

## “BIOLOGIA TODO DIA” - CREATION AND USE OF A PROFILE ON INSTAGRAM AS A SCIENTIFIC DISSEMINATION TOOL

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### ABSTRACT

Access to technology is a reality experienced by a large portion of the world's population. Since the emergence of the internet, human relationships have changed at a global level, mainly regarding the content consumed online. This study aims to validate a profile on the Instagram application, entitled “Biologia Todo Dia”, as a tool for scientific dissemination. Knowing the presence of this social network in the lives of the vast majority of people, especially young people, it is

interesting to explore its potential in promoting knowledge aimed at all audiences, in a dynamic and democratized way. The influence of the page was validated by means of analyzing the metrics provided by the application itself, as well as through the analysis of a questionnaire applied to 57 followers. It was possible to infer, after analyzing the collected data, that the “Biologia Todo Dia” profile has the potential to be used as a scientific dissemination tool for its audience, providing information in a clear, meaningful, and attractive way.

**KEYWORDS:** Disclosure, Science, Validation, Instagram, Biology.

## “BIOLOGIA TODO DIA” - A CRIAÇÃO E UTILIZAÇÃO DE UM PERFIL NO INSTAGRAM COMO FERRAMENTA DE DIVULGAÇÃO CIENTÍFICA

### RESUMO

O acesso à tecnologia é uma realidade vivenciada por grande parcela da população mundial. Desde o surgimento da internet, as relações humanas mudaram à nível global, principalmente sobre o conteúdo consumido online. Este estudo tem por objetivo validar um perfil no aplicativo *Instagram*, intitulado “Biologia Todo Dia”, como ferramenta de divulgação científica. Sabendo da presença desta rede social na vida da grande maioria das pessoas, principalmente dos jovens, é interessante explorar o seu potencial na promoção de conhecimento

destinado a todos os públicos, de forma dinâmica e democratizada. A validação da página se deu através de análise das métricas disponibilizadas pelo próprio aplicativo, como também, através de análise de questionário aplicado com 57 seguidores. Foi possível inferir, após análise dos dados coletados, que o perfil “Biologia Todo Dia” possui potencial de ser usado com ferramenta de divulgação científica para o seu público, levando informação de forma clara, significativa e atrativa.

**PALAVRAS-CHAVE:** Divulgação, Ciência, Validação, Instagram, Biologia.

## 1 INTRODUCTION

Dynamism and technological transformations occur quickly in our society, especially when it comes to the exchange of real-time data. In the late 1960's, the internet was created in the United States and soon spread around the world, arriving in Brazil in the 1990's as a source of consultation for the most varied topics (Silva, 2001).

The ways of accessing the information available on the internet accompanied its growth and dissemination. The popularization of devices, such as tablets, computers and smartphones, gave the user the ability to be instantly connected to the resources available on the network and, above all, the ability to connect with each other (Silva, 2001).

The emergence of social networks has changed the way people relate and socialize. In the school context, for example, students can share and elaborate their work; create study groups; receive guidance; search in several national and international sources, among others, having different paths in the search for new discoveries (Antônio, 2010).

However, the use of social networks is not limited to the context of the classroom. Scientific communication associated with the popularization of science through electronic communication technologies, configures the expansion of the public interest in these subjects, mainly outside the scientific community, in addition to accommodating an exchange of knowledge and data, in a way never seen before (Valeiro & Ribeiro, 2008).

Still in the context of social networks, *Instagram* can be highlighted: a platform based on the user's experience in taking photos (or recording videos), editing them, assigning captions and/or hashtags, and publicly posting the result. Currently, this network is popular worldwide and has millions of active users (Ranginwala & Towbin, 2018). Several companies have created commercial profiles on Instagram, with the purpose of digitalizing their brand, which, consequently, turned out to be a great marketing strategy. Another purpose given to Instagram, and which has a great emphasis, is the sharing of information in the most different areas of knowledge. (Shafer, Johnson, Thomas, Johnson, & Fishman, 2018).

The Covid-19 (new coronavirus) pandemic has further expanded the scenario for using social media. Social isolation, as a measure to contain the spread of the virus, promoted an increase in the use of digital technologies in communication, study, work and entertainment. In this way, the flow of users of social networks, including *Instagram*, grew considerably in this period.

Based on this premise, the objective of this work was; to Evaluate the “Biologia Todo Dia” profile on Instagram as a tool for scientific dissemination, through the interpretation of the available metrics within the application itself and by reviewing the social media-based public opinion regarding the quality and usability of the page.

## 2. BIBLIOGRAPHICAL REVIEW

### 2.1. The transmission of information

The central component of science is communication, acting as a fundamental part in the knowledge construction process. Communication involves three levels: horizontal communication between peers (legitimation); transversal communication between science and society (dissemination) and vertical communication between generations (teaching) (Vrana, 2013).

According to Vrana (2013) public scientific communication concerns the appropriate use of media, activities and dialogues, suitable for the production of one or more personal responses to science, namely: awareness, pleasure, interest, opinions and understanding.

The facility of transmitting information provided by social networks, through content dissemination platforms such as Instagram, allows for a greater dissemination of knowledge but, when not used correctly, may perpetuate erroneous information and/or solidify previous concepts built over generations. Therefore, it is important that scientifically based information dissemination tools are within everyone's reach, to enable greater criticality by the users if they have access to content derived from common sense, which arise from a mix of ideas that enable an interpretation of the phenomena in a non-critical way, mixing with beliefs and values, maintaining a conservative, limited and comfortable conception (Marques & Fraguas, 2021).

