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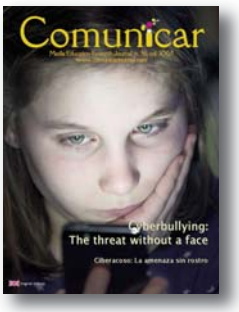

Online risk perception in young people and its effects on digital behaviour

Percepción de riesgo online en jóvenes y su efecto en el comportamiento digital

Dr. Irene Ramos-Soler is Full Professor in the Department of Communication and Social Psychology at the University of Alicante (Spain) (Irene.Ramos@ua.es) (https://orcid.org/0000-0003-4616-1494)

Dr. Carmen López-Sánchez is Full Professor in the Department of Communication and Social Psychology at the University of Alicante (Spain) (mc.lopez@ua.es) (https://orcid.org/0000-0003-3411-5546)

Dr. Teresa Torrecillas-Lacave is Associate Professor in the Department of Journalism at San Pablo CEU University in Madrid (Spain) (teresat@ceu.es) (https://orcid.org/0000-0001-6167-658X)

ABSTRACT

An important part of current research regarding online risks is aimed at analysing cyber aggression according to its frequency and type. By contrast, there is less scientific knowledge available on risk perception, the analysis of its components, and the measurement and impact on the behaviour of minors on the Internet. Therefore, the main objective of this study is to establish a classification of minors based on their perception of risk, digital consumption habits, family and/or educational protection factors, and the flow of communication. A structured questionnaire was used from a sample of 865 minors aged 10 to 17 from the Autonomous Region of Madrid. Data were processed using SPSS 15.0 and SPAD 5.0. After a factor and classification analysis was conducted, seven different groups were obtained. The predominant profile, in 42% of the cases, is that of a 'prudent person', characterized by a high perception of risk, not spending an excessive amount of time on the Internet, avoiding unsafe behaviour, talking with parents about online difficulties, receiving advice, and having clear rules on Internet use. The perception of risk is shown as a relevant construct in relation to other indicators such as child-rearing techniques used by parents, the time children spend on Internet, dependency on the device, and the type of digital behavior involved.

RESUMEN

Una parte importante de las investigaciones actuales sobre riesgos online están encaminadas a analizar las ciberagresiones, su frecuencia y forma. En cambio, hay menos acumulación de conocimiento científico centrado en la percepción de riesgo, el análisis de sus componentes y la medición e impacto sobre la actuación de los menores en la red. Por ello, el objetivo principal del estudio es establecer una clasificación de menores a partir de su percepción de riesgo, hábitos de consumo digital, factores de protección familiares y/o educativos y flujos de comunicación. Se ha aplicado un cuestionario estructurado a una muestra de 865 menores, de 10 a 17 años de la Comunidad de Madrid. Los datos se han procesado con SPSS 15.0 y SPAD 5.0. Tras un análisis factorial y de clasificación se han obtenido siete grupos diferenciados. El perfil predominante, en un 42% de los casos, es el de «prudentes», caracterizado por tener una alta percepción de riesgo, no pasar excesivo tiempo en la red, evitar comportamientos no seguros, conversar con los padres sobre las dificultades online, recibir consejos y tener normas claras sobre el uso de Internet. La percepción de riesgo se muestra como un constructo relevante en relación a otros indicadores como la intervención educativa de los padres, el tiempo que se pasa en Internet, la dependencia del dispositivo y el tipo de comportamiento digital.

KEYWORDS | PALABRAS CLAVE

New technologies, Internet, families, parental mediation, media literacy, adolescents, minors, risk perception.
Nuevas tecnologías, Internet, familias, mediación parental, alfabetización mediática, adolescentes, menores, percepción de riesgo.

