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## Personal uses of internet and perceptions of parental mediation: a research with children 10 and 11 years old

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### Abstract

The exploratory study here presented investigates the relation between children and Internet considered into the domestic context. Through a closed format questionnaire, self-completed by 272 Italian tweens aged 10 and 11 years, the research inquires practical uses of Internet, meanings given to personal practices and perceptions about parental mediation activities. The data analyses show different levels of Internet usage, the most often experienced functions, some prevailing dimensions of meaning related to use of Internet and perceptions of a partial parental mediation, and some differences between the two age groups regarding the dimensions of meaning and the perceptions of parental intervention.

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### 1. Introduction

The presence and the rapid diffusion of new media in the Italian children's life is widely recognized as a fact. Internet is a recent medium (its use has spread since 1993) and definitely it is one of the most attractive and ambivalent subject of public debate, discussion among scholars and negotiation within families in everyday life.

An Italian national survey (Istat, 2008) shows that families with at least one minor are the most technological, pointing out that 60,9% of these families in 2008 had a domestic Internet access, while the national mean occurred around 42,0%.

Home is the primary place where children use the Internet, from infancy and for different purposes. Children are web users since the age of 2 years and the amount of users increases with age (Mantovani & Ferri, 2006): there is a peak in the on-line use particularly between children aged 7-9 (39%) and 10-13 (62%), that roughly correspond in Italy to the passage of school grade, from primary to secondary school. The school grade transition seems to be related to a change of perspective: if children in the primary school perceive the web surfing as a play, the ones in the secondary school perceive the Internet as an already familiar tool, useful for school-based work, and they manage the web based activities with equal or higher skills/competences in respect to their parents (Mantovani &

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Ferri, 2006). The main functions for children aged 6-10 and 11-14 years deal with communication (sending/receiving e-mail); information (web searching), expression (uploading user created contents), entertainment (listening to music, watching videos) and sharing (downloading software or upgrades) (Istat, 2008).

Similar dimensions of usage meaning are considered also in other studies. For example, Internet is important for communicating, playing, searching and learning (Livingstone & Bovill, 2001). It is characterized by aspects such as playfulness, relief, leisure; knowledge and information; communication through and about the web (Rivoltella, 2006). Moreover, Internet involves children perceptions of being always in touch with friends as part of a group, and it is seen as a tool and a toy to spend time and avoid boredom (Rivoltella, 2009). As a technology, Internet can be characterized in terms of: necessity, or importance of the technology for the person in the daily life routines; control, both in terms of managing the medium and experiencing a skill/competence that empower the own sense of mastery; functionality, as Internet is a useful tool that has a convenience in simplifying tasks; and interactions, as it can avoid, or empower, people's sociality and privacy (Livingstone, 1992). Finally, Internet represents a chance for experimenting aspects of personality and roles in a mediated environment, possibly perceived safer if compared with "real" life, and it can give an access for self-identity and the development of personal interests (Kats & Rice, 2002).

For its complexity aspects, Internet is an object that cannot be set aside by parental education: parents or, in a broader sense, family should help children to develop digital literacies (Buckingham, 2007) and not only technical fluency (Papert, 1996). However, a matter of digital and cultural divide can affect the familiar educative relationships: if children are portrayed as digital natives, "native speakers of the digital language", adults still remain digital immigrants and they often hardly cope with the rapid technical evolution (Prensky, 2001), not being prepared to face their educational role because of the lack of technological competency (Rivoltella, 2006). This leads to develop, on one hand, moral panic (Payne, 2008) about dangers and harmful consequences of Internet exposure, and, on the other hand, an attitude of parents to leave children alone in their interactions with media (Eurispes-Telefono Azzurro, 2008), reinforced by positioning of digital media in the child's room and the consequent development of a bedroom culture (Bovill & Livingstone, 2001). Many studies on parental mediation agree on the fact that parents act in both directions of care and control (Vestby, 1994) and regulate media use in different ways (e.g., Van Der Bulck & Van Den Bergh, 2000; Livingstone, 2002): parents in fact may try to steer their children through discussion (active mediation or evaluative guidance), by sharing media time with children (co-using or unfocused guidance), or they may try to control access to media and time spent on media activities (restrictive mediation or restrictive guidance). Furthermore, other analyses of parental mediation reveal a considerable discrepancy between amount and quality of the mediation actions declared by parents, and quantity and significance of the parental interventions perceived and reported by children (Nathanson, 2001; Livingstone, 2007).

The exploratory study presented in this paper aims primarily at finding children practical uses of Internet and some meaning dimensions that accompany children Internet usage, trying to join different aspects considered in previous researches. Secondly, it aims at understanding if children perceive an educational intervention by parents or if they perceive that parents do not interfere in their interactions with the web, in line with research on bedroom culture (Bovill & Livingstone, 2001).

