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# Child protection agents and social networks. The TiKToK dilemma

## Agentes protectores del menor y redes sociales. El dilema de TiKToK

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#### Abstract

Minors must enjoy all rights and freedoms, and they must be provided with guarantees for their self-realisation. Videos on social networks are the showcase wherein they project their personality and concerns. In Information and Communication Technologies, young people find the tools and languages whereby they develop their creativity and socialise. The article focuses on the protection systems that TiKToK offers to minors given its penetration among them. In the results phase, an analysis was performed based on a review of the "Conditions of Use" and other instruments, all confronted by the youth protection agents, closing with a brief presentation of cases. A range of videos created and broadcast by minors were observed. As a discussion, the work shows that TiKToK presents some questions that diverge from the specific framework in which it operates, opting to present general norms for contexts in which greater specificity would have been desirable. We conclude by acknowledging that TiKToK makes efforts to control the access of minors, as well as the content they generate and consume, but this dilemma is not always met.

#### Resumen

Los menores de edad deben disfrutar de todos los derechos y libertades, y se les deben facilitar garantías para su autorrealización. Los vídeos en redes sociales pasan a ser el escaparate donde proyectan su personalidad e inquietudes. Los jóvenes encuentran en las Tecnologías de la Información y Comunicación las herramientas y lenguajes con los que desarrollar su creatividad y socializarse. El artículo pone el foco en los sistemas de protección que ofrece TiKToK a los menores de edad dada su penetración entre estos. En la fase de resultados se ha realizado un análisis basado en una revisión de las "Condiciones de Uso" y demás instrumentos, confrontadas todas mediante los agentes protectores de los jóvenes cerrando a través de una breve exposición de casos. Se han observado diversos vídeos creados y redifundidos por menores. Como discusión, el trabajo arroja que TiKToK presenta algunas cuestiones que no se ajustan a rigor respecto al marco específico en el que opera, optando por presentar normas generales para contextos en los que hubiera sido deseable mayor concreción. Concluimos reconociendo que TiKToK realiza esfuerzos por controlar el acceso de los menores, así como los contenidos que generan y consumen, pero no siempre se cumple dicha disyuntiva.

# Keywords

TiKToK; minors; young prosumers; normative; digital literacy; media literacy.

#### Palabras clave

TikToK; menores de edad; jóvenes prosumidores; normativa digital; alfabetización digital; alfabetización mediática.

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## 1. Introduction

Society 2.0 (Durán-Medina, 2014) brings the capital and universal figure of the prosumer (Toffler, 1990). Fusion of the terms producer and consumer, this entity evolves along with the digital world (Aparici-Marino and García-Marín, 2018). One-way communication barely has a place on the Internet, which declines in the creation and dissemination of content by those who were previously a passive receiver. Web 2.0 (O'Reilly, 2006) changes the communicational status quo and the existing superstructure (Reig, 2011). Digital tools, increasingly simple, intuitive and accessible, democratize audiovisual and interactive culture, unleashing the personality and qualities of users (Pagani, Hofacker and Goldsmith, 2011; Herrero-Diz, Ramos-Serrano and Nó, 2016).

Whoever wants to create can do so with quality standards that a few years ago were hard to imagine. The issue even relates to children who, at times, become the makers of videos viewed by millions of people. Either on a stand-alone basis or with the help of their parents, there are many channels for minors with figures higher than traditional established media, although they are still vulnerable entities (Montes-Vozmediano, García-Jiménez and Menor-Sendra, 2018).

The situation is increasingly complicated by, among others, the number and diversity of social networks. When it seemed that the market was dominated by YouTube, Facebook, Instagram and Snapchat, disruptive spaces such as Twitch and TiKToK found their niche. The first appears as an evolution of video game streaming (Gutiérrez-Lozano and Cuartero-Naranjo, 2020), through eSports (Martín-Ramallal and Merchán-Murillo, 2021) until today with all kinds of events commented on by 2.0 stars. as Ibai Llanos (Cuartero-Naranjo, Gutiérrez-Lozano and Ramos-Rodríguez, 2021).

The platforms make available everything that is needed to generate audiovisual content since, ultimately, they continue to be the beneficiaries through advertising (Quijandría, 2020). Occasionally there may be a conflict between business interests and the protection of the minor, at least from an ethical point of view (Schneble, Favaretto, Elger and Shaw, 2021). Is it acceptable for child-generated materials to become the center (and property) of a multibillion dollar business of large corporations? (Gentina, Chen and Yang, 2021). Treating children as trademarks or as promotional actors (Cervilla-Fernández and Marfil-Carmona, 2019) becomes the issue of debate and specific regulation. It is also unethical to use them to sell commercial products by playing without specifying that it is a commercial action (Vizcaino-Laorga, Martinez, Angel, and Atauri, 2021). Oversharing deserves mention, the overexposure of family life by some parents, including that of the minor (Holzer, 2017).

Children often view these videos as a game, and having a following would be perceived as a sign of their worth. Young prescribers become role models and a reference for boys of their own age (Renés-Arellano, González-Pérez and Berlanga-Fernández, 2020), and may be positive references (Feijoo-Fernández and Fernández-Gómez, 2021). The situation has reached a point that one of the jobs they most admire and want is that of influencer. In the case of youtubers, interest rises to fifth place (Adeco, 2019). It is still paradoxical, since it is estimated that in Spain only 7,500 people live entirely from this profession (López, 2021), a residual figure for the entire labor market. According to 2btube, an agency specializing in social media, to reach the professional category you must have at least 100,000 followers. The proven influencers are those who reach one million active followers. According to the same source, at the time of writing, 691 people have achieved the feat.