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1. Introduction and state of the issue

The smartphone has become a fundamental means of socialization for minors. The figure of 25.4% of children ten years of age have a mobile phone connected, which is a figure that rises to 93.9% in the 15-year-old age group. Between 14 and 17 years of age, in more than 75% of the cases, they claim that they make unplanned decisions daily based on the information they receive by the mobile phone (INE, 2016; Fundación Telefónica, 2016). The high penetration of this device intensifies their online activities such as the use of instant messaging or visiting social networks.

These data describe a new interactive user profile that has been shaped since childhood and consolidated after ten years of age, characterized by the accessibility and intensive use of digital services in any context and at any time (Garmendia, Jiménez, & Mascheroni, 2017). This is a scenario in which parents find new difficulties in supervising their adolescent children, who are a risk factor in themselves, due to the tendency to look for new sensations and their greater propensity toward a wider spectrum of digital relationships. (Batalla, Muñoz, & Ortega, 2012; Sánchez-Carbonel & al., 2008).

1.1. Risk perception

In this new context of autonomous use, the perception of risk, being understood as the "cognitive process that rests on the information that each person has on certain issues (...), and that each one processes by organizing their value judgments", which will condition their behaviour (García-del-Castillo, 2012: 138), is a fundamental factor in the acquisition and maintenance of actions related to cybersecurity, mainly as a shield against present dangers; those associated with unsafe behaviour in which minors incur voluntarily (Catalina, López-de-Ayala, & García, 2014).

In general terms, the research is in agreement in pointing out that access to the Internet offers an infinite number of opportunities (Aguaded, 2011: 7), but at the same time, exposure to risks is also greater (Duran & Martínez, 2015; Kowalski & al., 2014), especially the risk of cyber-aggression or cybervictimization (Corcoran, MacGuckin, & Prentice, 2015).

The team from the multinational research network "EU Kids Online" concluded that online risk experiences do not necessarily have to involve harm (Livingstone & al., 2011), but that minors who are more exposed to risks demonstrate more resilience. In a more recent study, this network showed that 31% of subjects between 9 and 16 years old had suffered online or offline harassment and those minors have relationships with strangers through the Internet (Garmendia, Jiménez, & Mascheroni, 2017).

Of all dangers, the most investigated has been cyber bullying (Fernández-Montalvo, Peñalva, & Irazabal, 2015, Navarro & al., 2013, Lee & Stapinski, 2012). Kowalski & al. (2014), point out the increase of this type of risk, which has been promoted by the current social context of intense Internet access through mobiles. Álvarez-García, Barreiro-Collazo, and Núñez (2017), show that verbal aggression and exclusion are the most common behaviours. To this, we must add research that confirms that cyber-aggressors have considerable social support (Romera & al., 2016; Yahner & al., 2015). Regarding the perception of risk, there are several investigations that indicate a high degree of self-confidence shown by the minors regarding perceived risks, which contrasts with the risks experienced (Catalina, López-de-Ayala, & García, 2014).

Labrador and Villadangos (2010) affirm that age increases the perception of the problem posed by the excessive use of the Internet and the mobile phone, and the possible adverse consequences. In 2012, the work of Frutos and Vázquez proved that minors tend toward a more rational use as they acquire maturity.

1.2. Family context

Another line of research has studied the relationship between the contexts of family and school in cyber bullying. The study by Ortega-Barón, Buelga, and Cava (2016) states that some dimensions of family and school settings can predict cybervictimization in adolescence. In addition, the emphasis is placed on low academic performance and attention problems in school as a result of suffering cyber bullying (Tokunaga, 2010).

Regarding the profile of the bully, it has been pointed out that a conflictive environment gives rise to children who are capable of being more hostile and exhibiting antisocial and even violent behaviour (Buelga & al., 2015) compared to households with greater parental support that presupposes more positive peer relationships, which diminishes the vulnerability when confronted with this behaviour. Parents acting as mediators in a restrictive way with their children from 6 to 14 years of age mitigate such risks, but also restrict the opportunity to use ICT (Livingstone & al., 2017). Navarro & al. (2015), defend the view that minors with less social skills are more

vulnerable to peer cyber bullying, or that a lack of communication skills foretells problems of self-control (Villa Moral & Suarez, 2016). Lereya, Samara, and Wolke (2013), and they conclude that a negative family environment makes minors more vulnerable.

