

Social networks and media: impact on the pediatric age

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Abstract

This article presents a review of the impact, both positive and negative, of media use, social networks and video games in childhood and adolescence, and the direct relationship between this and the use or abuse of Technologies of Relationship, Information and Communication (TRIC). The pre and adolescent development associated with the construction of youth identity is taken as a starting point in the context of a new cybercommunication paradigm, where the limit between what is public and what is private becomes increasingly blurred. In turn, the positive aspects that TRICs offer are detailed (various opportunities for learning, socialization, development of skills or creativity) and the associated negative aspects (affective distance, loss of limits in communication, loss of hearing ability or addictions, among others). It is an important need for pediatricians to play an active role, adequately guiding minors and families through the impact of media use and social networks, to become a true promoter of the psychophysical and social development of children and adolescents.

Key words: Media use; Social networking; Video games; Adolescence.

Palabras clave: Pantallas; Redes sociales; Videojuegos; Adolescencia.

Resumen

En este artículo se presenta una revisión del impacto, tanto positivo como negativo, de las pantallas, de las redes sociales y de los videojuegos en la infancia y adolescencia, y de la relación directa entre esto y el uso o abuso de las Tecnologías para la Relación, Información y Comunicación (TRIC). Se toma como punto de partida, el desarrollo pre y adolescente asociado a la construcción de la identidad juvenil en el contexto de un nuevo paradigma de cibercomunicación, donde el límite entre lo público y lo privado se torna cada vez más difuso. A su vez, se detallan los aspectos positivos que las TRIC ofrecen (diversas oportunidades de aprendizaje, socialización, desarrollo de habilidades o creatividad) y los aspectos negativos asociados (distanciamiento afectivo, pérdida de límites en la comunicación, pérdida de la capacidad de escucha o adicciones, entre otros). Es una necesidad importante que los pediatras desempeñen un papel activo, guiando adecuadamente a los menores y a las familias a través del impacto de las pantallas y de las redes sociales, para convertirse en un verdadero impulsor del desarrollo psicofísico y social de niños y adolescentes.

OBJECTIVES

- To be cognizant of the main milestones of the digital world and the definition of TRICs.
- To understand the impact generated by new technologies in our pediatric population.
- To be aware of the negative aspects and the dangers to which young people can be exposed with the use of social networks.
- To know the possible positive aspects of social networks and video games in children and adolescents.
- To highlight the impact that the influence of video games can have in various areas of health.
- To detect the inadequate use of media, video games and social networks in the Primary Care consultation.

Introduction. A matter of terminology

For far, far too long, we have been labeling social media-related technologies as “new”.

Perhaps, it would be convenient to remember some of the milestones of the digital world so as to begin to reverse that denomination⁽¹⁾:

- The Internet, as such and open to the general public, began to be used at the beginning of the nineties and became popular in a short period of time.
- The first social network, SixDegrees®, created in 1997 by Andrew Weinreich, closed in 2001, but has the privilege of being considered the pioneer of such applications.

- Many were to follow, highlighting those that present a greater implantation in our environment: Facebook (2004), YouTube (2005), Twitter (2006), WhatsApp (2009), Instagram (2010), Twitch (2011) and TikTok (2016).
- Digital entertainment platforms and streaming channels have also been part of our lives for decades and, after all, they always end up being consumed through screens.
- All this without going into talking about television which, after multiple advances, with the appearance of a multitude of channels and operators, ends up broadcasting its content live or “on demand”, on any device equipped with a screen.

This recently initiated 2023 could be the starting point to begin to withdraw the label of “*new technologies*”, so implemented in the common jargon, which also continues to be used in the medical field. It is hard to believe that a child born after the creation of any of them identifies them with something new. Perhaps, and being sarcastic, the name TtWNATTaTHR would be more appropriate: technologies that were new at the time and that have remained.

On the other hand, its use by the end user, in this case our minors, and due to the features that social media has incorporated, has shifted to the point of turning “*new technologies*” into another instrument of socialization in their day to day. It is for this reason that the UNICEF⁽²⁾ report on its use in preadolescents and adolescents in our country proposes, from the outset, changing the well-known name of ICT (Information and Communication Technologies) to that of TRIC (Relationship, Information and Communication Technologies). They play with them and compete with and/or against others, while interacting with their peers. Our society, increasingly globalized and digitized, relies on technology to be close to people, share and exchange what is tangible and what is not, as emotions or feelings. The last two years of the pandemic have only increased this trend, for reasons well known to all.

