Blood donors wanted: narrative innovation on *TikTok* to enable mobilization

Raquel Martínez-Sanz; Amaia Arribas-Urrutia

Nota: Este artículo se puede leer en español en: https://revista.profesionaldelainformacion.com/index.php/EPI/article/view/87171

Recommended citation:

Martínez-Sanz, Raquel; Arribas-Urrutia, Amaia (2023). "Donors wanted: narrative innovation on *TikTok* to enable mobilization". *Profesional de la información*, v. 32, n. 3, e320305.

https://doi.org/10.3145/epi.2023.may.05



Raquel Martínez-Sanz https://orcid.org/0000-0002-4753-0282

Universidad de Valladolid Facultad de Filosofía y Letras Plaza del Campus, s/n 47011 Valladolid, Spain raquel.martinez.sanz@uva.es



Manuscript received on 8th November 2022 Accepted on 28th February 2023

Amaia Arribas-Urrutia M https://orcid.org/0000-0001-9452-8364

Universidad de Valladolid Facultad de Filosofía y Letras Plaza del Campus, s/n 47011 Valladolid, Spain amaya.arribas@uva.es

Abstract

The explosive success of *TikTok* is one of a long list of phenomena that are transforming audiovisual relationships, creation, and consumption (Gómez-García; Vicent-Ibáñez, 2022). At the same time, social networks are demonstrating a capacity for outreach, awareness, and activism through innovative narratives that impact the audience. Therefore, we ask if and how, in addition to entertaining and being a place to find the latest trends, *TikTok* can help promote health activism linked to blood donation –an act of social responsibility– the collection of which has been in sharp decline for years (Carter *et al.*, 2011; Huis-in 't-Veld *et al.*, 2019). Through multimodal discourse analysis (Kress, 2012), we determine the characteristics, significance, and communicative resources of the *tiktoks* that the platform grouped under the hashtag #donasangre [#DonateBlood], ultimately comparing them with the perception and relationship that a large group of young university students expressed in focus groups. Among the results, we highlight how content on *TikTok* is reinterpreted and appropriated, as well as the false myths perpetuated among young people that keep them from donating and reinforce the importance of health institutions taking an active role in the online conversation and integrating narrative innovation into their content creation dynamics. Qualitative analysis of comments (6,215) revealed that there is an audience that "comes together" (Juris, 2012) and whose members reaffirm their status as donors and whose experience tempers the idea of donating being stressful and scary.

Keywords

Health communication; Social media; Social networks; Blood donation; Recipients; *TikTok*; Social transformation; Activism; Misinformation; Digital citizenship; Innovation; Storydoing; Narratives.

Funding

This article is a result of:

1. The R+D+i project "Innovation ecosystems in the communication industries: actors, technologies and configurations for the generation of innovation in content and communication. Innovacom" ["*Ecosistemas de innovación en las industrias de la comunicación: actores, tecnologías y configuraciones para la generación de innovación en contenido y comunicación. Innovacom*"], funded by the Spanish State Research Agency [*Agencia Estatal de Investigación*] (PID2020-114007RB-I00) , MCIN AEI/10.13039/501100011033.

2. The author Raquel Martínez-Sanz is a beneficiary of a Requalification Grant (2022–2024) funded by the Next-GenerationEU *European Commission*.



1. Introduction

Social networks are a powerful channel for the dissemination of important content (**Gutiérrez-Lozano**; **Cuartero**, 2020; **Mannell**; **Ahmad**; **Ahmad**, 2018; **Syrdal**; **Briggs**, 2018); their dynamics have been able to turn each user, either individually or corporately, into a valuable driver of thoughts, lifestyles, or information, thereby challenging the dominance of traditional media (**Dubovi**; **Tabak**, 2021; **Vandenbosch**; **Eggermont**, 2016; **Campos-Freire** *et al.*, 2016). In addition to inevitably losing control of the message through its exposure to the social audience's comments, reinterpretation, and criticism (**Zulli**; **Zulli**, 2020), the current information ecosystem is faced with the phenomenon of disinformation (**Semi-nario-Córdova**, 2021; **Gisondi** *et al.*, 2022), which encompasses both the spread of malicious information or infoxication –an instigator of hate speech– (**Azzimonti**; **Fernandes**, 2023; **Porroche-Escudero**, 2017) and a lack of cited sources for a topic.

Altruistic blood donation has a limited media presence (**Bomfim-de-Souza**; **Santoro-Domingo**, 2020), especially considering the vital role it plays in any public health system (*WHO*, 2022). The fact that blood cannot be manufactured and that it expires and the variety of applications for it in an increasingly longer-living population make hemoderivatives a valuable asset, dependent upon the sense of responsibility and civic-mindedness of citizens (**Eser** *et al.*, 2010). Healthcare organizations have addressed this concern mainly by launching massive communication campaigns (**Weidmann** *et al.*, 2022). However, the emergence of platforms such as *TikTok*, the sixth most important social network globally (*Hootsuite*; *We are Social*, 2022), which is popular with very young age groups (*IAB*, 2022), has forced institutions to adapt and innovate content with the aim of capturing the attention of this age group (**Waheed** *et al.*, 2020; **Yuan** *et al.*, 2016), which is especially valuable because it is a potential asset when it comes to both donating and communicating the altruistic values and responsibility that define this act (**Padilla-Garrido** *et al.*, 2021; **Rael** *et al.*, 2021).

Health is increasingly socially valuable. It is understood as not just the absence of disease but a state of complete physical, mental, and social well-being (**Francis**, 2021; **Rojas-Rajs**; **Jarillo-Soto**, 2013). Health communication concerns how the recipient can take action, either by developing a new healthy habit or by eliminating an established harmful habit (**Martínez-Beleño**; **Sosa-Gómez**, 2016). And despite the features that digital media offers for carrying out health activism, these tools are underutilized by healthcare organizations (**Sobowale** *et al.*, 2020; **Strauck-Franco**; **Guillén-Arruda**, 2017).

With this in mind, the main objective of this research is to analyze the narratives about altruistic blood donation constructed on *TikTok*, a social network on which entertainment, ephemeral attention (**Navarro-Robles**; **Vázquez-Barrio**, 2020), and trivial topics (**Olivares-García**; **Méndez-Majuelos**, 2020) reign, but which has shown a great capacity for raising awareness (**Hautea** *et al.*, 2021) and disseminating information (**Martínez-Sanz**; **Buitrago**; **Martín-García**, 2023). Secondarily, we hope to:

O1. Identify the narrative innovation aimed at mobilization that has been developed on TikTok.

O2. Analyze the conversation generated on *TikTok* around the topic and verify the audiovisuals' mobilizing effect.