In short, there is a vital need for parents to acquire the necessary skills to exercise constructive mediation (López-Sánchez & García-del-Castillo, 2017; Torrecillas, Vázquez, & Monteagudo, 2017).

1.3. ICT use

A study on the frequency and characteristics of Internet use by Spanish adolescents concludes that the majority connect daily and that the frequency of connection increases with age so that from the age of fifteen onward the connection is almost permanent (Reolid & al., 2016). Carbonel & al. (2012), conclude that there is a relationship between connection time and the problematic use of the Internet and the mobile phone. Lee & Stapinski (2012), state that time is a predictor of more unsafe use.

Regarding distribution, frequency, and causes of addiction to ICT, several works have been published on the subject, but whether or not these technologies cause addiction is still unresolved (Echeburúa, Labrador, & Becoña, 2009). Other studies indicate a strong association between cyber addiction and cyber-bullying (Arnaiz & al., 2016).

> The behaviour of minors in the context of their multi-screen use is becoming increasingly autonomous, mainly due to the spread of the smartphone, which limits the ability of parents to intervene directly in their children's use of the Internet in various devices with measures such as control of connection time or the type of content accessed.

1.4. Objectives and hypothesis

Based on the above information, the objectives set out in this article are the following: a) To analyze the different types of underage users from the point of view of risk perception; b) To describe the online behaviour of minors and the family mediation in each category of user.

The hypotheses to be verified are the following: a) The majority of minors have a low perception of risk; b) Children with greater risk perception have a stronger upbringing by their parents; c) Children with greater risk perception spend less time on the Internet; d) Children with higher risk perception have less dependence on the device; e) Children with higher risk perception exhibit safer behaviour and have experienced these situations to a lesser extent.

2. Materials and methods

The target population that is the subject of study are minors enrolled in the Autonomous Region of Madrid. We have used an ad hoc personal questionnaire as a means of collecting information. The sampling is multi-stage and stratified by groups according to education levels and type of educational centre (private/semi-private or public). In the case of public schools, the income level of the district was another segmentation element used (above average, average, or below average). By means of a simple random sample, a school was selected by type of educational centre: nine schools in total of which three are private or semi-private, and six are public. In each of the centres, random selections were made involving two classes of primary school year 5, secondary school year 8, and high school year 11 (n=865). We have worked with a margin of error of 3.87% for a confidence level of 95.5%, and for the most unfavourable option of P=Q=50%. 60.7% of the sample are boys (525) and nearly 40% girls (340).

For the grouping of students in segments according to perceived risk, an analysis that was factorial and of classification of multiple correspondences have been carried out with the SPAD 5.0 program. The factorial analysis of multiple correspondences is a method that allows for the study of relations between the modalities of a set of qualitative or nominal variables (Grande & Abascal, 2003: 391). Through the use of this procedure, groups of variables have obtained that segment the population target of the analysis.

In order to know the people involved in each category or group, and therefore their habits and behaviours, a

classification was used. For this analysis, questions pertaining to the risk perception module were used as active variables, and as illustrative variables, the rest of the survey questions related to the use and consumption of ICT, perception/attitudes of the digital culture and ICT, media literacy/competencies, family mediation and communication flow. After analyzing the previous Table 1, a decision was made to create a partition of seven groups.

