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Online Risks in Children with Special Educational Needs: An exploratory study

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ABSTRACT

Background: Children with learning or attention problems are often more isolated and they more frequently experience low self-esteem, anxiety and depression compared to other children. Some recent studies suggest that they also experience more online risks and that they more frequently receive online sexual requests compared to typically development peers.

Method: The present study aims to analyze the risky use of the internet in a small group of children with special educational needs: Learning Disabilities (LD) and Attention Deficit Hyperactivity Disorder (ADHD) compared to that of a small group of typically developing peers. Also, the study shows the perception of parents of both groups about their children internet use.

Results: Children with special educational needs who participated in this study were found to be more at risk of perpetration or suffering cyber-bullying, being contacted online by strangers and receive requests for intimate pictures. Small differences also emerged in the parental mediation of these children which is more restrictive compared to that of parents of typically developing children.

Conclusion: Results, although they cannot be generalized due to the small number of participants, suggest that it may be important to further study and deeply analyze the use of the web of children with special educational needs.

Keywords: *Learning Disabilities; ADHD; Online Risk; Online Vulnerability; Cyberbullying; Parental Mediation*

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Introduction

Digital tools are fundamental in the social and recreational life of children and adolescents: they influence the way they approach knowledge and socialize with each other (Good & Fang; 2015). One might think that playing and interacting from home without venturing outside is a safer way to have fun and to know people; however, several risks can be encountered on the web.

One of the most important categorizations of these risks was conducted by Livingstone and colleagues (2012); they have identified three main categories: content, contact and conduct risks. (1) Content risks refers to come across online aggressive, sexual or dangerous materials: racist messages, extreme thinness, drugs, homophobic or sexist content (Livingstone & Haddon, 2012); (2) contact risks see the child as the recipient of dangerous requests such as sending intimate photos, forwarding private data, or meeting a stranger (ibidem); finally, (3) conduct risks refer to anything dangerous or illegal a minor can perpetrate online maybe underestimating the consequences of such actions. Examples of conduct risks are: spending money on gambling, perpetrating cyberbullying, create and sharing inappropriate images (ibidem). In addition to these three categories, psychosocial risks exist, such as problematic internet use (PIU) or internet addiction (IA) (Gentile et al. 2011; Weinstein and Lejoyeux 2010).

As children grow older parents' influence become less relevant, but they continue to play an important role in reducing their children's exposure to these risks (Hutson et al., 2018): they may or may not allow their children to own a technological device, they can decide to set online time limits and they can decide how and when to talk to their children about online risky situations (Steinberg & Silk, 2002). Although every child or adolescent may experience online risks, some of them may be more vulnerable than others, for example children with Special Educational Needs (SENs) such as Learning Disabilities (LDs) or Attention Deficit Hyperactive Disorder (ADHD) (Good & Fang, 2015). For these children, technology and the internet have a particularly important meaning: because they often experience a greater isolation in offline contexts (Thompson et al., 1994), they could benefit even more than others from a functional and safe use of the web.

LDs and ADHD are neurodevelopmental disorders characterized by difficulties in controlling behaviors and by deficits in communication, empathy or cognitive functions (American Psychiatric Association DSM-5 2013). Problems with learning and attention often coexist and can be considered along a continuum of severity (Mayes et al. 2000). Children and young people with these disorders have very heterogeneous characteristics, but often present symptoms that can negatively affect their social skills, self-regulation, emotion regulation and critical thinking (Al-yagon 2012). Furthermore, these children tend to exhibit secondary psychiatric symptoms such as

anxiety and depression, that can further complicate their development and quality of life (Schatz & Rostain 2006; Wilson et al. 2009).

Some recent studies suggest that young people with special educational needs experienced more risks both online and offline and that they are more frequently receptors of online sexual messages (Livingstone & Gorzig, 2012; Good & Fang, 2015). Emotional problems and reduced social support can lead to problematic use of new technologies which, in turn, can increase these problems (Sarti et al., 2019). In addition, children may not perceive the threat of some messages or content or, if they do, they could have difficulties in controlling their impulses, overreacting or committing actions that they may later regret (Good & Fang, 2015).

