Internet mediated adolescent relationships

Relacionamentos adolescentes mediados pela Internet

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Abstract

This paper aims to contribute towards the comprehension of the adhesion of adolescent to digital technologies and their usage in the search for or consolidation of relationships with their peers. The objective was to analyze the role of blogs in the maintenance and establishment of relationships among adolescents from the State of Espírito Santo, Brazil. Three boys' blogs and three girls' blogs were selected, and five pages of each blog were selected, in a total of 30 pages. Categories were elaborated from reading the posts left at the 30 pages and subsequently used to classify and quantify the posts. Messages and comments left at the blogs had a positive affective connotation, in search for approximation and contact with the blog owner. Messages were also noted for gender differences. It was concluded that some determined patterns of offline interaction guided the establishment of online relationships.

Keywords: information technology; adolescence; Internet; relationship; digital media

Resumo

Este artigo pretende contribuir para o entendimento da adesão dos adolescentes às tecnologias digitais e sua utilização na busca ou consolidação de relacionamentos com seus pares. O presente estudo teve como objetivo analisar o papel dos Blogs na manutenção e estabelecimento de relacionamentos entre adolescentes residentes na

Região Metropolitana da Grande Vitória, Espírito Santo, Brasil. Foram selecionados três Blogs de rapazes e três de moças, e destes, cinco páginas de cada um totalizando 30 páginas. A partir da leitura dos posts deixados nas 30 páginas dos Blogs foram elaboradas categorias utilizadas, posteriormente, para classificar e quantificar os posts. As mensagens e comentários deixados nos Blogs tinham conotação afetiva positiva, buscavam aproximação e contato com o dono do Blog. As mensagens também foram marcadas pelas diferenças entre gêneros. Concluiu-se que determinados padrões da interação off-line nortearam o estabelecimento de relações on-line.

Palavras-chave: tecnologia da informação; adolescência; relacionamento; Internet;

mídia digital

Contemporary society, according to Salles (2005), is marked by, among other factors, the predominance of information technology, virtual reality, and interaction mediated by electronic medium, forcing specific ways of subjectiveness [construction of a specific repertoire which, according to Weber (2005), people acquire during the developmental process, and involves both environmental and biological aspects] to be determined by the particularities of this contemporary society. Thus adolescent's identity construction process occurs, nowadays, in a culture characterized by information industry which emphasizes the present, velocity, quotidian, and the search for immediate pleasure.

The culture of mobility, flexibility, ephemeralness, and provisionality, characteristic of societies marked by information technology and interaction mediated by electronic media, imputes such characteristics to adolescents. Thus, today's adolescent interacts with a time that progresses ever so fast, pushing the teenager towards elaborating and moving through the turmoil of events around him/her. And all along the teenager is compelled to be an instantaneous subject, responsive to the demands of the surroundings without delaying or postponing the realization of his/her needs. In this way, the adolescent is subjected to a new form of subjectiveness which is

characteristic of contemporaneity: the connection to the information and virtual reality production networks.

Modern information technologies

The revolution produced by information technology is a historical event, as stated by Nicolaci-da-Costa (2002a), as important as the Industrial Revolution, for having introduced a discontinuity element to the material bases of economy, society, and culture. In much the same way as the outcome of the steam engine brought to the core of society a radical change in the ways of life of then, the upcoming of digital technologies which constitute a new interactive media installs in current society a discontinuity with the precedent order of things making it extremely important to evaluate the psychological impacts inherent to this preexistent order discontinuity. In comparative terms, that what today is called the cyberspace is "for Internet Revolution as the metropolis was for Industrial Revolution" (Nicolaci-da-Costa, 2002a, p. 197).

It is understood by information technology the complete set of technologies in microelectronics, computer science (software e hardware), telecommunications, broadcasting and optoelectronics. All of those, as pointed out by Nicolaci-da-Costa (2004), complement each other to form a space characteristic of these days denominated "flux space" which is constituted as a new spatial form, characteristic of the social practices that dominate and shape what today is the so called "network society". This society is particular about having the specific characteristic of the flux space where digital information flow and can be shared in real time. This space is provided by the network of computers interconnected, by cell phones, cables, optical fibers, and satellites. Lévy (1999) calls it cyberspace and defines it as a communication medium that arises from the interconnection of the computers and is not just the material

infrastructure of the digital communication; but, also, all kinds of information that this space encompasses, as well as the people who navigate and stay on it.