O3. Explore young people's stance on altruistic blood donation and compare it with the stories uploaded to *Tik*-*Tok*.

In addition, several research questions are posed to help further explore the topic. They are as follows:

Q1: What is the purpose of posting videos about blood donation on TikTok?

Q2: What communicative resources do content creators use on *tiktoks* about blood donation to mobilize the audience; do they combat the myths associated with this practice?

Q3: Does the audience show a commitment to action through their comments?

Ultimately, we hope that the knowledge derived from this study will improve institutional health communication focused on the importance of being a blood donor, pointing out digital narrative innovations that further the mobilization and perceptions of the target audience. With all this in mind, we hope to demonstrate *TikTok*'s capacity to raise awareness of and promote healthy and humanitarian lifestyles.

2. Theoretical framework

2.1. Social media health activism: giving blood to give life

The concept of health has evolved extensively in recent decades, taking on the idea of not only the absence of disease but also the development of a state of physical, mental, and social well-being (*WHO*, 1986). In this sense, health communication focuses its efforts on promoting the adoption of healthy lifestyles by increasing public knowledge, helping people learn health skills, spreading the word about the benefits of behavioral change, and refuting myths and misconceptions (**Francis**, 2021; **Rojas-Rajs**; **Jarillo-Soto**, 2013).

The misinformation provided in the health field is the result of either the unintentional propagation of erroneous content or the premeditated dissemination of intentionally misleading messages (**Salaverría**, 2021). Social networks have created an information ecosystem full of data mixed with opinions and often unverified claims. Thus, public health today is faced with the challenge of curbing and disproving false, inaccurate, or incomplete news (**Seminar-Córdova**, 2021; **Porroche-Escudero**, 2017). This situation is exacerbated by health agencies' segregation of information, posing a challenge for their institutional communication, given that they must redouble their efforts to inform, prevent, and motivate effectively in the interest of collective health. The various stakeholders who produce content can generate the same level of social impact on social media as health professionals

It is possible to approach the experience of health communication using an informational model –already outdated – that is aimed at the adoption of content that inspires action through messages that come mainly from authorized sources, physicians, and health institutions, and the extensive use of the mass media, or using a relational model (Veron, 1996) that involves recognizing that messages are reinterpreted, whereby discourses and meanings have a greater capacity to be heard, read, or perceived. Social networks, which play an important role in the social production of meaning, are technological mediations that construct social relationships (Arribas-Urrutia; Islas-Carmona; Gutiérrez-Cortés, 2019).

In the Internet, social movements have found an excellent channel for their exposure and collaborative strategies, turning cyberspace into an interactive, collaborative, and participatory space (**Sola-Morales**; **Zurbano-Berenguer**, 2020). The objective of digital activism, which offers the user a new way to live out digital citizenship, is communicating, promoting, and defending social, political, or cultural causes, among others, in the digital environment (**Candón-Mena**; **Benítez-Eyzaguirre**, 2016). It is worth remembering that health professionals are not the only ones who can play a key role in the process of social change in health –the various stakeholders who produce meaning, capable of having a great impact on society, can, as well (**Mannell**; **Ahmad**; **Ahmad**, 2018).

Social networks have been particularly active during the recent Covid-19 health crisis, creating such dissimilar effects as providing misinformation (**Gisondi** *et al.*, 2022), raising awareness (**Hautea** *et al.*, 2021), or promoting activities beneficial to health (**Martínez-Sanz**; **Buitrago**; **Martín-García**, 2023). Consequently, health activism aims at a social transformation that leads citizens to develop a collective conscience about a certain health issue –in our case, altruistic blood donation.

Blood's health applications are numerous, including transfusions to alleviate blood loss during surgery or trauma, the production of drugs and vaccines, and the treatment of blood diseases (*WHO*, 2022). In Europe, blood is collected through a voluntary and unremunerated system that has experienced a sharp decline in recent years (**Carter** *et al.*, 2011). In addition, during the Covid health crisis, the fear of contagion, social isolation measures, and the increased demand for plasma, used to improve the recovery of patients admitted for Covid, caused stocks to fall sharply, greatly increasing mass calls for assistance (**Weidmann** *et al.*, 2022; **Waheed** *et al.*, 2020).

In addition to having a better state of health, which makes them the most suitable subjects for donation in terms of quality, young people are a population segment with a higher rate of social involvement (**Padilla-Garrido** *et al.*, 2021; **Rael** *et al.*, 2021). However, as research by **Greffin** *et al.* (2021) and **Hupfer**, **Taylor**, and **Letwin** (2005) has shown, there are significant barriers to motivating them to action, the most repeated of which are the fear of pain, needles, and having a bad experience. Likewise, the lack of information and role models negatively condition the intention to donate. **Kalargirou** *et al.* (2014) suggest targeting recruitment campaigns to explain the real asset needs. A survey of 28 European Union member states revealed that, on average, 30% of non-donors would come forward to donate to alleviate stock shortages (**Huis-in't-Veld**; **De-Kort**; **Merz**, 2019).

The factors that influence behavior and whose approaches drive our study has been examined from the point of view of social psychology and communication. Thus, **Grunig** and **Hunt's** (2003) situational theory of audiences focuses on the environment as the main element in transforming a passive individual into an active one, whereas social cognitive theory (**Bandura**, 2004) points out the importance of modeling and self-efficacy, defined as the self-confidence to overcome fears and take action. Thibaut and Kelley warn, using the theory of social exchange (**Garza-Guzmán**, 2009), that all human relationships are shaped by cost-benefit analysis and the comparison of alternatives, predicting people's behavior when it comes to perceived rewards and costs. And Katz, Blumler, and Gurevitch's uses and gratifications theory (**Sheldor; Newman**, 2019) explains media consumption, including that of social networks, based on the satisfaction of the specific wants and needs of audiences, who take an active role.

TikTok is the social network that has generated the most interaction in 2022, with an increase of 107%, with 250% more views than in the previous year (*IAB*, 2022). The power that this network of short videos has to enhance youth expression, identity development, and community membership makes *TikTok* the ideal platform for spreading activism. Traditional methods for mobilization have been adapted to the digital environment, developing new ways of communicating and producing content that transform collective action and emphasize the subject's power to become a player (*Arribas-Urrutia*; *Islas-Carmona*; *Gutiérrez-Cortés*, 2019).

