

## The intensive use of the internet by children and adolescents in the context of COVID-19 and the risks for self-inflicted violence

Suely Ferreira Deslandes (<https://orcid.org/0000-0002-7062-3604>)<sup>1</sup>

Tiago Coutinho (<https://orcid.org/0000-0002-0545-9457>)<sup>2</sup>

**Abstract** *This essay aimed to discuss the implications of social isolation due to the COVID-19 pandemic for the intensive use of the internet among children and adolescents and its possible consequences for the practice of self-inflicted violence. We briefly discussed the anxiogenic potential and the reproduction of a “global fear” that are consolidated with the massive and unmediated exposure of the content consumed, which can increase the vulnerabilities to stress and suicidal ideas. We centered our debate on “recreational” practices, called “challenges” with self-harm power, carried out by teenagers on the YouTube website. This practice has been shown to increase with the social isolation measures. Our reflection on these risks builds on the theoretical perspective of digital sociability, and its implications for the internet-mediated interactions of adolescents.*

**Key words** *Self-inflicted violence, Internet, COVID-19, Social isolation, Online challenges*

---

<sup>1</sup> Instituto Fernandes Figueira, Fiocruz. Av. Rui Barbosa 716, Flamengo. 22250-020 Rio de Janeiro RJ Brasil. [deslandes.s@gmail.com](mailto:deslandes.s@gmail.com)

<sup>2</sup> Núcleo de Atendimento Farmacêutico, Escola Nacional de Saúde Pública, Fiocruz. Rio de Janeiro RJ Brasil.

## Pandemic and social isolation

On March 11, 2019, the World Health Organization (WHO)<sup>1</sup> declared that the new coronavirus (Sars-Cov-2) that caused COVID-19 shifted from the epidemic to a pandemic status. This decision was made given the exponentially increased number of cases worldwide. Thus, WHO suggested that all countries adopt the social isolation protocol as the main measure to contain the expansion of the pandemic.

It is known that such a measure was not adopted by all countries equally, nor by all groups and social classes. In Brazil, there is a profound inequality between those who had the social, financial, and health values that favor the adoption of this form of protection. However, undeniably, millions of people worldwide were forced to interrupt a good part of face-to-face human interactions abruptly. From one hour to the next, data transmission through digital means, generically called the Internet, became the only means available for the complete non-interruption of social and work interactions, in an attempt to simulate and reestablish a new form of normality in the face of the pandemic. If, before the social isolation protocol, the issue of fluidity in the border of online-offline sociability<sup>2,3</sup> was exhaustively discussed for the first time, contact with the offline world is only possible for these people in situations of isolation via the digital connection.

Starting from reflections stimulated by research results that aimed to analyze the relationship between digital social networks and the violence experienced and practiced in the digital environment by children and adolescents, this essay assumes that the social isolation adopted to face the COVID-19 pandemic intensified some elements related to digital sociability (hyperexposure, diluted public-private-intimate borders, self-spectacularization)<sup>4-8</sup> that create conditions for the exacerbation of digital violence.

The period of social isolation caused by this pandemic coincided with the moment of consolidation, popularization, and expansion, albeit unevenly, for all social classes of the so-called Internet 2.0. The main characteristics of Web 2.0 are the hyperinteractivity between users and the mobility in which these digital spaces can be accessed.

Driven by the massive amount of data exchanged on the broadband Internet, hyperconnectivity occurs through various tools such as the exchange of text messages, photos, audios, live transmission, meeting rooms; in short, mech-

anisms that enhance the interaction between people. The nanotechnology associated with the broad access of the Internet coverage area meant that these interactive spaces could be accessed anywhere at any time without the need for a mediator.

The hyperconnectivity and mobility of Internet 2.0 brought what the authors point out to be the main characteristic of digital sociability, the spectacularization of the “I” in the search for a media recognition of its persona<sup>9-11</sup>. From platforms such as Instagram, Twitter, Facebook, Tinder, among others, we can observe that digital world-mediated sociability depends on the way that the “I” will present itself to the “others” who present themselves in different ways in the discourse constructed by this digital “I”. Pretending being loved, appreciated and applauded, individuals would be subjected to what Sibilia<sup>9</sup> called “tyrannies of visibility”, having to stylize and cultivate their images along the lines of characters in the audiovisual media and “act as if they were always in front of a camera, willing to show themselves on any screen”. The author states that we live in times when personalities are summoned, and visibility is a new way of existing in Western societies<sup>9</sup>. Hyperexposure thus becomes an intrinsic feature of this digital sociability. Such elements are exacerbated in the digital mediations of interactions between the youngest, for whom self-esteem is affirmed from acceptance on social media, through the lenses and approval of the other (known and unknown)<sup>5</sup>.