Employability in vestigial careers is not a negative thing in a changing and dynamic society (Government of Spain, 2021). The optimization of training and vision for the future would require supervision so that children grow up in a healthy, normalized environment with prospects, without neglecting their expectations and concerns, since they are full persons with rights and standards.

# 1.1. Minors and screen 2.0

Axiomatically, children are a part of society that require special supervision because of their vulnerability despite their need for independence. As a result of ICT and ubiquitous access to information, the situation seems complicated (Garmendia-Larrañaga, Jiménez-Iglesias, Casado-del-Río and Mascheroni, 2016). When infants are physically removed from the family unit, it is virtually impossible to monitor all the interactions they engage in. Nor is it advisable to turn towards hyper paternalism, since protection should not be confused with domination, even when it comes to children.

Young people from the age of seven (Garmendia-Larrañaga et al., 2016) have superlative access to online content, especially through their own or someone else's smartphone. They find in ICT 2.0 a channel of emancipation and empowerment (Kahne, Middaugh and Allen, 2014) that strongly influences families (Buxarrais, Noguera, Tey, Burguet and Duprat, 2011). Sánchez-Martínez and Barceló-Ugarte highlight that "the use that children make of these devices can have a profound impact on their learning, behavior and even on the development of their social skills" (2014: 2). Without undermining their fundamental rights, contained in the Convention on the Rights of the Child and in the Spanish

Magna Carta itself, or their psychosocial self-development, decisive action is needed to tackle the challenge. It takes on a greater dimension given the peculiarities of the touch generation (t), the one that makes the touch screen an axis of its incipient worldview (Zamorano-Jiménez, 2017).

The interactive paradigm shift implies a challenge. Guardians are faced with a pressing dilemma. To strike a balance in the use of smartphones and other devices so that young people acquire the skills to integrate into an increasingly cyber society and, in turn, develop their sociability, values and ethical principles in a healthy, democratic and inclusive framework.

The child, defined as "every human being under eighteen years of age, unless, by virtue of the applicable law, he or she has reached the age of majority earlier" (Article 1 of the Convention on the Rights of the Child), has a technological melting pot difficult to grasp by his parents and guardians. They were born connected to haptic screens and their handling is almost innate to them (Herrero-Diz, Ramos-Serrano and Nó, 2016). The equation becomes complex with the rule of the social networks as a fundamental channel of interrelation.

Facebook, although it is still the reference, has lost its hegemonic role among the new generations, although it adapts its interoperability to adjust to new tastes. Its universal vocation makes it difficult for it to reach these social strata. An example of Facebook's survival skills relies on the 2012 purchase of Instagram in the face of evidence. As a result, it has become the favorite digital space of generation Z (Martín-Ramallal and Micaletto-Belda, 2021). It is characterized by being a visual environment where photographs and filters take center stage. Its success continues to be undeniable. Its multi platform ecosystem is characterised by certain narcissistic endowments. What Baños-González and Aguilera-Moyano state is significant:

Users' motivations for following a brand on social networks are based, fundamentally, on hedonistic attributes and on a reward that must be materialised in a value proposition coherent with the values and attributes of each brand (2017: 11).

Social networks, despite their virtues as instruments of collective self-defense and champions of democracy (Alias-Maldonado, 2016; Merchán-Murillo and Martín-Ramallal, 2020), carry elements that can spur vanity (Cenizo, 2021). During childhood and adolescence, where one does not have enough maturity or is referentially migrated from the family to the group, the pro-ego hypothesis takes on value. For example, the quasi-professional pose is common in selfies (García-Mendoza, 2018), far from the customs of previous generations. If you add the beauty filters, the quotation is more relevant.

#### 1.2. Protective agents for minors

Parents should not bear the burden of protecting children exclusively on their own, as it is the responsibility of society as a whole and its institutions. There are agencies and entities that will accompany them (see Figure 1). Bringué-Sala and Sádaba-Chalezquer, (2009) speak of different agents, the most prominent being the legislative framework, public institutions, education, and parents, the latter two the first level. Our study elevates social networks to this category, since they will be the sphere in which the exchange with minors takes place. They take on a primary role that is difficult for other actors to occupy. The scheme developed arises from an extension based on Selva-Ruiz and Martín-Ramallal (2019: 97) to which self-regulation is implemented, external collaborators and the community that make up the social networks, as they have essential custodial qualities and duties.



#### Figure 1: Protective Agents of the minor

The first line of defense for children is their parents and they have to "mediate" in the access to the network (Garmendia-Larrañaga et al., 2016: 77). In the digital sphere, the best way to fulfill this role is for them to be aware of the ecosystem through which young people interact and socialize. Training and self-training are key, and mastering the tools of the influencer space would be recommended (Moreno-López, González-Robles, Torres-Gómez and Araya-Hernández, 2017; Bach and Jiménez, 2019) Other instruments at their disposal are those offered by the platforms, which allow them to limit and supervise access to certain content, something advisable in the early stages of personal growth.

Secondly, education and teaching plans should include specific strategies to train young people in the contingencies they will encounter in a hyper-connected world (Milan, 2018). They are free individuals with rights and will not always be under the protection of their parents, who must avoid intransigence (Bach and Jiménez, 2019). Education is the remedy for them to understand the consequences and limits of their actions on the Internet. It is the parents' and teachers' mission to undertake this process (Del-Rey-Alamillo, Casas-Bolaños and Ortega-Ruiz, 2012).

