex worlds in which it is easy to enter, where the border between one dimension and the other are fuzzy and not always easily discernible, especially by young people. Possessing technological competencies, in fact, does not always mean being in possession of the knowledge necessary for managing the relational potential characterizing the social media. Such media endow young people with enormous communicative power, which may be used to varying degrees of adequacy, both in dealing with one’s peers and within the family context.

This double-edged reality of the Web brings to light the issues of young people’s computer literacy, their need for protection, and their ways of sharing experience on the Web. Such questions demand response from the social and educational institution par excellence: the family. It is the
parents, therefore, who should promote the online well-being of their children, accompanying them in such a way that they can develop responsible ways of using digital devices (Livingstone, 2010; Ferri, 2011).

As Livingstone points out (2010), the digital media are different from the media preceding them not only given their greater potential, but also because their use demands specific competencies. In the case of books, films, radio and television, parents might not have known their children’s preferences, but they were able to gain access to those media; they knew how to use them and how to share the information gained from them. As regards computers and the Web, instead, the competencies required make many parents “immigrants” in that society of information which their children, instead, inhabit as “natives” (Prensky, 2001).

We must ask, then, whether in today’s reality, parents are really capable of accompanying their children through the digital experience, in part by controlling and sharing online activities; we must ask whether they are aware of the Web’s true potential; and above all, whether the young see the family as a structure where their technological experiences can be deposited or whether, on the contrary, the “family digital divide” is too deep, leaving adolescents in a virtual realm of extreme autonomy.

A European study commissioned by McAfee (2012) has revealed the gap between what parents believe they know and what their children actually do: 31.8% of European parents and 44% of Italian ones are convinced that their adolescent child tells them everything they do on Internet, while 75.5% of European adolescents and 69% of Italian ones are sure they know how to hide their online activities from their parents. The young people admit to using numerous tricks in order to elude parental control (when present); for example, 47.5% minimize the browser window when a parent enters the room; 38.8% erase their browser chronology; 28.7% admit to visualizing content outside the home; 28% hide or eliminate improper video content; 17.7% of the adolescents surveyed have created a private email address unknown to their parents, which serves not only in sending mail but also for participating in chat rooms or forums, or
for enrolling in social media networks. In addition, 41.7% admit that their parents would disapprove the sites they visit, while 43.6% (47.5% in Italy) have seen at least once a video with content that their parents would not condone.

In Italy, among parents who monitor their youngsters, approximately 24% have set up the “parental control” function, but only 18.4% know their children’s telephone password, and only 10.7% have had their child tell them their password for accessing email and social networking sites. Finally, 17.6% of the parents openly declared that they do not control their adolescent children’s online conduct; among them, 30.8% say they are confident that their children do not run significant online risks. Only one parent out of five admits that their child has greater technological competence than they do.

We clearly see, then, that the digital media create a new, complex social territory in which parents find it difficult to manage the normal mechanisms for control, orientation and protection. In offering a cross-section view of digital family habits, the article starts out by analyzing the computer literacy of digital natives, and then, strategies for parental control. By so doing, the authors hope to provide indications useful in constructing modes for digital mediation and sharing between the two generations.

Research goals and methods

This study is based on 1701 interviews carried out between May and June 2012 with students attending the first, third and fifth year of 15 “Secondo grado” secondary schools present in the Veneto Region: technical institutes, vocational schools and lyceums. The survey required

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3 The enquiry furnishing our data, entitled “Young people and cross-mediality”, was financed by the Veneto Regional Committee for Communications (CoReCom).
the online administration (CAWI – Computer Aided Web Interviewing) of a questionnaire to students during school hours, through access to an *ad hoc* website.

The questionnaire, entitled “Young People and Cross-Mediality” was composed of 71 questions subdivided into 6 thematic areas:

1. Socio-personal data and styles of consumption;
2. Cell phones and computers;
3. Social networks;
4. Parental control;
5. New technologies and risk factors;
6. Internet and the future (Scanagatta; Segatto, 2007; Pew Internet American Life Project, 2009).

The article explores ways in which adolescents’ use of the Web takes place within the family context. The intention is to analyze parents’ role in their children’s digital education, and in strategies aiming to control or protect youngsters in the face of possible Web-linked risk.