In this technological complex, Internet appears, according to Leitão and Nicolaci-da-Costa (2003), producing direct (from its direct usage) and indirect (from the effects generated by changes introduced by it) social changes, and promoting the upcoming of a new subjective and social organization. In the early nineties, with Internet breaking the military barriers and pervading through the North American population, people began unprecedented experiments with the net through research about different subjects and chat rooms. But the growth of Internet and the popularization of microcomputers during the decade came followed by confusion, anxiety, excitation, fear, freedom, euphoria, et cetera (Leitão & Nicolaci-da-Costa, 2003).

Eco (1996) states that the fear that a recently created technological apparatus would destroy or abolish something precious, useful, and of great value in people´s day-to-day lives has been noteworthy along history. It was feared that writing would destroy memory and that books would destroy the religious imaginary, and as such the media needed time to assimilate the possibility that our civilization would be oriented by television images without the danger of literacy decay. All this hinders the acceptance of Eco's idea according to which the upcoming of new Technologies does not necessarily make the old ones obsolete. Even if history demonstrates that the worst scenario does not happen, as for the case of writing and steam engines, the recurrent fear of the new always resurfaces.

Amidst all the current confusion surrounding this subject, Nicolaci-da-Costa (2002b) warns that there seems to exist double standards in the evaluation of what is done in the online life and in offline life [The expressions online and offline will be

adopted here in spite of the dichotomy real versus virtual for the concept according to which the online dimension is characterized by computer/Internet mediation and the offline dimension is characterized by not having such mediation].

> If we allocate several hours each day for reading, we will count with practically unrestrained approval. We will be, even, seen as scholarly and learned. If we spend those same daily hours in front of the television, the acceptance will be of another kind, though automatic. We will be part of the worldly legion of television spectators and certainly will have lots of subjects for easy conversations. If we decide to keep in daily contact with our extended family members and close friends through hours on the phone that will also be seen as natural. We will not be criticized for substituting the "reality" of a face to face meeting by the virtuality of a telephone contact. If, though, we leave aside all these activities in their "real" version and dedicate the same time to similar activities in their online version, our behavior will be easily interpreted as one of the various pathological manifestations: social isolation, escape from reality, fear of real contacts, incapacity of maintenance of face-to-face conversations, preference for anonymous contacts, etc. (Nicolaci-da-Costa, 2002b, p. 33).

Despite the fear it could generate, a new modality of social integration is being configured and that is not equivalent to isolation, offline life abandonment, or absence of strong affective ties. For Nicolaci-da-Costa (2005), the creation of an online space for collective dates alters the bases set until then of distance communication exactly for presenting a way of interaction that, utilizing the World Wide Web, allows every individual to interact, individually or in group, with acquaintances or non-acquaintances who are close or distant. In this interaction, strangers might identify common interests, migrate their contacts from a "many-to-many" environment to "one-to-one" environment such as the private environments at the Chat rooms, ICQ, Messenger, etc., and cultivate reasonably lasting relationships, involving thought and action patterns similar to those used in offline relationships.

Digital media, besides having provided changes in the actions of people and in their traditional notion of time and space, also modified the way these people think and establish their relationships (Wulfhorst, 2004), since the online dimension of the relations steps upstage with the construction of this scenery. New meanings and new

conceptions of establishment and maintenance of social relations are being constructed after the digital communications media and in this it is possible to verify the influence of the electronic media and its idea of cultural reinvention and resignification without being tied to the idea of stagnation (Wulfhorst, 2004). In this perspective, researchers investigate online relations, comparing with offline relations, and indicate the advantages of online relations.

According to Dornelles (2004), the synchronized communication in a chat room allows a kind of sociability very much alike that provided by offline relations. Even if there are a multiplicity of worlds and realities brought by different people, it is possible to say that what these people seek is a common significant experience of involvement among subjects. This, just as in offline life, shows that online sociability is also conditioned to communicative actions from one person towards the other, seizes the other as a person, and notices the other as a subject with whom to share a common communicative environment, all of this in a very interactive and immediate manner.

Another aspect considered was the widening of the possibilities of social relationship for the fact that the Internet breaching geographical restrictions and even social isolation kept by prejudices, illnesses, or impediments in consequence of routine life schedules. It is pertinent to highlight also that, in the analysis by Dias and La Taille (2006), the net relationships occur around common interests and are less subject to questions linked to time, space, and physical appearance, characteristics that permeate face-to-face relations.

Dornelles (2000) states that in the offline world the subject seeks the existence of common interests among colleagues, neighbors, acquaintances and, upon manifest of his/her opinions and personal stile, friendship ties can or cannot be constructed. In the online world, this happens backwards. First, the establishment of common interests

occurs among people such that, after, the approximation might happen. As states Dornelles (2000), after research about the subject, the exposure of interests and affinities before the approximation makes the friendship establishment on the cyberspace to have a higher probability if compared to the traditional offline manner. In investigation conducted by Maiorino (2000), the interviewed Internet users pointed out as a positive trait of online life the possibility of finding people and making friends in a relaxed and low cost way. People approach each other in account of their nicknames (aliases) or what they Express about themselves, making the initial stages of communication anonymous and non concrete (Terêncio & Soares, 2003).