2.2. Innovative narratives: from storytelling to storydoing on TikTok

Creativity and innovation in content promote its consumption (**Gómez-García**; **Vicent-Ibáñez**, 2022). Young people produce and search for viral, fresh, ephemeral, and fun content on *TikTok*. Likewise, they value online audiovisual content for its spatiotemporal immediacy, its thematic variety, and their identification with the creators (**Navarro-Robles**; **Vázquez-Barrio**, 2020), which is associated with a creative demand. The stories that are produced and disseminated on social networks are designed to engage an audience that prioritizes rapid consumption and viralization, turning them into echo chambers (**Rodríguez-Cano**, 2018). Consequently, as **Gutiérrez-Lozano** and **Cuartero** (2020) point out, a transformation is taking place in the way in which young people relate to audiovisual products. With *storydoing*, the *tiktok*er can take stronger ownership of the cause they are promoting, making it more credible while also developing their creative qualities

The creative principle of empathy leads the receiver to identify with the story and its protagonists. Empathy humanizes the relationship and develops a deep understanding of people's motivations and needs. Storytelling has the ability to instill empathy (empathetic storytelling) in the audience, and through it, to move them. The work of **Burgess**, **Rogers**, and **Jeffries** (2022) demonstrates that storytelling is a useful resource for the topic of health because it awakens solidarity in people. Storytelling is ideally suited to institutional communication by showing the more human face of the company, its corporate values, its actions, and its social programs to the community, thus engendering greater trust (**Zabala-Cia**; **Lorenzo-Sola**; **González-Pacanowski**, 2022).

However, storytelling has a greater impact if, in addition to narrating, it provides boots-on-the-ground proof of what is being done or advocated for. "Storydoing" consists of showing videos of the actions, testimonials, or rationales that spur action. **Rodríguez-Ríos** and **Lázaro-Pernias** (2022) define it as a new narrative discourse that involves people in a cause and encourages them to participate by co-creating and, in the corporate case, spreading the brand story through their social networks.

With storydoing, the *tiktoker* has the advantage of taking stronger ownership of the cause they are promoting, making it more credible. The user develops their creative qualities and turns the application into a socializing agent of content (**Moreno-Barreneche**, 2022). Thus, *TikTok* users take ownership of the content they post, edit it with user-friendly programs, and give it a meaning with the aim of influencing and advocating for a certain cause, with a tinge of humor and entertainment in most cases (**Olivares-García**; **Méndez-Majuelos**, 2020).

3. Methodology

Given that *TikTok* is a social network in the process of consolidation and its academic study is in its early stages, a mixed methodology with an exploratory sequential design (**Creswell**; **Plano-Clark**, 2011) in two phases is proposed to respond to the objectives and research questions posed herein. The first phase aims to study university students' perceptions, beliefs, and attitudes about altruistic blood donation through the use of several discussion groups. The second is a multimodal speech analysis (**Kress**, 2012) of the audiovisuals posted with the hashtag #donasangre. The hashtag, characteristic of social networks, is defined as

"a conduit for individuals to locate, organize and collectively contribute information flows [...] resulting in thematic and affective audiences that converge around a topic or event" (**Zulli**; **Zulli**, 2020, p. 3).

Seven focus groups involving 44 young university students younger than 25 years of age were organized in the facilities of the Universidad de Valladolid. The access-controlled convenience sample sought gender parity (45.5% men and 54.5% women) and a proportional representation of donors and non-donors in accordance with the most widespread figures: 3 out of 10 university students in Spain have donated at some point (**Padilla-Garrido** *et al.*, 2021). The sessions had an average duration of 50 minutes, were recorded, and subsequently were transcribed. Participants signed an informed consent form that explained the purpose of the study and how the data collected would be processed. In addition, to understand their connection to blood donation and availability and, above all, to encourage reflection on this topic, students were invited to complete a brief survey two weeks before the focus groups were held.

Then, we collected the first 100 videos with the hashtag #donasangre suggested by *TikTok* between September 22 and 29, 2022; this was carried out without logging in to avoid having the researcher's previous searches or interests condition the results. To identify the intentionality, message framing, innovative narrative resources, and impact, a worksheet was prepared for this purpose based on the work of **Hautea** *et al.* (2020) and **Rael** *et al.* (2021). Regarding the study of creators, behavioral engagement was calculated (**Dubovi**; **Tabak**, 2021) and the type (institutional or personal) and thematic nature of each profile was identified. Finally, through qualitative observation, we determined whether the comments made on each post prompted the audience to commit to mobilizing, as evidenced by an intention to donate and/or to pass on the message (**Durántez-Stolle**; **Martínez-Sanz**; **Rodríguez-de-Dios**, 2022).

The result was a sample of 100 audiovisuals from 88 different profiles, which generated a total of 6,215 manually monitored comments. After evaluating the descriptive characteristics of the dataset, the authors of this paper, together and then in isolation, recorded the emergent themes; the semiotic interaction between images, text, and sound (**Moreno-Barreneche**, 2022); and the narrative innovation (**Trauth-Taylor**, 2021) of the first 12 *tiktoks*. Subsequently, the responses were discussed, the analysis sheet was reviewed, and a taxonomy of the intention of the inferred message, type of innovation, and thematic nature of the author's profile was created.

4. Results

4.1. The role of *TikTok* in normalizing blood donation

The videos about blood donation given priority by *TikTok*, i.e., those that were placed in the first 100 positions and, consequently, were easier to access, broke down as follows: 19 were from institutional profiles –donation centers and compulsory education schools, mainly– whereas the remaining 81 were from personal accounts, of which 30.9% were linked to profiles of healthcare professionals, mostly from medicine and nursing. The rest did not express any affiliation, beyond wanting to communicate an experience, need, or knowledge of the subject.

Of the profiles, 10.2% (9 out of 88) dedicated more than one post to the topic of blood donation; this occurred both with healthcare (@bancodesangrehcsb) and educational (@purezarealejos) institutions and on the profiles of healthcare professionals (@cris_carrillo) and non-healthcare professionals (@tanit_tb).

The videos suggested by *TikTok* were mostly from the previous six months (68%). This breakdown (Graph 1) allowed us to confirm how the platform's algorithms work, tending to prioritize the latest content and the accounts with the most followers, since the only three posts older than two years were made by the creators (@jose_eduardo_derbez, @rudyruymanoficial, and @alexis_moralejo) who had a large community of users; the peaks of activity that occurred in the month of June had a thematic explanation as they were related to the celebration of World Blood Donor Day on June 14.