This construction of the image of oneself mediated by technological tools can potentiate a phenomenon characteristic of modernity and the emergence of large urban centers to place intimacy as the main focus of spectacularization<sup>12,13</sup>. According to Sibilia<sup>9</sup> “The constant reaffirmation of the self in its complex relations with the other, the narrative, privacy, visibility, instantaneity, the cult of personality, fiction, loneliness, and spectacle, allows understanding the transformation of intimacy into a spectacle as a complex relationship between the self, others and us within cyberculture”.

In this digital sociability driven by a spectacularization of the self whose main core of exposure is intimacy, we can observe that the main consequence is a hurdle between the boundaries that separate the public and private spheres. Currently, users, billionaires who own platforms, lawyers, politicians, and civil society, discuss the new frontiers of these levels through controversial cases such as exchanging intimate images,

personal documents, or capturing health-related data. It is still unclear to the Internet 2.0 user whether a publication, comment, or sharing of audiovisual material belongs to the public or private spheres.

In contrast, in this context of exception to everyday interactions as experienced with social isolation in the COVID-19 pandemic, the Internet allows some form of normality to be reestablished by simulating aspects that were previously restricted to the offline world. Besides the home-based work, one can observe that people's routine started to be mediated exclusively by the digital world, attempting to print a schedule of activities capable of filling isolation time healthily: Pilates, yoga, weight training, podcast, meetings, parties, online presentation, network gambling, video game competitions, among others.

Thus, it is expected that circulation and interaction in digital environments in the context of the pandemic can avoid the various side effects of isolation such as depression, anxiety, loneliness, greater vulnerability to family and partner violence, possible suicide attempts linked to the lack of face-to-face sociability and the social climate of fear vis-à-vis the consequences of the pandemic. Some support that interactivity and mobility of the Internet can mitigate the effects of this measure that suppressed the presence of human interaction for so many. Most transnational health and child protection agencies suggest that social contact should be maintained through digital channels as a means of prevention and seeking support for situations involving the main violence in the family sphere and romantic intimacy, as well as self-inflicted violence<sup>14,15</sup>. However, what would these adolescents' vulnerability to violence be like, precisely because of the longer contact with social networks in the digital environment?

Thus, this essay seeks to discuss the implications of social isolation due to the COVID-19 pandemic for the intensive use of the internet among children and adolescents and its possible consequences for the practice of self-inflicted violence. According to the WHO definition<sup>16</sup>, self-inflicted violence comprises a broad spectrum of events, such as suicidal ideas, self-harm, attempted suicides, and suicides.

### **Intensive use of the internet and the vulnerability to self-harm attempts and practices**

The first aspect to be discussed concerns the contents (information, memes, testimonies, among others) that speak of the pandemic situation, its prognosis, and high anxiogenic potential, potentiating a "global fear" ("totalizing fear felt by all the inhabitants of a group while expecting an enormous amount of deaths that potentially or actually will affect all, and end the world as we knew it")<sup>17</sup>.

The coronavirus pandemic is the first we experience online. The internet, with its multiplying capillary communication capacity, provides a global sensitization while creating expectation and paranoia, hoping that the large numbers of sick and dead, supposedly defined with millimeter accuracy daily, do not reach our dwelling places with the same intensity<sup>17</sup>.

According to the UNICEF guidance report on family management during COVID-19, children or adolescents can increase their burden of stress and anxiety (UNICEF, 2020)<sup>18</sup> without parental help to assign meanings to the pandemic. Thus, international agencies such as UNICEF, World Health Organization, Internet of Good Things, End Violence Against Children, USAID suggests that information about the pandemic be mediated by parents, without secrets, but with language understandable for different ages and stages of development, allowing children and adolescents to express their feelings, anxieties, and concerns, and thus psychically and culturally elaborate the situation, without prejudice or xenophobia<sup>14,15,18</sup>. Naturally, this orientation comes with the idealization that parents and other adults have discernment and temperance behaviors, in a rationalizing logic, which does not take fully into account the processes of cultural interpretation, appropriated differently by each social group.