Analyzing the importance of interpersonal abilities and of the relationships on the psychosocial development in adolescence, Marques and Horn (1995) assert there is a significant relation between friendship and psychosocial adjustment since acquaintanceship is a fundamental factor for a collaborative relation to be established among adolescents. The absence of friendship relations, for example, is pointed by Marques (1996) as a source of stress, because contact among equals favors self-expression, the exploration of oneself to validate one's own modes of understanding the world, life, and personal experiences. "The adolescent who fails in the establishment of such intimacy relations with his/her peers might present feelings of frustration, insecurity, anxiety, and consequent low self-esteem" (Marques, 1996, p. 49).

Strong evidence that contact establishment has been stimulated in online life, as for example in chat rooms, can be found on current chat communications tools. Software tools enable the use of microphones for spoken communication and camera for people to see each other. In a communication of this type, only the possibility of physical touch is absent (Lopes, 2004).

With the outcome of these possibilities, even the anonymity so characteristic of chat rooms disappears at some moments, mainly when the users want to transpose their relations from the online to the offline world. It is not that this was not possible before the webcams. The point is that today people can interact in the Internet, utilizing either written or spoken language, at the same time as they see their interlocutor/tress. This lowers yet more the differences between relations online and offline. Lévy (1999) is quite emphatic on associating emotions to online relations, besides pointing the complementary character that traditional relations and those mediated by electronic media can present.

> For those who do not practice them, it should be clear that, far from being cold, online relations do not exclude strong emotions. Furthermore, neither individual responsibility nor public opinion and its judgment disappear on cyberspace. At last, it is rare for communication by means of computer networks simply to substitute physical meetings: most times, it is a complement or an additional (Lévy, 1999, p. 128).

In this sense, the considerations of Campos (2004a) are interesting while asserting that the relationship possibilities on the Internet are as ample as those existent on offline life and vast as the desires and actions of the people immerse in human universe present in cyberspace.

Amidst this vastness it is possible to find the construction and maintenance of electronic log diaries in the net, the blogs (shortened form of web logs)*,* which are personal pages with text and pictures, just pictures (in the case of phlogs), videos (in the case of videologs), among others, where internauts discourse on aspects of their life, of their day-by-day, their projects or themes of their interest. In these pages, other people can enter and leave comments on the content registered therein.

According to Campos (2004b), the community built around the Blogs points out to a sociability and friendship network maintained both offline and online. The blogs

are, mostly, updated daily, and read and commented by people who access them. This author also reveals that eighty percent of the world's blogs are maintained by adolescents.

Evolutionary approach

At the current degree of technological sophistication of the industrial society it is possible to undermine the collective conquests that the human species has accumulated since the times of living in a tribal environment. From an evolutionary perspective, Bussab, Ribeiro and Otta (2006) argue that current technology "is not much more than a sequence of developments from the basis of our hunter-gatherer ancestors" (p. 242) and the developments of the Paleolithic production, approximately two and a half million years in East Africa, allow to infer a social arrangement for handling food and an information transmission that characterize the basis of cultural living involving intelligence in a complex way. Instruments, then, became part of the quotidian in such an intense form that made the human species dependent on them (Pinker, 1998).

These authors (Bussab, Ribeiro & Otta, 2006) consider it unlikely that cultural development occurred in the absence of subtle and intense communication mechanisms. These mechanisms became so sophisticated because human social groups are complex, involving an extensive network of relatives and friends and levels of interdependence between individuals which do not exist in other species (Foley, 2003). On an evolutionary perspective the language is considered a human ability that evolved in a social context and became an essential tool for the establishment and maintenance of social relations (Winston, 2006; Pinker, 2004; Dunbar, 1997).

It is important to notice the implications that a highly formal and ordered society has con the development of language, since it was exactly this social structure that

facilitated the existence of such a sophisticated behavior pattern. Pinker and Bloom (1992), after the proposition of Gould and Lewontin (1979), sustain the point of view that language evolution was an incidental product of the evolution of group life and not a natural selection directly constituted ability.