It is of vital importance that professionals have the ability to integrate

and assume these changes in our daily professional development, whether or not we are TRIC users, in order to understand the world in which our patients interact. They are not novel elements for occasional use, but new forms of life within the reach of -in our environment- practically everyone. And that can have negative and positive aspects, but in order to detect them, in the first case, and promote them, in the second, we must be aware of what is out there.

Impact of the use of social media in childhood and adolescence. Putting the numbers in

According to the aforementioned UNICEF report⁽²⁾, the average age of access to the first mobile phone in our country is 10.96 years, with almost 100% of them having Internet access with unlimited data. Almost 60% of them take it to class every day and more than 90% connect to the Internet daily. Almost 30% admit being connected more than 5 hours a day during the week, a figure that reaches 50% during the weekends.

Nearly 60% of those surveyed sleep every (or almost every) day with their mobile phone in the room and 21% admit connecting to the Internet after midnight.

More than 40% are aware of what the Dark Web is (it is a portion of the Internet intentionally hidden from

search engines, with IP addresses masked and accessible only with a special web browser, whose “intentions” are not always the best) and even 4% say they have browsed it at some point.

It is estimated that there are 33% of adolescents who are developing problematic use of the Internet, a percentage that increases in girls and in higher grades.

More than 58% use video games once a week, with a much greater preponderance of the male sex, mainly using the telephone, console or computer. 54.7% play video games that are not suitable for children under 18 years of age.

According to the 2020 EU Kids Online survey⁽³⁾, for example, children between the ages of 9 and 16 check social networks every day or very frequently, when they are in the school stages corresponding to primary education. The study highlights that 11% of Spanish minors between 9 and 10 years old and 42% of minors between 11 and 12 years old have at least one profile on a social network (Fig. 1). In addition, this same report indicates that 40% of adolescents between the ages of 11 and 16 acknowledged not knowing how to use the Internet safely and only 16% claimed to browse under a filtering or parental control system imposed by their parents.

Given these figures and as child and adolescent health professionals looking after the physical, mental, emotional and cognitive fields, we must be aware of the impact that these new technologies generate in our population.

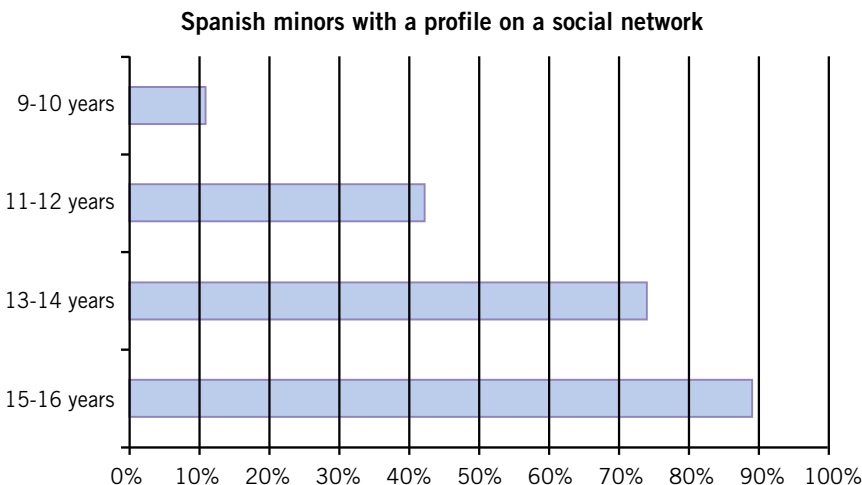


Figure 1. Spanish minors with a profile on a social network. Source: EU Kids Online 2020.

Impact of social media in childhood and adolescence

TRICs have become a natural and daily part of adolescents' socialization processes, in such a way that they live fully integrated in an audiovisual culture that marks their day to day, unaware of the possible risks that inappropriate use of these networks entails.

There are published studies that focus on how the still-developing adolescent brain processes media use. Crone and Konijn⁽⁴⁾, for example, conclude that: "the neural systems that are associated with behaviors important for the use of social networks, including social reward processing, emotion-based processing, regulation and awareness, stand out from other brain regions. Because these neural systems are still underdeveloped and undergo significant changes during adolescence, they can contribute to rejection sensitivity, acceptance, peer influence, and emotionally charged interactions in media and online environments."

