



The use of digital media as a tool for scientific dissemination on physical activity and health

O uso das mídias digitais como ferramenta de divulgação científica sobre atividade física e saúde

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ABSTRACT

Understanding the digital environment as an important space to enhance interaction with scientific communication and the society, since the beginning of its activities, the 2020–2022 board of the Brazilian Society of Physical Activity and Health (SBAFS) intensified its participation in social media. This essay describes the structuring and planning processes, as well as the progression of the work carried out on social networks at SBAFS. In this way, we can highlight the creation of a team of voluntary collaborators to work on social media (page and electronic address, [®]Facebook, [®]Instagram, [®]Twitter and [®]Youtube), based on continuous planning and work plan, focused on the strategic dissemination of knowledge, advances and interactions with people interested in the different subjects that permeate the topic of physical activity and health. On [®]Instagram, due to the greater frequency of content posted, the increase in the number of followers and, consequently, interactions were notable. [®]Twitter also showed impressive results, with a 23.2% increase in profile visits and an 18.8% increase in impressions in the number of views (“tweets”). Due to the work carried out, the spread of SBAFS actions among people interested in the subject increased considerably. This can be explained because, with the start of the COVID-19 pandemic, we saw the emergence of digital interactions and, therefore, greater engagement with the profile content was identified. Such information confirms the usefulness of social networks as a tool for scientific dissemination in a fast, dynamic, widely accessible, attractive, interactive, and practical way.

Keywords: Social networks; Scientific communication; Physical activity; Health.

RESUMO

Compreendendo o ambiente digital como um importante espaço para aumentar a interação com comunicação científica e aproximação entre as pessoas, desde o início de suas atividades, a gestão 2020–22 da Sociedade Brasileira de Atividade Física e Saúde (SBAFS) intensificou sua participação nas redes sociais. O presente ensaio descreve os processos de estruturação e planejamento, assim como a progressão do trabalho desenvolvido nas redes sociais da SBAFS. Dessa forma, pode-se destacar a criação de uma equipe de colaboradoras voluntárias para o trabalho nas mídias sociais (página e endereço eletrônicos, [®]Facebook, [®]Instagram, [®]Twitter e [®]Youtube), partindo-se de planejamento e plano de trabalho contínuo, centrados na disseminação estratégica dos conhecimentos, avanços e interações com pessoas interessadas nos distintos assuntos que permeiam o tema atividade física e saúde. No [®]Instagram, a partir da maior frequência de conteúdos postados, foi notável o aumento no número de seguidores, e, consequentemente, de interações. O [®]Twitter também apresentou resultados expressivos, com um aumento de 23,2% de visitas ao perfil e 18,8% de impressões na quantidade de visualizações (“tweets”). Devido ao trabalho desenvolvido, aumentou-se consideravelmente a capilarização das ações da SBAFS entre as pessoas interessadas sobre o assunto. Isso pode ser explicado, pois, com o início da pandemia da COVID-19, viu-se a emergência das interações por meio digital e, por isso, foi identificado um maior engajamento com o conteúdo do perfil. Tais informações ratificam a utilidade das redes sociais como instrumento de divulgação científica de forma rápida, dinâmica, amplamente acessível, atrativa, interativa e prática.

Palavras-chave: Redes sociais; Comunicação científica; Atividade física; Saúde.

Introduction

In the absence of an immunizing agent and the need to control the dynamics of its transmission, the initial moments of the COVID-19 pandemic were marked by a new organization of life and society¹. This new organization saw the emergence of remote interactions,

mainly through the digital media (e.g., virtual platforms and social networks). In this way, the population has had to adapt and communication through virtual environments, for the most part, has intensified².

Thus, a new look at the use of digital media has made it possible to carry out different activities and social in-

teractions, in the dimensions of self-care, education and work, with the highlights being the ease of exchanging public and private messages, as well as sharing content, the possibility of updates in a short space of time, the possibility to create groups, organizational pages and the inclusion of questionnaires and polls³.

In the health domain, more specifically, digital media have played a stronger role in informing, educating and empowering people on important issues related to the virus, its dynamics and the ways to take care of themselves according to the available knowledge.