Bussab, Ribeiro and Otta (2006) point out that the primate social life favors brain growth by demanding prediction and manipulation of the behavior of the other. The observation of cerebral cortex augmentation in primate species with complex social interactions seems to corroborate this statement. This increase in cerebral volume, accompanied by the high degree of complexity of the brain, allowed, according to Buss, Haselton, Shackelford, Bleske and Wakefield (1998), the appearance of some sub products which are not properly considered as original brain functions as, for example, reading, writing, speech, arts, religion. This explanation by Buss et al. (1998) renders more understandable the words of Leakey and Lewin (1988) when they state that "the more effective communication through spoken language might have been simply a casual sub product of the need our ancestors had of words for other less obvious reasons" (p. 177-178).

From the results of comparative studies and research on the subject and number of people who, frequently, compose informal conversation groups, Dunbar (1997) concluded that the fact of human beings establish and maintain links with a large number of people is only possible with language skills. In non human primate groups the formation and maintenance of alliances, links or, even, pacification demand physical or visual contact with the other. In human groups the individual can update the links with some people in group conversations and communicate at distance, through spokesmen, written messages, or on other available means.

Considering the role attributed to language on the establishment and maintenance of social relations, the adolescent adhesion to blogs, where writing is used, this research had as objective to investigate the characteristics of adolescent social relations (friendly, affiliate, affective) through analysis of the comments and messages (posts) left in blogs of other teenagers who were their acquaintances. In function of the effects of gender socialization on the attitudes and actions of youngsters, which manifest since childhood (Souza, 2000; Souza & Rodrigues, 2002), it was decided to analyze, separately, the posts left by girls and boys in blogs of girls and boys.

Method

Six blogs created by adolescents were selected, three owned by boys and three by girls, residents of Vitória Metropolitan Region, Brazil. The objects of investigation were the posted written contents by their readers.

For access to the blogs and selection of the analysis target ones, it was asked of adolescents and some adults in the region the addresses of known adolescent blogs, with ages ranging from 12 to 18 years. One of the adolescents who informed the blog addresses also provided general information about blog operation and cleared doubts about the meanings of abbreviations and graphical signs in the posts.

Only blogs of identified (known) adolescents were selected since it was possible to identify the gender of the blog owner and of the contributors who left posts. The blogs were accessed and those with less than five pages or without a picture of the owner − since it was essential for confirmation of sex and age − discarded. Six blogs were then drawn among those meeting both conditions. Of each of the six chosen blogs

were selected five pages, according to chronological postage order. Thus, 30 pages were analyzed, presenting a total of 350 written readers' posts.

The successive readings of the posts originated the following categories, which observe the recommendations from Bardin (1977) and Bauer (2002):

- Affection Expression: feelings towards the owner of the blog.

- Approval of the Blog: points out characteristics viewed as positive and pleasant on the blog, as well as its contents.

- Cracks/Jokes: make some kind of anecdotal comment and joke about determinate characteristics of the person or the blog itself.

- Search for Contact: comments that show the search and/or maintenance of a proximity relation using the blog as a tool. This category includes requests to be posted in the blog, thankful remarks to the colleagues' posts, and asks for MSN address of a colleague.

- Approval of the Blogger (person who owns a blog): points out characteristics viewed as positive and pleasant of the person who maintains the blog.

- Longing Expression: Expresses feeling of longing such as missing the colleague; sends hugs, kisses, and felicitations.

The posts left by readers were classified in the created categories, calculating, from the frequency chart, the mean values per page of each category. For statistical evaluation of the mean differences *Student* t test was used (Levin, 1987).

Results

Initially, were calculated the mean number of posts, by category and by page, left by girls and boys at the six blogs under study. As shown in Table 1, despite the mean of Affection Expression of the boys (3,53) being higher than that of girls (2,26), such difference was not considered statistically significant. The statistical comparison between the mean frequencies of approval of the blog exhibited by boys and girls was statistically significant, with boys presenting a superior mean value (6,46) than that of the girls (4,0).

Table 1. Mean number of posts left by girls and boys on the six blogs, per category

Category	Mean values		to	Statistical significance
	Boys	Girls		
Affection Expression	3,53	2,26	1,06	No
Approval of the Blog	6,46	4,00	2,05	Yes
Cracks/Jokes	3,26	1,26	2,06	Yes
Search for Contacts	4,40	3,86	0,46	No
Approval of the Blogger	2,46	1,46	1,26	No
Longing Expression	2,66	1,40	1,08	No

Note. t critical = 2,048 for p = 0,05; to = value obtained by applying the difference between means test on small samples (t ratio) and comparison with t critical value, standard, to verify the statistical significance of difference between means.

The mean value of Cracks/Jokes for the boys (3,26) was superior to that for girls (1,26), a significantly considerable difference. The boys also presented higher mean values than those for girls for the Search for Contacts, Longing Expression, and Approval of the Blogger categories (see Table 1).