Online communications allow a fluid interpersonal relationship and stimulate dialogue among minors, as it allows them to promote and share concerns or actions and integrate into similar groups. In some ways, however, texting and communicating online does not cause a nonverbal learning disability, but it does place young people in a context of nonverbal disability, where body language, facial expression, and even the smallest types of verbal reactions become invisible. This creates great difficulty in evaluating what the messages sent are causing in the recipient⁽⁵⁾.

The digital world has risks and benefits that affect all spheres of the individual, at a physical, psychological, social, sexual and functional level. In other words, the inappropriate use of the digital world impacts health at any age, especially in children and adolescents, since they are, as previously mentioned, developing.

Be that as it may, the growth of interactive media platforms in recent years and their rapid adoption by young people is a compelling potential indication that social media tools hold.

According to the study carried out in a recent critical analysis on the Risks

in the use of the Internet and social networks during childhood and adolescence, published in the Frontiers 2021 platform⁽⁶⁾, Spanish children between the ages of 9 and 16 access social networks on a daily basis, and even older people can have up to three types of profiles in them: one for the family, another to search anonymously and freely express their opinions, and a third to spy on other users from TikTok, Instagram, YouTube or Twitter communities.

This research highlights that the use of mobile devices has been increasing in recent years in Spain, data that has generated great interest in the academic community, to investigate the uses, risks, threats and opportunities for children and young people, especially those belonging to the Generation Alpha.

The Generation Alpha is the one that succeeds Generation Z, and it is the term with which researchers and the media refer to children born in the 2010s, and it is the first generation that will be one hundred percent digital, the so-called digital natives.

The fact that these are individuals who have lived from the beginning with all kinds of technological and electronic devices, requires a work of awareness and control of use by parents, who must be in charge of educating minors of the risks to which they may be exposed when using the Internet.

Negative aspects of the use of social networks

Intensive use of social networks is associated with: less satisfaction in life, internalization of negative experiences, severe depression, negative effects on social-emotional functioning, anxiety, attention problems, and stress⁽⁷⁾. In addition, misuse, abuse, and addictive behaviors on the Internet have shown an association with: insomnia, decreased total hours of sleep, increased risk of obesity, and decreased academic performance, failure, and school dropout. These problems often coexist and their prevalence is increasing⁽⁸⁾.

The Internet and social networks can easily stimulate inappropriate behavior, due to the existence of anonymity and false identity, such as exhibitionism, aggressiveness or deceit, among others.

Below are some of the dangers that young people may be exposed to.

School cyberbullying

Cyberbullying is defined as: "the repeated, intentional and consequential harm, exerted by one child or group of children against another through the use of digital media". It must be a long-standing situation and it is carried out through the dissemination of harmful or defamatory information, or the publication of videos or photographs, including: blackmail, humiliation and insults. Abuse is carried out through email, instant messaging or social networks⁽⁹⁾.

It is usually a (virtual) extension of the abuse carried out in person. It involves recurring and repetitive damage that has a significant impact on the victim or victims⁽¹⁰⁾. It is essential that adolescents who are exposed to this phenomenon be able to ask for help, in order to create a work team that investigates, stops, sanctions, and repairs. The interventions must be directed at both the victims and the aggressors as well as the families involved⁽¹¹⁾.

Cyber sexual abuse or on-line grooming

It is cyberbullying with sexual content deliberately exercised by an adult on a child (or between 2 children in whom a relationship of power and emotional control can be established), whose ultimate goal, in most cases, is to obtain images of child pornography or commit sexual abuse. The main risk is voluntarily sending or sharing images with sexual content (sexting) to strangers⁽⁹⁾.

It is a crime classified as child sexual abuse; therefore, in order to be considered grooming, there must be sexual content obtained through coercion.

Sexting

It is a practice that consists of sharing images of sexual nature, personal or of others, through smartphones or the Internet. The risk is that the images are published and viralized without permission. With this, privacy is exposed to the public eye, with all the short and long-term consequences of this fact⁽⁹⁾.

