



How to cite this article in bibliographies / References

MD Cáceres Zapatero, G Brändle, JA Ruiz San-Román (2013): “Interpersonal communication in the web 2.0. The relations of young people with strangers”, at *Revista Latina de Comunicación Social*, 68. La Laguna (Tenerife): Universidad de La Laguna, pages 436 to 456, retrieved on ___ de ___th of ___ of 2_____, from DOI: [10.4185/RLCS-2013-984](https://doi.org/10.4185/RLCS-2013-984)

Interpersonal communication in the web 2.0. The relations of young people with strangers

María Dolores Cáceres Zapatero [[CV](#)] [] [] Full Professor. Departamento de Sociología IV. Universidad Complutense de Madrid (Spain) / caceres@ccinf.ucm.es

Gaspar Brändle [[CV](#)] [] [] Associate Professor. Departamento de Sociología y Política Social. Universidad de Murcia (Spain) / gbrandle@um.es

José A. Ruiz San-Román [[CV](#)] [] [] Full Professor. Departamento de Sociología IV. Universidad Complutense de Madrid (Spain) / jars@ccinf.ucm.es

Abstract

[EN] **Introduction.** This article presents the results of a research study on the new forms of interpersonal communication that young people establish in the Web 2.0. The general objective is to identify the transformations that have occurred in interpersonal computer-mediated-communication. The particular objectives are: a) to determine whether communication with strangers is a common practice among young people; b) to establish young internet users' perception of “stranger”; and c) to establish the degree of trust young people place on strangers. **Methods.** The study (whose reference code is CSO2008-01496) is based on a survey carried out in Spain among 1121 young participants. **Results.** More than half (53.1%) of young people consider online communication with strangers to be a normal type of social relation; the profile of the internet users who talk to strangers on the internet is different from that of the people who do not talk to strangers online, as this latter group conceives interpersonal communications as more sincere, more controllable and more personal.

Keywords: Interpersonal communication; computer-mediated-communication; communication with strangers; young people; virtual social relations.

Contents: 1. Introduction. 2. Methods. 2.1. Research object and initial hypothesis. 2.2. Methods. 3. Results. 3.1. Computer-mediated-communication with strangers. 3.1.1. Who is a stranger? 3.1.2. Trust placed on online strangers. 3.2. The profile of the internet users who interact with strangers.

3.2.1. Restricting and expanding online social relations. 3.2.2. Profile of internet users according to the type of people with whom they interact online. 3.2.3. Frequency of internet use. 3.2.4. Expansion of the communication space. 3.2.5. Perceptions of the social relations established on the internet. 4. Conclusions and discussion. 5. List of references. 6. Other sources. 7. Notes.

Translation by **CA Martínez Arcos**, Ph.D. (Universidad Autónoma de Tamaulipas)

1. Introduction

This article presents some of the results of an R&D project carried out in Spain, titled *La construcción de la realidad social en los jóvenes a través de los servicios y contenidos digitales abiertos: conductas y competencias sociocomunicativas en la red de los “nativos digitales”* (“Construction of social reality in young people through online open services and content: digital natives’ online social and communicative behaviours and competencies”) ([reference code: CSO2008-01496](https://doi.org/10.4185/RLCS-2008-01496)). As the title suggests, this study investigates the current online socio-communicative behaviours and skills of the Spanish digital natives, in relation to digital and open services and content, in order to understand how these behaviours and competencies influence young people’s construction of social reality.

Internet is enabling new forms of sociability and social interaction through platforms that allow virtual relations: chats, forums, social networks, etc. This new forms of sociability is what Walther (1996) has termed the paradigm of hyper-communication or "hyperpersonal communication", where interaction in the virtual space is: a) easy, because it requires a low level of expertise to achieve a satisfactory result; b) recreational, because it constitutes a new form of entertainment for large segments of the internet users; c) far-reaching, because it generally occurs among large groups of people and through multiple channels; d) intense, because of the time and degree of involvement it requires.

This new socio-communicative space is characterised by the possibility of interacting and engaging with other known or unknown users, with whom concerns, motivations and passions can be shared. At the present time, communication has become an end in itself, giving rise to what has been called the permanent communicator (Sainz Peña, 2011) whose contacts do not necessarily have to be friends or acquaintances.

While the characteristics of the internet may suggest that the friendships and relations it generates can be superficial and less committed, Bouté, Wood and Pratt (2009) argue that it may also benefit people with poor social skills because it allows them to decide how they want to introduce themselves (Goffman, 2001), in asynchronous interactions where feedback does not have to be immediate. Computer-Mediated-Communication (hence, CMC) also has advantages for people who have difficulty trusting other people, since they can get to know other people little by little and without putting at risk elements that may come into play in offline relations.

According to the previous study undertaken by this team of researchers [1], some people feel more comfortable with CMC than with Face-To-Face (FTF) interaction. This previous study found that a third of respondents (32.2%) admitted that it was easier for them to establish relations in virtual environments than in real FTF interaction. Internet could be used by people who have problems to establish FTF relations or feel isolated or depressed to improve their social problems. However, it

has been shown that the excessive and compulsive use of internet can actually worsen these types of problems, by decreasing the social skills and increasing the bad experiences arising from online interactions (Caplan, 2003).

On the other hand, the so-called Web 2.0 (O'Reilly, 2007), which started to be developed in the dawn of the 21st century, constitutes a new virtual, interactive, participatory and collaborative space that enables the previously unknown possibilities of the internet. In this sense, in contrast to the Web 1.0, where the contents were created by the website's creator and were rarely modified after their publication, the contents of the second version of the Web are generated mainly by the users themselves. The Web 2.0 allows the creation of active networks of individuals who share interests, hobbies, friendship and carry out collaborative activities.