Media literacy (Potter, 2018) has an area where instruction is provided in the management of social networks. The digital education they receive in schools is crucial. It should be taught so that they are aware of the shields available to them. These actions limit reprehensible phenomena such as cyberbullying (Ortega-Ruiz, Del-Rey-Alamillo and Casas-Bolaños, 2013). For Gutiérrez-Martín and Tyner (2012: 10), it is necessary to "go beyond the concept of verbal literacy, reading and writing, to include languages and forms of expression based on still and moving digital image". It is essential that children understand the importance of taking care of their privacy, a point where the classroom takes on a basic role (Livingstone, Stoilova and Nandagiri, 2020). As part of the solution, techniques such as learning through entertainment and games -edutainment (Egenfeldt-Nielsen, 2011) seem to be effective (Argente, Vivancos, Alemany and García-Fornes, 2017).

The platforms, in this case TiKToK, must manage the contents that are published on them, respecting the law. They must do the same with private data, implementing strict security systems. They must offer transparency in how the data will be used and who are the senders and receivers of such sensitive information and whether it will be used by third parties, especially when it concerns children. Commitment, effort and means are required to enforce the standards that are deposited in the social networks and that are in line with the legislative framework of the regions in which it operates. The digital challenge has nooks and crannies that involve observing a 2.0 reality in constant mediamorphosis.

There is a conflict "between the autonomy of the minor and the duty to protect minors" (Toral-Lara, 2020: 182) and it is here where the State makes sense. Minors enjoy a strong legal and institutional framework. However, the speed with which changes occur clashes with the tedious legislative processes (Selva-Ruiz and Martín-Ramallal, 2019). However, there are supranational regulations that advocate fair and equal treatment. The Universal Declaration of Human Rights and the Convention on the Rights of the Child protect infants until they reach adulthood. Paragraph 3 of article 17 makes considerations on how the information material consumed by minors should be treated, avoiding violence, sexist material, etc. Safer Internet Plus, an entity supported by the European Commission, ensures a Safe Internet. Among its competences, the EU Kids Online project monitors the laws to adapt them to the constant testing of the Internet and children.

The social networks must at all times warn parents and guardians of minors about the information they collect and the treatment they make of it and request prior approval (Brito-Izquierdo, 2018). Comment that the RGPD (General Data Protection Regulation -Europe-) or the LOPD (Organic Law of Data Protection -Spain), are regulatory systems that watch over citizens to a greater extent, including, among others, rights as important as the right to be forgotten on the network (Angulo-Garzaro, 2019). In Spain, the Data Protection Act regulated in art. 13 of Royal Decree 1720/2007 of December 21 stands out, where those over fourteen years of age may transfer their data to join these social networks (cited by Fernández-de-Marcos, 2017: 17).

Continuing, the CNMC (National Commission of Markets and Competition) launches a proposal to regulate the activity of influencers in the draft bill General Law on Audiovisual Communication. They are inclined to call the profession as "providers of audiovisual communication services" (Montón, 2021). The initiative coincides with the controversy over the tiktoker Naim Darrechi, who boasted of cheating on girls in acts that that allegedly went against the Organic Law of Integral Guarantee of Sexual Freedom. In the face of the scandal, the need for specific tools has become visible. The 18-year-old explicitly requested self-regulation (Aguiar, 2021):

The Government does not want to realize that we are such an important media of communication that they are now using us to get votes. So, if you use us to get votes, at least support the community, let there be a committee of influencers, let there be regulations, let there be rules like there are on TV, in the newspaper or on the radio.

As is the case in advertising with Autocontrol, it would be desirable that areas such as social networks that concern minors are regulated by themselves. This self-regulation should not be the final controlling body, but it would be beneficial as a first filter when the harmful event manifests itself, as parents and education initially watch over in a preventive way. Other situations such as misleading or veiled advertising suggest that taking steps towards self-regulation would be appropriate (Sixto-García and Álvarez-Vázquez, 2020).

The community should also take care of its children through the feedback provided by the platforms. Users have to collaborate on the job using the tools at hand. It is the subject in their daily interaction with social networks who will come across inappropriate uses. Without having to take on the role of the authorities, they have the capacity to give voice to inappropriate activities. This also affects children, in particular the little ones. Finding content where it is evident that the child does not have parental consent, such as drinking alcohol, should be sent for review. Beyond the fact itself, it is not appropriate to shed light on behaviour that does not correspond to such ages. When talking about a community, it is appreciated from the point of view of anonymity, as it is the individual members of the community who should exercise the function without publicity.

The seventh supervisor-agent is an organization, often non-profit. The special need to look after young people gives rise to the existence of external institutions, which usually collaborate with governments and with social networks to mediate spaces for debate with a different perspective. They are often adept at handling the digital language of young people and parents, producing quality materials.

### 1.3. TiKToK. Prosumer space for the new generations

TikTok is a Chinese social network accompanied by controversy (Tamara-Quiroz, 2020) during an unparalleled expansion. Known in China as Douyin -www.douyin.com- which means, "shake the music", derived from Musical.ly, from which in 2018 it mutated towards a more transversal and global philosophy. In this period it has reached more than 3 billion downloads, surpassing networks such as Instagram in some records. Its parent company, ByteDance, is the fastest growing tech giant on record (Brennan, 2020). The milestone is commendable as it is achieved in an environment that seemed saturated and even nowadays sets the pace (Cid, 2021) .The hatching is justified by an original mix based on vertical videos (Ryan, 2018).