Cyber addiction or addictive behavior to the Internet

It is defined as a pattern of behavior characterized by the loss of control over the use of the Internet. This behavior leads to isolation and neglect of: social relationships, academic activities, recreational activities, health, and personal hygiene⁽¹²⁾. Some authors suggest that some young people (between 10-15% of all users) develop addictive behaviors similar to substance dependence⁽¹³⁾. Withdrawal and tolerance phenomena are generated, as well as a feeling of loss of control and they are used as a method to escape from reality. It involves serious social and family disturbances. Table I shows some indicators of addition to social networks.

| Table I. Detecting negative influences of social media |
|--|
| <p>Some indicators of addiction to social media are:</p> <ul style="list-style-type: none"> - Progressive increase in time spent online - Difficulties separating from the cell phone or any device that keeps them connected - Disproportionate irritation if encouraged to leave social media for a while - Altered, restless, anxious and nervous states - Put aside activities they previously enjoyed so as to spend more time in front of a device - They do not leave their cell phone even at night in their bedroom - Academic performance has dropped noticeably because they spend too much time online - They are discouraged and dissatisfied with everything - They are constantly aware of their messages and obsessively looking at devices to check if any message has arrived - Usually, the first and last thing they do upon waking up and going to sleep, is checking their phone |
| <p>Source: https://www.pantallasamigas.net/.</p> |

Positive aspects of the use of social media

Adolescence is a stage full of opportunities for growth and personality consolidation. The value of social relationships and the pleasure they generate are very important in the life of an adolescent. Electronic devices have become the means chosen by the majority of young people for one of the most important activities of this stage: socializing⁽¹⁴⁾.

It has been shown that the Internet: stimulates a greater number of brain regions, increases working memory, produces a greater capacity for perceptual learning and allows one to deal with various stimuli simultaneously. Digital natives have a better ability to make quick decisions. It has also been associated with greater development of the frontal pole, the anterior temporal region, the anterior and posterior cingulate cortex, and the hippocampus⁽¹⁵⁾.

The use of social networks shows many other positive aspects: creation of blogs, videos and web pages, which can develop feelings of competence to socialize, make plans, provide support and collaborate with school tasks.

Social networks can support healthy behaviors such as: daily exercise, access to mental health services, sexual education and medication compliance, through applications, games and reinforcement, and online social feedback. They can help improve social connection, emotional empathy, and moral sensitivity⁽⁷⁾.

Video games

During the last decades, video games have become the favorite hobby of many children and adolescents, and their use continues to increase. Play has always been an important part of childhood and it is clear that its tendencies are changing. Video games occupy a significant proportion of our minors' daily activities, being a potential driver of their health and development, both in a positive and negative sense. From this dichotomy, debates have been generated between the different entities involved, including families, social entities, health professionals, researchers and, of course, the game producers themselves.

In our country, and according to the study carried out by UNICEF⁽²⁾, 58.7% of the surveyed sample –carried out among students between 13 and 17 years of age– affirm that they use them regularly, a trend that is higher in the upper age ranges and mainly in the male sex (85.6%). It represents one of their main sources of leisure.

Many of the boys surveyed admit playing games that are not appropriate for their age, in which there is explicit violence, without their parents paying much attention to the coding of the game in this sense.

The influence of video games can have an impact on various areas of health, considering this as a whole that encompasses physical, emotional and social aspects.

Impact of video games on physical health

The adverse effect that time spent with screens has on the health of children and adolescents seems to be clear, and its relationship with excess weight in children has been amply demonstrated; however, there is not so much literature on the matter as far as video games are concerned. A recent 2020 review, which had 26 eligible articles to assess the relationship between video games and obesity⁽¹⁶⁾, concluded that in 14 of them there was no relationship between both conditions. Finding, in some of them, some evidence that exergames (video games that promote exercise) could be an adequate tool to reduce weight or moderate its increase.

All this could be the consequence of the fact that, compared to sitting passively, gaming is capable of increasing heart rate, blood pressure and generating an increase in caloric expenditure.

On the other hand, video games could favor unhealthy eating habits, increasing the consumption of foods rich in saturated fat, snacks, salt and sugary drinks. Gamers are less exposed to unhealthy food ads than those who use other networks or watch television, despite the fact that they are more commonly present on some devices such as tablets or phones.

We also know that playing video games close to bedtime can affect both the quantity and quality of sleep.

Playing in the late afternoon is associated with greater difficulty in falling asleep, a total decrease in sleep hours, and certain structural changes in REM periods.

The causes of all this could be: an altered release of melatonin, a psychomotor stimulation generated by the game itself or by the displacement of the time to go to sleep.

Undoubtedly, these sleep disorders have their health consequences, in the form of decreased skill acquisition and school performance, irritability, mood swings, and physical inactivity. In addition, the fact of having a gaming device in the room decreases the ability of parents to supervise and limit it.

