Abstract

The aim of this article is to analyze and describe the perceptions of children with 4 and 5 years old regarding the use of Facebook. For this purpose, 33 children were interviewed. From the data analysis it was found that most children know Facebook, mentioning that it is possible to communicate, play games and view photos on the social network. In addition to these representations, some children also mentioned that they used Facebook to communicate with their family or to play games. The representations mentioned by children are based primarily on the observation of their parents using Facebook. From these findings, it is proposed that school could provide training to parents and children about issues of online safety, in order to prepare both for a conscientious use of social networks.

Keywords

Children, Facebook, Social Network, Representations
**Introduction**

Young children have grown and are part of the information age; they can handle many kinds of digital tools with better ability than most adults. They know how to handle a computer (Cruz and Brito, 2012), tablets and smartphones. This will probably result in a growing number of children with Internet access, which will also mean an increasing exposure to the risks that come with using the Internet (Holloway et al, 2013).

With regards to using the Internet, we focus on social networking given its ease of use and sharing features, a very popular tool particularly with the young of age. At home you will find that parents, siblings and other relatives use social networks, and children want to be a part of it too. Therefore, it is expected to see young children also wanting to participate. Such an environment will bring new challenges, questions and anxieties to parents. What can parents do to protect their children when they themselves are not aware of the risks?

This research has the objective to detail and analyze the perceptions of children of 4 and 5 years of age with regards to the social network Facebook. In our previous research (Brito, 2015) we have worked with children of the same age, on the related topic of using a computer and accessing the Internet. For the present research we interviewed 33 children from 2 kindergartens.

Below, a short literature review will be presented, followed by the explanation of the concept and methodology chosen for the research, as well as a description of participants and procedures for data collection. Data will be presented and interpreted, followed by a final comment.

**Literature Review**

In the past years we have witnessed a huge increase in Internet access by children between the age of 3 and 5. Ninety three percent of children between the age of 3 and 9 access the Internet a weekly average of 8 to 9 hours (Jie, 2012). In the United States 25% of 3 year olds are online on a daily basis, which rises to 50% for 5 year olds (Gutnick et al, 2011). One of the main reasons for young children having access to the Internet and using it more often is due to young parents (between the age of 25 and 45) and the experience they provide by the variety of Internet-connected equipment at home. Older siblings will also play an important role, influencing and encouraging the adoption and use of social networking websites like Facebook (Holloway et al, 2013).

This social network is currently the most popular with over 1.3 billion monthly user visits (Statista, 2014). Society as a whole has adopted Facebook and children are no exception, their natural curiosity attracts them to the social platform and its applications, even though the social network itself is meant only to be used by children with 13 years of age or older. Nonetheless young children access Facebook and its part of their daily chatter amongst friends. In research conducted by Brito (2013: 4), 50 children of the age of 5 were interviewed and it was observed that 66% of them new of the existence of Facebook, referring to it as place “where you can communicate and play games”.

The computer anti-virus company AVG has published a study named “Digital Diaries” and concluded that 16% of children between the age of 6 and 9 from the United Kingdom, Spain, Germany, Italy and France, had a Facebook (2014) profile. A 2012 study conducted in Germany...
reported that 44% of children younger than 13 years of age used online social networks, with Facebook being the most popular. This research also detailed that 5% of children with the age of 6 and 7 were frequent users of Facebook (Medienpädagogischer Forschungsverbund Südwest 2012, retrieved from Holloway et al, 2013).