In other words, the new online collaborative actions enable the generation of social cohesion, a sense of community, and new forms of sociability that in turn have given rise to some interesting practices, such as community cooperation, the establishment of emotional ties with absent people, the management of multiple identities and the acquisition of new forms of commitment, as well as the coordination of joint actions, like the political events that took place in 2011 in Egypt and Tunisia and mobilised thousands of people across the web 2.0 to force profound political changes.

The Web 2.0 takes advantage of the collective intelligence and the enormous number of people willing to collaborate in the construction of a common context of content and a space that, according to Area and Pessoa (2012), is simultaneously a universal library that stores a vast amount of information; a global market of products and digital services; a giant puzzle of hyper-textually connected information; a public point of encounter and communication enabled by the social networks; and a territory where multimedia and audiovisual communication as well as a variety of interactive virtual environments are the protagonists.

In this sense, as Winocur (2006) points out, most young people move effortlessly between virtual and FTF relations. The digital natives do not end their online connection even when they move away from the computer and do not end their connection with the real world, even when they are physically connected to the Internet. Young people move between two worlds that offer different experiences but are not seen as antagonistic, but instead as continuous, convergent and complementary. In fact, for young people much of what happens in the virtual world acquires meaning when they enjoy their benefits in the real world.

In addition, it is important to remark that virtual interaction takes place in a context characterised by a significant degree of trust and horizontality in relations, since it is a peer-based production system, where everybody is can use their knowledge and ideas to enhance the contributions of others. This is an ideal environment to explore the concept of “rhetoric of democratization” (Beer and Burrows, 2007) as it generates a space of open social participation in which, at least in theory, anyone can be seen and heard, and has the ability to participate in the online creation and exchange of contents.

Callejo and Gutiérrez contend that the “relations that are produced by these *communication machines* have their own innovative features” (2012: 133) and that, in this sense, they transform the modes of sociability. This article explores these changes motivated by the importance that CMC can acquire in the process of socialisation, particularly among young people.

Some aspects of this new virtual sociability (Cáceres, Ruiz and Brändle, 2009) that characterise the digital natives are:

- 1) a changing self with a controlled identity or, rather, multiple changing identities which allow them to play to be whatever they want at any moment;
- 2) hyper-connectivity, i.e., uninterrupted connection with other people who are always available and guarantee a permanent social link;
- 3) multiple modes of relations, i.e., transformation of the affective links and new ways of being in touch with others and new forms of meaning construction based on shared experiences within a reticular structure, disconnected of the everyday and local contexts.

In this context characterised by hyper-communication, there is a new form of sociability, especially among young people: the social relation with strangers. This work focuses precisely on this aspect, which is certainly new since so far interpersonal relations were based on the direct and more or less profound knowledge of the persons involved.

There are many recent studies on the different aspects of the social networks: their commercial use, their inclusion of brands and interaction with consumers and followers; their number of users; usage history and frequency; fears, mistrust, and risks for minors, etc. However, with the exception of data on the number of contacts and comparisons between social networks or viral distribution, the new interpersonal relations that can be established on the internet have not been fully explored as well as other subjects related to people's otherness and their membership and reference groups.

There are new studies that focus on the quality of the social relations. From evolutionary anthropology, Dunbar argues that 150 is the cognitive limit (Dunbar's number) to the number of people with whom one can maintain stable social relations. Other authors (like Keegan, 2008) have pointed out that there is a new philately or trend that privileges quantity over quality, and leads to the collection of friends in the same way stamps are collected. Even the social network Tuenti has recently considered the possibility of introducing innovations in its interface to allow users to distinguish between friends and contacts, i.e., between superficial and solid relations.

Christakis and Fowler (2010) indicate that being part of social networks involves being affected by and affecting other people. This means that other subjects influence our habits and behaviours, which in turn has social and moral consequences, and that we lose some sovereignty over our behaviour and our choices, without forgetting the fact that interaction in online networks makes it possible to transcend ourselves and our limitations.

The new transformation is that through this chain of influence (the "three degrees of influence" rule of human behaviour), which is based on the fact that we have some influence on our friends and they over their friends and contacts (Christakis and Fowler, 2010), our actions and decisions can influence people that we do not know and that we can also be influenced by strangers.

2. Methods

2.1. Research object and initial hypothesis

Technological innovation cannot be approached as an agent of change in itself. Instead it should be approached from the social uses and practices of subjects who determine the construction of meaning around it. Technology only creates opportunities, but there are many different ways to take advantage of those possibilities. The existence of an online world is not what really matters. What

matters is how people use this world. This is why it is important to identify the conditions on which inter-subjective relations and forms of sociability are built and defined in CMC.

This survey-based study, which is the follow-up of a empirical study carried out in 2010 as part of the same research project, tries to describe the relation of internet users with online strangers. This study particularly tries to determine whether internet users interact only with people Previously Known Through Face-To-Face Interaction (hence, PKTFTFI) or also with strangers.

Based on this general objective, the research question this study tries to answer is whether the profile of the people who interact with strangers on the internet is different from the profile of those who only communicate with PKTFTFI people? A related objective is to identify the implications of these profiles in the forms adopted by this new virtual sociability.