Additionally, a study from Englander (2012) reports that adolescents who send sexually content online are more likely to have special educational needs. Research also suggests that vulnerable children use anonymous chat more frequently than others (Wells and Mitchell, 2008). These factors could place these young people at risk of compulsive or problematic internet use (Finkenauer et al. 2012). Finally, a study by Helsper and Smahel (2019) suggests how children with special educational needs experience more online risks even because of their lower digital competence.

Given the more problematic situation, it could be assumed that the frequency of parental mediation practices of digital tools is higher among these most vulnerable children. However, a study by Del Rio and colleagues (2019) shows a result that does not confirm this hypothesis: parental mediation practices among the most vulnerable children and adolescents seem to be less frequent than those received by typically developing peers.

Methodology

Given the risks and negative experiences that can be experienced online for young people, especially those with Special Educational Needs (SEN), our study aims to highlight the online risk exposure and parental mediation of vulnerable categories of minors compared to their typically development peers. The study was approved by the ethics commission of the psychology center where it was conducted.

Participants

The study received the approval of the ethics commission of the Tice center, a learning and psychological center in northern Italy where the data of minors with SEN were collected. This study includes both parents and children (with and without SEN) point of view. Parents completed a parental consent forms prior to completing their questionnaires and the children completed an informal assent form prior to completing their questionnaires.

Of the 45 parents contacted (21 from Tice center, 24 from a parental association of the same city) only 36 gave their consent to the administration of the questionnaire. A total of thirty-six children 11-14 participated in the study. Twenty-one students with SEN (16 with LDs and 5 with ADHD) were selected from a learning and psychological treatment center in Piacenza, a city in northern Italy, and fifteen typically developing peers were selected through a parental association of which their parents belonged, in the same city.

Of parents who gave the consent to the study, twenty-six parents participated by filling out their own questionnaire: fifteen were parents of the typically developing children and eleven were parents of the children with special educational needs. The study was conducted in northern Italy between November and December 2019. Parents who responded the questionnaires were mainly mothers (80.7%).

Procedure

Data was gathered using two ad-hoc questionnaires: for children (appendix 1) and for parents (appendix 2). The questions were aimed at investigating exposure to online risks and parental mediation practices, both from the children's and their parents' point of view. Each parent was informed of the study and signed the informed consent form for their own and their child's participation. Each SEN and non-SEN student was given a questionnaire. This was done in two separate groups. During the administration to both groups of children, the researcher was present to answer any doubts and read aloud the questions if necessary. The students were asked to take home a questionnaire for one of their parents and return it completed to the researcher the next day.

Results

The primary goal of this study was to assess whether minors with special educational needs engaged in riskier online activities than their peers. Consistent with past research, in the small sample examined some differences were found between the two groups. This study shows some small percentage differences in online risks exposure and in type of parental mediation that children with and without SENs receive.

Figure 1 shows how children with SEN are more frequently perpetrators or victims of cyberbullying, see dangerous videos with a higher frequency (showing drugs, ways of getting physical pain or extreme thinness) and, above all, they receive more online often sexual requests. It is possible that people who contact them know them in their offline life and are aware of their greater vulnerability. However, it is also possible that children with SEN that participated in the study show their vulnerability to strangers when using social networks.
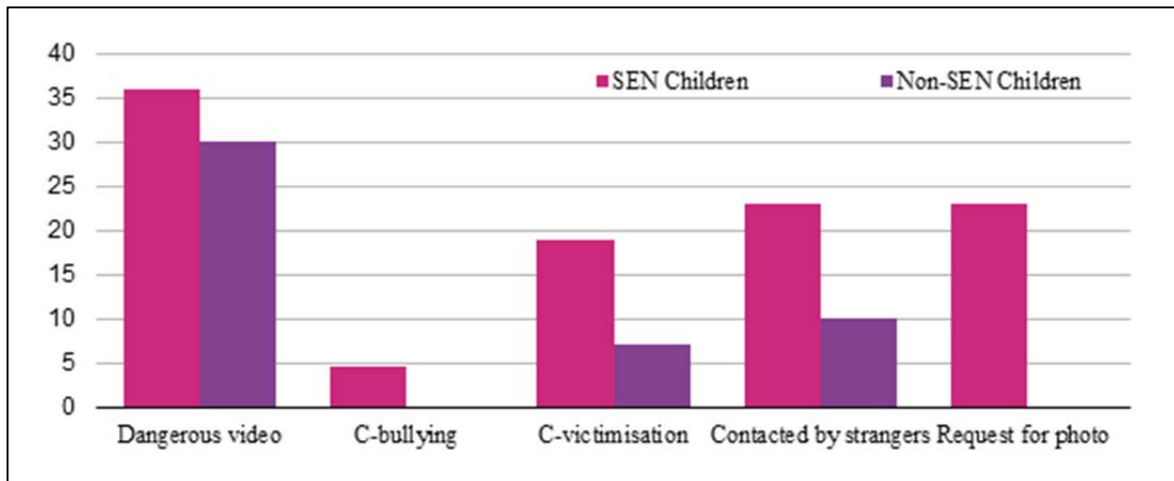
Figure 1 - Percentage of children exposed to online dangers