Besides the fact that children are using social networks, we should also be aware of the manner how parents access these applications. A phenomenon that AVG labels as “sharenting” is ever more prevalent in young parents that decide to publish and share photographs of their young ones at an increasingly early age. “Sharenting” can be described as parents performing an excessive sharing of the day-to-day life of their children, be it the first day of school, first baby steps or even a mother’s ultra-sound. Digital Diaries (AVG, 2014) interviewed parents from 10 different countries, and observed that 80% mentioned to have uploaded images and information about their children (ages 0 to 2) with the intention to share with grandparents, family and friends. 30% of parents said that they had shared an ultrasound image, a 23% increase when compared with the same study by AVG in 2010. 62% of parents shared photos of their children up to the age of 2. 50% of parents had shared photos of their new-born babies. This study also showed that 80% of parents were not totally public about sharing photos and only did so with family members and friends. 25% of parents admitted to “showing off” their children online, 8% created an e-mail account for their child, and 6% went on to creating a profile on a social network (children were 2 years or younger). It is expected for these percentages to grow in the coming years (Medienpädagogischer Forschungsverbund Südwest 2012, retrieved from Holloway et al, 2013), which points to the need of researching ways for children to use the Internet in a safe and beneficial manner, as well as making sure that parents are aware of the risks and benefits of letting their children use social networks.

Methodology

Approach

This research uses a qualitative methodology approach of the exploratory kind, focusing on the perception of children in regards to the social network Facebook. According to Bogdan and Biklen (1994), this kind of approach is descriptive in nature, given that collected data is based on words. These words are important given the approach, “looking at the world in a detailed fashion” (p.49).

Context and participants

The present study took place during the 2013/2014 school year at 2 pre-schools in Portugal. One pre-school was private pre-school and located in the district of Oeiras, the other was public and located in the Sintra district, both near Lisbon. Both districts are suburbs the city of Lisbon, Portugal. These schools were chosen due to their proximity with regards to the author of this study, and that both teachers of each school showed interest in the subject. 33 children were interviewed, of which 19 belonged to the private school and the remaining 14 were from the public school. Children were of the age 4 (27%) and 5 (73%), 41% were boys and 59% girls.

Procedures before collecting data

Authorization was requested to both schools for the researcher to be allowed to conduct observations and interviews in the classroom. An explanatory letter was sent to the parents of each child requesting authorization for the interview and detailing the reason. All collected data was guaranteed to be confidential, including audio recordings.
**Data collection procedures**

Data collection procedures comply with the principles listed by Bodgan and Biklen (1994). These authors recommend that the “breaking the ice” (p. 135) whenever the case of the interviewer not being familiar or acquainted with the interviewees. As such, the interviewer took the first day solely to get acquainted with the environment and children. Both pre-school teachers were very supportive, this approach proved to be successful as the next day when interviews were performed all the children remember the interviewers name and were at ease to answer questions. The interview ran through a script of questions of the sort: (1) Have you heard of Facebook? (2) Do your parents use Facebook? (3) What can you do on Facebook? To collect a genuine perception on the subject, the questions were performed in a dialogue fashion. Sometimes these questions would end up in different order depending on how at ease and well versed the children were. According to Mukherji and Albon (2010) this kind of approach provides greater flexibility and chances of getting a richer and detailed answer, the interviewer can also adapt the questions according to age and knowledge on the subject.

Each child was told that the interview was just a conversation as to know their opinion on a given subject and that there was no right or wrong answer. Mukherji and Albon (2010) recommend to be watchful when interviewing children in pre-school and to make sure the subject is not dull or boring. The interview should not take too long and should take place in a familiar and comfortable surrounding. At both schools, children took the interview in a joyful fashion and were genuinely excited to talk about the subject. Interviews lasted up to 15 minutes each and were all performed during morning hours.

All interviews were audio recorded and later transcribed. For ethical reasons each recording was labelled with a numerical identification as to safe guard the children’s identity. The purpose of this research was to analyse the data as a whole and not to differentiate schools.

**Analysing data**

A system of categorising was used in order to analyse data. The goal was to classify elements of a given group into categories that have common characteristics (Bardin, 2011: 55). This author started off by the “pre-analysis”, consisting on material selection to be analysed, then “encoding” and moving on to “categorization”, which consisted of corpus classification on a significant number of units of record. This process concluded with a “interpretation” consisting of an inferential process that will be detailed further ahead.