## 2. Method

In a pre-research stage, six focus group interviews were conducted with Italian children aged 9-14 to explore Internet use, conceptions about usage and parental mediation perceptions, according to literature on this subject. On the basis of data obtained through the analysis of focus group interviews (partially reported by Rivoltella, 2009), a questionnaire was elaborated to focus more systematically on the dimensions mentioned above.

### 2.1. Participants and procedure

Research participants are 10 and 11-year-olds because they represent the tweens (Tufte *et al.*, 2005), a group "in between ages", i.e., between childhood and adolescence: they are considered interesting technological users as they gain an increasing autonomy in evaluating and choosing their media use, and a certain freedom in recognizing and following their tastes and interests, according to, or sometimes in spite of, the family. Moreover, they belong to transitional school classes (in Italy, children aged 6-10 years attend to primary school and children aged 11-14 years to secondary school) and this aspect could affect the dimensions inquired.

The sample consisted of 272 children enrolled in schools in the urban area of a city situated in the North-East of Italy: 134 were attending the last primary school class and 138 were attending the first secondary school class; 57% were male and 43% were female; the prevailing age was, as expected, 10 years for the primary school students, and 11 years for the secondary school students: for this reason the variable *school class* was adopted instead of the variable *age* in the data analyses.

## 2.2. Questionnaire and measurement scales

Participants were recruited in schools to favour the data collection: the instructions were given in all classes by the same researcher and the percentage of valid returned questionnaires was nearly total. Informed consent was required and permissions for children's participation by schools' headmasters, teachers and parents were obtained.

The questionnaire was composed of two parts: an introductory one concerning general personal data and another one concerning Internet. This second part is divided in four subsections: subsection 1 inquires ownership and level of usage; subsection 2 concerns the function used; subsection 3 inquires some tweens' conceptions regarding their Internet usage; and subsection 4 refers to tweens' perceived parental mediation activities. Subsection 1 presents two yes/no/don't know items and one item which answer is measured by a 4-point scale, and the same scale is used for subsections 2 (18 items), 3 (37 items) and 4 (14 items): 1=not true at all in my case; 2=not very true in my case; 3=true enough in my case; 4=absolutely true in my case.

The data analyses were conducted using SPSS 17.0 for the entire questionnaire, involving descriptive analysis, factor analysis, variance analysis and correlation analysis, according to the purposes of the study.

## 3. Results

### 3.1. The Internet access and usage

The questionnaire subsection 1 is composed of two items, surveying the presence of a domestic connection and the overall level usage. The questionnaire subsection 2 is composed of 18 items aimed at eliciting Internet-related functions used: a single score was required for every itemized function, using the 4-points scale mentioned above.

In the considered sample, Internet access is definitely superior to the national standard: 85,7% of respondents have a domestic connection to Internet, 3,7% use Internet in the internet café or at their parents' workplace, and only 10,7% don't accede to Internet.

Levels of usage increase with school grade: among primary school classes students, 15,7% define themselves as non user, 22,4% as low users, 31,3% as medium user and 30,6% as high user; among secondary school classes students, 14,5% define themselves as non user, 21,0% as low users, 29,0% as medium user and 35,5% as high user. The level of usage was not measured asking the amount of time spent using the Internet, because the quantification was perceived difficult by children during the preliminary test of the questionnaire, but it was explored by a single item – "I use the Internet" – requiring a declaration of usage on the 4-points scale already described.

The most regularly experienced functions, considering together the answer scores 3 and 4, are: on-line gaming (48%), watching videos on sites like YouTube (52,6%), searching and downloading images according to personal interests and hobbies (47,6%), surfing and web searching (48,9%), using instant messaging (35,0%). The non-practiced activities on-line, considering the solely answer score 1, are: downloading games (79,2%) or movies (76,4%) or programs (77,9%), uploading videos on sites like YouTube (85,2%), participate to forum (82,7%) or social network (77,5%), buying on sites like e-Bay (86,6%), managing a personal web page and blog (72,7%).

### 3.2. Conceptions about the Internet usage

The questionnaire subsection 3 is composed of 37 items surveying tweens' conceptions about Internet by the same 4 points scale above described. On this section, a factor analysis was conducted using main components extraction method and Oblimin rotation with Kaiser normalization. Only pure items and item-factor correlations equal to or greater than .40 in absolute value were considered. For the negative saturation items, it was provided the reversal of the meaning.

Three factors emerge from the analysis. The first factor refers to *sense of mastery, benefits and involvement* in the Internet use. The factor explains 30,739% of variance, Chronbach's  $\alpha=.920$  and n. items=18. Items loading on the second factor relate at *fears* connected to the Internet usage. The factor explains 8,684% of variance, for a cumulate variance of 39,424%; Chronbach's  $\alpha=.736$ , n. items=7. The third factor deals with *communicative values* associated to the Internet use. The factor explains 5,787%, of variance, for a cumulate variance of 45,211%; Chronbach's  $\alpha=.818$ , n. items=7. The first and the third factors are highly and positively correlated: Pearson coefficient=.408; the second factor seems independent.