And at a time of crisis, as observed during the COVID-19 pandemic, the importance of disseminating quality information, based on available technical-scientific knowledge, has been reinforced, in order to keep the population calm and informed about the correct steps to be taken and to control the significant wave of misinformation, which leaves room for dualities, sensationalism, guesswork and also the spread of false information, popularly known as 'fake news'⁴⁻⁶.

One of the ways to combat fake news has been to broaden the dialog between the population and scientific practice, intensifying health-related scientific dissemination on social media channels⁷. As pointed out by Souza et al.⁸, even though this is a potential strategy, this dialog requires the use of accessible language, so that knowledge can be appropriate to people from different contexts and, as far as possible, inserted into lifestyles. In this way, the digital media team of the Brazilian Society of Physical Activity and Health (SBAFS – from Portuguese 'Sociedade Brasileira de Atividade Física e Saúde'), throughout the 2020–2022 term, has built and shared scientific information and knowledge about 'health', in accessible language, in order to reach as many people as possible, in order to reduce the spread of fake news.

Due to its protective role in different health indicators, physical activity was promptly highlighted as a possible strategy for preventing and/or treating COVID-19⁹⁻¹⁰. This debate has been addressed by different scientific representations that are close to the topic¹¹. However, realizing the inconsistencies between the recommendations and reinforcing itself as one of the scientific societies most related to the subject in Brazil, the SBAFS advocated greater engagement in social media, through the creation of content and greater possibility of communication with its diverse audience (e.g., students, professionals, teachers, researchers, or even people interested in the subject)¹²⁻¹⁵.

Thus, using this tool to break down barriers of time and distance has helped to create and maintain partnerships and dialogues with the community with a view to strengthening public health, with the understanding that the digital environment is an important space for scientific communication and bringing together people interested in the subject of physical activity and health.

As a private, non-profit legal entity which, since it was founded in 2007, has brought together students, professionals and researchers from various backgrounds with an interest in the field of physical activity and health, the SBAFS realizes the importance of its participation in social networks in order, among other things, to intensify the dissemination of actions aimed at promoting physical activity and health.

The aim of this essay is to report on the experience of the work carried out on SBAFS digital media during the 2020–2022 term. To this end, we will contextualize the COVID-19 pandemic and the emergence of social networks, the importance of conveying scientific knowledge to society, as well as the main indicators of the work carried out.

Organization of the Work Process

The 2020–2022 management of SBAFS, understanding the digital environment as an important space for scientific dissemination and bringing together people interested in the subject of physical activity and health, had as its strategy the creation of a team of volunteer collaborators, made up of members associated with SBAFS, to work on the institutional website and to boost the Society's social media, with actions on the [®]Facebook, [®]Instagram, [®]Twitter and [®]YouTube platforms.

The team took on the commitment in October 2020 and worked on the basis of action planning and a continuous demand for work, aimed at the strategic dissemination of knowledge and progress, thus providing a greater contribution of interactions. Strategic communication, which is defined as the intentional use of communication by an organization to achieve its mission¹⁶, was established through the development, implementation and evaluation of: marketing management, public relations, technical communication, political communication and information/social marketing campaigns.

Results

When it comes to scientific dissemination about physical activity and health, the social network [®]Instagram stands out as having the greatest interactions between

society and scientific entities, with around 174 posts and 16 live broadcasts over a period of 18 months. It has also seen an exponential increase in the number of followers, from around 500 in 2020 to over 6,000 in 2022, the majority of whom are men and adults aged between 18 and 34.

The team has also adopted the use of “Reels” videos, which have been increasingly used and can be viewed in the feed, in stories and also in a tab dedicated just to this function. On the SBAFS profile, the average number of views of videos published using this tool is approximately 1,600. Another important development on Instagram is the growing number of posts over the years, with only 4 posts in 2018 and 5 in 2019. In 2020, the year in which the team of volunteers started working on the network, there were 98 publications and, in 2021, the year in which the team worked from January to December, there were 105 publications. By September 2022, there had already been 115 publications, as shown in the graph below (Figure 1).

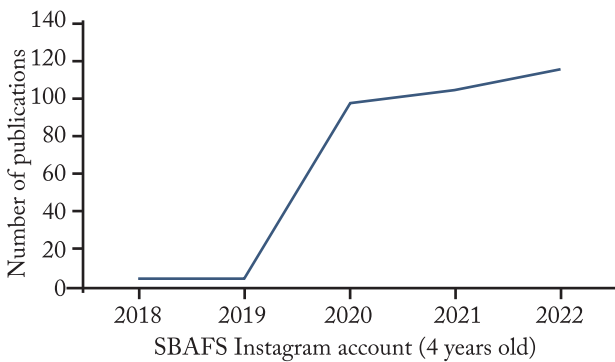


Figure 1 – Progress of SBAFS publications on Instagram between 2018 and 2022.
Legends: SBAFS: Brazilian Society of Physical Activity and Health.