**The family digital divide**

*Self-taught adolescent Web users*

Based on what the young people in the survey sample declare, their families possess an average of 2.4 computers: 61.2% of the sample possess up to two computers, 30.5% up to 4 computers, and the remaining 8.3% have 5 or more computers. Moreover, 58.1% of the sample state they possess their own computer, with a slightly higher percentage among males -59.9%- compared to 40.1% for females.

The average age at which youngsters begin using a computer shows as 8.9 years, while they begin access to the Web at and average age of 11.2 years.
This data is in line with the research EU Kids Online (2011), according to which the average age of initial access to the Web for those thirteen to fourteen years old was 10, while for those fifteen to sixteen it was 11. Overall, the European study highlights a sort of “delay” in Web access for Italian youngsters, with an average two-year gap compared to those their age in Nordic countries, and a four-year gap compared to young people in Denmark and Sweden, who start websurfing when they’re around seven years of age.

The time spent by youngsters online was subdivided according to weekdays or holidays, though no substantial differences emerged here: the average number weekday hours is 2.3 while the average for holidays is 2.7. Most of the sample, in any case - 84% - is placeable in the area showing one to four hours of online connection; only 5.3% of the interviewees state that they are online less than one hour a day, while 10.4% say they are online from 5 to 24 hours daily (probably indicating that they remain Web-connected via smartphone).

Young people also appear among the greatest users of social networks; they are the undisputed protagonists of the Web 2.0, and are active in creating online content. Regarding the use of digital instruments, we find that 82.7% of the sample belong to at least one social network, although on the average, adolescents state they are members of two. The average age for starting membership is 13.6 years, with an age range from 7 to 19 years; whereas 26% say they became members when younger than 13: the legal limit for the most well-known social networking sites. In this case, as well, sample percentages are in line with European data, which show that 73% of those from thirteen to fourteen are members, and 82% of those from fifteen to sixteen.

As regards the age of initial access to computers, the Internet, and social networks, no substantial difference emerges between genders. However, we see significant gaps according to the school year attended: we find, in fact, that adolescents attending the first year of high school -the youngest, therefore- begin to use the computer, access the Web, and become members...
of social networks approximately two years earlier compared to those attending the fifth year. This datum points to the fact that surprisingly, differences in digital literacy exist not only between generations, but also within the adolescent generation itself: that is, within a space of merely five years.

Table 1. Average age for beginning use of computers, Web and social network according to school year.

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<th>First-year st.</th>
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<th>Fifth-year st.</th>
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<td><strong>Computer use</strong></td>
<td>8.1 years</td>
<td>9.3 years</td>
<td>9.8 years</td>
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<tr>
<td><strong>Internet access</strong></td>
<td>10.3 years</td>
<td>11.8 years</td>
<td>12.2 years</td>
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<tr>
<td><strong>Enrolment in social network</strong></td>
<td>12.2 years</td>
<td>14 years</td>
<td>14.8 years</td>
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The results listed show, then, that the computer and the Web are highly present in the lives of adolescents, who approach digital technologies when still children. We therefore asked the youngsters from whom they had learned to use the Web; in so doing, we hoped to understand the ways in which digital natives gain computer competency.

The 60.8% of the adolescents state they have learned to use the Web by themselves, a fact which highlights the self-teaching nature of digital literacy. This datum is very important. On one hand it points to adolescents’ great capacity to use the Web and the great potential offered them by the Web. On the other, it reflects the difficulties adults of referral have in entering a world in which digital education, in its guiding, educational and protective functions, is fundamental not only in helping youngsters to gain knowledge, but to use the Web safely, critically and reflectively. As pointed out by Ferri (2011), parents end up by providing the technological infrastructure for their children’s online activity without, however, succeeding in accompanying them in their actual digital practice.
In further analyzing our results, we see that only 1.3% of the interviewees state they have not yet learned to use such instruments, while 33.5% of the youngsters say they learned from their parents, 25.3% from friends, 22.8% from siblings, and 22.4% at school. In small percentages, we find those stating they learned from “others” (5.9%) or by attending a computer course (2.1%).

We notice that the percentage of those who have become computer literate through their parents approaches that of individuals who received indications from peers (siblings, friends) or at school. This datum points to the fact that regarding technological issues, both institutions (family, school) and the peer group are considered only by a minority of youngsters as “figures” from which to gain competency and knowledge. For most of the sample, digital competency and knowledge appear to be obtained directly from the Web.