Table 1. Description of the partition into seven categories

	Inertia	Effectiveness	Weight	Distance
Inertia Intergroups	0,3887			
Inertia Intergroups				
Group 1/7	0,0873	366	366	0,0764
Group 2/7	0,0613	145	145	0,1830
Group 3/7	0,0353	127	127	0,4361
Group 4/7	0,0268	33	33	0,9130
Group 5/7	0,0511	73	73	0,5626
Group 6/7	0,0783	75	75	0,9690
Group 7/7	0,0318	46	46	1,7939
Total Inertia	0,7607			

3. Analysis and results

3.1. Group 1. The prudent group

This group, made up of 42% of the surveyed population, is the most numerous segment of all involved and the most heterogeneous. For them, it is quite important to have Internet on the mobile, even though they do not exhibit much dependence on it. They use the Internet to interact with people they already know, download applications, access social networks, make video calls, and take photos.

During school time, they are connected to the Internet less than one hour. However, when they are not in school, the frequency increases and oscillates between one and three hours. They have an account on Instagram, and their profiles on social networks are usually private. They never talk about their personal lives because it is forbidden by their parents. Their contacts range from ten to one hundred, including parents, but not teachers. They do not like to show affection toward their parents through the Internet.

This prudent behaviour on social networks is consistent with their perception of risk. They are aware of many dangers associated with the use of the Internet such as harassment, blackmail, impersonation, loss of privacy, access to sexual, violent, offensive or unreliable content, among others.

They know how to block messages to increase their security in the online world. If they detect any danger, they talk to their parents and teachers. In fact, they have done it when they have been worried or upset about something related to the Internet. From them, they have received advice on how to use the Internet safely, and the recommendations have seemed useful to them. Their parents let them upload personal photographs and videos under their supervision. They negotiate with them the time and use of the Internet.

3.2. Group 2. The sociable and self-confident group

This group is the second most numerous; it represents 16.76%. It is characterized by having a mobile phone, a video game console, a computer and being connected to the Internet either every day or almost every day, with a frequency that exceeds three hours a day outside of school hours.

Online activity is very high: browsing, using social networks, playing, using instant messaging, working with word processors, downloading movies, searching for information, buying products, among others. They prefer to buy online rather than in physical stores. They are very sociable and dynamic on social networks; their record in a social network is more than five hundred contacts. The privacy settings of their profiles are usually open and public, or partially private. They have Instagram, a YouTube account, Snapchat, and Google+, among others. They often follow YouTubers, and they do so because it entertains them, they like what they do or say, because of the way they talk or dress, and because they learn from them.

They use the Internet to interact with people they already know, with relatives, with friends of acquaintances, and with people, they have met on the Internet, and with the latter, they have even met these people face to face at some time. They have made many new virtual friends.

They identify the following as dangers on the Internet: being a victim of blackmail, losing privacy, access to bad, sexual or violent content, someone posing as another person, and being harassed.

This is a group that is familiar with tools and techniques for navigating safely in the online world, such as blocking messages, deleting the history of pages visited, or bookmark a website as a favourite. If the members of this group perceive any danger on the Internet, they talk to others, preferably parents and teachers. They acknowledge that they have discussed their use of the Internet at times with parents and educators and that their teachers have recommended websites to visit, but their advice, information or suggestions have had little effect on these young people.

They buy online with the supervision of their family, but it should be noted that they have unsupervised permission from adults to watch videos on YouTube, surf the net, follow YouTubers, send emails, access social networks, and upload personal photos or videos, among others.

Their parents pay little attention to them when they surf the net, and parents hardly ask them what they do on the Internet. Moreover, they receive few instructions or rules from their parents when they connect. In spite of this, they argue with their parents about the duration of the connection time as well as the moment in which they connect.

Regarding family relationships, they indicate that it is harder for them to show affection toward them through the Internet rather than personally. Many have taught their parents to do something on the Internet and share instant messaging groups with them.