### 3.3. Perceptions of parental mediation activities

The questionnaire subsection 4 is composed of 14 items surveying tweens' perceptions of parental mediation activities regarding their Internet use; the 4 point scale and the factor analysis method used are the same described in the previous paragraphs.

Three factors emerge from the analysis. The first factor refers to perceptions of *parental support*. The factor explains 32,209% of variance; Chronbach's  $\alpha=.760$ , n. items=4. The second factors deals with perceptions of *parental worries*. It explains 12,684%, of variance, for a cumulate variance of 44,893%; Chronbach's  $\alpha=.602$ , n. items=2. The third factor is connected to perception of *parental control*. The factor explains 9,959%, of variance, for a cumulate variance of 54,852%; Chronbach's  $\alpha=.616$ , n. items=5. The first and the third factors are correlated, Pearson coefficient=.281; again, the second factor seems to be almost independent.

### 3.4. Correlation between conceptions about usage and perceptions of parental mediation activities

Factors about usage conceptions and about parental mediation activities reported by tweens were correlated in order to identify possible relations among those two areas of inquiry.

A negative correlation links *sense of mastery, benefits and involvement* in the use of Internet with perceptions of *parental support* (Pearson coefficient= -.246); the same is found for *communicative values* associated to the Internet use and perceptions of *parental support* (Pearson coefficient= -.313). A significant positive correlation emerges between the factor *fears* connected to the Internet use and all the factors regarding perceived parental mediation activities: *parental support* (Pearson coefficient= .364), *parental worries* (Pearson coefficient= .173) and *parental control* (Pearson coefficient= .324).

### 3.5. Variance analysis

A variance analysis was conducted to identify significant differences according to school class on: level of usage, functions used and the factors dealing with Internet usage conceptions and perceived parental mediation activities.

No difference among primary and secondary school students can be noticed about usage levels and perceived parental mediation. On the contrary, some significant differences can be outlined about functions related to Internet use: the on-line gaming activity decreases from primary to secondary school,  $F(1,229)=6.228$ ,  $p=.013$ ; the search and download of texts increase,  $F(1,229)=10.784$ ,  $p=.001$ ; the usage of instant messaging increase,  $F(1,229)=5.261$ ,  $p=.023$ . A significant difference emerges regarding the factor dealing with *communicative values* associated to the Internet use, rising with the school grade,  $F(1,229)=5.261$ ,  $p=.023$ .

## 4. Discussion

The presented study was aimed at inquiring tweens' practical uses, conceptions about personal practices, and perceptions about parental interventions of mediation in relation to the Internet. For this purpose, a closed format questionnaire was administered to 272 Italian children belonging to the last year of primary school and to the first year of secondary school classes.

Level of usage seems to increase with school grade. The more used Internet functions for tweens aged 10 and 11 years are: gaming, watching videos, searching and downloading images, surfing and web searching, using instant messaging. The non-practiced activities on-line are: downloading games or movies or programs, uploading created

contents, participate to forums or social networks, buying on sites like e-Bay, managing a personal web page or blog.

From the factor analysis of tweens' conceptions on Internet usage, three factors emerge: sense of mastery, benefits and involvement; fears; communicative value. The factors concerning sense of mastery, benefits and involvement and communicative values are proportionally correlated.

From the factor analysis of tweens' perceived parental mediation activities, three factors emerge: parental support; parental worries; parental control. The factors concerning parental support and parental control are proportionally correlated.

The correlation analysis between factors relating to tweens' conceptions on Internet usage and tweens' perceived parental mediation activities reveals a negative correlation among sense of mastery, benefits and involvement and parental support, and among communicative values and parental support. This seems to indicate that tweens don't perceive parental presence in their on-line practices, confirming their loneliness in the Internet management, but there aren't evidences to infer if the perceived parental absence is related to autonomy of children and trust of parents or to parental educational disengagement. At the same time the factor fears is proportionally correlated with all the three factors of perceived parental mediation: this could mean that parents are present in case of need, or that children may share or be influenced by parents' fears.

The decrease of on-line gaming and the increase of text searching and downloading during the school grade transition seems to confirm a shift from an entertainment-oriented use to a more functional use of the Internet.

Furthermore, the increase of instant messaging services use and the perception of Internet communicative value may indicate a more social-oriented use of the Web, typical of the teens' culture.

The results suggest the opportunity of further qualitative investigations, particularly to deepen the understanding of parental mediation and to check if the limited educational impact reported by children relates only to the use of this technology or if it deals with a more general problem of parent's educational engagement.

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