Impact of video games on cognitive development

It is also clear that not all screen viewing is the same in many ways, the active attention and participation required are, for example, much higher in video games than in watching television or video channels. Undoubtedly, the virtual game cannot and should not replace the real one, but it is true that it is capable of generating certain abilities to solve enigmas, overcome obstacles and create cohesion among equals. Possibly, considering that they have come to stay, the best solution is to establish a reasonably healthy balance between the two.

It has been demonstrated that some video games can stimulate certain cognitive areas, such as problem solving, the way in which information is processed or active memory.

Some action games are able to improve image processing and reaction skills, and there is evidence that some of these skills can be carried over to the real world. There are even studies that have shown improvements in reading and fluency levels, as well as in the acquisition of new words in patients with dyslexia who play some of these games⁽¹⁷⁾.

The relationship between attention deficit disorders and video games is convulsive. The connection between the excessive use of video games and the symptoms of attention deficit hyperactivity disorder (ADHD) is observed in

child and adolescent populations; however, not everything is yet clear in this relationship. Although it is true that children with ADHD are more vulnerable to becoming addicted to videogames⁽¹⁸⁾, a risk that increases in parallel with the severity of the disorder's symptoms, it has also been found that videogames can be useful in its diagnosis and even in its treatment⁽¹⁹⁾. Therefore, the relationship between both conditions could be considered bidirectional.

Impact of video games on mental health

Video games, in the right measure and with adequate supervision, can be effective in reducing stress and anxiety. In addition, they also provide an environment in which the child can discover new identities, since under the anonymity they confer, they can reveal gender expressions other than their own and vary them at their whim. However, the risks of addiction and/or compulsive gambling always remain present.

In 2009, Lemmens et al.⁽²⁰⁾ developed the Game Addiction Scale for Adolescents (GASA), adapting 7 diagnostic criteria for gambling to the use of video games, which in 2018 was validated in Spanish. The questionnaire is used to assess video game addiction symptoms and determine if further evaluation is necessary. It assesses, among others: the amount of time spent playing video games, the feeling of restlessness or discomfort experienced when not playing, the need to play for longer periods or more frequently to obtain the same sensation of pleasure (tolerance) or withdrawal symptoms or physical or emotional discomfort experienced when gambling is stopped. The test can be easily performed in any clinical practice or even at the family level, and is also available online: <https://www.adictalia.es/test/adicto-a-videojuegos/>.

Impact of video games on social health

The trend of the last decades plus the momentum of the pandemic has led to the use of more and more technological tools to feel close to the people around us. Video games are one more of those tools, many boys use them, primarily, to build or maintain relationships with their peers. Playing video games with

friends is just another way to stimulate social development, just as playing hide-and-seek in the streets had been decades ago. Being socially active in video games emphasizes cooperation and empathy. Those who have social connections online and in real life may have them more intense than those who only maintain them in real life.

Role of the Primary Care pediatrician

Primary Care pediatricians play an essential role in promoting the physical, mental, cognitive and social well-being of children and adolescents. In fact, they are in a privileged position to advise on the use of social media, limit their risks and detect their harm. From the first contacts with the child and her family, the Primary Care pediatrician can promote rational and responsible use of social media depending on the child's age. Throughout childhood and adolescence, improper use of social media, video games and social networks, with the consequent exposure to risks or the presence of possible harm can be detected, and acted upon accordingly.

It is an important need for pediatricians to play an active role, adequately guiding children and families through the impact of social networks, to become a true promoter of the psychophysical and social development of children and adolescents, being able to detect, not only disorders derived from their intervention in the different areas described and addictions, both to the exaggerated use of social media and video games. Recently, the WHO has included "Gaming disorder", which refers to the use of digital games or video games, either through an Internet connection or without it, linking it to three negative conditions caused by the misuse of digital games:

1. The lack of control of gambling behavior in terms of the start, frequency, intensity, duration, completion and context in which it is played.
2. The increased priority given to gaming over other vital interests and daily activities.
3. Maintaining or escalating the behavior, despite being aware of the negative consequences.