The in-depth study of the messages' intention based on the multimodal analysis permitted us to establish three categories of content:

- Donor's testimony. In first person, the protagonist talked about the experience of donating along with the steps followed, making the viewer a participant in the whole process: from entering the facility (hospital, bus, or donation center) and registering informed consent to the actual extraction on the donation chairs and subsequent snack. The cheerful and casual attitude of the *tiktokers*, mostly young and sometimes accompanied by friends, projects an image of normality and contrasts with the sense of fear and anxiety traditionally associated with this practice (Image 1). Although it is true that a positive bias stands out in these stories, there were quite a few who expressed being upset because they had been rejected for some reason (low hemoglobin, recent travel, or sexual partners in quick succession). These situations, even if they were a one-off, also send a message: that of strict control and the priority of health safety over the individual's desire to donate. The rest of the criticisms were about the wait times or the unfriendliness of the health personnel.
- Authorized disclosure. The explanation of the main issues related to blood donation, such as the individual requirements that must be met by the potential donor (weight and age), the most common reasons for rejection (hemoglobin, medicine intake, or travel), or blood compatibility, among others, were mostly provided by personal profiles linked to health, medicine, and nursing, primarily. They also frequently mentioned myths in an attempt to make users aware of the existence of erroneous beliefs that are widespread among the population. With their posts, these profiles developed an informative function that is not just limited to the video in question but goes on by answering the many questions asked on their walls.
- Empathic awareness. A third category related to the intention of the post analyzed was found in the clear call to donate. This request was strongly emotionally charged, highlighting the personal well-being achieved with this act and/or what it would mean for the recipients in terms of health and life. In the latter situation, the advocacy fell to sick people, sometimes children, who related some specific aspect of their experience (the treatment followed, the progress that had been made in their disease, their hospital stays, etc.) always in a positive and hopeful mood. This subgroup

of profiles received comments mainly of encouragement and admiration for their struggle, in addition to achieving the highest rates of commitment to mobilization (Table 1). The emotional nature of the videos is enhanced by expressions such as "you can save three lives" or "tomorrow it could be you, it could be me, or even someone in your family", which appeal directly to the receiver with the goal of not leaving them indifferent.

Young *tiktok*ers project a happy and relaxed attitude when it comes to blood donation, in contrast to the sensation of fear and anxiety traditionally associated with this practice



Image 1. Representation of message categories according to their intention: testimony, disclosure, and awareness Source: The profiles of @elenadmiguel, @donasangre.donavida, and @siilviacarreras

Translations:

1. Form with personal data

2. Can I donate if I drink alcohol or smoke marijuana? You can donate provided that more than 12 hours have passed since you last drank or smoked. 3. Give blood, give life!

In conjunction with the above, we found that the topics most frequently addressed (in the following order) were focused:

(a) on the protocol followed for donation (40%), in which phlebotomy itself was very much front and center. The *tik*tokers gravitate toward streaming how the medical staff inserted the IV and how the extracted blood was stored in constantly moving bags. Although this content was not planned with an informative purpose in mind per se, they did produce the sense of closeness and understanding of a subject and procedures that the general population is not familiar with, as evidenced by the numerous questions that were commented on these posts.

(b) The second thematic block corresponded to the call for donation (31%), which was focused on attracting the attention of potential donors by presenting a specific circumstance: a shortage, a sick person, a visit of a mobile unit, or a rare blood group, among other examples.

https://acortar.link/Bxq8sv

(c) In third place, we found the topic focused on the intrinsic qualities of donation (29%), where questions such as requirements, previous advice, benefits, or myths associated with altruistic blood donation were addressed. In these videos, there was a clear intention to transfer knowledge, for which simple approaches, lists, and visual aids that summarized the principle key ideas were used.

Entertainment is a constant. Although it is true that it was not an end in itself for creators, it was the main method used to capture and retain the user's attention. Resources such as dances, group choreographies, visual effects, or sketches helped to bring a smile to the viewer's face and keep the audience waiting to see how the audiovisual developed. They were widely used, on both personal and institutional profiles. A good example of this is the works made by schoolchildren and posted by their respective schools.

https://acortar.link/ySalot

Within the blood donation content, we found that outreach was mainly supported with demonstrations and examples, establishing comparisons, and the use of common references: "that thing that looks like a lemon-lime *Calipo* is the plasma concentrate", said @perdidue (Ima-

Health professionals on *TikTok* go beyond an informative function to also respond to questions asked on their walls

ge 2). Explanations were provided using simple vocabulary, and the main concerns or most widespread erroneous beliefs were explained. Similarly, we highlight the authority that *tiktokers* who worked as health workers used by appearing with some recognizable element of their profession –a gown, a stethoscope, the interior of an ambulance, etc.– that identified them as leaders.

The innovation applied to the creation of content aimed at health mobilization on *TikTok* had three features:

- Re-editing. This was especially evident when it came to sound, incorporating music and familiar and/or loud voices from third parties as another element of the creation. The ability to make duets and interacting with prerecorded content is also part of the re-editing phenomenon, although this specific situation did not occur in our sample.



Image 2. Resources on which outreach was based Source: @miguelassal, @perdidue, and @cris__carrillo profiles Translations:

2. World Blood Donor Day

3. I went to donate and they told me I couldn't because I had to have not had sexual relations for 6 months. Abstinence and donating blood

- Editing. The creators had outstanding audiovisual editing skills and presentation skills, such as incorporating on-screen advertisements, applying different visual effects, interspersing still images, or creating careful transitions between scenes.
- Reinterpretation. The most viral challenges, trends, and suggestions on the networks were applied and transformed to suit users' needs. Thus, we found dances and choreographies, such as a video (Image 1) in which several young people positioned themselves to the right and left, under a "yes" or "no", depending on the phrase being said; parodies of everyday situations; unboxing sessions, in which a young person unpacked something and commented on the package received after donating; and jokes, etc., about blood donation.

4.2. Effects on the conversation and purpose-driven action in the audience

After analyzing the narrative and the innovative nature of the primary *tiktoks* about donation, we identified their effect by studying the comments. Specifically, we focused on the type of reaction the post caused by differentiating between direct action (mobilization) and affirmation (model). The former is the serious and immediate commitment of a user to take action in support of blood donation. This is what occurred in 62 comments on 19 different videos.

They attested to the commitment of the receiver and the impact of the content consumed, using expressions such as "I donated blood just this week, and they treat you super amazingly!" or "I'm going on Tuesday" (Durántez-Stolle; Martí-nez-Sanz; Rodríguez-de-Dios, 2022). It should be noted that the audiovisuals that proportionally presented a greater intention to donate were those that made a call to action (Table 1), specifically those that emphasized the need for assets (low reserves) and humanized the recipients by presenting specific cases of people who were sick.