As alerted by the child protection agencies, the mass consumption of content on the epidemic situation (number of cases, number of deaths) may generate anxiety, panic, and, ultimately, depression. Such issues may be much more intense when children or adolescents already evidence previous mental health conditions that require monitoring, thus establishing exacerbated vulnerabilities to suicidal ideas and attempted suicides.

The excessive use of the internet itself can also generate a type of addiction<sup>19</sup>, a disorder that generates dependence, expressed in the five

categories classified by the Center for Online Addiction: 1- Cybersex, 2- Relational (from social networks), 3- Net Gaming Addiction, which includes a wide range of behaviors, such as gambling, video games, shopping, and obsessive e-commerce, 4- Search for information; 5- Game addiction. If the youngest were already netizens with the longest time of use<sup>20</sup>, this condition of exposure seems to deteriorate with the social isolation measure. Once again, the limits between the nosological definitions of disorder and normality will be redefined and interpreted by the degree of cultural tolerance to such practices.

Therefore, we infer that the intensive use of the internet in the context of this digital sociability in an exceptional situation of social isolation may enhance the vulnerability of children and adolescents to self-inflicted violence.

Next, we will address self-harm, which does not necessarily involve emotional disorders or depressive conditions but is seen as cultural practices accepted socially as “game and play” in the online universe.

### **The internet, time use, and self-image management**

The guides that address the topic of time use among adolescents in social isolation due to the pandemic suggest the creation of routines for study, leisure, and exercise activities<sup>15,21</sup>. If it is true that such suggestions take into account a healthy routine, there is also a dose of idealization of the conditions for its realization, which depending on the space available, the number of children and other people residing in the house may hinder somewhat the compliance with such advice. In its guide “How teenagers can protect their mental health during coronavirus (COVID-19)”<sup>21</sup> UNICEF provides tips for managing stress and regarding time use, highlighting suggestions for creating distractions and maintaining online contact with the network of friends. In the tip “be kind to yourself and others”, it mentions the possibility of adolescents experiencing cyberbullying and recommends seeking help from adults if this occurs.

Even in quarantine, adolescents maintain their digital sociability bonds and find themselves, as before, called upon to maintain their visibility in the online universe. Their image needs to circulate in the circuits of their relationships, and for some, the expectation already widely stimulated in this cultural environment of

“becoming famous” and perhaps a “digital influencer”<sup>22</sup> is reaffirmed. The quest for fame in digital media reorganizes conscience for the constant display and monitoring of detailed accounts of life. Life as a whole can be mediatized. The author’s personality, his adventures, routines, and opinions are supported by imagery, sound, text, audiovisual material or all interconnected at the same time, in order to show “life as it is”<sup>23</sup>. These daily routine mediatization techniques are escalated among web celebrities, who usually transform their routines into reality shows that can be followed through the digital world.

One of the main platforms hosting the audiovisual material of these web celebrities is YouTube. In their book “YouTube and the digital revolution”<sup>24</sup>, they add that the success of the site may also have been caused by a shift of the company’s ideals. This change was observed in its new main slogan. In the first years of its existence, the site’s slogan was “Your Digital Video Repository”. The new slogan is “Broadcast yourself”, which expresses the company’s new wishes and ideas. This new concept has transformed the site from a resource for personal video content storage to a personal expression platform, placing YouTube in the context of the ideas of a user-led revolution that characterizes the rhetoric surrounding “Web 2.0”. In this new phase, YouTube attracts attention to the content while offering a cash share in ad sales on the site.

Thus, YouTubers have become an important source of information and entertainment for the “digital native” generation<sup>25</sup>. Influential YouTubers are often described as micro-celebrities. Conceived as a bottom-up social media video platform, YouTube conveys the feeling that micro-celebrities are not involved with the established and commercial system of celebrity culture, appearing to their audience as self-governing and independent. This appearance, in turn, makes YouTube users more understandable and authentic, also stimulated by the direct connection with the viewer using the means of interactivity provided by YouTube (comments, messages, and links).

One of the main contents made available on YouTube that portray this self-spectacularization is the online challenges that involve some kind of self-harm. The peculiarity of these acts is that they have the tone of “play” or take the form of a “game”, without their participants necessarily being aware of the harm they can suffer when performing the prescribed tasks.