After the presentation of the global data (from the six blogs), the mean number of posts left by boys and girls on boy owned blogs (Table 2) and on girl owned blogs

(Table3) are now separately presented. As shown in Table 2, the mean number of posts of Affection Expression from boys on boy owned blogs (0,2) was less than for Affection Expression of girls (3,26) and this difference between the mean values was statistically significant. Girls also presented a superior mean value than that from boys in the category Approval of the Blogger and, also for this case, the difference between means was considered significant.

Table 2. Mean number of posts left by girls and boys on boy owned blogs, per category

Category	Mean values		to	Statistical Significance
	Boys	Girls		
Affection Expression	0,20	3,26	3,29	Yes
Approval of the Blog	3,20	3,06	0,17	No
Cracks/Jokes	1,66	1,60	0,07	No
Search for Contacts	1,60	2,60	1,44	No
Approval of the Blogger	0,60	1,73	2,13	Yes
Longing Expression	1,00	1,60	0,82	No

Note. t critical: 2,048 for p = 0,05, and 2,763 for p = 0,01

With exception to the Search for Contacts, for which the mean values for girls exceeded that for boys, on the remaining categories – Approval of the Blog, Cracks/Jokes, and Longing Expression – the mean values for boys and girls were quite close to each other.

The analysis of the posts left on girl owned blogs (Table 3) reveals that contrary to what happened for the boy owned blogs (Table 2) the difference between the mean values was not significant. The same pattern was, though, kept: girls posted, on average, more comments with Affection Expression than boys.

As shown on Table 3, none of the statistical comparisons between the mean values was considered significant. Girls presented superior mean values to those of boys

for the categories Approval of the blog and Search for Contacts, while boys exhibited on average more comments on the categories Cracks/Jokes, Approval of the Blogger, and Longing Expression.

Table 3. Mean number of posts left by girls and boys on girls owned blogs, per category

Category	Mean Values		to	Statistical Significance
	Boys	Girls		
Affection Expression	0.93	1.26	0.64	No
Approval of the Blog	1.66	2.13	0.70	No
Cracks/Jokes	0.73	0.53	0.60	No
Search for Contacts	1.66	2.06	0.48	No
Approval of the Blogger	0.66	0.53	0.32	No
Longing Expression	0.86	0.40	1.04	No

Note. t critical: 2,048 for p = 0,05

For the category Approval of the Blogger boys presented a superior mean value to that of girls for girl owned blogs (Table 3) whereas for boy owned blogs (Table 2) the opposite occurred, with girls presenting a significantly superior mean value.

Discussion

As the categories themselves show, the great majority of the comments and messages left in the blogs by the readers expressed affection, longing, or interest in having contact. Those are: Approval of the Blog, Affection Expression, Approval of the Blogger, Search for Contact, Longing Expression. Besides being an exception, the posts that compose the category Cracks/Jokes signalized themselves as jests.

Boys manifested more affection than girls when the data of the 6 blogs were considered. When posts in boy owned blogs and girl owned blogs were separately

analyzed, though, boys expressed in mean terms less affection. Furthermore, boys expressed more affection when the blog belonged to a girl. These results might mirror gender differences; boys do not tell their male friends they like them, but can tell that to their female friends. Girls, on the other hand, manifest affection for both boys and girls.

In the affection declarations between girls and boys the obtained mean value for the boys (3,53) is slightly higher than that for girls (2,26). This is interesting since, in a certain way, it contradicts the above statement about the relative prohibition for boys to manifest their feelings. Even with this prohibition, it is pertinent to point out that boys exhibit affections in certain occasions, although their expression is better understood when directed towards people of the opposite sex.

In evolutionary terms, affection is an emotion that initiates and maintains partnerships of an altruistic nature, since it reveals a disposition to do a favor for someone who is also inclined to requite (Pinker, 1998). But the altruism here emphasized is the reciprocal altruism, that in the definition of Oliva et al. (2006), involves an act that benefits whoever receives it, but with cost for whoever executes it and that will be later compensated. The costs for the donor are compensated in the future. In this way, it can be stated that the cooperation, so required for life in a group, is linked to the genuine expression of emotion (Pinker, 1998). It can be inferred from this analysis that the manifestation of emotion, though following patterns sexually typified by culture, promotes a tightening of social ties as well as, later, is influenced by this tightening.

In the remaining categories built upon the comments, the friendship relations were highly evident. In the declarations of affection towards someone, for example, the theme of closeness with friends and friendship maintenance was constant. The evolution of the feeling of friendship is understood on the basis of the reciprocal altruism concept

mentioned above. In the words of Pinker (1998), "if you ask people why they are friends, the tendency is to be answered: "We like the same things and know we can always count on each other. (...) The hard times show us our true friends are. This occurs because the goal of friendship, in evolutionary terms, is to save you in hard times, when it is not worth for anyone else" (p. 534).