The general hypothesis that underlies these issues and that has guided this research is that in the current context people who interact online with strangers are more communicative and active internet users and see their behaviours as normal. In other words, the objective is to determine whether it is possible to talk about changes in the current socio-communicative context, at least in a sector of the population that has integrated online social relations in their everyday forms of social interaction.

These objectives and hypotheses are materialised in the following specific objectives:

- To verify whether online interaction with strangers is a frequent practice among Internet users and whether it is possible to affirm that the permanent communication, whether with friends, acquaintances or strangers, is synonymous with normality.
- To determine how internet users define who is a stranger.
- To determine the degree of trust placed on online strangers.
- To establish the differences between the internet users who communicate with online strangers and those who do not.

2.2. Methods

This is an exploratory study aimed at better understanding the current forms of sociability that exist among internet users, given that digital natives, and increasingly digital immigrants (Prensky, 2001), are changing the ways in which they establish social relations: 1) Communication with strangers is becoming more and more frequent; 2) the internet acts as an instrument that facilitates this type of contacts in the same way that the telephone did it in the past; 3) these new forms of social relations lead to the development of forms of affective bonding that challenge classic concepts such as membership or reference group.

This study is based on a national online survey carried out during the second half of December 2011 in several regions of Spain: Northwest, Northeast, North, Centre, South, East and Canary Islands. The survey questionnaire was answered by 1121 internet users of both genders and aged 14 to 35. The online interviews were conducted by panel of internet users. Respondents were randomly selected to fairly represent three age groups: 14-17, 18-24 and 25-35.

Based on the database created by the panellists, we carried out a random sampling based on sex and age stratification variables. The members of the selected sample were invited to participate in the study via a personalised email, which contained a link to the online survey. In order to reach the expected number of properly answered questionnaires we sent out a larger number of online invitations and reminders to encourage people to participate.

The survey was subjected to strict quality control. For instance, we took into account the time it took participants to respond and those questionnaires answered in less than 2 minutes were deemed invalid.

The study had a sampling error of $\pm 3.0\%$ for the general data (1.121n), $p=q=0.5$, and a confidence interval of 95.5% (2s).

3. Results

3.1. Computer-mediated-communication with strangers

CMC allows a greater diversity of communicative exchanges, creating new possibilities that allow people to modify their traditional relations. For example, having a conversation with a stranger now is a common practice among most internet users. This section examines people's changing perception of what constitutes a "stranger" in online interactions, and whether this change in perception also entails a greater range, intensity and frequency in online social relations with strangers.

3.1.1. Who is a stranger?

In order to establish internet users' perception of who is a stranger, the survey participants were asked whether they perceived as strangers to the people they interact with in chats, forums, and blogs, to their friends' friends and acquaintances and to famous people. The category "famous people" was included because it is known that most internet users follow and interact with this type of social actors through Twitter, Facebook and other social networks.

Social networks in particular are facilitating the maintenance of relations with large groups of people and may be in process of redefining who is considered to be a stranger or a friend, since this virtual connection occurs between internet users that hardly know anything about each other (see table 1).

More than 80% of internet users considered the participants in chat rooms, blogs and forums to be strangers. Almost three quarters of the Internet users considered participants and famous people on the social networks to be strangers, while just over 40% considered their friends' friends or acquaintances to be strangers.

Table 1: Do you perceive the following online groups of people as strangers

	Yes	No
Friends' friends or acquaintances	42.1%	57.9%
Famous people	73.0%	27.0%
Blogs and forums participants	84.0%	16.0%
Chat room participants	86.3%	13.7%
Social networks participants	73.4%	26.6%

Source: Authors' own creation

The perception of who is and who is not a stranger is not necessarily based on whether there has been a FTF interaction with that person. Common friendship, even if it is indirect (friends' friends or acquaintances), is what produces more interaction with people online and decreases their perception as strangers. Participants in social networks and famous people in online platforms are the second groups most perceived as strangers. People participating in situations that allow greater anonymity (chats, blogs and forums) are the most commonly perceived as strangers.

3.1.2. Trust placed on online strangers

In the 2010 survey, participants who stated that they communicate with strangers on the internet were asked about the trust that they place on such subjects. The answers confirmed that there is certain ambivalence in this regard, since just over half of the respondents placed much or some trust on strangers (54.8%), and a similar percentage (45.2%) places little or no trust at all on strangers.

As we can see, there is a positive correlation between the increase in the level of trust with the increase in the frequency of relations with strangers and vice versa, which suggests that people who establish online communication with strangers on a daily basis, develop trust towards these individuals.

These results of the 2010 survey motivated us to further explore the issue of trust on strangers in this second survey, in order to verify how this trust is related to the different groups of people found online. With the exception of friends' friends and acquaintances, in general, strangers are trusted little or not at all by about half of respondents. The less trusted groups of people online are chat rooms participants, followed by famous people and social networks participants. Friends' friends and acquaintances are trusted, in varying degrees, by seven of every 10 Internet users (see table 2).

Table 2: Level of trust placed on the different groups of strangers that exist online

Groups	High or very high	Medium	Low / non-existent
Friends' friends or acquaintances	34.8%	35.4%	29.6%
Famous people	15.7%	27.8%	56.3%
Blogs and forums participants	16.1%	37.6%	46.3%
Chat room participants	11.1%	25.3%	63.5%
Social networks participants	15.1%	31.2%	53.7%

Source: Authors' own creation.

The fact that for many internet users the lack FTF contact does not necessarily make someone to be perceived as stranger is not related with the level of trust placed on strangers, which seems to be based on other factors, which surely include FTF experiences. Once again, friendship seems to be privileged: the fact that strangers are backed up by friends seems to be a guarantee for internet users.