The most famous challenge was known as the

“Blue Whale” game, whose creation is attributed to Russian Filipp Budeykin, who allegedly recruited young people to suicide groups. The game involved a series of daily tasks that were sent in advance or instantly and even challenged self-mutilation, culminating in the task of committing suicide<sup>26</sup>. Several “challenges” are launched, often by young YouTubers or teenagers who invite their audience to drink boiling water, inhale deodorant and hold their breath, go into apnea indefinitely, hang themselves, take self-portraits (selfie) in risky situations, swallowing substances, self-harm and even killing yourself. Such “challenges” are seen as a joke and an event to be filmed and posted, gaining popularity in several countries.

From a survey conducted on Google Trends, it was possible to observe that the search for the term “challenges online” has grown considerably worldwide after the social isolation measure was implemented. Following the history of recurrences of this keyword in the Google search engine, we identified that as of March 8, 2020, the curve that represents the number of searches for this term had risen sharply in the last 12 months. It is interesting to note that the peak of this graph happens on April 12, when the highest number of searches was reached in this period (Figure 1).

We will take as a case to illustrate this debate one of the challenges that has spread in Brazil in times of pandemic and fear of infection by the new COVID-19: the challenge of alcohol gel – one of the most requested products for hygiene and infection prevention. According to experts, 70% alcohol would be effective in eliminating the virus. Along with the masks, the product has become a symbol of fighting the pandemic, causing shortages in several Brazilian states. Taking advantage of the product’s popularity and high media exposure, several YouTubers proposed to their audience the Alcohol Gel challenge.

Among the 10 most accessed Brazilian videos from the search made with the keyword “Alcohol Gel Challenge”, the most popular challenges with the product address the following practices: inhaling, drinking and setting fire to a quantity of the product in the body of the challenger, or spitting the product into a flame. The video with the highest access rate to this small collection had 421,000 views in just one week, and the one with the lowest access rate, 18,023 views.

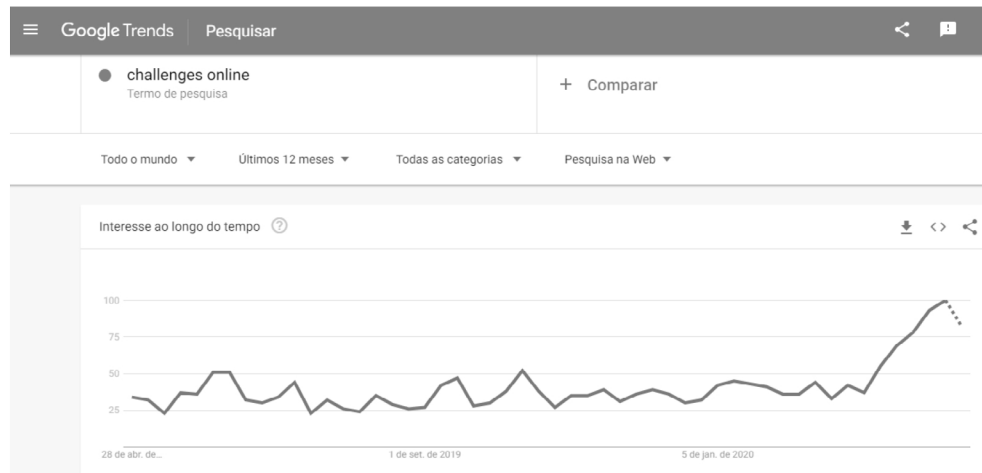
In the inhalation videos, the challenges are to place a small amount of alcohol gel on a surface in the shape of a straight line and with a straw or any other cylindrical object to inspire the alcohol

gel into the challenger’s nostril, causing reactions such as burning, sneezing, vomiting, nausea and the need to drink water. In the challenges of ingestion, the challenger proposes to his audience to drink alcohol gel directly from its bottle as if it were a dose of a distilled drink.

Just as the challenges of inhalation, several children and adolescents provide their statements about the side effects experienced. The last type of challenge carried out with alcohol gel was the one that gained greater notoriety and repercussion, forcing YouTube to remove it from its platform for violating the security rules established by the company. A recent search could not return the video recording of this challenge, leaving only reports and comments from other YouTubers on the dangers involved. It is the challenge of introducing the alcohol gel in the mouth and then spitting this fraction of the product into the fire of a lighter or candle. Also, involving the risk of burns, there is still the possibility of spreading the product on one’s hands or arms and setting it on fire. Another challenge carried out with alcohol gel, but which does not offer risk to the participants, was the challenge idealized by Falcão, a player of the Brazilian indoor soccer team, which consists of making the largest number of “keepy uppies” with the product bottle or spreading it in the hands.