Table II. Ten safety tips from the website “Pantallas amigas” for the use of video games, applicable in most of its items to Internet browsing in general

1. Keep device and game software up to date
2. Use antivirus, also on cell phone and tablet
3. Buy only in official stores and download from authorized platforms
4. Create a new email for registration in gaming services
5. Use a different and robust password, and change it from time to time. Do not use the same one as for other matters
6. Activate the double authentication system if it is available
7. Check where you are verifying the web address and that it starts with https. These websites guarantee extra security
8. Avoid clicking on links that come to you, especially if it is via chat (WhatsApp, SMS or similar)
9. Pay by virtual card or other service, avoiding the credit card. Generate a specific credit card for online purchases
10. Connect through a trusted network and bypass public or unknown WiFi. From the latter, it is easier to access your data

Source: <https://www.pantallasamigas.net/ciberseguridad-para-videojuegos-gaming/>.

Help guides for families and pediatricians

There are various guides published from different fields, both professionally and for families, in order to promote good social media use, to prevent their risks, to enhance their benefits and, when the time comes, to be able to relatively easily detect addictions and other detrimental effects. Its main weakness is the lack of knowledge that pediatricians and parents have about them.

- Among the various guides reviewed, we would highlight those detailed in Table II (Ten security tips for video games on the web) and in table III (Decalogue of the web “thegoodgamer”).
- Resources or tools to assess possible addiction to video games: ten-item Internet Gaming Disorder Test (IGDT-10) (adapted from: Orsolya Király, PhD, Institute of Psychology, ELTE Eötvös Loránd University, Budapest, Hungary) or those found on the net, like the one on Adictalia website: <https://www.adictalia.es/adiccion/videojuegos/>.
- PEGI code for video game classification (Pan European Game Information): The PEGI system, to which the Spanish Video Games Association is part of, is a self-regulation system designed by the industry to provide its products with guidance information on the appropriate age for consumption.

It consists of two types of descriptor icons, one related to the recommended age, and another to the specific content susceptible for analysis. Within the latter, it stands out, for instance: if the game mentions drugs, there is explicit violence, or if foul language is used (Fig. 2), whose detailed description can be found at: <http://www.aevi.org.es/documentacion/el-codigo-peg/peg/peg.info/es>.

The system is also used for online game and it should be noted that some of the main digital platforms such as: Google Play Store, Nintendo, Apple iOS or Microsoft have the PEGI rating system for their applications.

Table III. Decalogue of the web “The Good Gamer”, which complements table II in some aspects and adds the perspective of a shared and creative game

1. Play with your children: understand their world
2. A video game for every age. Use the PEGI system*
3. Video games also educate. Get the most out of them
4. Avoid unpleasant surprises. Buy in official stores
5. You rule in the video game. Use parental controls
6. You set the rules: what, when, how much and how to play
7. First school and homework, then the child can play
8. The video game can also be played with the family
9. Get to know your children’s friends, even virtual ones
10. Fantasy stimulates creativity, but prevents them from confusing reality and fiction

Source: <https://thegoodgamer.es/divertirse-con-responsabilidad/#decalogo>. *The PEGI System (Pan European Game Information) is the self-regulation mechanism designed by the industry to provide its products with indicative information on the appropriate age for consumption.

Conflict of interest

There is no conflict of interest in the preparation of the manuscript. Declaration of interests: none.

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The asterisks show the interest of the article in the opinion of the authors.

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Figure 2. Video game classification code according to the PEGI (Pan European Game Information) system, a self-regulation mechanism designed by the industry to provide its products with indicative information on the appropriate age for consumption. *Source: Spanish Association of Video Games, adapted from PEGI.*

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This article analyzes how the environment conditions the experience of adolescents, the digital media generation, who were born immersed in information and communication technologies, and details the risks and opportunities.

- Paniagua Repetto H. El impacto de las pantallas: televisión, ordenador y videojuegos. The impact of screens: television, computer and videogames. *Pediatr Integral*. 2018; XXII: 178-86. Available at: <https://www.pediatriaintegral.es/publicacion-2018-06/el-impacto-de-las-pantallas-television-ordenador-y-videojuegos/>.

Great article that reviews the benefits and possible risks that social media could cause in childhood and adolescence. On the other hand, it highlights the figure of the Primary Care Pediatrician, who plays a decisive role in promoting the rational use of these.

- Wan CS, Chiou WB. Why are adolescents addicted to online gaming? An interview study in Taiwan. *Cyberpsychology & behavior*. 2006; 9: 762-6.

Study that explores the psychological motivations of online gaming addicts and further analyzes the relationship between real-life interpersonal relationships and online gaming, such as compensation or extensive satisfaction of addicts' needs.