**Results**

As seen in Figure 1, the majority of participants know of the existence of Facebook, but yet only a small fraction (30%) use the social network. As previously mentioned, according to records from other countries which have already gone through the adoption phase, it is predictable that we will see a considerable increase in Facebook users in the next couple of years in Portugal. This is an expected behaviour given the contagious nature of user adoption of social networks. The fact that we have not achieved a large user adoption yet gives meaning to the need to discuss, reflect and document on the risks of children creating and feeding an online profile and digital fingerprint. The sooner we approach this subject the more mishaps and accidents we can avoid of excessive sharing of a child’s life on the Internet.
It is important to mention that it is easy to share information and photos on the Internet, but reversing or deleting is a much harder task, sometimes almost perceived as impossible from a user’s perspective. Users may think that they have been successful at deleting previously shared online content only to later discover that the Terms of Services of the related social network actually reserve the right to never actually delete the information and photos. Personal information that one shares on the Internet today is something that will accompany him/her into the future and perhaps not always in a desirable way.

![Figure 1: Percentage of children that have heard of Facebook and use it.](image)

**Have you heard of Facebook?**

From analyzing the collected data, it is shown that 70% of the users are aware of Facebook, while the remaining 30% have never heard of Facebook. Of all the interviewed children, one child claimed to have a Facebook profile; however, the author of this study did not confirm this claim. The following questions were applied to the sample of children who are aware of Facebook (70%, n=24).

**What one can do on Facebook?**

The purpose of this question was to understand and detail the perception that children have of what one can do on Facebook. Answers were classified into 8 categories as shown in Table 1.

<table>
<thead>
<tr>
<th>Categories</th>
<th>(%)</th>
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<tbody>
<tr>
<td>Communicate</td>
<td>50%</td>
</tr>
<tr>
<td>Play Games</td>
<td>42%</td>
</tr>
<tr>
<td>Look at Photos and Pictures</td>
<td>38%</td>
</tr>
<tr>
<td>Listen to Music</td>
<td>13%</td>
</tr>
<tr>
<td>Watch Videos</td>
<td>13%</td>
</tr>
<tr>
<td>Write</td>
<td>13%</td>
</tr>
<tr>
<td>Print</td>
<td>8%</td>
</tr>
<tr>
<td>Shopping</td>
<td>4%</td>
</tr>
</tbody>
</table>

*Table 1: Percentage distribution of Facebook activities as perceived by children (N=24)*

From the 24 children aware of Facebook, 50% say that it can be used for communicating with other people. In their own words, they referred to the social network as “you can use it to talk
to people”, “my mum chats with her friends and my dad chats with his friends”, most said that they communicated with family members: “with my dad and aunt”, “with my grandparents, our cousins and godparents”. The interviewees were also familiar with the possibility of having video calls with people that are “far away”, “we can talk and see my grand parents and godparents”.

A total of 42% of the participants also mentioned that they play games on Facebook. “Mom finds games for me to play on Facebook”, “I like playing my new games on Facebook”, “it is on the iPad but you can only play it on Facebook”, while other children only mention “you can play games on Facebook”. Section 4.3 will detail the kind of activities children perform on Facebook. 38% of the children stated it is possible to view photos and images on Facebook, claiming that you can “post photos” and “view photographs on it”, “you can post photos and then load them and look at them, when you have more of them you can look at them by sliding to the side” [the child exemplified by moving his finger on top of the table and sliding it from right to left]. 13% of the children also noted that you could use Facebook to listen music, watch videos and movies. The same amount of children also detailed that you can use Facebook to chat with people, “my older brother is chatting with his friends all the time”.

“You can print stuff on Facebook”, like “pictures and drawings”, was a feature mentioned by 8% of the interviewed.

Finally, only 4% of the children mentioned that Facebook can be used for shopping, as described in this excerpt “first Mom writes down on a piece of paper what she needs, then on Facebook she orders it and it is delivered home!”