The listed data indicate a higher percentage of self-taught users among the males (65.5%) compared to females (47.8%), who state they rely more on help from their parents and siblings. According to the school year currently attended, instead, we see a higher number among first-year students who are helped by their parents (35.1%) than among third- and fifth-year students, whose percentages are, respectively, 32% and 28%.

It is interesting to note that the school wins only fifth place among adolescents’ “technological educators”, considering that in recent years, computer science, the use of digital technology in particular, has gained more importance in school programs, beginning with elementary school. However, as declared in several interviews⁴ with high school teachers, the material resources available to schools in terms of computer technology still remain marginal, and do not permit a reform in teaching programs

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⁴ The study “Young people and cross-mediality” considered two focus groups and 5 semi-structured interviews with high school teachers of the Veneto Region, dealing with topics linked to the new media and to the school’s role in adolescents’ digital literacy. Topics included the Web as a relational space or space of solitude, e-teaching, social network friendships between students and teachers, and Internet hazards.
capable of providing young people with new or more complex competencies compared to those they have already acquired on their own. Moreover, difficulty in ensuring control over students’ online activities and of providing adequate digital protection in school is a such a worry for educators that it blocks the updating of teaching programs. The interviewees were asked who, besides themselves, uses Internet in their family. 83.4% responded that parents use it, 71.1% that siblings use it as well; while 5.3% declare that their grandparents websurf too. Only in 7% of the sample do we find that no one in the family besides the student interviewed has access to the Web. This datum is in line with the 2008 Eurobarometer study, which finds that 83% of Italian parents say they use Internet.

We must not forget or underestimate the fact that adults present in the virtual realm have in most cases entered it previously in their work environment. Adults are not digital natives. The Web and digital instruments, in fact, arise as means addressed to an adult public; their aim is to assist adults in their work, professions and information-seeking; only later do they become communicative, relational instruments.

In this context, therefore, parents have developed a technological education primarily oriented toward professional tasks or functions, unlike youngsters, or “digital kids”, whose assimilation process has occurred naturally, within a strictly communicative dimension (Pedrò, 2006). For adolescents, computers, smartphones and tablets exist as devices for Web socialization, for game-playing and information-sharing, while experiencing actual and virtual reality in a merging continuum, and not as two separate realms, as typically occurs in the adult mentality.

In the process of child and adolescent digital literacy, the Web becomes an instrument for self-teaching, by which websurfing, trial-and-error experiences, tutorials and peer communication allow youngsters to carry out most of their daily activities focusing on relationships, information and entertainment. According to Livingstone (2010), before young people can learn by using the Internet, they must learn to use the Internet, just as
learning to read and write has long been a necessary prerequisite for any other type of learning.

What we wish to emphasize is that the frequent lack of computer training filtered by figures of referral is what leaves children and adolescents free to explore virtual reality in a nearly uncontrolled manner. Admittedly, youngsters can thus acquire competencies just the same; however, they lack that part of discerning, mediated education which can make an important difference in young people’s digital lives.

**Parental control: when children are digital**

If it is true that adolescents learn autonomously to access and appropriate digital reality, within the family context, it becomes important to enact strategies and use instruments capable of guiding youngsters in their online activities and of protecting them from the possible risks listed previously.

The family’s role in mediating and regulating the use of media has always existed; we need only consider the case of television (Nathanson and Yang 2003; Valkenburg, 1999) and videogames (Nikken and Jansz, 2007). Three main strategies emerge in this sphere: active mediation, when media content is discussed with children; restrictive mediation, putting limits and fixing rules on media use; and finally, shared use, sharing the experience of media consumption together (Valkenburg, 1999; Livingstone, 2010).

As regards the Web, alongside the above strategies, further, specific instruments of control have come to the fore, which parents may use to verify/limit media use and content type. Also taking into account research done in the European sphere, we see that parents favor the use of “social” mediation strategies rather than that of technological “parental control”: only 28% of European parents and 21% of Italian ones block or filter Web
sites, while 24% of European parents and 15% of Italian ones use software capable of tracing their children’s websurfing pathways.