What seems to have changed in these new forms of sociability is the conception of who is a stranger, while there are no substantial changes with regards to the trust placed on people considered to be strangers, which suggests that CMC is acquiring a degree of normalcy and reaching the same level as FTF communication.

3.2. The profile of internet users who interact with strangers

Based on the initial survey, a new variable was introduced in this survey to determine whether the people who Interact with strangers on the internet and those who do not have different profiles. This variable has two categories:

1) People who interact only with PKTFTFI people on the internet: this category includes users who stated that they only interact with friends, acquaintances, colleagues and/or neighbours but never with strangers.

2) People who interact with both PKTFTFI people and strangers on the internet: this category includes users who in addition to interacting with friends, acquaintances, colleagues and neighbours also do so with strangers.

The objectives were: 1) to establish the percentage of the population who restricts their CMC to a close group of people and the percentage who expand their CMC to strangers; 2) to identify the basic demographic features that characterise the internet profile of people who only interact with PKTFTFI people on the internet and those who also do so with strangers; 3) to establish the frequency of internet use of the two groups of internet users; 4) to determine whether the behaviours and habits on the Internet vary between these two groups of users; and finally 5) to determine whether the perceptions towards social relations and the changes brought about by this new online socio-communicative context are influenced by the social relations established or not with virtual strangers.

3.2.1. Restricting and expanding online social relations

The analysis of the answers of the whole sample indicates that it is more likely to maintain social relations not only with close people but also with strangers. Currently over half of the population (53.1%) extends their CMC to groups of people that are outside their circle of close people, which normalises a kind of interaction that tends to be more restricted in FTF social relations. In any case, the data can be interpreted in two ways and so we could simultaneously highlight that despite the new possibilities offered by the internet, a large number of Internet users (46.9%) still restrict their social relations to people that are part of their close environment.

3.2.2. Profile of internet users according to the type of people with whom they interact online

a) Influence of the sex variable

Table 3: People with whom respondents interact on the internet
(Distribution across sex groups)

Sex of respondents	Interact only with close people	Interact with close people & strangers
Male	34.9%	65.1%
Female	54.1%	45.9%

Source: Authors' own creation

Previous studies (Cáceres, Ruiz and Brändle, 2012) suggest that the sex variable can be related to people's willingness to interact with just close people or also with strangers. Our survey confirmed that indeed men and women understand and use the possibilities offered by the internet in different ways: men interact with strangers to a greater extent than women do, while women interact more with close people [2]. Men seem to be a little more willing to expand the boundaries of their CMC; while women are still more cautious in this regard (see table 3).

b) Influence of the age variable

The initial hypothesis is that younger people (who are traditionally the early adopters and have less afraid of the risks that the CMC with strangers may involve) would interact with strangers to a greater extent than older people. However, as we can see in table 4, there is not a noticeable trend in this regard. While it is true that the oldest group of people (although not really old as they are under 35) interact with strangers the least, there is not a uniform trend across age groups [3].

Table 4: People with whom respondents interact on the internet
(Distribution across age groups)

Age group	Interact only with close people	Interact with close people & strangers
14-17	47.6%	52.4%
18-24	41.4%	58.6%
25-35	49.3%	50.7%

Source: Authors' own creation

In any case, the data suggests that we should not take as face value the studies that indicate that for young people internet is a space for communication without barriers, since a large part of the digital natives only interact with close people. In addition, it is logical to think that if we surveyed older

people and applied a FTF survey including light internet users and even of non-users, we could get different results about the relevance of the age variable.

Table 5: People with whom respondents interact on the internet
(Distribution across levels of study)

Level of studies	Interact only with close people	Interact with close people & strangers
Primary or secondary	44.4%	55.6%
Vocational training	38.3%	61.7%
University studies	52.0%	48.0%
Postgraduate studies	49.3%	50.7%

Source: Authors' own creation

c) Influence of the level of studies variable

There seems to be a relation between respondents' level of studies and the type of people with whom they interact [4]. Respondents with the lowest level of studies or vocational training are more open to interact with strangers on the internet. On the other hand, respondents with university studies are divided almost in equal parts between those who interact with close people and those who do so also with strangers (see table 5).

3.2.3. Frequency of internet use

Based on the hypothesis that people who interact with strangers on the internet are more active and heavy internet users, and take more advantage of this common space of interaction, we expected this group of people to spend more time on this communicative environment.

The results certainly confirm this hypothesis: the average time dedicated to using the Internet per day is higher among the group of people who also interact with strangers (6.6 hours) than among those who interact only with close people (5.1 hours) [5].

3.2.4. Expansion of the communication space

a) Fake identities in CMC

The results of this study indicate that there is a relation between people who interact with strangers on the internet and those who have interacted with people who use a fake identity. People who interact with strangers on the internet are more likely to recognise people who use a fake identity [6]. These results seem coherent since it is logical to think that the interaction with different people encourages a broader variety of situations.

b) Conflicts in the Internet

The emergence of conflicts is an unavoidable aspect as the frequency and variety of interpersonal relations increase, just as it happens in FTF relations, even more so in a context in which there is no physical feed-back. In addition, the internet allows people to carry out conducts covered in anonymity and invisibility and to do things more freely due to the immunity that the internet provides. According to Lapidot and Barak (2012) the internet decreases people’s inhibition, which explains the emergence of certain deviant, anti-social and negative behaviours such as flaming.

Table 6: Have you experienced social conflicts online?