3.3. Group 3. The control group

This group represents 14.68% of minors. More than 80% of this group are children between 10 and 11 years old. They have a tablet to access the Internet. For them, having a mobile phone with access to the Internet is not important. From time to time they go online to download applications, watch videos or movies, make and/or edit photos, and use instant messaging. They connect at the most two or three times a week. Connection time on school days is low and on days without school, the time rises to one or two hours. This is a group with a low level of social activity online. They do not have profiles on most social networks, and in fact, they almost never participate in such networks and have few contacts as well. They are aware of the risks on the Internet such as access to harmful content or receiving offensive messages, among others. If they suffer any of these dangers, they talk to their parents or teachers, rather than with friends. They are not familiar with tools or techniques to increase their security such as changing privacy profiles of their social networks or content preference filters. They do not know how to block ads or messages, nor do they know how to bookmark a website as a favourite, or how to find information to use the Internet safely.

When they need to use the Internet to do homework, they receive help from their parents and teachers. What stands out is that they talk with their parents about the dangers and opportunities of ICT and ask them and their teachers for their opinion before publishing content. They never argue with parents about the use of the Internet. Parents control their use of the Internet, impose clear rules, and even make explicit prohibitions such as uploading personal photos or videos, giving personal information, buying online, chatting on social networks, or following YouTubers, among others. With parental control some are allowed to download files, send messages to mobile phones or emails, surf the Internet, watch videos on YouTube, play online, and chat.

When they exceed time limits or do something on the Internet that their parents do not like, they are asked to turn off the computer or stop using the mobile. Minors usually negotiate with their parents for connection time and what they are allowed to do, but the criteria of the adults prevail.

Parents explain to them how to use certain resources and maintain awareness of what the youngsters are doing by asking questions and by through direct supervision. They believe their parents and teachers have a very good level of knowledge about the Internet and other digital tools. However, they have not received advice or recommendations from their teachers. In spite of this, they believe that their teachers care about what could happen to them on the Internet.

3.4. Group 4. The connected and independent group

This is the most homogeneous group of all. It represents 3.82% of minors. They are 17 years old, have a mobile, individual television and a computer. They know how to make a blog and download movies. For these students, it is very important to have a mobile phone with Internet access. They are connected the entire day.

They frequently use instant messaging, watch videos or movies, participate in social networks, and follow some YouTubers. Downloading applications and making or editing photos is something they also do very often, along with uploading content, playing online and making video calls. From time to time, they look for information regarding courses or training. They like to learn about the characteristics of a product or service before purchasing it.

They follow well-known people on the Internet because they like what they do or say or because they learn from them. They have profiles on the main social networks such as Instagram, Twitter, and Snapchat. In their profiles, they are very active uploading their photos or videos, and sometimes they talk about their private life. They use the Internet for interaction and have made many new friends through this channel. They also interact personally with these new friends.

To increase their security in the online world, they know how to change the privacy profiles of their social networks, bookmark a website as a favourite, and see if the navigation bar turns green. If they have a problem on the Internet or perceive a risk, they talk with their friends, but never with teachers, parents or siblings. They think the advice they receive from them is not useful. Their parents allow them to surf, chat, access social networks and upload personal photos or videos. They give personal information without their parents' knowledge.

3.5. Group 5. The 'hooked on the mobile' group

This group represents 8.44% of children. The mobile phone and Internet access through this device are highly important for members of this segment. If they forget their mobile phone at home, they return to it, and if they are not able to return home, they spend the day suffering because of the absence of their smartphone.

They connect to the Internet every day, or nearly every day, of each week. Outside of school hours, they are connected permanently, and even on days when they have school, they are connected more than three hours a day. They use instant messaging with a high-level frequency, often connectingoften in order to search for information about products or services, and from time to time they buy or contract them.

They use social networks, have profiles on Instagram, Snapchat, and YouTube, among others. They upload many personal photos or videos, some of friends or acquaintances, and sometimes they talk about their own life. They follow YouTubers because they like what they do or because they learn something from them. They use the Internet for interaction, especially with friends of acquaintances, or with family members, although they have also made some new friendships through the Internet and even meet with some of them in person.