	Total comments	Comments about taking action	Videos with comments about taking action	Comments about affirmation	Videos with comments about affirmation
Qualities of the donation	2,421	10 (0.41%)	5 out of 29	48 (1.98%)	12 out of 29
Call to action	1,204	41 (3.40%)	8 out of 31	47 (3.91%)	9 out of 31
Donation process	2,590	11 (0.42%)	6 out of 40	60 (2.32%)	8 out of 40
Totals	6,215	62	19	155	29

Table 1. Mobilization and affirmation rate by message theme

With regard to affirmation, or in other words, the expression of pride in one's status as a donor¹, there are comments that are positive references. The emergence of role models –even more so when traits are shared– had a great ability to reduce fear (**Igartua**; **Guerrero-Martín**, 2022) and reinforce self-efficacy (**Bandura**, 2004), defined as the belief in one's capabilities to make a change. Comments of this type occurred on 155 occasions, coinciding with 29 different videos where the characteristic that most frequently recurred was the first-person account. Statements such as

"I am a donor and the truth is that it makes you feel really good I encourage you all to do it" or

"every 3 months, I go. Very important"

show the audience's desire to support an act embraced by people from very different walks of life.

The amplification of the "go donate" message from the selected hashtag #donasangre also occurs in the spontaneous remarks of *TikTok* users, which, on some occasions, were equally as valuable or more valuable than the video that sparked the conversation. One example is this discussion on the profile of @miguelassal (Image 3).

Additionally, *TikTok*'s robust popularity among teenagers (*IAB*, 2022) is confirmed by the high number of comments from users who indicated that they were looking forward to turning 18 years old so that they could donate:

"Wait another year or two!!! ever since I was 12, I've wanted to donate blood @ when I turn 18, I'm going to go donate".

4.3. Evidence of commitment in the virtual and in-person environment

Comparing the meanings inferred from the most relevant *tiktoks* about blood donation with the perception expressed by young university students when asked in focus



Translations: 1. Follow 2. does donating blood have any risks? Respond 3. no, provided that you follow the proper protocol and do it in a sanitary place with a sanitized needle and syringe Respond 4. Of course there is a risk, improving your well-being and your karma. You run the risk of being happy, or even being proud of yourself. Respond 5. There's no risk at all

5. There's no risk at all Respond See more

groups about donating blood revealed interesting points of convergence.

Students self-identified as caring and felt that they had the "ability and interest to help others" (man, group 3). *TikTok* videos starring young people donating blood showed ordinary men (33.3%) and women (66.7%) eager to contribute and happy to do so

https://acortar.link/30j6GL

This attitude was especially significant in women, the group that, in the focus groups, most frequently expressed their reluctance to donate for fear of possible pain or dizziness at the sight of blood ("I'd pass out", woman, group 1), as was echoed in numerous comments on social networks. In contrast, lack of time and commitment was the response repeated most frequently among male university students in regard to why they do not donate.

The naturalness of the videos' protagonists helped to normalize the act of blood collection by showing it as an everyday occurrence that does not require superhuman effort or a particularly significant investment of time. Furthermore, these testimonies helped eradicate some false beliefs that were repeatedly expressed in the focus groups with university students, such as having to fast first or the risk of contagion, the mention of which undermines the high respect for and trust placed in the Spanish public health system.

We observed a general rejection of receiving compensation for blood donation because of the loss of meaning that it would entail.

"Absolutely not, that would not get me to donate. I think it would defeat the purpose" (woman, group 6).

On *TikTok*, this possibility is not even mentioned in any of the top 100 videos, although the comments do ask, in isolation, about the possibility of receiving financial compensation. Such comments sparked little debate and were met with responses such as "Saving a life is priceless", which emphasizes the selflessness inherent in the word "donate."

Finally, we point out that tragedies increase immediate cooperation, as many of the young people were able to remember events that had appeared in the mass media, on television, and on social networks, primarily, that awakened

their conscience. On *TikTok*, 9% of the videos showed people who were living with a critical situation, generally related to cancer, reminding and explicitly asking the audience to donate. It was these direct and emotional appeals in particular that generated the highest percentage of comments (Table 1) expressing a strong commitment to donate.

Pride in being a donor is expressed through first-person accounts on *TikTok*, demonstrating a wish to lay claim to and support blood donation

5. Discussion and conclusions

The phenomenon of digital health activism in the context of blood donation on *TikTok* follows what **Juris** (2012) describes as "aggregation logic", in which a common position, encapsulated in a hashtag and integrated by the spontaneous remarks of various users, creates a shared identity capable of reaching beyond the screen and which, in our specific case, manifests itself in the adoption of a healthy and charitable habit (**Eser** *et al.*, 2010; **Kalargirou** *et al.*, 2014). Despite all of this, healthcare institutions' lack of prominence as content creators is striking –one might wonder why they are not present or prominent on *TikTok*. This means that the online visibility of this act depends on the goodwill of individual profiles that, by leveraging their audiovisual skills and interest in combating misinformation (**Salaverría**, 2021), use their experience as donors, recipients, or health professionals to highlight the benefits of donation.

The narrative innovation of the audiovisuals analyzed was based on the phenomena of appropriation, editing, and reinterpretation, which enhanced the replication of content. Likewise, the approach that some videos used showed a transition from storytelling to storydoing, and with it, the demand of a receiver who is not satisfied with just being caught up in the story but rather seeks facts and co-participation (**Rodríguez-Ríos**; Lázaro-Pernias, 2022).

Consulting young university students confirmed the persistence of false myths related to blood donation, and ascertained the level of involvement in and limitations of access to blood donation. Fear and lack of time were the main barriers, in line with the results of **Padilla-Garrido** *et al.* (2021) in Spain, **Greffin** *et al.* (2021) in the German context, and **Duboz** and **Cunéo** (2010) in the French context. The presence of blood and/or needles is uncomfortable, so **Lemmens** *et al.* (2005) recommend avoiding showing them when developing recruitment campaigns. However, the analyzed *tiktoks* that had the greatest visibility showed how the protagonists experienced the different steps of the process, including blood collection, in great detail. The comments that this inspired, far from reflecting rejection, provided a way for the audience to affirm "I am also a donor" and, ultimately, to be a role model.

The *tiktoks* relied primarily on the emotional, in line with the main motivating feature of viralization (**Arjona-Martín**; **Méndiz-Noguero**; **Victoria-Mas**, 2020). Several studies have shown that positive experiences, especially those related to healthcare in donation centers, lead to repetition and sharing by word of mouth among friends and family (**Weidmann** *et al.*, 2022). In addition to expanding their audience, the dissemination of these experiences in a forum such as social networks exponentially increase the leaders who are visible to young people. Investigating the influence that these digital profiles have opens up a range of possibilities in future research considering that the theory of planned behavior (TPB) assumes that subjective norms, understood as perceived social pressure, determine the individual's important decisions (**France** *et al.*, 2014).