Groups of respondents:	Yes	No
Interact only with close people	34.3%	65.7%
Interact with close people & strangers	54.3%	45.7%

Source: Authors’ own creation

Therefore, we tried to verify whether interaction with strangers on the internet is linked to the experiencing of conflicts in online environments, because the internet offers a parapet which facilitates this type of confrontation especially among strangers who only know each other’s name or nickname (see table 6). The results confirm this situation, since respondents who have experienced conflicts with other people on the internet are mainly those who interact with online strangers [7].

c) The emergence of the *prosumer*

As we can see in table 7, the survey results indicate that people who interact with strangers on the internet [8] are also more active in the creation of content (respondents indicate that the main reason the use the Internet is to upload content: information, videos or audiovisual material). This also suggests that people who make a greater use of the possibilities of the Internet also see interactions with strangers as something more usual. In this case, the publication of content in the public sphere facilitates the expansion of social relations over the internet, as it motivates interaction between the content’s creators and strangers who access this content.

Table 7: Have you published content on the Internet?

Groups of respondents:	Yes	No
Interact only with close people	13.9%	86.1%
Interact with close people & strangers	27.9%	72.1%

Source: Authors’ own creation

d) Think before posting content on the internet

The posting and sharing of content over the network can have negative consequences and provoke feelings of regret when the barriers of privacy that characterise FTF relations are broken. This study examined whether people’s feeling of regret after publishing content on the Internet may be associated with their interactions with online strangers. The results have shown that people who interact with strangers on the internet regret posting contents over the internet to a greater extent than people who do not interact with online strangers [9] (see table 8).

Table 8: Have you experienced regret after publishing content on the Internet?

Groups of respondents:	Yes	No
Interact only with close people	12.5%	87.5%
Interact with close people & strangers	22.5%	77.5%

Source: Authors’ own creation

3.2.5. Perceptions of the social relations established on the internet

a) Perception of relations

In order to examine people’s perception of the relationships they establish on the internet, the survey asked respondents to state the extent to what they agreed with the description of such relationships as more sincere, controllable, personal, intimate and planned. The list of characteristics were established in a previous qualitative study based on three focus groups that represented the three age ranges considered in this research (Núñez, García-Guardia and Hermida, 2012). Most respondents agreed with the descriptions of online social relations but the respondents who interact with online strangers agree to a greater extent that these relations are more sincere, more controllable, more personal, more intimate and more planned [10] (see table 9).

Table 9: Respondents’ perceptions about online social relations

Agreement with the following statements about online social relations:	Interact only with close people			Interact with close people & strangers		
	Strongly agree	Agree	Disagree	Strongly agree	Agree	Disagree
They are more sincere	23.7	30.6	45.1	39.0	29.4	31.6
They are more controllable	34.8	36.3	28.9	50.4	28.1	21.5
They are more personal	27.2	27.2	45.6	33.9	25.4	40.8
They are more intimate	21.2	23.5	55.3	30.6	24.7	44.7
They are more planned	38.6	31.2	30.3	53.8	25.2	21.0

Source: Authors’ own creation

These results reflect the changes in the perception and experiencing of the “liquid” relations (Bauman, 2006) that characterise this new virtual sociability. CMC does not produce emotional disengagement (more personal and intimate relations) and facilitates communication with new friends, i.e. people who used to be strangers, but does not necessarily contribute to the maintenance of relations with close people.

b) Influence of Internet on internet users’ mentality

Taking into account the fact that CMC is very important in the daily life of the digital natives and society in general, the survey questioned respondents whether the internet had changed their mentality. Respondents were firstly questioned about the influence of the internet in general terms and later in more specific aspects. In general terms, three out of ten respondents said that the internet has changed their way of thinking and respondents who interact with online strangers admitted this influence to a greater extent [11] (see table 10).

Table 10: Has the internet changed your way of thinking?

Groups of respondents:	Yes	No
Interact only with close people	19.8%	80.2%
Interact with close people & strangers	38.5%	61.5%

Source: Authors’ own creation

In order to further investigate the influence of the internet, respondents were questioned whether this medium had changed their perception about: 1) change and the evaluation of this change; 2) communication and personal relations; 3) new practices, precautions and responsibility; 4) had transformed their skills and abilities; 5) or improved the practical aspects of everyday life; and 6) had opened their minds and encouraged them to share their opinions and points of view.

The responses to these questions were unevenly distributed: more than a quarter of respondents recognised that the internet and new technologies have changed their way of thinking. The aspects influenced by the internet among the largest group of respondents were interpersonal communication and social relations with other people.

The group of aspects that have been influenced by the internet among the second largest group of respondents are intellectual and psychological skills and abilities. The third area most influenced by the internet is the practical aspects of everyday life (carry out chores, paying services, shopping, etc.).

Table 11: Has the internet produced the following changes in you?

	Interact only with close people		Interact with close people & strangers	
	Yes	No	Yes	No
Has changed your generalised perception of change	10.0	90.0	13.8	86.2
Has change the way you value change	12.9	87.1	13.2	86.8
Has changed your interpersonal communication and relations	37.1	62.9	44.7	55.3
Has taught you new online practices, precautions and responsibility	7.1	92.9	5.3	94.7
Has provoked transformations in your abilities and skills	17.1	82.9	11.2	88.8
Has improved the functional aspects of your everyday life	4.3	95.7	1.3	98.7
Has opened-up my mind	11.4	88.6	10.5	89.5

Source: Authors' own creation

Only 13% of the respondents stated that they have perceived a change, which sometimes is total and sometimes is not specific. In addition, over 12% of respondents made an assessment (whether positive or negative) of this change and the internet technologies. Slightly less than 10% of the respondents who perceived that Internet and the new technologies have changed their way of thinking indicated that they have opened their mind. Finally, 7% pointed out that this change has to do with the new situations of caution, suspicion or responsibility generated by the use of the internet technologies.