They know how to block messages and change the privacy profiles of their social networks, bookmark a website in favourites, and delete the record of pages visited. If they perceive any danger or are worried about something related to the Internet, they only talk about it with their friends. They never tell their parents, teachers, or siblings. They do not ask parents for their opinion or permission regarding the personal content they publish, and they believe that neither their parents nor their teachers worry about what might happen to them on the Internet.

When they use the Internet for their homework, they do not receive help or recommendations from their parents. In general, the information, advice or suggestions from parents and educators does not seem useful to them, and they believe that their teachers have very basic knowledge about the Internet.

The supervision exercised by parents toward their children on the use of the Internet is quite permissive. Parents do not negotiate with their children about connection time, nor what they can do on the Web. They do not give them clear rules about Internet use, nor do they ask them much about what they do on the net. They let their children send emails, chat, follow YouTubers, access social networks, download files and upload personal photos or videos, all without parental control. This group prefers to talk with their parents face to face about their intimate or private affairs rather than through the Internet.

3.6. Group 6. The group of confident players

This group is mostly male and is characterized by the possession of video consoles and their channel on YouTube. They frequently use the Internet to play games, download movies and applications, and to look for information about education and training. This group represents 8.67% of minors. This group is highlighted by its lack of risk perception. They do not identify as such social isolation or loneliness, harassment, being the victim of blackmail, or receive offensive messages, among others.

They interact on the Internet with people whom they have only met in a virtual sense. If they had a problem on the Internet, they would not talk to their teachers. They indicate that their teachers have not taught them how to use the Internet services, nor have they given them advice on how to use the Internet safely. They believe that their educators do not worry about what could happen to them on the Internet and that these same educators do not have any knowledge about Internet and digital tools.

Regarding their parents, students also believe that they do not worry about what could happen to them on Internet, as they do not receive prohibitions regarding connection time or use. Parents do not give them advice on how to use the Internet safely or discuss with them regarding the time of the day that they connect, but parents do complain if their children make noise, or if the parents are bothered by what the children are doing or watching.

3.7. Group 7. The group that is always connected to friends

This group is very homogeneous and represents 5.32% of the minors. Composed mostly of 16-year-old students

who express their preference for reading books on paper instead of on a screen. They have a personal laptop and mobile phone, and if they forget the mobile at home, they return to it. They connect to the Internet every day, or nearly every day, more than three hours a day. They have a high frequency of use of instant messaging and social networks as well, and they often upload their content to the Web to share it with others. They use their devices with access to the Internet to make video calls, use text processors, and save data in the cloud.

From time to time, they go online to search for information on health and education topics, or to buy a product or service. On the other hand, they almost never play games online, either alone or with other people. Their profile in social networks is usually private, something they know how to do perfectly. They have accounts on Instagram, Twitter, Snapchat, among others. Their contacts in a social network range between two hundred and five hundred and even their teachers are among them.

Regarding the type of people with whom they have relationships through the Internet, these are people they know from the previous face to face encounters. If they felt there was a problem on the Web, they would not talk about it with their teachers, even if these educators have recommended Internet sites for them to visit and the students share an instant messaging group with them. Instead, they would talk about it with their friends.

The perception of risk is based on value judgments that are translated into the ability to detect, identify and react to problematic situations when surfing the Internet, which aids the self-control of minors, and therefore, their cyber security.

Their parents do not help them when they have to enter the Internet to do homework, nor have they taught their children to use Internet services. Their parents do not monitor them when they are surfing the net, although they have discussed with their parents and teachers about use of the Internet.

Their family allows them, without supervision, to send emails and messages to mobile phones, chat or use Messenger, connect to social networks, follow youTubers, download files, upload personal photos or videos, and give personal information. With family supervision, they can buy through Internet.