With its own youth-oriented theme, TiKToK is the ideal prosumer place. The videos may seem to appear randomly, but their order is based on an algorithm and artificial intelligence. This formula takes into account age, age-related limits, gender, history, searches, who is being followed, likes, comments, content that the user creates and / or shares, language, device type and so on (Galeano, 2020). A key factor in its success is its focus on the smartphone (Vitelar, 2019), from which 90% of members access daily (Mohsin, 2021). Another reason is its aggressive marketing campaigns, sponsorships –Eurocup 2020-and the ease of downloading and sharing content (Cid, 2021). The network has a web version with a user experience based on the desktop metaphor and a similar one in app format. However, its natural habitat is the mobile phone. In the "Terms" section of the website, it states that "certain functions are only available in the app".

Generations Z and touch have added new forms of interrelation (Herrman, 2019). The influence of social networks has led to an early transition to adolescence (Milan, 2018). TiKToK is trendy and highly addictive (Brennan, 2020). Vertical videos, especially designed for and from the smartphone, with a fresh and original approach, are its raison d'être (Omar and Dequan, 2020). Active users are called tiktokers, and would fit into what Gil-Quintana (2015) calls "collaborative creators", entities that collectively create, produce and innovate through digital elements such as videos. They tend to bypass copyright and, based on third-party content, make their mark on what they remediate (Martín-Ramallal and Micaletto-Belda, 2021). Their broad sociability occurs through 2.0 channels that they understand naturally along with interaction and transmedia narratives.

Young people have evolved from homo videns (Sartori, 2012), and primarily seek entertainment and self-fulfilment, various benefits and monetisation of their creations on TiKToK. They also crave the consumption of certain products, keeping up with trends and interacting with other young people (Zuo and Wang, 2019). Another peculiarity intrinsic to TiKToK is the challenges. They can be found of all kinds, ranging from humour, jokes, dances and even advertising (see Figure 2). It is common to see audiovisuals of denunciation and information-disinformation. Music is a fundamental pillar, with an extensive free library. However, it should be noted that not all young people make active use of the networks (Pagani, Hofacker and Goldsmith, 2011).

TiKToK becomes the mirror in which the new generations see themselves (Tamara-Quiroz, 2020) just like Facebook among millennials (Sabate et al., 2014). Statistics (Mohsin, 2021) divide network users into segments: 20% of users are under 19 years old; 32% of users are between 20 and 24 years old; 27% of

users are people between 30 and 40 years old; mainly young people between 13 and 18 years old are more active in this application; 55% of users are women and 45% are men. A determining factor for its implementation was the confinement derived from COVID-19 (Olivares-García and Méndez-Majuelos, 2020).



Figure 2: TiKToK. Elements of attraction among young people

Source: self made

### 2. Objectives

The aim of this article is to observe from a critical and normative perspective how the emerging social network TiKToK manages the creation and consumption of content with respect to minors, as they are of special interest due to their vulnerability and the possible repercussions of integration of a new ICT channel-message in their daily lives.

Subsidiarily, four specific objectives are formulated:

- Generate a multidisciplinary theoretical and conceptual framework that constitutes a useful research and dissemination tool for the analysis of the relationship between the TiKToK social network and minors who consume, generate and share videos, likes and so on.
- Analyze TiKToK's underage safeguarding tools to validate their effectiveness through the seven proposed custodians: parents and guardians, education, authorities and regulations, sectoral self-regulation, social networks, user community and external organizations.
- Identify underage users who appear to be in breach of online regulations, either because of their age or because of the subject matter and content of the videos they share and create.
- Set as conclusions some recommendations to be implemented and open a subsequent debate regarding minors on platforms such as TikToK to ensure their correct consumption in these age groups, always respecting their rights and free personal development as full individuals in society.

### 3. Methodology

Given the social nature of the subject matter, the research and the objectives presented, it is appropriate to adopt the deductive method (Hernández-Sampieri, Fernández-Collado and Baptista-Lucio, 2010). Having set out the objectives and the topic are set forth, characterized by a significant emergence, the document assumes an exploratory approach (Bernal, 2010), without renouncing a descriptive-explanatory facet, as it is considered as viable and appropriate (Behar-Rivero, 2008). It should be noted that, after an intense documentary review, studies can be found that address the problem of minors as creators of videos for social networks. However, this is not the case with TiKToK and its treatment of this population group from a critical and normative point of view.

The study uses a qualitative and multifocal methodology in accordance with the object to be observed (Hernández-Sampieri, Fernández-Collado and Baptista-Lucio, 2010). As a basis, the seven agents described in the theoretical framework have been taken into consideration as verification items for the safeguarding of minors in TikToK. As a reminder, these are: parents and guardians, education, authorities and regulations, sectoral self-regulation, social networks, user community and external organizations.

This approach is considered adequate to verify whether they are actually doing their job properly. A review of the "TiKToK Terms of Use", the regulatory structure of the app and the site, the control tools and certain partners is brought up to confront their adequacy to the requirements that precede their relationship and protection of minors.

After this, a brief case study is carried out (Yin, 2017) focusing on videos of minors posted in TiKToK which due to their characteristics, context and peculiarities, show that the regulations, instruments and supervision of previously indicated protective agents are bypassed. The first variables in the selection of the audiovisuals are the age of the broadcaster (generation touch and generation Z minors) and the subject matter of the video itself, which would be outside the normative uses permitted by TiKToK. Another item in the localisation of the multimedia consists of resorting to keywords typical from the social context of Spanish youth, as well as from their slang. As a sample, general words such as "instituto" and more specific ones, such as "viaje\_fin\_de\_curso" were used. The aim is to test the existence and inappropriate dissemination in TiKToK of different materials featuring young people.