Friendship, besides performing an important role on a person's life by providing means for the development of emotions, for socialization, for the development of moral and ethical values, still represents one of the relationships that can offer the most satisfaction (Albertassi, Merizio, Boreli, Scarabelli & Garcia, 2005). This satisfaction can be inferred in the posts when the adolescents ask their friends to send messages by blog, when they apologize for being away or not updating the page, and when they ask to be added to someone else's blog.

A good example of the valuing of this proximity could be seen when there was an approval of the colleague's blog. This way, the colleague possesses an attribute that is valued in the group with which he/she interacts or wants to interact. Thus, approval of your blog rewards the effort of doing things that make possible the interaction with that group. The mean values presented for boys and girls in the category "approval of the blog" showed statistically significant difference when comparing girl and boy owned blogs. However, when the mean value obtained for the blogs of girls and obtained for the boy owned blogs is analyzed separately, this difference is not verified.

With respect to joking with their peers, a similar occurrence to Approval of the Blog was obtained. There was no difference when the analysis focused on girl and boy owned blogs. In the comparison between these groups, nevertheless, boys presented a higher mean value and significantly different than that presented for girls.

In the cracks about the colleagues, were often used expressions intended to mean laughter, such as "uahauhauah" and "hehehe", or a warning that it was a joke. This remember the pacification rituals discussed by Bussab (2000), in which the individual assume postures, vocalizations, or movements that signal to the other he/she does not want confrontation. Making jokes about someone requires that this one is known and that a proximity relation with this one exists. The expressions above described would serve to avoid possible conflicts which could arise from an aggressive interpretation of the mockery in the jokes.

There was no statistically significant variation between the mean values for boys and girls in the comparison of their blogs with respect to the category Approval of the Blogger. When the mean values were compared specifically on the boy owned pages, though, a significant statistical variation was detected (0,6 for the boys and 1,73 for the girls), showing less appreciation from the boys towards the other boys. On the girl owned pages, on the other hand, the situation is again that of no significant variation in such a way that approval comments by boys and girls occur with very close frequencies and with a slightly higher average for the boys (0,66 against 0,53 for the girls).

It is shown, thus, as mentioned on the affection expression analysis, a quite peculiar sexually typified pattern for boys and girls relations. It is only allowed to girls to approve those of the same gender. This fact, together with the affection manifestation patterns, highlights the position of Nicolaci-da-Costa (2002b) that in cyberspace there is an online version of the relations experienced without digital mediation. On the other hand, categories which involved expressions of affection and approval presented, as group, a considerable frequency. These results are interesting because they demonstrate that the blog constitutes itself as a space where a praising speech plays its role in the proximity maintenance and, consequently, the social relations (Dunbar, 1997).

In this research most of the posted comments were from acquaintances (schoolmates, neighbors, friends, etc.) of the blog owner. Thus, the posts left by acquaintances served, probably, to tighten relations with the blog owner at low cost such as the Internet users interviewed by Maiorino (2000). Besides, they had relationships offline, since they knew each other, and online, what would not be expected after the differences between online and offline relations presented by Dornelles (2000). Although the same individuals maintained relationships offline and online, it is supposed that the matters discussed are not exactly the same. While at informal conversations (offline) of people who know each other, analyzed by Dunbar (1997), gossip was frequent; at the present research no gossip content was posted.

Discussing the behavior ontogeny, Eibl-Eibesfeldt (1989) argues that mammal infants are particularly curious and always attempt to be in new situations and exploring objects. They employ all their senses on the exploration of objects and play with them on different ways. The experimentation allowed in playful situations seems to bring in itself the need to accumulate new experiences.

For men, the environment exploration initiates at birth. We also manipulate unknown objects and our curiosity fades after that object or the situation becomes familiar or when a task to be performed is concluded. Furthermore, Eibl-Eibesfeldt (1989) shows that man, having the ancestral heritage of curiosity, also experiences and manipulates his social environment.

These remarks help in the understanding how, from an evolutionary point of view, can the interest for this new tool that is the Internet be explained. Before a new object, it is attempted to experiment it to make it familiar. When discussing social environment manipulation it is possible to assert, as does Campos (2004b), that while attempting to utilize a blog to read about other people's life or registering your own

experiences on it, much more then to state that maintenance of these behaviors happens in consequence of a voyeuristic or exhibitionist desire, it is necessary to consider that all these possibilities are new to people and they, necessarily, will attempt to interact with this new technology in order to render it familiar. Thus, access to blogs and the Internet as a whole might disclose this specific form of knowing new environments and learn new experiences. Furthermore, such access to determinate online spaces also provides the feeling of belonging to a group by becoming the adequate space for interactions with the novelty and with the peers who also attempt to familiarize with it.