4. Discussion and conclusions

The main objective of this work has been to analyze the relationship between risk perception and family and behaviour variables on the Internet in order to shed light on the problem of Internet cyber security. The perception of risk, which is highly present in studies aimed at the prevention of problematic behaviour in the field of health, is considered a key variable in the initiation and maintenance of risky behaviour (García-del-Castillo, 2012). Although there is no accumulated knowledge about its conception in the field of cyber security, we can define it as the value judgment and the meaning that the child attributes to a situation of danger on the Internet. This value judgment translates into the ability to detect, identify and react to problematic situations when surfing the Internet, and has less to do with the degree of awareness of the dangers that the Internet entails. The question is to analyze how that value judgment is constructed and how parents can intervene to influence the variable as a protection factor.

The results of this study reveal that there is a significant relationship between risk perception and other family and behavioural variables. Minors with a greater perception of risk on the Internet have more ability to protect themselves against the online dangers, and at the same time are those who have a more favourable educational upbringing from their parents, and who also have healthier practices on the Internet. This group, which we have designated as "prudent", represents 42% of the target population. This data refutes the proposed hypothesis that stated that minors have little perception of risk, both from the perspective of self-confidence when confronted with the dangers associated with ICT (Catalina, López-de-Ayala & García, 2014), as well as from the point of view of being able to face problematic situations.

To this 40%, we must add the 16.76% that also show a high perception of risk and greater ability to act against possible dangers, but with a different profile. They use ICT more intensively, often performing a wider range of online activities, are very active in social networks, and highly connected to others. They are willing to ask parents for help in dealing with problematic situations, have greater ability in applying cyber security techniques, while at

the same time parents exercise a type of mediation based on dialogue and moderate supervision rather than on explicit rules and prohibitions. This is the group described as "social and self-confident". It has been confirmed that the family plays an essential role in developing risk perception, which minimizes problematic experiences, as confirmed by other investigations (Ortega-Barón, Buelga, & Cava, 2016).

This work also confirms that age, as stated by Frutos and Vázquez (2012), is a significant variable, not only for the perception of risk, but also with regard to family and behavioural variables. It has been confirmed that the youngest children are the ones who receive more mediation strategies based on supervision, prohibition, and control of connection time and content. 14.68% are in the so-called "controlled" group. These are minors up to the age of 11 whose use is very limited, but who at the same time have a lack of knowledge of the techniques or tools to increase their security because early training in the home is not common, even to the point of not receiving any advice or recommendations.

The age of 11 is the point of transition to the adult age on the internet, when family mediation strategies of the type described above decrease, and when connection time and use of digital services soars along with greater exposure to risks and opportunities. 26.25% of minors show little perception of risk, and there are four distinct profiles that can be distinguished. A common characteristic among these four groups is that of not perceiving parents and teachers as authority figures, and these children have a negative perception of the help these adults can give to them. They affirm that their parents are absent from the media experience of the children. Two other hypotheses are verified: first, as the educational intervention by parents increases, the perception of risk by minors also increases; secondly, as the perception of risk by minors increases, the exposure to problematic behaviours decreases.

On one hand is the so-called "hooked on the mobile" group (8.44%). They are characterized by their dependence on this device. They are the ones who use the mobile the most, more than three hours a day when they have school and uninterrupted on weekends. They use the Internet to navigate and interact. The group known as "confident players" (8.67%) are mainly male and are characterized by using the Internet basically to play video games and to download movies. They feel that both parents and teachers do not care about what they do on the Internet. The "always connected to friends" group (5.32%) use the Internet primarily to interact with peers, and the "connected and independent" group (3.82%) are older, have an average age of 17 years, and make a more solitary use of Internet, without the need to connect with others, but to publish content, download movies or access information of interest. Regarding device dependence and connection time, no significant relationship was perceived.

In short, although this study only presents a description of how the variables behave in each group and have been unable to establish causal relationships, it is nonetheless a novel and pioneering contribution in placing the perception of risk as a fundamental variable in cyber security. It is necessary to conduct new studies aimed at deepening our understanding of risk perception as an ability when faced with problematic behaviour, and to study measures to influence it as a protection factor in a context in which self-regulation by minors, based on solid value judgments, emerges as a fundamental path for the cyber security of minors in the digital world.

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