Comparing publications from previous years, in which the media team had not yet planned, we can see a big difference in interactions. Figure 2 shows a comparison between two publications about Physical Education Professional Day in 2020 and 2021, respectively. In September 2020, the post yielded no profile visits, no new followers, received 205 likes and reached only 50 accounts. In September 2021, the post on the same topic yielded 31 profile visits, 16 new followers, 432 likes and reached 2,678 accounts.

A comparison was also made with another post, made on April 6, 2020, 2021 and 2022 (World Physical Activity Day). The results also show an exponential evolution in the social network’s numbers. In April 2020, the publication resulted in no profile visits, no

new followers, 80 likes and only 20 accounts reached; in April 2021, the publication reached 99 profile visits, 28 new followers, 469 likes and 2,917 accounts reached; while in 2022, the results showed a big increase, with 188 profile visits and 108 new followers coming from the publication, as well as 723 likes and 3,355 accounts reached.

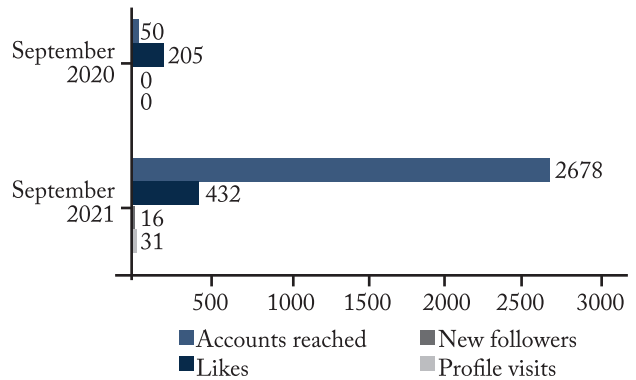


Figure 2 – Comparison between two publications about “Physical Education Professional’s Day” in 2020 and 2021.
Legends: “Accounts reached”, number of unique accounts that saw the publication at least once; “Likes”: metric to indicate whether the content is being well accepted; “New followers”: number of times people viewed the publication and followed SBAFS because of it; “Profile visits”: number of times people viewed the publication and visited the SBAFS page because of it; SBAFS: Brazilian Society of Physical Activity and Health.

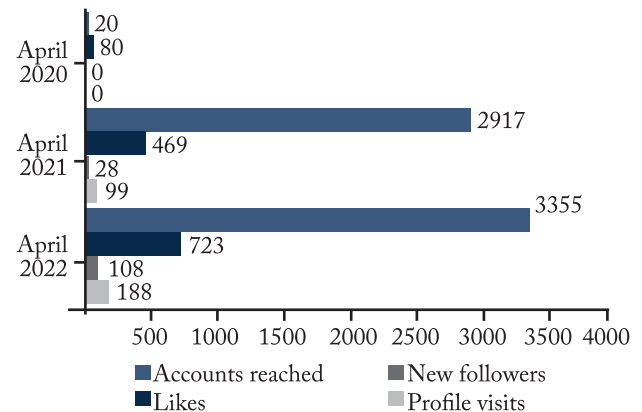


Figure 3 – Comparison of posts about “World Physical Activity Day” in 2020, 2021 and 2022.
Legends: “Accounts reached”, number of unique accounts that saw the publication at least once; “Likes”: metric to indicate whether the content is being well accepted; “New followers”: number of times people viewed the publication and followed SBAFS because of it; “Profile visits”: number of times people viewed the publication and visited the SBAFS page because of it; SBAFS: Brazilian Society of Physical Activity and Health.

Other important factor to consider in this publication is the number of times it was forwarded to other accounts, from 0 in 2020, to 175 times in 2021 and 997 times in 2022, as well as the number of times the

publication was “saved”, from 3 in 2020, to 20 in 2021 and 102 in 2022.