Figure 2 shows how mediation practices defined as "active" such as talking about what happens online, monitoring chats and profiles, being a "friend" or follower on social networks are more often practiced by the parents of children without SEN, while children with SEN are more often subject to time limits, a strategy that falls within the "restrictive" mediation practices.

In figure 2, percentage of answers "sometimes", "often" or "yes" to these questions are reported:

- "Do your parents carry out online activities with you (search for videos, watch social network profiles, comment on photos, search for music ...)?"

- "Are you a friend or follower of one of your parents on Instagram or other social networks?"

- "Do your parents check your profiles or chats?"

- "To what extent do your parents give you limits on the time you can spend on the internet?"
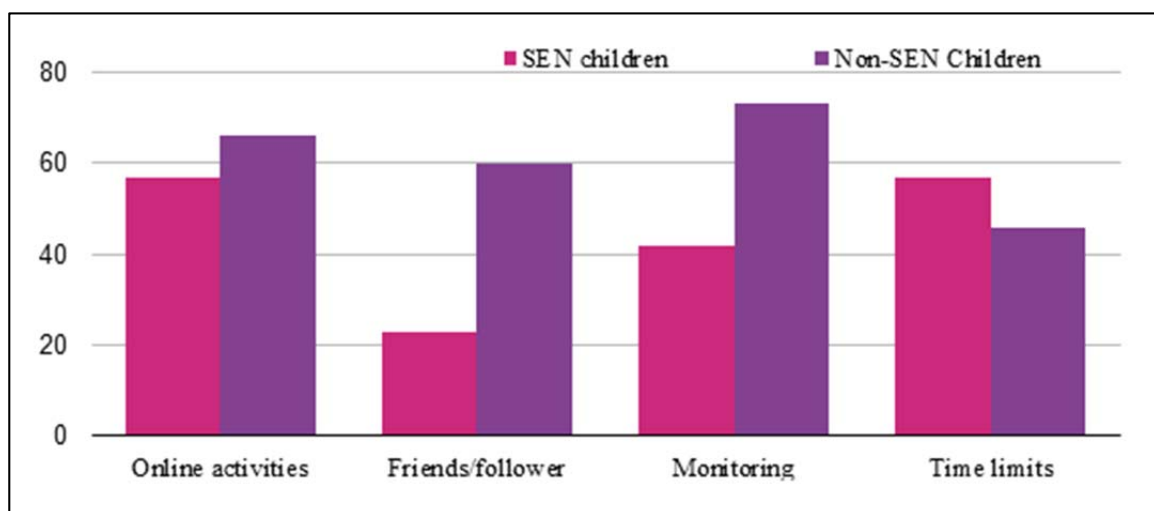

Figure 2: Percentage of parental mediation received

This result finds one of its possible explanations in the scholastic results of children with SEN, which tend to be lower than those of peers without SEN (Kern et al., 2007; Wenz-Gross & Siperstein, 1998): parents could impose such time limits to enable children with SEN to study and do homework to improve their academic performances.

Figure 3 shows how discussions between parents and children are more frequently related to time of use and not to type of activities. As shown in figure 3 (graphic 3a and 3b), the greatest parent-child quarrels are caused by too much time spent online. This applies to both the group with and without SEN.