Healthcare professionals featured on *TikTok* took on the role of authoritative voices. With a relaxed tone and an explanatory and direct narrative, they performed a primarily informative task, supported by their audience (**Martínez-Sanz**; **Buitrago**; **Martín-García**, 2023). People undergoing treatment were another of the groups of protagonists. Their highly empathetic stories stood out owing to the support they received in the comments, generating the highest mobilization rates. As shown by **Durántez-Stolle**, **Martínez-Sanz**, and **Rodríguez-de-Dios** (2022), perceived similarity moderates the effects of emotional appeal when it comes to a narrative of pride and satisfaction (donor protagonist) and solidarity and empathy (recipient protagonist), as well as producing a greater intention to spread the message and become a donor.

Zulli and Zulli (2020) point out that, on TikTok, socialization is driven by content, thereby reducing interpersonal con-

nections on the platform. In this sense, we found a number of disparate comments, removed from the debate or from the proposal of ideas. On the contrary, asking questions and talking about personal experiences whose value lies in reinforcing the feeling of community (Mannell; Ahmad; Ahmad, 2018) and empowering its members (Francis, 2021) were prevalent. Meanwhile, the continued raising of doubts, some associated with the false myths acknowledged in the focus groups, highlighted the need for healthcare institutions to increase their efforts to have a presence wherever the potential donors are.

The explicit call to donate is strongly emotionally charged, especially for those creators who are or have been ill, achieving the highest levels of commitment to act. They advocate donation through their positive and hope-filled talent, and in turn receive comments full of encouragement and admiration

6. Note

1. For the sake of accuracy and validity, we did not count the responses of those donors who said that they were donors in the past but, for some reason, were no longer donors at that time or who had tried and had been rejected. For example:

"I donated once, but because of anemia I can't anymore $\Theta \Theta \Theta \Theta'$ "

"for 10 years I did not miss a donation appointment. Now I'm undergoing treatment that prevents me from doing it"

7. References

Arjona-Martín, José-Borja; **Méndiz-Noguero, Alfonso**; **Victoria-Mas, Juan-Salvador** (2020). "Virality as a paradigm of digital communication. Review of the concept and update of the theoretical framework". *Profesional de la información*, v. 29, n. 6. *https://doi.org/10.3145/epi.2020.nov.07*

Arribas-Urrutia, Amaia; Islas-Carmona, Octavio; Gutiérrez-Cortés, Fernando (2019). "De prosumidores a observadores: una tendencia emergente en Internet y en los jóvenes ecuatorianos. Resultados del estudio del *World Internet Project*, Ecuador". *Revista latina de comunicación social*, n. 74, pp. 969-996. *https://doi.org/10.4185/rlcs-2019-1367*

Azzimonti, Marina; Fernandes, Marcos (2023). "Social media networks, fake news, and polarization". European journal of political economy, v. 76, 102256.

https://doi.org/10.1016/j.ejpoleco.2022.102256

Bandura, Albert (2004). "Health promotion by social cognitive means". *Health education & behavior*, v. 31, n. 2, pp. 143-164. *https://doi.org/10.1177/1090198104263660*

Bomfim-de-Souza, Mariluce-Karla; **Santoro-Domingo, Pablo** (2020). "Donación de sangre y medicina transfusional en la prensa española". *Revista española de comunicación en salud*, v. 11, n. 1, pp. 9-19. *https://doi.org/10.20318/recs.2020.4717*

Burgess, Simon; **Rogers, Marg**; **Jefferies, Diana** (2022). "Empathy and narrative: a discussion of contemporary stories from childcare and healthcare". *International electronic journal of elementary education*, v. 14, n. 5, pp. 631-646. *https://doi.org/10.26822/iejee.2022.268*

Campos-Freire, Francisco; Rúas-Araújo, José; López-García, Xosé; Martínez-Fernández, Valentín-Alejandro (2016). "Impacto de las redes sociales en el periodismo". *Profesional de la información*, v. 25, n. 3, pp. 449-457. *https://doi.org/10.3145/epi.2016.may.15*

Candón-Mena, José; **Benítez-Eyzaguirre, Lucía** (2016). *Activismo digital y nuevos modos de ciudadanía: una mirada global*. Institut de la Comunicació (InCom-UAB). ISBN: 978 84 944171 8 4 *https://incom.uab.cat/publicacions/20160000_0000_ebook12.cat.html*

Carter, Moira C.; **Wilson, Jeniffer**; **Redpath, Gordon S.**; **Hayes, Paul**; **Mitchell, Carol** (2011). "Donor recruitment in the 21st century: challenges and lessons learned in the first decade". *Transfusion and apheresis science*, v. 45, pp. 31-43. *https://doi.org/10.1016/j.transci.2011.06.001*

Creswell, John W.; **Plano-Clark, Vicki L.** (2011). *Designing and conducting mixed methods research* (2nd. ed.). Thousand Oaks, CA: Sage. ISBN: 978 1 4129279 1 8

Dubovi, Ilana; **Tabak, Iris** (2021). "Interactions between emotional and cognitive engagement with science on *YouTube*". *Public understanding of science*, v. 30, n. 6, pp. 759-776. *https://doi.org/10.1177/0963662521990848*

Duboz, Priscilla; Cunéo, Bernard (2010). "How barriers to blood donation differ between lapsed donors and non-donors in France". *Transfusion medicine*, v. 20, pp. 227-236. *https://doi.org/10.1111/j.1365-3148.2010.00998.x*

Durántez-Stolle, Patricia; **Martínez-Sanz, Raquel**; **Rodríguez-de-Dios, Isabel** (2022). "Effects of narrative persuasive frames on *Twitter* regarding blood donation: pride versus empathy and people versus numbers". *Profesional de la información*, v. 31, n. 4. *https://doi.org/10.3145/epi.2022.jul.15*

Eser, Bülent; **Kurnaz, Fatih**; **Kaynar, Leilagül**; **Yay, Mehmet**; **Sivgn, Serdar**; **Ünal, Ali**; **Çetin, Mustafa** (2010). "Are university students a favorable target group for blood donation campaigns?". *Turkish journal of hematology*, v. 27, n. 4, pp. 275-281. *https://doi.org/10.5152/tjh.2010.42*

France, Janis L.; Kowalsky, Jennifer M.; France, Christopher R.; McGlone, Sarah T.; Himawan, Lina K.; Kessler, Debra A.; Shaz, Beth H. (2014). "Development of common metrics for donation attitude, subjective norm, perceived behavioral control, and intention for the blood donation context". *Transfusion*, v. 54, pp. 839-847. https://doi.org/10.1111/trf.12471

Francis, Diane B. (2021). "*Twitter* is really therapeutic at times: examination of black men's *Twitter* conversations following hip-hop artist Kid Cudi's depression disclosure". *Health communication*, v. 36, n. 4, pp. 448-456. *https://doi.org/10.1080/10410236.2019.1700436*