This was done by collating various hashtags that will delimit these users, as well as the children themselves. In the words of Daer, Hoffman and Goodman, (2014: 2), "this metacommunicative tagging is a subgenre that arises from the specific needs or demands perceived by users and determined (in part) by what the medium enables". Consequently, appealing to these key terms as a resource materializes in an analytical tool that allows us to observe behaviors and ideas of the central subjects of social mediabased research, in our case, TiKToK.

The first crawl sought to identify accounts that evidenced subjects under the age of thirteen up to the age of fifteen. Several keywords specific to this group such as "recreo" or "niño" were used to search for the youngest users. More than thirty terms were used in the field survey, with the most significant terms being brought into the discussion because of the obvious infringement. It was not necessary to continue the examination any further as the results quickly became apparent. After testing based on 40 searches, 8 cases of videos featuring children aged 13-15 or younger emerged. A further criterion for incorporating the profiles into the study was that the videos were sufficiently disseminated.

The spatial framework of the work will focus on EEA (European Economic Area), specifically on Spain. This position is taken because we are taking into account the regulations through which we have access to TiKToK, set in the EULA, End-User License Agreement. This agreement states the conditions and limitations of use and access to digital content, such as software, apps, video games or social media. The time span of fieldwork is between July and August 2021, a context marked by COVID-19 and which can be seen in the cases. When searching, the network redirects to materials mostly linked to the national environment, as the algorithm understands that it is of special interest to user-authors due to the geolocation implicit in the smartphone and the associated account data. The analysis will take into consideration both the Android app, the website and the desktop application. The decision is not due to usability issues but, as the company states, to "Different elements may be available in different versions of the Services."

When depicting the figures of the cases addressed, when subjects under eighteen years of age are observed, they will be anonymized to preserve their fundamental rights and to respect the legislation in force for this purpose. The screenshots shown for illustrative purposes will be blurred eliminating any possible reference that might allow the identification of those involved.

### 4. Results

### 4.1. Access and creation of content by minors in TiKToK

It is imperative to limit the age limit to which TiKToK gives access. Within the "Privacy Policy", under the section "Information relating to minors", it is literally clarified that "it is not directed to persons under 13 years of age. In certain cases, this age may be higher due to local regulatory requirements, please consult your local privacy policy for more information". Accordingly, it accepts minors in their adolescent stage. The closing of the clause indicates that the text has not been fully adapted to the relevant regional legislation, leaving it up to the guardians to read said regulations without providing more explicit mechanisms, a situation that may appear deficient to some recipients.

Another section where it defines its target in a vague way is in the "Terms" section, where it explains that the entry barrier will be "at least 13 years of age". Probably this point would have required more specificity and clearer explanations, which is common in social media (Schneble et al., 2021). Specifying under the heading "Supplementary Terms - Specific Jurisdiction" deals exclusively with the case of Mexico, where this procedure is corrected by stating that only those over the age of 18 may use the app freely. However, minors may use it with the consent of their "parent or guardian", without clarifying the minimum age. It is noteworthy that the term mother is omitted from the possible authorization, not being as inclusive as it would have been desirable.

One part of the text must be acknowledged that, to a certain extent, ensures the integrity of the youngest users. "Some items are not available to users under a certain age." Consequently, there will be stages of access to content. This will mediate levels of privacy, as well as content viewing and other features as shown in Figure 3 (Friendly Screens (2021a: 7). However, it opens the door to sharing elements with what minors consider "friends", an ambiguous term at ages eager to socialize and gain popularity, TiKToK tightens the default conditions over time.



Figure 3: Default settings and functionalities available by age

Source: Pantallas Amigas (2021a: 7)

Logging in from a browser offers us: using QR, using phone, or applying accounts linked to social media and platforms (Google, Facebook, Twitter, Apple and Instagram). This policy delegates responsibility to third parties, to said platforms and to whoever has provided the smartphone. This means that young people who have a terminal at their disposal will be able to log in with full powers, as it will be easy for them to falsify the age of an adult. In this "unauthorized access" (Toral-Lara, 2020: 179), the ease of bypassing age protections is not exclusive to TiKToK, as it is widespread.

Among "Privacy Policy" items is "Proof of your identity or age". This states: "We will sometimes ask you to provide proof of your identity or age in order to use certain features, such as Livestream or verified accounts, or when you apply for a "Pro Account" (TiKToK, Last update: July 2020). Not all users have full privileges. Children under the age of 13 can only share certain items with their close ones, which prevents them from posting or commenting fully (except for close - accepted - contacts) as they have exclusively private accounts by default.

The network warns that the profile picture and description will be public, making it somewhat easier to locate them. Nor do they have the capacity for direct messaging. One option that is made possible for them is to carry out duets (grosso modo, synchronous recording with two nearby smartphones). Finally, members aged 16 and over already operate with almost all the possibilities of the platform (uploading and recording videos, live messaging, etc.) except for a few uses such as buying, selling and donating, which is implicit at the age of majority.

### 4.2. TiKToK and minor protective agents

### 4.2.1. TiKToK to help parents

TikToK is aware that many of its users are minors and tries to answer any questions they may have with the "Guide for Parents and Guardians" (2021). The website is easy to find with two simple clicks. From the first moment, with a friendly and assertive language, it recognizes that the app is aimed at teenagers. The information is illustrated with short, not particularly relevant. As a remedy, they offer an interesting solution, the TikToK Guide for Parents. Create, learn, enjoy and have fun (see bibliography), an extensive and elaborate PDF document that can give parents confidence. This resource has not really been developed by itself, but is edited together with Pantallas Amigas, an organization whose mission is "the promotion of the safe and healthy use of the Internet and other ICTs, as well as the promotion of responsible digital citizenship in children and adolescents "(Pantallas Amigas, 2021b).