Also, on [®]Instagram, the publications that show the most interaction with followers are related to: 1) dissemination of scientific reports and/or guidelines from health entities, such as the World Health Organization; 2) dissemination of scientific studies in the area of physical activity and health; and 3) dissemination of events in the area of physical activity and health.

In general, the Twitter account also showed significant results, with a 23.2% increase in visits to the profile and an 18.8% increase in impressions, defined as the number of times users viewed the tweet, between 2020 and 2022. Considering that one of the main engagement indicators for this media is impressions, a comparison was made between specific periods in 2019 (the year in which the media team did not manage the account), 2020 and 2021 (the years in which the media team did manage the account).

For comparison purposes, the period from July 1 to September 29 was considered for all years. In 2019, during this period, tweets had 4.5 thousand impressions, as well as 50 impressions per day and an engagement rate of 0.6%. In 2020, there were 9,200 impressions, 101 impressions per day and an engagement rate of 4.1%. In 2021, the same period saw 14,200 impressions, 156 impressions per day, but an engagement rate of 3.3%.

On the [®]Facebook account, between 2020 and 2022, there was a 10.3% increase in page reach (number of people who saw any content on the page, including posts and stories), an 86.4% increase in page visits (number of times the page was accessed) and a 201.4% increase in new likes on the page, when compared to the 2019 and 2020 period.

The profile of the public that follows SBAFS on this social network is 39.8% between the ages of 25 and 34 and 38% between 34 and 44, in addition to having a total of 4,046 followers distributed in different countries, such as Brazil (95.3%), Portugal (1%), Chile (0.7%), the United States (0.5%), Spain (0.3%), Colombia (0.2%), Peru (0.2%), Australia (0.1%), Italy (0.1%) and the United Kingdom (0.1%).

YouTube is one of the most accessed social networks in the world¹⁷ and, considering the scientific dissemination of physical activity and health, it is an important tool for reaching out to society. The SBAFS began its dissemination on this platform in 2018, with 06 broadcasts, where it had 1,200 views in the event with the greatest reach; in 2019 it increased the num-

ber of broadcasts by 50%. In 2020, at the height of the COVID-19 pandemic, there were 19 broadcasts, an increase of 217% compared to 2018, with broadcasts reaching 2,000 views.

During 2021, 12 events were broadcast on the YouTube channel, with particular emphasis on the technical presentation of the Physical Activity Guide for the Brazilian Population¹⁸, which obtained 5,200 views, an increase of 334% compared to the most viewed event in 2018.

In the period between 2020 and 2022, the SBAFS channel on [®]YouTube, created for courses and events, obtained approximately 20,148 views, 5,325 hours of viewing, an increase of 1,122 subscribers to the channel and 228,647 impressions (number of times the video was shown to viewers). It's worth mentioning that the most frequent age groups among people subscribed to the channel are between 25 and 34 years old (42.9%) and between 35 and 44 years old (35.9%).

Final considerations

Apart from limitations, such as the lack of standards among the information that can be exported from digital platforms, which hinders access and analysis, the efforts made on SBAFS social media in the 2020-2022 term have resulted in a greater dissemination of the scientific knowledge available on the subject, attracting new people interested in the debate. Thus, in addition to strengthening the strategy of having a specific team working on social media, by creating content and developing strategic communication, the usefulness of social media as a tool for disseminating scientific knowledge in a fast, dynamic, widely accessible, attractive, interactive and practical way is confirmed.

Authors' contributions

Pinheiro IKAS: Conceptualization, Methodology, Design of the data presentation, Writing of the original manuscript, Writing - revision and editing, Approval of the final version of the manuscript. Brunheroti KA: Conceptualization, Data analysis, Design of the data presentation, Writing of the original manuscript, Approval of the final version of the manuscript. Silva AFAC: Conceptualization, Data analysis, Writing of the original manuscript, Approval of the final version of the manuscript. Valle MB: Data analysis, Data curation, Writing of the original manuscript, Approval of the final version of the manuscript. Camargo EM: Supervision, Writing of the original manuscript, Approval of the final version of the manuscript. Guerra PH: Methodology, Supervision, Writing of the original manuscript, Writing - revision and editing, Approval of the final version of the manuscript.

Statement regarding the use of artificial intelligence tools in the process of writing the article

The manuscript did not use artificial intelligence tools in its preparation

Availability of research data and other materials

The contents underlying the research text are contained in the manuscript.

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