Garza-Guzmán, María-Rosalía (2009). "Fuentes genealógicas y teorías esenciales de la comunicación interpersonal". *Razón y palabra*, v. 67.

https://www.redalyc.org/pdf/1995/199520725003.pdf

Gisondi, Michael A.; **Barber, Robert**; **Faust, Jeremy-Samuel**; **Raja, Ali**; **Strehlow, Matthew**; **Westafer, Lauren**; **Gottlieb, Matthias** (2022). "A deadly infodemic: social media and the power of Covid-19 misinformation". *Journal of medical internet research*, v. 24, n. 2. https://doi.org/10.2196/preprints.35552

Gómez-García, Salvador; **Vicent-Ibáñez, Mireya** (2022). "¿A qué juega Netflix? La convergencia de contenidos a través de los videojuegos en su estrategia multietapa". *Revista de comunicación*, v. 21, n. 2, pp. 115-134.

https://doi.org/10.26441/rc21.2-2022-a6

Greffin, Klara; **Schmidt, Silke**; **Schönborn, Linda**; **Muehlan, Holger** (2021). "Blood for blood'? Personal motives and deterrents for blood donation in the German population". *International journal of environmental research and public health*, v. 18, n. 8, 4238. https://doi.org/10.3390/ijerph18084238

Grunig, James E.; Hunt, Tood (2003). Dirección de relaciones públicas. Gestión 2000. ISBN: 84 8088 395 2

Gutiérrez-Lozano, Juan-Francisco; **Cuartero, Antonio** (2020). "El auge de *Twitch*: nuevas ofertas audiovisuales y cambios del consumo televisivo entre la audiencia juvenil". *Ámbitos. Revista internacional de comunicación*, v. 50, pp. 159-175. *https://doi.org/10.12795/ambitos.2020.i50.11*

Hautea, Samantha; Parks, Perry; Takahashi, Bruno; Zeng, Jim (2021). "Showing they care (or don't): affective publics and ambivalent climate activism on *TikTok*". *Social media + society*, v. 7, n. 2. https://doi.org/10.1177/20563051211012344

Hootsuite; We are Social (2022). Digital report 2022: el informe sobre las tendencias digitales, redes sociales y mobile. https://bit.ly/3zN5VQK

Huis-in't-Veld, Elisabeth M. J.; De-Kort, Wim L. A. M.; Merz, Eva-María (2019). "Determinants of blood donation willingness in the European Union: a cross-country perspective on perceived transfusion safety, concerns, and incentives". *Transfusion*, v. 59, n. 4, pp. 1273-1282. https://doi.org/10.1111/trf.15209

Hupfer, Maureen E.; **Taylor, Daniel W.**; **Letwin, Jim A.** (2005). "Understanding Canadian student motivations and beliefs about giving blood". *Transfusion*, v. 45, n. 2, pp. 149-161. *https://doi.org/10.1111/j.1537-2995.2004.03374.x*

IAB (2022). Estudio de redes sociales 2022 de IAB Spain. https://bit.ly/3T37MI0

Igartua, Juan-José; **Guerrero-Martín, Iñigo** (2022). "Personal migrant stories as persuasive devices: effects of audience-character similarity and narrative voice". *Journal of social and political psychology*, v. 10, n. 1, pp. 21-34. *https://doi.org/10.5964/jspp.8237*

Juris, Jeffrey S. (2012). "Reflections on #occupy everywhere: social media, public space, and emerging logics of aggregation". *American ethnologist*, v. 39, n. 2, pp. 259-279. https://doi.org/10.1111/j.1548-1425.2012.01362.x

Kalargirou, Aikaterini A.; Beloukas, Apostolos I.; Kosma, Alexandra G.; Nanou, Cristina I.; Saridi, Maria I.; Kriebardis, Anastasios G. (2014). "Attitudes and behaviours of Greeks concerning blood donation: recruitment and retention campaigns should be focused on need rather than altruism". *Blood transfusion*, n. 12, pp. 320-329. https://doi.org/10.2450/2014.0203-13

Kress, Gunther (2012). "Multimodal discourse analysis". In: Gee, James-Paul; Handford, Michael (eds.). *The Routledge handbook of discourse analysis*, pp. 35-50. Routledge. ISBN: 978 0 3674738 3 9

Lemmens, Karin P. H.; Abraham, Charles; Hoekstra, Trynke; Ruiter, Robert A. C.; De-Kort, Wim L. A. M.; Brug, Johannes; Schaalma, Herman P. (2005). "Why don't young people volunteer to give blood? An investigation of the correlates of donation intentions among young nondonors". *Transfusion*, v. 45, n. 6, pp. 945-955. https://doi.org/10.1111/j.1537-2995.2005.04379.x

Mannell, Jenevieve; Ahmad, Lida; Ahmad, Ayesha (2018). "Narrative storytelling as mental health support for women experiencing gender-based violence in Afghanistan". *Social science & medicine*, v. 214, pp. 91-98. https://doi.org/10.1016/j.socscimed.2018.08.011

Martínez-Beleño, Carlos-Andrés; **Sosa-Gómez, María-Silvina** (2016). "Aportaciones y diferencias entre comunicación en salud, comunicación para el desarrollo y para el cambio social". *Revista de comunicación y salud*, v. 6, pp. 71-82. *https://doi.org/10.35669/revistadecomunicacionysalud.2016.6(1).71-82*

Martínez-Sanz, Raquel; **Buitrago, Álex**; **Martín-García, Alberto** (2023). "Comunicación para la salud a través de *TikTok*. Estudio de influencers de temática farmacéutica y conexión con su audiencia". *Revista mediterránea de comunicación*, v. 14, n. 1.

https://www.doi.org/10.14198/MEDCOM.23435

Moreno-Barreneche, Sebastián (2022). "Identidades estetizadas, interacciones mediatizadas: un abordaje de *Instagram* desde la sociosemiótica". *Comunicación y medios*, v. 31, n. 45, pp. 129-141. https://doi.org/10.5354/0719-1529.2022.64515

Navarro-Robles, María; **Vázquez-Barrio, Tamara** (2020). "El consumo audiovisual de la Generación Z. El predominio del vídeo online sobre la televisión tradicional". *Ámbitos. Revista internacional de comunicación*, v. 51, pp. 10-30. *https://doi.org/10.12795/ambitos.2020.i50.02*

Olivares-García, Francisco-José; **Méndez-Majuelos, Inés** (2020). "Análisis de las principales tendencias aparecidas en *TikTok* durante el periodo de cuarentena por la Covid-19". *Revista española de comunicación en salud*, supl. 1, pp. 243-252. *https://doi.org/10.20318/recs.2020.5422*