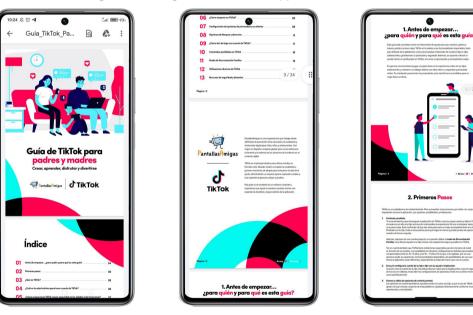
The section "Guide for Parents and Guardians" (2021), includes explanatory videos. They are produced for the app as they are in vertical format, something exogenous to the computer. They can be synthetic

and it would have been advisable for them to be more extensive and informative for parents. They make clear the values of the organisation, such as its position against cyberbullying and other types of misuse of TiKToK.

In addition to parents' proactive day-to-day work with their children, they have specific tools that teach them to supervise in TiKToK. First, Family Safety Mode involves a set of functions that parents have at their disposal to monitor activity. There is also the Family Synchronization mode, creating a shared context where content control is greatly facilitated. Also of interest is Screen Time Management which, as its name suggests, is a system that delimits the daily range that young people can be involved in TiKToK. More recently, "Toque de queda (curfew)" has been incorporated, an option that silences the messages after a certain time. As a result, parents have in place systems that, if mastered, can ensure more positive experiences.

#### 4.2.2. Education. Guides and educational channels for parents and children

The higher the level of education of both parents and children, the better, safer and more enriching the interactions will be. As mentioned above, a series of guides and links are available for anyone who requires them. It should be noted that some document are formatted in DIN A4 PDF, a format that is not as ergonomic in the app as it is on computers, as it has to be downloaded and is more complex to read on the phone, which results in a problem of usability and learning (see Figure 4). In this sense, the "Help Centre" and "Safety Centre" sections provide useful information for both children and parents. Assimilating the textual content requires effort, an effort that is difficult for children to make unless they are helped by their parents, who should accompany them in their first steps in TiKToK. At this point, the app demonstrates that its primary language is video, as reading is more comfortable in the desktop version.



#### Figure 4: Viewing PDF hosted in the app. Non-native forma

Source: Screenshots (2021)

Within the "Safety Centre", the "Anti-Bullying Guide" stands out, especially designed to train minors. Its distribution and planning are very appropriate and correct. The language is close and direct, in line with the demands of the young reader. It offers a link to a series of supporting videos that will help. Each one deals with a specific problem. Their length is again short, but one has to be aware that this is the essence of TiKToK, and they are sufficiently formative to guide minors who are used to information pills. These "security videos" are also hosted by @tiktokseguridad and, to quote the network, "combine education and entertainment"

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### 4.2.3. Regulations and authorities

It is peculiar that because of the Law on Minors of 23 July 2015 (Spain), when the image of a child is published or broadcast by a media outlet, including free-to-air television, his or her face is usually blurred in post-production for possible damage to his or her reputation or for possible interests. Moreover, even with parental consent, the procedure does not change. A simple glance at social media shows that this eventuality is not applied in the same way. The issue is relevant because some of these spaces have transcended the level of the media. Mark Zuckerberg, founder of Facebook, came to recognize this situation (Martínez, 2017).

The European Regulation establishes that to have access to social media, one must be 16 years old, although it delegates the final word to the member states. As we have explained, in the case of Spain, in accordance with the Data Protection Law regulated in art. 13 of Royal Decree 1720/2007 of December 21, the limit is fourteen years of age. Once this age has been exceeded "minors can manage their personal data in web environments without parental consent." Therefore, if they have their parents' permission, they can log in. The point is that it is very easy to bypass the legislation, as ultimately a connected terminal and an email are often the only key. It has to be assumed that this is the case across the board. The age indicated in a lax manner in the TiKToK network does not coincide with that of the Spanish legal system. This issue is common in other networks such as Facebook, Twitter or Instagram.

## 4.2.4. Self-regulation

Social media is a huge ICT area with thousands of versions and a very broad and diffuse typology. This may be one of the reasons why there is no single institution that represents them all. Another is the tremendous competition between them. However, this issue does not prevent the large platforms from building a self-regulatory space based on consensus. Despite this, there are parallel formulas in this respect.

It is worth mentioning the PEGI (Pan European Game Information) system, a model of labels to delimit digital content by means of a scale in the field of digital entertainment and culture, especially video games, although it also affects apps from various online shops. It is the developers who voluntarily submit to the scale in an attempt to avoid uncertainties and safeguard sensitive people. It is based on a colour code, where green means that it is suitable for everyone, amber that there are limitations and red that it is for an adult audience. They also indicate the ages with four bands: three, seven, twelve, sixteen and eighteen years old. Another interesting fact is the type of sensitive content the user will encounter (violence, indecent language, sex, fear, drugs, discrimination and online gambling).

Although they share characteristics and audience with traditional media, social networks move away from traditional control mechanisms. In this sense, TiKToK, when downloaded from Google PlayStore, has an amber PEGI age code, which makes it suitable for its target audience (teenagers). Apple AppStore, on the other hand, restricts its use to 12+. These digital marketplaces carry a certain screening function by explaining and cataloguing applications according to age ranges and typologies, affecting social media.