Obviously, while it may be difficult for adolescents to elude control by such instruments, it is certainly easier to hide content or to avoid telling parents about what they do online. The McAfee study and EU Kids Online findings confirm this: 39% of Italian youngsters say they sometimes ignore their parents’ advice, and 8% declare they ignore it totally.

In order to understand how parental mediation and control work in our interviewees’ family, we asked the adolescents to complete the statement, “Your parents usually control …” by choosing one of the following: “what sites you frequent”; “your social network profile (status, posts, photos, videos)”; “what friends or contacts you add to your online profile”; “messages or emails you send or receive”; “how much time you spend on the Internet”; “none of the preceding”.

The 65.4% of these adolescents say that their parents do not check up on any of their digital activity; the percentage is higher for males (65.3%) than females (58.3%). In connection with the school year attended, the “non-controlled” are more numerous among the fifth-year students (75.9%), and fewer among third- and first-year students (64.4% and 54.8%, respectively), where greater parental control is exercised, although it succeeds in covering less than half the adolescents. As regards the remainder of the sample, i.e., the “controlled”, we find that parents’ attention focuses mostly on the amount of time spent online (28.2%), followed by the social network profile (8.7% of the cases), the Websites frequented (5.3%), and the emails and other messages received (4.1%). The smallest percentage refers to parents’ controlling of children’s social network contacts; in this area, only 2.6% admit to being controlled in the family context.

With respect to gender and the school year being attended, the category of the “controlled” is composed mainly of girls, especially as regards Web content, while the amount of time spent online is parentally controlled in
equal measure; first-year students show slightly higher percentages of control, which in any case remain low.

The study then proceeded to enquire into the presence of instruments enabling parental control within the computer personally used by the youngster, by asking them whether their parents had placed a filter blocking some types of Website; had set up a control system enabling them to monitor the sites visited; had installed a service limiting the time spent on the Internet; had installed software designed anti-spam and anti-virus software; or had not installed any limitation or control system.

The 58.4% of the interviewees say that the computer they use lack any system of monitoring or limitation. When such systems exist, the top spot is held by anti-spam and anti-virus programs (51.1% of the cases), filters blocking certain types of site (4.7%), and monitoring systems keeping track of the sites visited (3.9%). Only in 1.7% of the cases do we find any system limiting the amount of time spent online.

In this case, as well, it is the girls who are most frequently submitted to controls compared to boys, and generally, there is a gap of 10 percentage points between first-year and fifth-year students.

The picture resulting from our reading to the data therefore shows that approximately 60% of our sample say they are not subject to any type of control, neither at the level of shared mediation - i.e., joint online verification between parents and children - nor at the level of restrictive computer systems.

It is also worth noting several results gathered within the area linked to online risk, in order to understand whom adolescents address if they experience bothersome situations online, or if they enter into contact with potentially harmful content.

Students were presented with the query, “Sometimes one may find oneself troubled or embarrassed because of a situation arising within a social network. If this has ever happened to you, how did you behave?” The interviewees were to reply by choosing one of several possible answers, such as “I blocked the person that had sent me certain content”; “I deleted
all the messages and content I’d received”; “I changed my privacy settings”; “I stopped using the social network for at least a given period”; “I reported the problem to the social network administrators”; “It has never happened to me”; “Other”.

The 42.8% of the sample stated they had never found themselves involved in such negative situations, while most of the adolescents say they have (57.2%). Most of those who have had such an experience say they have blocked the person who sent improper content (26.1%), and/or that they deleted such content (10.5%). The other alternatives were chosen to a minor extent.

What emerges as being most important, in this context, is the query which follows: “If this has ever happened to you, did you talk about it with anyone?” In answering, students were asked to choose among the following alternatives: “to parents, siblings, other relatives, friends, teachers, others, no one”.

The 9.9% of the adolescents state that they did not speak of the matter with anyone (6.5% of the girls, 11.7% of the boys). 21.4% say they spoke of it with friends (32.1% of the girls, 16.8% of the boys), while only 5.9% say they spoke of it with parents (9.6% of the girls, 4.3% of the boys). Small percentages show for parents, siblings and teachers.

The same situation holds for the query relative to possible risk: “In using the Web one may encounter messages, groups, forums or blogs encouraging particular types of behavior; have you ever involuntarily happened to encounter sites or other online context promoting pedopornography? bullying? violence against persons? violence against animals? disturbing dietary practices? drug use? suicide? affiliation with religious sects? affiliation with extremist political groups? other?”