OMS (1986). Carta de Ottawa. Primera conferencia mundial de promoción para la salud. https://www.paho.org/hq/dmdocuments/2013/Carta-de-ottawa-para-la-apromocion-de-la-salud-1986-SP.pdf

OMS (2022). *Disponibilidad y seguridad de la sangre*. Organización Mundial de la Salud. *https://www.who.int/es/news-room/fact-sheets/detail/blood-safety-and-availability*

Padilla-Garrido, Nuria; Fernández-Herrera, María-Dolores; Aguado-Correa, Francisco; Rabadán-Martín, Inmaculada (2021). "Motivators, barriers and communication channels for blood donation in relation to students at a university in Spain". *Transfusion and apheresis science*, v. 60, n. 6. https://doi.org/10.1016/j.transci.2021.103270

Porroche-Escudero, Ana (2017). "Problematizando la desinformación en las campañas de concienciación sobre el cáncer de mama". *Gaceta sanitaria*, v. 31, n. 3, pp. 250-252. https://doi.org/10.1016/j.gaceta.2016.11.003

Rael, Christine T.; Pierre, Dominique; Frye, Victoria; Kessler, Debra; Duffy, Louisa; Malos, Nick; Van-Tieu, Hong (2021). "Evaluating blood donor experiences and barriers/facilitators to blood donation in the United States using *YouTube* video content". *Transfusion*, v. 61, n. 9, pp. 2650-2657. https://doi.org/10.1111/trf.16568

Rodríguez-Cano, César-Augusto (2018). "Los usuarios en su laberinto: burbujas de filtros, cámaras de eco y mediación algorítmica en la opinión pública en línea". *Virtualis: revista de cultura digital*, v. 8, n. 16, pp. 57-76. *https://www.revistavirtualis.mx/index.php/virtualis/article/view/250/218*

Rodríguez-Ríos, Antonio; Lázaro-Pernias, Patricia (2022). "Nuevas narrativas en publicidad. El storydoing como modelo de comunicación que favorece la cocreación del relato de marca entre los usuarios de *Instagram*". *AdComunica*, n. 24, pp. 57-80. *https://doi.org/10.6035/adcomunica.6554*

Rojas-Rajs, Soledad; Jarillo-Soto, Edgar (2013). "Comunicación para la salud y estilos de vida saludables: aportes para la reflexión desde la salud colectiva". *Interface. Comunicação, saúde, educação,* v. 17, n. 46, pp. 587-599. https://doi.org/10.1590/s1414-32832013000300008

Salaverría, Ramón (2021). Entender y combatir la desinformación sobre ciencia y salud. Ministerio de Ciencia e Innovación. https://dadun.unav.edu/handle/10171/60223

Seminario-Córdova, Renzo (2021). "Noticias falsas y su impacto en la sociedad en épocas de pandemia". Social innova sciences, v. 2, n. 2, pp. 6-17.

https://socialinnovasciences.org/ojs/index.php/sis/article/view/49

Sheldon, Pavica; **Newman, Megan** (2019). "*Instagram* and American teens: understanding motives for its use and relationship to excessive reassurance-seeking and interpersonal rejection". *The journal of social media in society*, v. 8, n. 1. *https://www.thejsms.org/index.php/JSMS/article/view/423/209*

Sobowale, Kunmi; Hilliard, Heather; Ignaszewski, Martha J.; Chokroverty, Linda (2020). "Real-time communication: creating a path to covid-19 public health activism in adolescents using social media". *Journal of medical internet research,* v. 22, n. 12.

https://doi.org/10.2196/21886

Sola-Morales, Salomé; **Zurbano-Berenguer, Belén** (2020). "Activismo digital y feminismo: un análisis comparado de cibercampañas contra el acoso callejero en España, Marruecos y Chile". *Comunicación. Revista internacional de comunicación audiovisual, publicidad y estudios culturales*, v. 1, n. 18. https://doi.org/10.12795/comunicacion.2020.i18.01 **Strauck-Franco, María-Antonia**; **Guillén-Arruda, Claudia-Alexandra** (2017). *"Twitter* como herramienta para la comunicación en salud en el contexto del fomento de la donación de órganos en el Perú". ZER: Revista de estudios de comunicación, v. 22, n. 42, pp. 189-209. https://doi.org/10.1387/zer.17841

Syrdal, Holly A.; **Briggs, Elten** (2018). "Engagement with social media content: a qualitative exploration". *Journal of marketing theory and practice*, v. 26, n. 1-2, pp. 4-22. https://doi.org/10.1080/10696679.2017.1389243

Trauth-Taylor, Kathryn (2021). "Innovators must be powerful storytellers". *Research-technology management,* v. 64, n. 3, pp. 43-47.

https://doi.org/10.1080/08956308.2021.1893057

Vandenbosch, Laura; **Eggermont, Steven** (2016). "The interrelated roles of mass media and social media in adolescents' development of an objectified self-concept: a longitudinal study". *Communication research*, v. 43, n. 8, pp. 1116-1140. *https://doi.org/10.1177/0093650215600488*

Verón, Eliseo (1996). La semiósis social. Fragmentos de una teoría de la discursividad. Gedisa. ISBN: 978 84 743250 2 7

Waheed, Usman; Wazeer, Akhlaaq; Saba, Noore; Qasim, Zahida (2020). "Effectiveness of *WhatsApp* for blood donor mobilization campaigns during Covid-19 pandemic". *ISBT science series*, v. 15, n 4, pp. 378-380. https://doi.org/10.1111/voxs.12572

Weidmann, Christian; Derstroff, Marie; Klüter, Harald; Oesterer, Martin; Müller-Steinhardt, Michael (2022). "Motivation, blood donor satisfaction and intention to return during the Covid-19 pandemic". *Vox sanguinis*, v. 117, n. 4, pp. 488-494.

https://doi.org/10.1111/vox.13212

Yuan, Shan; Chang, Shelley; Uyeno, Kasie; Almquist, Gay; Wang, Shirong (2016). "Blood donation mobile applications: are donors ready?". *Transfusion*, n. 56, v. 3, pp. 614-621. https://doi.org/10.1111/trf.13387

Zabala-Cia, Oroitz; Lorenzo-Sola, Francisco; González-Pacanowski, Toni (2022). "Interactividad en redes sociales para crear relaciones de confianza: ayuntamientos de Navarra en tránsito". *Revista de ciencias de la comunicación e información*, v. 27, pp. 25-44.

https://doi.org/10.35742/rcci.2022.27.e246

Zulli, Diana; Zulli, David-James (2020). "Extending the Internet meme: conceptualizing technological mimesis and imitation publics on the *TikTok* platform". *New media & society*, v. 24, n. 8, pp. 1872-1890. *https://doi.org/10.1177/1461444820983603*