# 4.2.5. Platform control

As can be seen in the document, TiKToK's interior offers a normative framework and a considerable battery of monitoring tools. Going one step further, and despite the overwhelming amount of content being uploaded at every moment, it has a review system based on human control. The model supports automated systems that allow for finer and more accurate monitoring of what is finally published. This group is known as the "safety moderation team" and they receive specific training to try to counteract the entry of children under the age of thirteen (Elizabeth, 2021). If they become aware of an infraction the account is scrutinised and, if it is verified that the subject is a minor, the account is suspended.

The number of banned users is published in the so-called "Transparency Report" as proof of this. One of TiKToK's monetisation systems is the sale of virtual goods using its own currency. The social network is explicit about this: minors are not allowed to use this option. It has an automated moderation system that, together with the algorithm, removes content that spreads hate speech or harassment.

### 4.2.6. Collaborating external organizations

The sixth agent will be external organizations. The aforementioned "Pantallas Amigas (Friendly Screens)", which collaborates with TiKToK, works towards an educated cyber-citizenship (Palacio-Mieles

and Medranda-Morales, 2018). It has a channel with a large amount of information for parents and guardians who need to know how to manage their children's dealings with the synthetic space and other means of consultation. Consequently, TiKToK takes advantage of synergies with a recognized organization, which translates into an increase in the site's credibility. The organization carries out:

Projects and educational resources for the training of children and adolescents so that they can manage independently on the Internet, the ultimate goal being that they develop the digital skills and competencies that will enable them to participate in an active, positive and healthy way on the Internet.

This is not the only example. To combat cyberbullying, one of the most pressing problems of the new generations, TiKToK provides a number of external resources with organizations that are heavily involved in combating such a reprehensible phenomenon. These include the Citizens' Council, Red PaPaz, Chicos.net and the PAS Foundation, all of which are dedicated to supporting young people and improving citizenship in general. At the international level, it does the same with Family Online Safety Institute Internet Watch Foundation, WePROTECT Global Alliance. To corroborate possible information, it coordinates with institutions such as Agence France-Presse (AFP), Animal Político, Estadão Verifica, Lead Stories, Logically, Facta, Politifact, SciVerify, Teyit and Newtral as a partner in Spain. It is obvious that TiKToK builds bridges with institutions dealing with online coexistence, including that of minors.

## 4.2.7. Community

TiKToK provides users with a series of alerts to report inappropriate content. These channels also include specific forms to protect parents (see Figure 5). As stated, "if you believe that we have personal data about a child under that age or collected data from a child under that age." This is where the EU protection referred to above comes into play.

Another notice appealing to the community to report is found in the Parents' Guide: "following the TiKToK Community Guidelines the platform encourages the community to report any inappropriate content / conduct that a user may find." Another more fluid option for the community is when an inappropriate video is found and the "Share" button is clicked. The "Report" option opens, and when the option is clicked, the user is prompted with the reason. One of the possibilities is "Safety of minors", thus avoiding going to the forms section.

0	TikTok	► Ver a
Tu c	orreo electrónico*	
	mail@domain.com	
Soli	citud relacionada con la privacidad y la seguridad	
¿Qu	é tipo de solicitud quieres enviar?*	
	Solicitar información o una acción relativa a los datos cuenta	s de la
	Denunciar una infracción de privacidad o seguridad	
	Denunciar a un usuario menor de edad	
	Otro	
	Enviar	
sobi Las	sulta nuestra <b>Política de privacidad</b> para obtener más info e cómo recopilamos, usamos y compartimos información Normas de la comunidad también definen qué tipos de o uderan violaciones de la privacidad.	personal.

### Figure 5: One of the forms for reporting content related to minors

Source: TiKToK (2021)

#### 4.3. TiKToK vs. the evidence

The case study presents evidence that the system, while robust, is fallible. The platform can hardly be held fully accountable because, as with other sites such as Instagram, the basis for access and use is based on the person's honour and maturity. If you do not conform to the truth and self-responsibility, you can log in with all the options.



Source: Own elaboration from keywords (2021): child, institute, confinement Mallorca

TiKToK has carried out a sweep through the use of keywords looking for vulnerabilities. After testing with more than thirty terms (school, teacher, friends ...) it has been demonstrated that the control system is rigorous in this sense, but it is evident that it is not infallible. As a loophole, we have found channels starring underage children who share ownership with their parents, although most of them appear alone, telling their experiences or acting in innocent stories (1). Everything seems to indicate that TiKToK and the agents work solidly in the age group described above.

The situation changes from this age group up to the age of eighteen. In a few minutes of sampling, it is easy to see that there are many videos that do not comply with the norm. The terms "end-of-year trip" and "end-of-school trip Mallorca" were used, coinciding with the controversy that occurred at the beginning of the summer of 2021 by COVID-19. It was easy to find videos of teenagers drinking alcohol without a mask or social distance. Recordings were also found of young people running through the corridors of what are pronounced to be hotels affected by the quarantine (2). In the frame (2) captured, the hashtag "#4eso" can be seen, which would imply that the age of those involved must be around 14-15 years old, so it could be a case of misinformation, one of the assumptions pursued by the platform.

In the case of the confinement in Mallorca, those affected were 17-18 years old and were in their second year of secondary school. It is true that most of them are about to come of age, but it is likely that many of the individuals who appear in the videos are not yet come of age. In one of the videos in the mosaic (3), the author complains that the platform deleted the previous video for breaking some of the rules. In the end, she says that practically everyone was infected during their stay. If the term "institute" is used, questionable content is also evident. In a secondary school (4), supposedly in Cádiz, some students are hanging a desk out of the window with a rope. This obviously violates the rules of the school and the network. TiKToK bans materials "Contrary to the safety of minors" in its entirety.