The percentages for various kinds of hazardous content range from 37.6%, for violence against animals, to 10.5%, for encouraging suicide. On this point, as well, the “risk-exposed” were asked with whom they had talked about the matter; they were to answer using the same alternatives provided for the preceding question.
The 37.8% of the adolescents state they did not speak of the matter to anyone (30.4% of the girls, 41.8% of the boys); 22.7% say they discussed it with friends (25.2% of the girls, 21.7% of the boys); while only 9.6% turned to their parents (11% of the girls, 9% of the boys).

The findings show that adolescents do not see their parents as figures to address in order consult over any problem arising online; instead, they trust in their peers, as occurs for most issues during the adolescent stage (Palmonari, 2011). However, while the group of friends does play an important role, it never overshadows the parents’ role (Cassidy and Shaver, 2002).

During the period of transformation which is adolescence, a breaking away from the parental figure is a physiological given (Dolto, 2006). Very often, therefore, youngsters try to flee from parental control by enacting behavior which distances them and puts them in opposition to parents. At the same time, they need more than ever a figure of referral on which to lean.

We must consider that today, many activities linked to youngsters’ emotional and relational world occur online. Clearly, therefore, one must perceive the parental figure in this context; whether or not a parent is seen as “controller”, he/she is present.

Conclusion

The presence of a marked “family digital divide” is linked to two main elements: the self-teaching nature of youngsters’ computer literacy, and the difficulty of parental control over Web use, which leads adolescents to consider adults as being more and more remote from their virtual world.

Unlike writing and mathematical skills, socialization in the new media, the Web in particular, seems so simple to digital natives—beginning with small children—as to require no help from adults. Taking up a concept expressed by Robertson (1988), we might speak of a “reverse
socialization”, that is, in inversion of traditional socialization roles, in which the youngest do not learn from adults, but are bearers of knowledge which adults have difficulty in acquiring. This ease in technological learning stems from youngsters’ having more time in which to experiment with the new technologies, as well as the practical familiarity they demonstrate in interacting with keys, mouse and software, thanks to their use of electronic games from early childhood on (Drusian, 2012).

We need to bring into focus the para-generational gap emerging within a period of merely five years, in our sample. It shows that students in the first year of high school have learned to use personal computers, the Internet and social media two years earlier compared to third- and fifth-year students, who are nearly the same age.

Ongoing digital innovation and the growing diffusion and availability of technological infrastructure appears to have fostered this earlier development of digital socialization, even in the space of just several years.

Instead, as regards parental control, the picture clearly emerging from our results is this: while around 60% of the adolescents interviewed state that they are subject to no form of active control (by discussing sites frequented, sharing elements acquired online, etc.) or specific (parental control devices such as monitoring sites, limits to access, etc.), they also say they do not turn to their parents in order to discuss what goes on in the Internet: not even when they find themselves in unpleasant situations or faced with potential harmful content.

Aroldi and Mascheroni (2012) argue that only active mediation in Web use and restrictive mediation are linkable in any statistically significant way to a reduction in risk and to the probability that youngsters will be disturbed by hazardous experiences. However, we must point out that excessive restrictions tend to diminish youngsters’ opportunities for online experimentation, and to diminish their competencies in computer literacy; such gaps lessen their preparation to deal with risk.

The best kind of mediation strategy for reducing this “family divide” is a strategy of sharing: the sharing of digital practices, from childhood on,
and family discussion of websurfing experiences. Parents are not always enlightened in this area, nor do adolescents spontaneously refer to it at home. While it is clear that digital natives quickly succeed in acquiring numerous technological skills, it is equally clear that parents possess greater competency and experience in terms of relationship, support and protection, compared to the peer group to whom youngsters often turn.

In light of this fact, within the educational environment in which children and adolescents live, we should promote initiatives aiming to foster dialogue and communication between youngsters and adults, regarding not only Web hazards (as occurs in most cases), but above all, the positive potential offered by the social media, so that the adults of referral can participate in children’s online experiences, and even more, in adolescents’. In this way, what today seems an instrument of rupture may become an effective communicative “binder” between the generations.

References

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