In summary, the main change mentioned by respondents is the one that has occurred in their personal relations and the forms of communication, although changes in other aspects have been also noticed. These results have been confirmed by recent studies (CIS, 2012). The study found out that people uses the internet to make new friends and less to communicate with family and their old friends. The results confirm that there is a relation between people's perception of change in their way of thinking and whether they interact with online strangers or not (see table 11).

On the one hand, people who only interact with PKTFTFI people indicate to a greater extent that the changed that the internet has produced in them refers to the new practices that it has introduced in their lives, the new capacities and skills that they have developed in relation to it, and the improvements that it has offered to the functional aspects of their life. In other words, it seems that for these people internet has opened up a previously unknown context, which reinforces our hypothesis that they are less intensive internet users and are probably in the process of adopting it as a natural part of their lives.

On the other hand, people who interact with PKTFTFI people and strangers point out that internet has changed their forms of communication and interpersonal relationships. In other words, the study of the changes perceived by internet users and this new type of social relations with online strangers, highlight a new sociability related to the relational dynamics proposed by Pisani (2008): we do not renounce to the social relations with the groups of membership, but tend to multiply the relations that are transitional, unidirectional, less meaningful, less rigid and more dynamic.

4. Conclusions and discussion

With regards to the perception of who is stranger and the changes in sociability forms in relation to the widespread implementation of the ICTs as instruments for social relations, according to this study two out of five respondents do not consider their friends' acquaintances and friends to be strangers.

Traditionally, people determined whether someone was a stranger based on the existence or lack thereof of FTF interaction with the person in question. However, currently FTF interaction does not seem to be essential, at least for an important share of the digital natives, who do not perceive their indirect contacts, i.e. people mediated by the friendship of a third person, as strangers. The phrase "the friends of my friends are my friends" has become a reality more than ever. Common friendship appears as a privileged link that facilitates online relations with third parties and the expansion of the circle of social relations.

It is necessary to reconsider the traditional modes of sociability that are based on FTF interaction as the standard way of establishing relations with others. As noted by Christakis and Fowler (2010), today, more than ever, people are not only maintaining social relations with socially or physically close people, but also with people that are part of a network which is not always evident. Our influence does not end in the people that we know and reaches those with whom we have not had FTF interaction, up to three degrees of influence, as Christakis and Fowler (2010) point out in their study of the transmission of happiness, obesity, smoking habits and political tendencies through the social networks.

This study suggests that in the near future, as it is already the case for many digital natives, who are certainly the early adopters, relations with strangers will inevitably be part of the normal forms of social relations, which will make the concept of network a glaring reality and will invert the current terms.

For the majority of people, the knowledge based on FTF interaction is still the decisive factor to determine who is a friend, an acquaintance or a stranger. Put differently, the normal, i.e. the most common social practice, will be to interact with people that we have never seen, and perhaps will never see, and to integrate them into our social circles. The most strange, uncommon or marginal social practice will be to establish social relations with people only through FTF interaction.

Given that relations between strangers is increasingly more frequent (e.g. friends, followers, contacts) it is necessary to delve into the concept of *online strangers* and into the redefinition of the concept of *friend*, which has not been addressed in this study and can be understood in different ways. The analysis of the different definitions of what constitutes a stranger among respondents, and the degrees of emotional connection that it entails, will contribute to the debate about the new forms of sociability in these "liquid times" (Bauman, 2006).

The results of this study confirm the hypothesis that there are two types of internet users: one who only interacts with people they have met FTF and other who also interacts with strangers.

The group of internet users who interact with strangers is formed mostly by males, who perceive these relations to be more sincere, controllable, personal, and intimate. At some point, these users have interact with people who have used faked identities, have experienced online conflicts and have regretted publishing content on the Internet. These users have been influenced by the ICT mostly in their ways of establishing and maintaining interpersonal communication and relations. They also share the widespread perception that ICTs represent a widespread change, although they cannot always clarify the peculiarities of this change. In other words, these people perceive the changes provoked by the introduction of the internet in their daily lives and appreciate the benefits provided by the ability to interact with many people, whether previously known through FTF interaction or not.

The group of internet users who interact only with PKTFTFI people is predominantly formed by females, who mostly perceive online social relations to be less sincere, controllable, personal and intimate. Most of them have not met people using a fake identity on the internet, experienced conflicts in their virtual interaction or regretted having uploaded content to the Internet. In comparison with the previous group, this group has been less influenced by the internet. The members of this group who admit the influence of the internet point out that this influence refers to the improvement of the functional aspects of daily life, the learning of new ICT capabilities and skills, which has in turn opened their minds and made them to be more precautions about the new internet-based social practices and to be more aware of the responsibility they should take towards third parties. It seems that for this group of people internet is opening up a new context, previously unknown, perhaps partly due to their less intensive use of the internet. This group of IU is possibly in a process of transformation and adaptation and about to accept this medium as a normal part of their lives.

As mentioned, in comparison to people who interact only with people PKTFTFI, people who interact with strangers on the internet stated that they perceive online relations to be more sincere, more controllable, personal and intimate, which suggests that for this group, which is presumably the early adopters of these new trends, ICT facilitate or enhance their social relations. This is the hyperpersonal level proposed by Walther (1996) in relation to CMC.