This could mean that parents are often unaware of their children's online activities or they don't consider these activities negative or dangerous in themselves. The assumption that parents are unaware of their children's online activities has been investigated in a study from Barlett & Fennel (2018): ignoring children's online activities is a risk factor for their online conduct, in particular for the perpetration of cyberbullying.
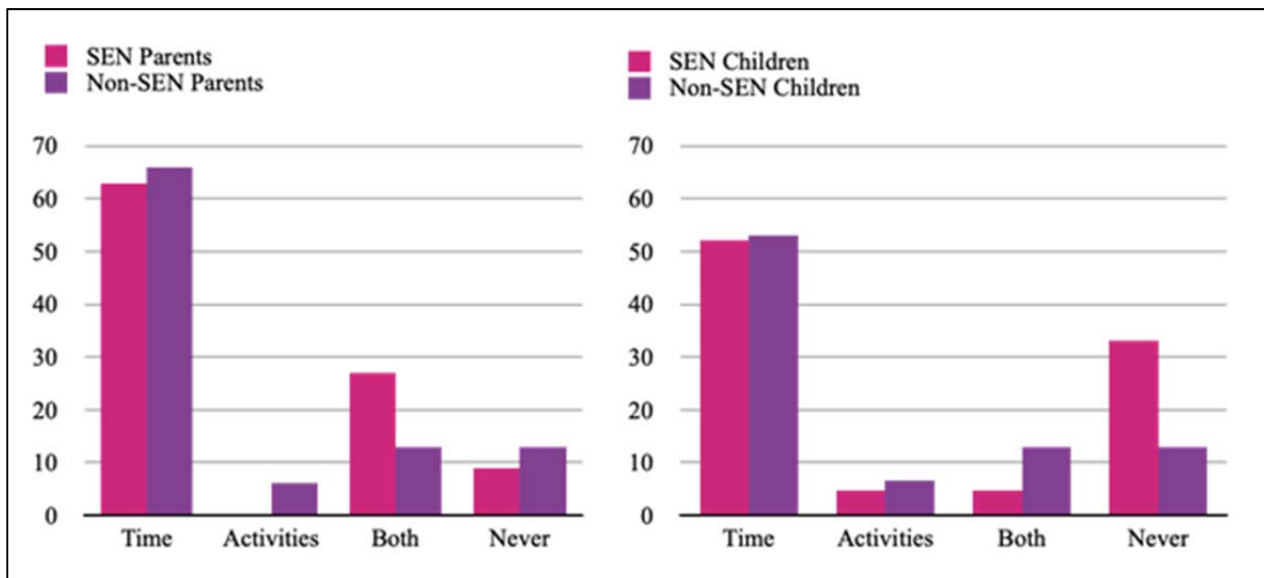

Figure 3 - Percentage of arguments' cause - graphics 3a -3b

Graphic 4a and 4b show how children generally perceive themselves as digitally more capable than their parents. However, 23% of children with SEN feels less digitally competent than their parents compared to 0% of typically development peers. This could depend on online time limits imposed to them by parents, that could influence the perception of their digital skills. Other hypotheses are also plausible: their perception of digital competence can be negatively affected by the learning or attention deficit.
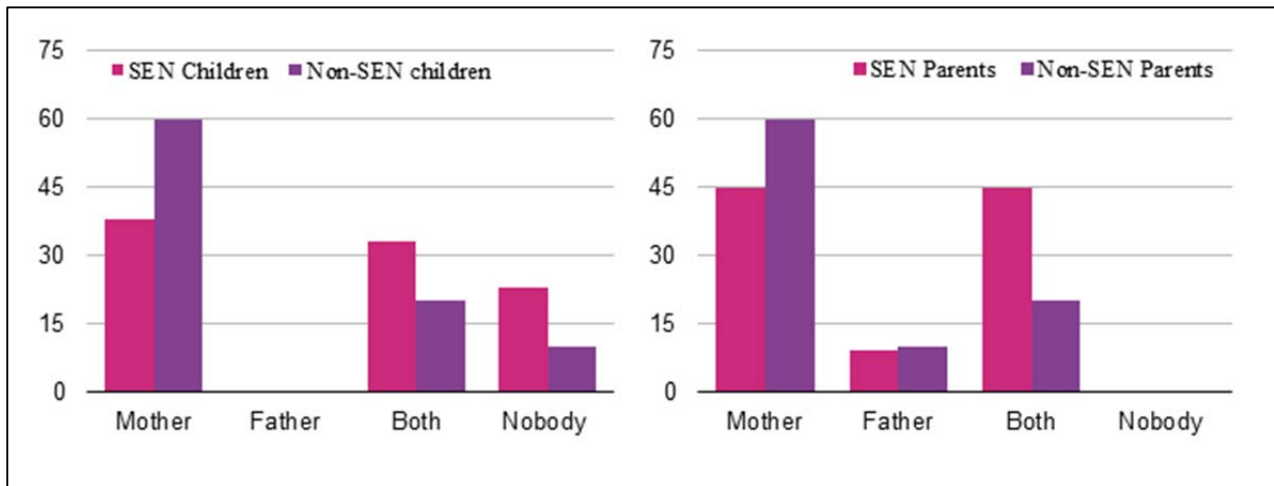
Figure 4: Graphics 4a-4b- How can you use the internet compared to your child/parents?