The challenge of alcohol gel is certainly ephemeral because new challenges will appear with each new theme or situation that attracts the attention of the media and, through that, the possibility of gaining visibility. The challenges of “fainting”, hanging, drinking alcoholic beverages, hot water, among others, took turns on the platforms, replaced weekly by more spectacular ones.

The challenges are not new children’s practices. Several generations played at challenging or carrying out activities that involved some risk before a group of peers, showing courage and protagonism<sup>27,28</sup>. However, on the internet, the role of challenges is expanded by digital culture, without the face-to-face mediation of friends or adults. Not all challenges involve damage, they can have an “overcoming”, athletic or skill performance feature, but they can also involve risks with great potential to harm health and physical integrity. Moreover, exactly the challenges with such risks are the ones that gain greater notoriety, starting to work as a strategy, in the guise of “play”, which has the potential to allow prominence in the digital dissemination media, perhaps to be “famous” in its groups.



**Figure 1.** Distribution of online searches for Online Challenges, April 2019-April, 2020.

Source: Google Trends. <https://trends.google.com.br/trends/>. Access on 23/04/2020.

### Final considerations

The WHO “COVID-19 parenting” guide<sup>15</sup> recognizes that the use of the internet for adolescents is essential to their sociability, but suggests that the content be known and even monitored by parents, which is a controversial topic, as it concerns the autonomy and privacy of the youngest, on the one hand, and parental control, on the other<sup>28,29</sup>.

The challenge also involves monitoring that does not occur technically (creating barriers to access certain content, for example), as parents, in general, have less digital mastering vis-à-vis teenagers and even children. Institutions that work with the prevention of violent and harmful practices on the internet, such as SaferNet, Instituto Dimicuida, Inhope, among others, support the perspective of digital education.

If adolescents are skilled with technologies, on the other hand, they are immature to discern the risks involved in certain current practices in digital sociability, and the keys of interpretation and mediation of content and information that are consumed almost without “filters”.

Dialogue and listening without blaming judgment are still the most effective tools to learn

from children what activities they do online. The opportunity to discuss the risks of harmful digital practices is given in the context of intensive internet use that we live from the health experience of social isolation. On the one hand, not trivializing such challenges as a “game” or “play” is a way of helping adolescents to question the risks involved and discuss the identity marks of this children’s digital sociability. On the other hand, the playful, challenging, and “transgressive” nature as marks of online connectivity are not removable, nor should they be “demonized”.

Finally, younger people also need the help of older generations to decode the information they receive via the internet and thus signify the pandemic, because, without such mediation, one can fall into the trap of an unbounded threat, without agency or role to address it.

We believe that, besides creating protocols and measures exclusively for adolescents regarding the prevention of self-inflicted violence forms through clear language that is compatible with their daily lives, it is necessary to bring this public into the role of the actions and measures that will be adopted during and after the pandemic.

## **Collaborations**

SF Deslandes worked on the design and drafting of the text. T Coutinho worked on drafting and reviewing the text.