Final remarks

The development of digital technology and the constitution of cyberspace have to be considered, according to Dornelles (2000), as a social fact for being materialized as different communication environments on the Internet and on the number of users of such spaces. To study the interaction of the subject with the new Technologies, especially with the World Wide Web, is to investigate an undeniable and irreversible process of construction of new spaces that become sociability spaces. Computer mediation, ever more widespread, does not take the social character of the relations. It is possible, thus, to talk about virtual sociability as the interaction performed by synchronous or asynchronous communication, and with interpersonal contact mediated by the computer.

The data presented above, far from being representative of the heterogeneous group of adolescents who use blogs, reflect a small sample constructed in a way not completely random. The observed blogs were selected from indications of adolescents and adults acquaintances of one of the researchers. The adolescent blog owners indicated were friends, family members, acquaintances, or, even sons or daughters of

the people who gave the addresses. This fact might have possibly introduced some bias in the results. It was not possible to evaluate if the identification of the blog owner, as well as blog access of family members and other people of their acquaintance, blocked the appearance of themes like gossip.

References

Albertassi, I. F., Merizio, L., Boreli, M., Scarabelli, R. & Garcia, A. (2005). A amizade da infância à terceira idade: Olhares diversos. In A. Garcia (Ed.), *Relacionamento interpessoal: Olhares diversos* (pp. 93-114). Vitória: UFES/PPG-Psicologia.

Bardin, L. (1977). *Análise de conteúdo* (L. Reto & A. Pinheiro, Trads.). Lisboa: Edições 70.

Bauer, M. W. (2002). Análise de conteúdo clássica: Uma revisão. In M. Bauer & G. Gaskel (Eds.), *Pesquisa qualitativa com texto, imagem e som: Um manual prático* (P. Guareschi, Trad.) (2.ed.) (pp. 189-217). Petrópolis: Vozes.

Buss, D. M., Haselton, M. G., Shackelford, T. K., Bleske, A. L. & Wakafield, J. C. (1998). Adaptations, exaptations and spandrels. *American Psychologyst, 53*(5), 533-548.

Bussab, V. S. R. (2000). Agressividade: A perspectiva etológica. In R. Kerbauy (Ed.), *Sobre comportamento e cognição: Conceitos, pesquisa e aplicação, a ênfase no ensinar, na emoção e no questionamento clínico: Vol. 5* (pp. 201-209). Santo André: SET.

Bussab, V. S. R., Ribeiro, F. & Otta, E. (2006). Comportamento humano. In M. E. Yamamoto & G. L. Volpato (Ed.), *Comportamento animal* (pp. 225-247). Natal: EDUFRN.

Campos, I. (2004a). As relações via Internet. In R. Farah (Ed.), *Psicologia e informática: O ser humano diante das novas tecnologias* (pp. 187-189). São Paulo: Oficina do Livro.

Campos, I. (2004b). Os diários virtuais – blogs e fotologs. In R. Farah (Ed.), *Psicologia e informática: O ser humano diante das novas tecnologias* (pp. 147-150). São Paulo: Oficina do Livro.

Dias, A. C. G. & La Taille, Y. (2006). O uso das salas de bate-papo na Internet: Um estudo exploratório acerca das motivações, hábitos e atitudes dos adolescentes. *Interação em Psicologia, 10*(1), 43-51.

Dornelles, J. (2000). *Amigos virtuais: Estudo antropológico sobre sociabilidade na Internet.* Retrieved in March 22, 2005, from www.megabaitche.hpg.ig.com.br/amigosvirtuais

Dornelles, J. (2004). Antropologia e Internet: Quando o "campo" é a cidade e o computador é a "rede". *Horizontes antropológicos, 10*(21), 241-271.

Dunbar, R. I. M. (1997). Groups, gossip and the evolution of language. In A. Schimidtt, K. Atzwanger, K. Grammer & K. Schäfer (Eds.), *New aspects of human ethology* (pp. 77-89). New York: Plenum.

Eco, U. (1996). *Da Internet a Gutenberg* (J. B. M. Alves, Trad.). Conferência apresentada na Academia Italiana para Estudos Avançados na América. Retrieved in September 26, 2006, from http://www.inf.ufsc.br/~jbosco/InternetPort.html

Eibl-Eibesfeldt, I. (1989). *Human ethology*. New York: Aldine de Gruyter.

Foley, R. (2003). *Os humanos antes da humanidade: Uma perspectiva evolucionista* (P. Zimares, Trad.). São Paulo: UNESP.