Results in figure 5 show how more often the children in both groups choose to talk to their mothers about what happens online, but it's more common for boys with SEN not to talk to any adult about their online experiences.
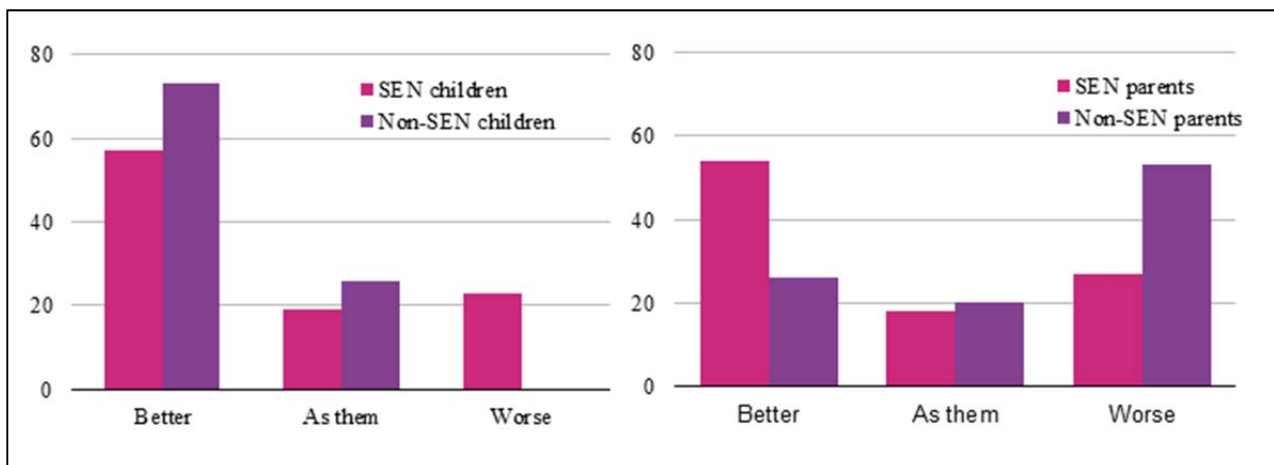

Figure 5 - Graphics 5a - 5b: Adult to talk to

One possible explanation is that they may be held back due to fears that their internet access will be further restricted. Also, this could be related to the type of relationship these children have with their parents which should be better investigated.

Conclusion

The following limitations should be considered when interpreting the current findings.

The results don't allow to elaborate generalizations regarding the difficulties that minors with attention or learning problems may experiment online. However, this is a first analysis of this children's risks and their parents' mediation strategies.

The role that many offline adversities play can lead to different online experiences for these children: for some it may represent a positive space that compensates their offline difficulties (Livingstone et al., 2005), but others, socially isolated or introverted, may not have sufficient resources and skills to use the internet properly and securely (Peter et al., 2005). Mediation by family and parents is essential to prevent or be able to better manage online risks or inadequate use of chat, social networks, online videogames and websites. The data collected suggests that the online risk exposure of children with special educational needs need to be better investigated to provide adequate information and tools to the families of these children and to address the challenges these children may face in the online world.

These findings shouldn't lead to all SEN children being automatically considered at risk online. The research should be used to ensure vulnerable children receive relevant media education and support to help them stay safe online. This study highlights that small steps are needed on interventions for digital education: 1. Update the online risk assessment for minors 2. Interventions to promote safety of boys and girls must include their online world 3. Better data collection and analysis within services 4. More personalized internet safety education for vulnerable young people and their parents.