The internet could provide the conditions for communication to flow with higher quality and intimacy, due to the fact that, among other things, the technology mediation can facilitate, for example, the overcoming of some obstacles that hinder the quality of interpersonal communication.

Whenever a new communication technology or medium emerges a debate on its possible effects on society and individuals is started. The new ICT reopen the debate on these issues and in fact there are many studies supporting or rejecting the different positions.

As we have seen, ICTs can weaken traditional forms of social communication and relations, but can also expand and complement them. However, this depends on the people using the ICTs. In other words, new ICTs can facilitate interaction for people with difficulties to establish social relations and provide a safe context in which they can rehearse behaviours that can be then put in practice in the real world, but can also worsen situations of isolation or asocial behaviours.

However, the social skills learnt online cannot always be extrapolated to the FTF-based interactions. Thus, people who have more social skills to interact with people FTF will have a greater capacity to take advantage of the potential of the new media; and those with poor social skills to interact with people FTF will not necessarily improve these skills if the CMC provide a vicarious experience to compensate their limitations.

Apart from these considerations, everything seems to indicate that there have been changes in the traditional forms of social relations if we take for a fact that, as many studies have shown, the digital natives move effortlessly between FTF interactions and CMC. This change is confirmed by people's increasing trend to develop less deep relations with a small number of people and more superficial relations with hundreds or tens of hundreds of people.

The changes produced by people's use of the internet's social tools are affecting the construction of sociability forms and, ultimately, the area of intersubjectivity constructed not only through FTF interactions, as it has traditionally happened, but also significantly through virtual relationships.

- This work is part of an R&D project funded by the National Basic Research Programme of the Spanish Ministry of Science and Innovation: *La construcción de la realidad social en los jóvenes a través de los servicios y contenidos digitales abiertos: conductas y competencias sociocomunicativas en la red de los "nativos digitales* ("Construction of social reality in young people through online open services and content: digital natives' online social and communicative behaviours and competencies"). [The project's reference code is CSO2008-01496](#).

5. List of references

- M Area, T Pessoa (2012): "De lo sólido a lo líquido: Las nuevas alfabetizaciones ante los cambios culturales de la Web 2.0". *Comunicar*, vol. XIX, nº 38, pp.13-20.
<http://www.revistacomunicar.com/pdf/preprint/38/01-PRE-12378.pdf#page=1&zoom=auto,0,655> [28 de septiembre de 2012] DOI: 10.3916/C38-2011-02-01.
- D Beer, R Burrows (2007): "Sociology and, of and in Web 2.0: Some Initial Considerations". *Sociological Research Online*, vol. 12, nº 5. Disponible en:
<http://www.socresonline.org.uk/12/5/17.html> [27 de abril de 2011].
- Z Bauman (2006): *Modernidad líquida*. Buenos Aires: FCE.
- VM Buote, E Wood, M. Pratt (2009): "Exploring similarities and differences between online and offline friendships: The role of attachment style". *Computers in Human Behavior*, vol.

25, nº 2, pp. 560-567.

http://onemvweb.com/sources/sources/exploring_offline_online_friendships.pdf [15 de junio de 2010].

MD Cáceres, JA Ruiz San Román, G Brändle (2009): “Comunicación interpersonal y vida cotidiana. La presentación de la identidad de los jóvenes en Internet”. *CIC*, nº 14, pp. 213-231. <http://revistas.ucm.es/index.php/CIYC/article/view/CIYC0909110213A> [5 de mayo de 2011].

MD Cáceres, JA Ruiz San Román, G Brändle (2012): “La construcción de la sociabilidad virtual. El papel de la mediación tecnológica en las situaciones de conflicto”, en Said, E. y Brändle, G. (Eds.), *Las sociedades en red: sociabilidad y mediación tecnológica*. Bogotá: Colombia Digital, pp. 11-23.

J Callejo, J Gutiérrez (2012): “Máquinas de comunicar, máquinas de producir la adolescencia”, en Callejo, J. y Gutiérrez, J. (Coords.), *Adolescencia entre pantallas*. Barcelona: Gedisa.

S Caplan (2003): “Preference for Online Social Interaction: A Theory of Problematic Internet Use and Psychosocial Well-Being”. *Communication Research*, vol. 30, nº 6, pp. 625-648. http://7cn.net16.net/quiz_1_setimo/mestrado/Emo%E7%F5es%20online%20LMS%20output/story_content/external_files/Preference_for_online_social_interaction.pdf [1 de enero 2012] DOI: 10.1177/0093650203257842.

Centro de Investigaciones Sociológicas. Estudio 2948 Barómetro de Junio 2012. Disponible en: http://www.cis.es/cis/opencms/ES/NoticiasNovedades/InfoCIS/2012/Documentacion_2948.html [11 de julio 2012].

Christakis, N. y Fowler, J., (2010): *Conectados*. Madrid: Taurus.

E Goffman (2001): *La presentación de la persona en la vida cotidiana*. Buenos Aires: Amorrortu.

V Keegan (2008): “Redes sociales ¿Exaltación o devaluación de la amistad?”, *El universal*, 27 diciembre. Madrid.

N Lapidot, A Barak (2012): “Effects of anonymity, invisibility, and lack of eye-contact on toxic online disinhibition”. *Computers in Human Behavior*, nº 28, pp. 434-443. <http://www.sciencedirect.com/science/article/pii/S0747563211002317> [3 de diciembre de 2012]. DOI: 10.1016/j.chb.2011.10.0144.