Analyzing the presented categories of Table 1, we can see that children perceive Facebook as being mostly used for communicating, playing games and viewing pictures and images. The same conclusions were made in a similar study (Brito, 2013), where 5 year old children detailed that the most common categories of Facebook use were: chatting, playing games and watching videos. Most children stated they do not use Facebook directly themselves, i.e. they do not have their own profile, but they do watch their parents and other relatives use Facebook, and can easily grasp what the social network can be used for, hence the response provided in the questionnaire. This finding has already been evidenced in another research (Cruz and Brito, 2012), where 5 year old children described their perceptions of a computer by what they saw at home, observing their parents and brothers using a computer, even though they used a computer themselves in kindergarten.

Do your parents use Facebook? What for?

Getting more into depth on the topic of the perception children have of their parents using Facebook and what for, a questionnaire was submitted to 15 children, which resulted in 8 categories (Table 2).

<table>
<thead>
<tr>
<th>Categories</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate</td>
<td>73%</td>
</tr>
<tr>
<td>See Photos</td>
<td>20%</td>
</tr>
<tr>
<td>Play Games</td>
<td>20%</td>
</tr>
<tr>
<td>Write</td>
<td>13%</td>
</tr>
<tr>
<td>Listen to Music</td>
<td>7%</td>
</tr>
<tr>
<td>Only Browsing</td>
<td>7%</td>
</tr>
<tr>
<td>Shopping</td>
<td>7%</td>
</tr>
</tbody>
</table>

Table 2: Percentage distribution of children’s parents using certain Facebook features (N=15).
Seventy-three percent of the interviewed children mentioned that their parents use Facebook for communicating, once again describing Facebook as a tool that can be used to talk with people from afar. 20% also mentioned that their parents use Facebook to browse photos and an equal share also stated their parents play games on the social network, e.g. “my brother, my mom, my dad play games on Facebook. My mom plays the dog game”.

Children also watch their parent’s type text on Facebook; this was mentioned by 13% of the interviewees as “they write stuff on it”.

Seven percent of the children say their parents listen to music from Facebook, the same amount also claim their parents use the social network for shopping, and 7% of the children simply described Facebook as something their parents looked at, “my dad and mom look at Facebook during dinner time”.

The perceptions children have about Facebook are deeply influenced by their parent’s activity and usage of Facebook, the same could be said about other technological experiences. The same conclusion was also made by the previously mentioned research (Brito, 2013), in this case children mentioned that they themselves did not use Facebook but watched their parents using it.

**Do you use Facebook? What for?**

One of the objectives of this research was to understand if children actually used the social network platform Facebook and what activities were being performed. Of the total number of children that acknowledged the existence of Facebook, 30% stated to use the social network itself for different activities as described in Table 3. We will now present the analyzed data of children that stated to actually using Facebook (N=10).

These children were interviewed on what they used Facebook for, and 70% answered that they played games on it, mostly games related with comic book heroes, such as “the Mia game and Barbie too” or “the sleeping beauty game and I also play the Ariel game”, some other games such as “dominoes” and puzzle games like “Angry Birds” were also mentioned.

30% of these children also mentioned using Facebook to communicate with family relatives, especially those far away. Only 10% of the interviewees stated that they used Facebook to look at pictures and watch Videos, like “Ruca, Pocoyo or the Tales of Mia”.

<table>
<thead>
<tr>
<th>Categories</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playing Games</td>
<td>70%</td>
</tr>
<tr>
<td>Communicate</td>
<td>30%</td>
</tr>
<tr>
<td>Look at Photos &amp; Pictures</td>
<td>10%</td>
</tr>
<tr>
<td>Watch Videos</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Table 3: Percentage distribution of children performing certain activities on Facebook (N=10)**

Even though Facebook recommends that only children with the age of 13 or older use its social platform, the children that participated in this research between the ages of 4 and 5, have access to Facebook using their parents or older brothers profile.
Conclusions

This conclusion refers to various items considered to be pertinent, especially those that were result of contemplating the data gathered in this research.