Authors' contribution – Maria Clara Cavallini conceived of the presented idea. Francesca Cavallini supervised the findings of this work. All authors discussed the results and contributed to the final manuscript.

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Appenndix

1: Questionnaire for Children

Dear student, we ask you to answer these questions by choosing the most appropriate answer for you.

You are:
- Male
- Female

Which social networks / chats do you use? On which sites you spend your time?

1. ………………………….
2. ………………………….
3. ………………………….
4. ………………………….
5. ………………………….
6. ………………………….

Your profiles are private (closed to strangers)?
- Yes
- No
- I don't have any social media profile

Do your parents do internet activities with you (search for videos, social profiles, comment photos, search music...)?
- Yes, often
- Sometimes
- Never

Do your parents tell you about what you can or can't do online?
- Yes, often
- Sometimes
- Never

Are you friends or follower with one of your own parents on Instagram or other social networks?
- Yes
- Yes, but I hide them some contents
- No
- I have no social profiles

Do your parents control your Social profiles or chats?
- Yes, always
- Yes sometimes
- Never

- I don't have profiles / chats

To what extent your parents give you limits on the time you can spend on the internet?
- Always
- Sometimes
- Never

Do you argue with your parents because of the internet or the smartphone?
- Yes, because I spend too much time online
- Yes, for the activities that I do on the internet
- Yes, for time and activities
- No, they don't tell me anything

On the internet have you ever stumbled upon violent or dangerous videos (showing drugs, ways of getting physical pain or extreme thinness)?
- Yes
- No
- I do not know

Have you ever been involved in episodes of cyber-bullying (threats, teasing)?
- Yes, I did it
- Yes, I've seen it in a group chat
- Yes, they threatened or made fun of me
- I do not know
- Never

Have some strangers ever written to you asking you out?
- Yes
- No
- I don't want to answer

Has somebody ever asked you to send them an intimate photo?
- Yes
- No
- I don't want to answer

Which adult are you talking about more than what happens to you online?
- Mum
- Dad
- Nobody
- Both of my parents
- Others: ………….

In your opinion, you can use the Internet…
- Better than your parents
- Worse than your parents
- As your parents

THANK YOU, these data are important!

Tice staff

1: Questionnaire for Children

Dear Parent, we are conducting a research. We ask you a few things to learn more about the online habits of parents and children.

You are:
- Mother
- Father
- Other:_____

What social networks / chats does your child use? Which sites does he/she spend time on?
1. …………………………
2. …………………………
3. …………………………
4. …………………………
5. …………………………
6. …………………………

Are your child's social network profiles private (closed to strangers)?
- Yes
- No
- He does not use social networks
- I do not know

Do you carry out internet activities with your child (search for videos, watch social profiles, comment on photos, search for music ...)?
- Yes, often
- Sometimes
- Never

Talk to your child about what can and cannot be done online?
- Yes, often
- Sometimes
- Never

Are you a friend / follower of your child on Instagram or other social networks?
- Yes
- Yes, but he/she hides some contents from me
- No
- He/She has no social network

Do you check your child's profiles or chats?
- Yes, always
- Yes sometimes
- Never
- He/She has no profiles / chat

To what extent do you limit the amount of time your child can spend on the internet?
- Always
- Sometimes
- Never (there is no need)
- Never (I can't)

Do you happen to have a fight with your child over the internet or smartphone?
- Yes, because he/she spends too much time online
- Yes, for the activities he/she carries out on the internet
- Yes, for too much time and activities that I don't like
- No, it never happens to me

Has your child ever come across violent or dangerous images or videos on the internet (showing drugs, ways of getting physical pain or extreme thinness)?
- Yes
- No
- I do not know

Has your child ever been involved in cyberbullying (threats, teasing)?
- Yes, he did it
- Yes, he saw it done in a group chat
- Yes, they threatened him or made fun of him
- I do not know
- Never

Have some strangers ever written to your child asking him/her out?
- Yes
- No
- I do not know

Has anyone on the internet ever asked to your child to send him/her an intimate picture?
- Yes
- No
- I do not know

Which adult does your child talk to the most about what's happening to them online?
- Mum
- Dad
- Nobody
- Both of parents
- Others: ………….

You think you can use the internet:
- Better than your son / daughter
- Worse than your son / daughter
- As your son / daughter