P Núñez Gómez, ML García Guardia, LA Hermida Ayala (2012): “Tendencias de las relaciones sociales e interpersonales de los nativos digitales”. *Revista Latina de Comunicación Social*, 67, pp. 179-204. http://www.revistalatinacs.org/067/art/952_UCM/08_Patricia.html [3 de diciembre de 2012]. DOI: [10.4185/RLCS-067-952-179-206](https://doi.org/10.4185/RLCS-067-952-179-206) / [CrossRef link](#)

T O'Reilly (2007): “What Is Web 2.0: Design Patterns and Business Models for the Next Generation of Software”, *Communications & Strategies*, vol. 65, nº 1, pp. 17-37. Disponible en: <http://mpira.ub.uni-muenchen.de/4578/> [6 de marzo de 2012].

F Pisani (2008): *La alquimia de las multitudes: cómo la web está cambiando el mundo*. Barcelona: Paidós.

M Prensky (2001): “Digital Natives, Digital Immigrants”. *On the Horizon*. vol. 9, nº 5.

RM Sainz Peña (Coord.) (2012): *La sociedad de la información en España 2011*. Madrid: Ariel y Fundación Telefónica. Disponible en: http://e-libros.fundacion.telefonica.com/sie11/aplicacion_sie/ParteA/datos.html [18 de junio 2012].

JB Walther (1996): “Computer-Mediated Communication: Impersonal, Interpersonal and Hyperpersonal Interaction”. *Communication Research*, vol. 23 nº 1, pp. 3-43. <http://crx.sagepub.com/content/23/1/3.abstract> [11 de julio 2012]. DOI: 10.1177/009365096023001001

R Winocur (2006): “Internet en la vida cotidiana de los jóvenes”. *Revista Mexicana de Sociología*, vol. 68, nº 3, pp. 551-580. <http://www.ejournal.unam.mx/rms/2006-3/RMS006000305.pdf> [11 de julio 2012].

6. Other sources

The survey was part of the national R&D project CSO2008-01496 and was carried out in several regions of Spain: Northwest, Northeast, North, Centre, South, East and Canary Islands. The survey questionnaire was answered by 1121 participants of both genders and aged 14 to 35. The survey was carried out during the second half of December 2011. The study had a sampling error of $\pm 3.0\%$ for the general data ($1.121n$), $p=q=0.5$, and a confidence interval of 95.5% ($2s$).

7. Notes

[1] The study is based on a national online survey carried out in Spain in March 2010. The survey questionnaire was answered by 1102 people aged 14 to 35.

[2] The Chi-square test confirmed that there is a statistically significant association between these variables (the probability associated to the Chi-square is less than 0.05) and rejected their H_0 of independence. Sex influences is related to the type of relations people establish on the internet.

[3] The Chi-square test indicated that there is no statistically significant association between the two variables (the probability associated to the Chi-square is greater than 0.05) and rejected their H_0 of independence. Age is not related to the type of relations people establish on the internet.

[4] The Chi-square test confirmed that there is a statistically significant association between these variables (the probability associated to the Chi-square is less than 0.05) and rejected their H_0 of independence. Educational level is related to the type of relations people establish on the internet.

[5] The T test for independent samples rejected the null hypothesis of equality of means. The means of both groups are significantly different ($t < .000$), spending more time on the Internet users that communicate with strangers.

[6] The Chi-square test confirmed that there is a statistically significant association between these variables (the probability associated to the Chi-square is less than 0.05) and rejected their H_0 of independence. Knowing a person with fake identity is related to the types of relations people establish on the internet.

[7] The Chi-square test confirmed that there is a statistically significant association between these variables (the probability associated to the Chi-square is less than 0.05) and rejected their H_0 of independence. Experiencing online social conflicts is related to the types of relations people establish on the internet.

[8] The Chi-square test confirmed that there is a statistically significant association between these variables (the probability associated to the Chi-square is less than 0.05) and rejected their H_0 of independence. Publishing content on the internet as main reason for connection is related to the types of relations people establish on the internet.

[9] The Chi-square test confirmed that there is a statistically significant association between these variables (the probability associated to the Chi-square is less than 0.05) and rejected their H_0 of independence. Regretting having published content on the internet is related to the types of relations people establish on the internet.

[10] The Chi-square test confirmed that there is a statistically significant association between these variables (the probability associated to the Chi-square is less than 0.05) and rejected their H_0 of independence. The degree of agreement with that the description of online personal relations as more sincere, controllable, personal and intimate is related to the types of relations people establish on the internet.

[11] The Chi-square test confirmed that there is a statistically significant association between these variables (the probability associated to the Chi-square is less than 0.05) and rejected their H_0 of independence. Recognising the influence of the internet is related to the types of relations people establish on the internet.

HOW TO CITE THIS ARTICLE IN BIBLIOGRAPHIES / REFERENCES:

MD Cáceres Zapatero, G Brändle, JA Ruiz San-Román (2013): “Interpersonal communication in the web 2.0. The relations of young people with strangers”, at *Revista Latina de Comunicación Social*, 68. La Laguna (Tenerife): La Laguna University, pages 436 to 456 retrieved on ___ de ___th of ___ of 2____,

DOI: [10.4185/RLCS-2013-984](https://doi.org/10.4185/RLCS-2013-984)

Article received on 31 January 2013. Submitted to pre-review on 4 February. Sent to reviewers on 7 February. Accepted on 22 May 2013. Galley proofs made available to the authoress on 25 May 2013. Approved by authoress on: 6 June 2013. Published on 22 June 2013.