- Hadjipanayis A, Efstathiou E, Altortjai P, Stiris T, Valiulis A, Koletzko B, et al. Social media and children: what is the paediatrician's role? *Eur J Pediatr*. 2019; 178: 1605-12. Available in: <https://doi.org/10.1007/s00431-019-03458-w>.

It provides pediatricians with knowledge and tools to guide children, adolescents and their families in the proper use of social networks.

Clinical case

Marta is 12 years old, the eldest of 3 siblings, throughout her childhood she has punctually attended the appointments of the preventive activities protocol at her health care center and she has no relevant family or personal history. She is enrolled in a well-performing public school and has been playing handball for five years, with increasing frequency and intensity.

Approximately two and a half years ago, coinciding with her birthday, her parents gifted her a game console. For some time now, a little over a year ago, they perceive that her attention has increasingly focused on video games rather than on other aspects of her previous predilection.

They ask us about certain aspects that are presented in the last three questions of the accreditation questionnaire.

Algorithm. Path to video game purchase



*The PEGI System (Pan European Game Information) is the self-regulation mechanism designed by the industry to provide its products with indicative information on the appropriate age for consumption.



Accreditation quiz

The Accreditation Questionnaires for FC topics can be done at "On line" through the web: www.sepeap.org and www.pediatrintegral.es.

To obtain the single continuous training accreditation from the accreditation system for health professionals for the entire national health system, 85% of the questions must be answered correctly. The accreditation questionnaires on the different issues in the journal may be carried out during the period stated in the online questionnaire.



Accreditation quiz

Subsequently, the following accreditation quiz of *Pediatría Integral* collects questions on this topic, which must be answered online through the website: www.sepeap.org.

In order to obtain certification by the Spanish “formación continuada” national health system for health professionals, 85% of the questions must be answered correctly. The accreditation quizzes of the different numbers of the journal may be submitted during the period indicated in the “on-line” quiz.

Social networks and media: impact on the pediatric age

9. The acronym of the so-called TRICs refers to the following except ONE:
- Revaluation and communication.
 - Information and communication.
 - Communication and relationship.
 - Communication and information.
 - Information and relationship.
10. The number of preteens and teens who are familiar with the Dark Web is ESTIMATED to be around:
- 20%.
 - 30%.
 - 40%.
 - 50%.
 - 60%.
11. Regarding online communication, mark the CORRECT answer:
- It is always dangerous.
 - It easily induces addiction to networks.
 - It can be done safely without parental supervision above the age of 7.
 - It allows a fluid interpersonal relationship and stimulates dialogue between minors.
 - All of the above are true.
12. Which of the following problems has NOT been described as a negative aspect of the use of Social Media?
- Grooming.
 - Cyberbullying.
 - Minustalking.
 - Sexting.
 - All of the above can appear.
13. In which of the following aspects of development do videogames have less intervention? Mark the CORRECT answer:
- Social.
 - Intergenerational.
 - Physical.
 - Mental.
 - Cognitive.
- Clinical case**
14. Can Marta’s parents access any resource or tool to assess a possible addiction to video games? Mark the CORRECT answer:
- No, only a specifically qualified pediatrician could assess it.
 - Yes, there are physical and/or online questionnaires suitable for it.
 - No, addictions must be assessed from the beginning in specific centers.
 - Yes, but most of the resources are not available to the public and very expensive.
 - There are, but they are unreliable.
15. They tell us that she spends more and more time playing videogames, currently more than 60 minutes a day, and that this worries them, since she doesn’t pay as much attention to her homework or practices sports as happy. Our most REASONABLE approach would be:
- It doesn’t seem like a worrisome situation. Good advice and proper follow-up could be enough.
 - The fact that she is playing beyond 60 minutes a day and abandoning other activities indicates a sufficient level of addiction so as to make a referral to a specialized unit.
 - If the video games they play are relational, they can play without any risk for up to 90 minutes.
 - Above the age of 11, the minor’s assimilation capacity is sufficient to leave playing time aside.
 - All of the above are false.
16. The recommendations that we can make to Marta’s parents are all of the following except ONE:
- To show interest and share their video games.
 - To set context any situation that could be strange to Marta.
 - Follow the PEPI code when buying games.
 - Place the game console in the dining room or in a room where the family is most of the day.
 - Avoid playing after dinner.