The objective of this research was to analyze and describe the perception children have of the social network Facebook. Hence, 33 children were interviewed; of those 27% were 4 years old, and the remaining were 5 years old.

In regards to the study itself, it was curious that some parents said that their children would not know how to answer any of the questions with regards on Facebook, nonetheless that wasn’t the case and in fact children showed to have correct perceptions on social network. Analysing the answers stated in the questionnaires, we can state that children are well aware of Facebook and what it can be used for, as such for communicating, playing games and browsing pictures and photos. These perceptions seem to be a result of children observing their parents and family members using the social network.

It is clear that children perceive Facebook as a way to communicate with family members, especially with those that are distant, some children said Facebook allowed them to speak with their fathers that are working abroad in a foreign country. For that matter, Facebook takes an important role when it comes to keeping family members in touch.

Many children declared that they played the game “Angry Birds” on Facebook. This game was described as being a “destruction game” and the aim is to “destroy the evil pigs with the least number of shots possible”. “Angry Birds” is a product of Rovio, a game developer company, and their privacy policy does not specify a minimum age to which children should be allowed to play but they do detail that the game collects data on all users and inadvertently may do so to children under the age of 13. If warned of the fact, Rovio are willing to delete a specific user profile from their database. Nonetheless, children play the game using their parents’ or older sibling’s profile; as they play data on their location, date and time is collected as to detail a profile in such a way that adverts may be better targeted. For a social network, the main revenue stream is selling marketing adverts, therefore it is essential to build a very detailed user profile to create marketing value and target it as good as possible with what could be considered relevant adverts while the user plays a game. The problem in this case is if the adverts themselves are adequate and appropriate for a small child, most games are free to play since they sustain themselves through this advert revenue model. Sometimes there are advert free versions of the game but at a cost. However, there is a way to minimize the amount of data that is collected by applications/platforms, for example, it is possible to configure a device to not share its geo-location, in some cases you can even play a game with the device disconnected from the Internet which would limit the exposure to adverts and would not share data on when and how long a user had played for.

That said, as to assist parents and even children, awareness workshops on the subject of online privacy would be commendable. Agreeing with Palfrey, Sacco & Boyd (2008), researchers are coming to the conclusion that regular users, independent of their age, need training in regards on how to use the Internet and its potential risks. Parents need guidance and confidence, they feel unsafe in this digital era, hence the need for good information that can allow them on how to take well thought decisions on how their children should access and use technology (Boyd et al, 2011). Lectures and workshops could prove to be an important vehicle to help parents. However, given the influence family has on how a child accesses and uses technology, it would be worthwhile that all family elements participate in such teachings, to ensure that children can have a safe as possible online experience.
Recommended content for such workshops could include: how to read the Terms of Service, especially in applications that are related with personal and family photo sharing; how to be aware of what you are sharing and its possible future implications; learn how to use closed networks for sharing with family members; learn how to use Google Alerts and similar tools to keep a lookout of what might be shared on the Internet about yourself and related family members; learn how to configure Internet connected equipment so that children can only access restricted and safe content.

Workshops and educational sessions are a practical way of promoting the subject. Another approach would be to develop a Best Practices Manual destined to parents and schoolteachers. It is apparent that parents have a preconceived notion of what their children think of Facebook; most are convinced that they have no knowledge of the social network and do not even know what it is. In future research it would be worthwhile to go into detail and interview both parents and children to compare perceptions on this topic.

It would also be relevant to know the daily practices of children under 6, their families and perceptions about technologies.

Acknowledgements

I would like to thank both schools and teachers that considered the research subject worthwhile and allowed my presence in their classrooms. I would also like to thank the parents that gave their consent so that I could interview their children. Last but not least, a warm thank you to all the children that joyfully shared their thoughts and views related to the subject.

References