In conclusion, it was not difficult for the authors to quickly find apparent inappropriate uses of the platform by groups of adolescents close to the age of majority (2nd Bachillerato). As the age range went down, the situation gradually decreased until it became negligible from 15 years of age onwards.

### 5. Discussion and Conclusions

The results obtained from the TiKToK analysis show that adolescents between 16 and 17 years old, despite the possible measures to be taken and the involvement of protective agents, can easily break the rules of publication and access to the digital space. The huge amount of content uploaded daily makes it impossible to have total control, although TiKToK relies on instruments for reporting inappropriate content by the community and other entities. It is confirmed that, despite the existence of a multitude of control tools, they are not entirely sufficient to tackle the issue despite their variety and the constant process of expansion and improvement. The research shows that TiKToK carries out intense monitoring work in Spain, especially with those under 16 years of age, so it is clear that the system is more robust among this age group (13-15).

The norms and instruments are developed in an attempt to delimit a multitude of situations of use and dissemination, but they are not entirely sufficient to protect children and adolescents, as evidenced by the possibility of finding content outside these rules. A reading of these texts suggests the need for greater specificity by country instead of such general texts. Along these lines, a useful resource would have been to include a table with the age of access by country and other fundamental data.

Education remains a cornerstone of the issue. One problem that has been identified is that some of the educational and informative content offered by TiKToK should be adapted for the various native screens, i.e. the computer and especially the smartphone. This logic should be extended to the receiver of the information, preparing more in-depth and exhaustive content for the parents, without renouncing an educational and / or pedagogical tone. At TiKToK, the training materials for adults can be more rigorous as they are very concise and do not cover all the doubts that may arise in a precise manner.

The results revealed a lack of advanced shared guidelines to initiate families in the first steps, which would be appropriate. It should also be remembered that we are in a digital context. The network should enable more flexible and dynamic channels than forms without having to give up the latter. One option would be to integrate chatbots or virtual assistants, ultimately adding human chats or voice lines. The resources devoted to this would be significant, but would improve the safeguarding of minors.

Another improvement detected in the study would be to eliminate the conceptual incompatibility of the PDFS integrated in the TikToK app and website. The document developed by Adobe is of high quality, but the format for transmitting information is not ideal for smartphones. The analysis showed that the web page is not very usable because, when clicking on the link to read it, it redirects to an external tab, which drags it out of the site. At the same time, its vertical layout is not desirable for the horizontal screens of conventional computers. If we appeal to the responsive version of the site, the printed A4 format is not the best option for the mobility paradigm or for mobile screens. In the app the problem is accentuated, as it involves several clicks, downloading the document and opening it with a specific program for this purpose, leaving the social network ecosystem again, something that goes against a correct user experience, hindering reading and learning.

In this analysis of the site structure, other problems were found, such as informative links that sent the user to a page in English. In some cases the translation was found, in others it was not. Despite the huge size of the website, this type of circumstance should be eliminated, especially when it comes to finding information relevant to the protection of minors.

Continuing with the experience and navigation in TiKToK, as proposed improvements, in the version of the app for young people (13-17 years old) it would have been effective to integrate the option "Report" option in the main screen and not on the "send" button. The study found that there were too many steps to activate it. However, it is recognized that another element in the main interface could cloud the interaction as its use would not be transparent. Something similar happens with the "Safety Videos". It is advisable to give them more visibility and increase their number, since they are effective and give robustness to the information. It is advisable to give emphasis to this type of options, which facilitates their location and would allow educating the user about their nature, functions and relevance. Once they are located, they are effective and provide solutions for a large number of situations.

The document has detected the inexistence of a specific self-regulation of social networks, so it is logical to infer that a point of interest would be to unify certain parts of their respective regulations and conditions of use. Homogenizing headings would imply a better understanding by the users of these digital habitats, both for adults and minors. If these networks self-manage certain control parameters from an organization, it would demonstrate their involvement and commitment to the defense of minors, strengthening the links with society.

The study proves, by showing the control tools offered by TiKToK (forms, report button, emails, etc.), that the user community is a key agent of the whole process. A greater implication on the part of this group would be necessary, which should be aware of both the regulations and the limits. It would be positive to inform and provide them with more and better tools to fulfill this task.

The limitations of the research are not having presented a greater number and variety of cases, as well as not having delved further into them, as they are objects of interest. This procedure is justified by the scarcity of existing literature on the central object of study, so this paper aimed to solve, in part, this epistemological gap. Thus, the present article is postulated as a first step in this line of research dealing with minors and their normative treatment with TiKToK, a socially relevant and necessary topic, especially from an ethical perspective. The proposed studies should deal with the subject, integrating qualitative and quantitative techniques that will appeal to the new generations as primary sources. It is also of special interest to involve in this process and issues the first-rate protective agents, i.e., parents and education.

In closing, it is evident that TiKToK (virtual emblem for the new generations), and the agents protecting minors, must continue to make efforts to minimize inappropriate access and creations. As a paradigm of a social network for new generations, this hypothesis can be extended to all the synthetic 2.0 environments used by young people. Minimizing toxic content in people in full development is a transcendental mission, and it is not being achieved, as the study shows. The situation leads us to think that without too much difficulty, it would be possible to find more harmful content than those exposed. That is why it is necessary to double efforts in this regard, increasing the instruments and improving the strategies. It is an urgent task to reduce these practices that affect minors by means of regulatory improvements, more and better instruments and the total involvement of all the agents involved.

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