Gould, S. J. & Lewontin, R. C. (1979). *The spandrels of San Marco and the panglossian paradigm: A critique of the adaptationist programme*. Retrieved in September 2, 2006, from http:/ethomas.web.wesleyan.edu/wescourses/2004s/ees227/01/sandrels.html

Leakey, R. E. & Lewin, R. (1988). *O povo do lago: O homem: Suas origens, natureza e futuro* (N. Galanti, Trad.). Brasília: Editora da Universidade de Brasília; São Paulo: Melhoramentos (Original published in 1978)

Leitão, C. F. & Nicolaci-da-Costa, A. M. (2003). A Psicologia no novo contexto mundial. *Estudos de Psicologia, 8*(3), 421-430.

Levin, J. (1987). *Estatística aplicada às ciências* humanas (S. F. Costa, Trad.) (2. ed). São Paulo: Harper e Row do Brasil.

Lévy, P. (1999). *Cibercultura* (C. I. Costa, Trad.). São Paulo: Editora 34.

Lopes, P. (2004). Relacionamentos via Internet. In R. Farah (Ed.), *Psicologia e informática: O ser humano diante das novas tecnologias* (pp. 133-41). São Paulo: Oficina do Livro.

Maiorino, F. (2000). As relações humanas nos chats. In E. Sayeg (Ed.), *Psicologia e informática: Interfaces e desafios* (pp. 55-62). São Paulo: Casa do Psicólogo.

Marques, J. C. (1996). Estilos de relações interpessoais na adolescência. *Psico, 27*(1), 47-57.

Marques, J. C. & Horn, R. V. (1995). Habilidades sociais e relacionamentos na adolescência. *Psico, 26*(2), 9-28.

Nicolaci-da-Costa, A. M. (2002a). Revoluções tecnológicas e transformações subjetivas. *Psicologia: Teoria e Pesquisa, 18*(2), 193-202.

Nicolaci-da-Costa, A. M. (2002b). Internet: A negatividade do discurso da mídia *versus* a positividade da experiência pessoal. À qual dar crédito? *Estudos de Psicologia, 7*(1), 25-36.

Nicolaci-da-Costa, A. M. (2004). Impactos psicológicos do uso de celulares. *Psicologia: Teoria e Pesquisa, 20*(2), 165-174.

Nicolaci-da-Costa, A. M. (2005). Sociabilidade virtual: Separando o joio do trigo. *Psicologia e Sociedade, 17*(2), 50-57.

Oliva, A., Otta, E., Ribeiro, F., Bussab, V., Lopes, F., Yamamoto, M. E. & Moura, M. L. S. (2006). Razão, emoção e ação em cena: A mente humana sob um olhar evolucionista. *Psicologia: Teoria e Pesquisa, 22*(1), 53-62.

Pinker, S. (1998). *Como a mente funciona*. São Paulo: Companhia das Letras.

Pinker, S. (2004). *O instinto da linguagem*. São Paulo: Martins Fontes.

Pinker, S. & Bloom, P. (1992). Natural language and natural selection. In J. H. Barkow, L. Cosmides & J. Tooby (Eds.), *The adapted mind: Evolutionary psychology and the generation of culture* (pp. 451-493). New York: Oxford University.

Salles, L. M. F. (2005). Infância e adolescência na sociedade contemporânea: Alguns apontamentos. *Estudos de Psicologia, 22*(1), 33-41.

Souza, F. (2000). *Menina não entra: Um estudo da segregação sexual na interação lúdica entre crianças de 8 e 9 anos*. Dissertação de Mestrado não-publicada, PPG-Psicologia, Universidade Federal do Espírito Santo, Vitória.

Souza, F. & Rodrigues, M. M. P. (2002). A segregação sexual na interação de crianças de 8 e 9 anos. *Psicologia: Reflexão e Crítica, 15*(3), 489-496.

Terêncio, M. G. & Soares, D. H. P. (2003). A Internet como ferramenta para o desenvolvimento da identidade profissional. *Psicologia em Estudo, 8*(2), 139-145.

Weber, L. (2005). *Eduque com carinho: Equilíbrio entre amor e limites.* Curitiba: Juruá.

Winston, R. (2006). *Instinto humano: Como os nossos impulsos primitivos moldaram o que somos hoje* (M. M. Ribeiro & S. Mazzolenis, Trads.). São Paulo: Globo.

Wulfhorst, C. (2004). Transitando entre folhas e bytes a expressão da mídia impressa e da mídia digital na cultura e na produção de subjetividade. *Psicologia: Ciência e Profissão, 24*(4), 78-87.