## References

1. World Health Organization (WHO). *Coronavirus disease 2020 (COVID-19). Situation Report – 67*. Geneva: WHO; 2020.
2. Horst H, Miller D, editors. *Digital anthropology*. London: Berg; 2012.
3. Daniels J, Gregory K, Cottom TM, editors. *Digital sociologies*. Bristol, Chicago: Policy Press; 2017.
4. Keen A. Hipervisibilidade. A era da grande exibição. In: Keen A. *Vertigem digital: porque as redes sociais estão nos dividindo, diminuindo e desorientando*. Rio de Janeiro: Zahar; 2012. p. 9-26.
5. Bruno F. *Máquinas de ver, modos de ser*. Porto Alegre: Editora Sulina; 2013.
6. Lemos A. As estruturas antropológicas do ciberespaço. In: Lemos A. *Cibercultura: Tecnologia e Vida Social na Cultura Contemporânea*. 7ª ed. Porto Alegre: Editora Sulina; 2015. p. 127-162.
7. Oisakawa R. Dinâmicas relacionais contemporâneas: visibilidade, performances e interações nas redes sociais da internet. In: Primo A, organizador. *Interações em rede*. Porto Alegre: Editora Sulina; 2016. p. 91-109.
8. Recuero R. Ator de ameaça à face e à conversão em redes sociais na internet. In: Primo A, organizador. *Interações em rede*. Porto Alegre: Editora Sulina; 2016. p. 51-69.
9. Sibilia P. *O show do eu: a intimidade como espetáculo*. Rio de Janeiro: Nova Fronteira; 2008.
10. Abidin C. *Internet celebrity Understanding Fame Online*. Bingley: Emerald Publishing; 2018.
11. Santaella L. Intersubjetividade nas redes digitais. In: Primo A, organizador. *Interações em rede*. Porto Alegre: Editora Sulina; 2016. p. 33-47.
12. Debord G. *A sociedade do espetáculo: comentários sobre a sociedade do espetáculo*. Rio de Janeiro: Contraponto; 1997.
13. Giddens A. *Modernidade e Identidade*. Rio de Janeiro: Jorge Zahar Editor; 2002.
14. Children EVA. *Protecting children during the COVID-19 outbreak: resources to reduce violence and abuse*. *End Violence Against Children*. [acessado 2020 Abr 22]. Disponível em: <https://www.end-violence.org>
15. World Health Organization (WHO), UNICEF, Children EVA, Things IG, Health Pfl, USAID, Center for Disease Control and Prevention, GCFL. *COVID-19 parenting*. [acessado 2020 Abr 22]. Disponível em: <https://www.covid19parenting.com>
16. Krug EG, Dahlberg LL, Mercy JA, Zwi AB, Lozano R. *World report on violence and health*. Geneva: World Health Organization (WHO); 2002.
17. Ribeiro GL. *Medo Global. Boletim n. 5. Cientistas sociais e o coronavírus*. *Anpocs*. [acessado 2020 Abr 22]. Disponível em: <http://www.anpocs.com/index.php/ciencias-sociais/destaques/2311-boletim-n-3>
18. United Nations Children's Fund (UNICEF). *How teenagers can protect their mental health during coronavirus (COVID-19)*. [acessado 2020 Abr 22]. Disponível em: <https://www.unicef.org/coronavirus/how-teenagers-can-protect-their-mental-health-during-coronavirus-covid-19>. 2020
19. Salicetia F. Internet Addiction Disorder (IAD). *Procedia* 2015; 191:1372-1376.
20. Agência Brasil. *Brasil tem 24,3 milhões de crianças e adolescentes utilizando a internet*. [acessado 2020 Abr 22]. Disponível em: <https://agenciabrasil.ebc.com.br/geral/noticia/2019-09/brasil-tem-243-milhoes-de-criancas-e-adolescentes-utilizando-internet>
21. United Nations Children's Fund (UNICEF). *How to talk to your child about coronavirus disease 2019 (COVID-19)*. [acessado 2020 Abr 22]. Disponível em: <https://www.unicef.org/coronavirus/how-talk-your-child-about-coronavirus-covid-19>. 2020
22. Vasconcellos A. *Celebridade 2.0: o Youtube e a nova fábrica de famosos* [dissertação]. Vitória: UFES; 2018.
23. Vasconcellos AM, Zanetti D. (Web) celebridade: O sujeito ordinário e a narrativa cotidiana sob holofotes. *Lumina* 2017; 11(1):1-16.
24. Burgess J, Green J. *You Tube e a revolução digital*. São Paulo: Aleph; 2009.
25. Palfrey J. *Nascidos na era digital: entendendo a primeira geração de nativos digitais*. Porto Alegre: Artmed; 2011.
26. Silva H, Barbosa JVA. Baleia azul: do pensamento ao ato. *Psicologia* 2017; 19.11.
27. Le Breton D. Le goût de la syncope: les jeux d'étrangement. *Adolescence* 2010; 72(2):379-391.
28. Guilheri J, Andronikof A, Yazigi L. "Brincadeira do desmaio": uma nova moda mortal entre crianças e adolescentes. Características psicofisiológicas, comportamentais e epidemiologia dos 'jogos de asfixia'. *Cien Saude Colet* 2017; 22(3):867-878.
29. Torres F, Vivas G. Comunicación electrónica y cyberbullying: Temas emergentes para la investigación e intervención socioeducativa. *Psicología desde el caribe* 2012; 29(3):707-730.
30. Ferreira TR, Deslandes SF. Cyberbullying: conceituações, dinâmicas, personagens e implicações à saúde. *Cien Saude Colet* 2018; 23(10):3369-3379.

---

Article submitted 24/04/2020

Approved 26/04/2020

Final version submitted 28/04/2020