## 2.2. Common sense, technology and learning

Common sense can be interpreted as an ideological construction where a certain truth becomes sovereign until it is refuted by another conception, in turn, scientifically solid, which starts to occupy the space of the previous ideology. Although this process does not occur immediately, once superimposed, the conception that causes the breakdown of common sense is established as the only current scientific truth and must be disseminated to the entire scientific and social body, with the aim of advancing in the search for knowledge still more innovative (Paty, 2003).

The excess of information released daily on the networks, and consumed by the public, requires a critical and questioning eye (Cerigatto, Karla, & Nunes, 2020), therefore, unpretentiously navigating this sea of information can favor the dissemination of dubious and false news, the famous "Fake News", which can collaborate in strengthening common sense.

One can cite, as a source of dubious information, the Wikipedia platform. According to Bolsarin and Passos (2016), one of the website's differentials is the democratization of the knowledge production that, on the other hand, can be edited by any user, even without intellectual property to do so. Nevertheless, Wikipedia is one of the most visited websites in the world, with approximately half a million hits monthly, in 265 different languages. (Padilha, Júnior & Santos, 2019).

The current digital context that encompasses the world needs directions. International organizations, such as the United Nations, Educational, Scientific and Cultural Organization (Unesco), and the European Union, for example, strive to create guidelines for the development of digital culture for all peoples (Cerigatto et al., 2020).

In this social context, it emerges, a new mode of real time communication, allowed by online virtual spaces. The so-called digital natives, born in the 90s, show great appreciation for the virtual social relationships and immense access to information is immense, which generates, in these young people, a dynamic ability to absorb knowledge (Prensky, 2001). Currently, it is noticeable how easy it is for young people to master technologies and get into the media, especially social networks such as *Instagram*.

### 2.3. Instagram

Taking into account the great size and scope of the World Wide Web and all the content present in it, it is essential that there is a delimitation of the scope subject to be studied within this field. The presence of multiple social networks and online communication platforms offer users a variety of options to choose from, allowing individuals to select those that best meet their needs for connection and social interaction, with Instagram standing out as one of the most popular choices.

Instagram, an online structure launched in October 2010, is the fifth most used social network in the world with more than 1 billion active users, coming after Facebook (2.6 billion users); YouTube (2 billion); WhatsApp (2 billion); and WeChat (1.2 billion) (G1, 2020). Available on several platforms and devices, this network besides enabling the sharing of images, videos and stories (lasting 24 hours), allows user's interaction through likes, comments and content sharing.

To start using, it is necessary to install the app on a mobile device with Android or iOS operating system. After installation, the user can start sharing photos and videos immediately, simply by clicking on the "Share" button (Santos & Santos, 2014).

In addition to digital marketing, used to promote products and services, or the interaction between personal profiles, Instagram has grown as a significant tool in scientific dissemination in 2021, Silva, Castro, and Silva tested Instagram as a tool for raising awareness about the preservation of three species of primates in the coastal region of Paraíba. Through original posts on the subject, the authors shared scientific information with followers of the '@primatasIn' profile. The study's results demonstrated the potential of social media platforms to engage audiences in conservation efforts and promote scientific education.

In view of the above, the present research aims, through a quantitative and qualitative analysis, to trace the profile of the followers of an Instagram page entitled "Biologia todo dia" (free translation: biology every day) and also to verify its engagement rate through the interpretation of metrics in order to validate its use as a valuable tool for scientific dissemination.

## 3 METHODOLOGY

### 3.1 Creation of profile on Instagram

The profile was created in February 2021 in the Education category. The page name (Biologia Todo Dia), including its username in the app “@biologiatododia” (<https://www.instagram.com/biologiatododia/>), were chosen because they make reference to the central theme to be approached: Biology content that is experienced daily through the questioning of common phenomena.

### 3.1.1 Profile picture

The image used as the profile photo measures 110 x 110 px (pixels) and was created in Photoshop 2020 Software. To compose the image, mostly shades of green were used with specific colorimetric references referring to nature (Figure 1). The font used to write the name of the profile was Anton, in capital letters, size 28; centralized; layer style: Drop shadow, blend mode: Multiply; Opacity at 27%; Angle: 90°; Distance: 22 px; Aperture: 0; Size: 6.

**Figure 1:** Logo corresponding to the profile image of the page, with appropriate colorimetric reference for each color used in Photoshop 2020.



Source: Own authorship, 2021.

## 3.2 Choice of content and posts

Sixteen posts were shared in the platform, each of them with the objective of answering an initial question that identified a central theme to be addressed, for example: “Por que o girassol acompanha a luz solar??” (Why does the sunflower move towards the sunlight?) or “Como funcionam as vacinas??” (How do vaccines work??). The choice of themes occurred randomly or inspired by day-to-day situations experienced by the author.

The theoretical basis behind the contents comes from the author's previous knowledge

(Bachelor in Biology) with the aid of references as consultation tools to clear up possible doubts. It is important to mention that the writing of the posts was done in an authorial way. The content is displayed in the form of illustrated text, in a summarized and direct manner, requiring more than three images (carousel post). The first image corresponds to the initial question and the last one to the closing of the post with the word "Share!". The explained content is arranged between the first and last image.

### 3.3 Frequency of posts

The posts were shared with an interval of seven days between them, always at noon. The posting period began on March 1, 2021 and ended on June 21 of the same year (Table 1).

**Table 1:** Organization of the schedule with the dates of the posts and their respective themes.

| Post | Publication Date | Post Title   | Post | Publication Date | Post Title                                |
|------|------------------|--|------|------------------|---|
| P1   | 01/03/2021       | Todos os gatos tricolores são fêmeas?              | P9   | 26/04/2021       | Por que animais são usados como cobaias?  |
| P2   | 08/03/2021       | O que é esse bichinho na minha parede?             | P10  | 03/05/2021       | Por que sentimos sono logo após o almoço? |
| P3   | 15/03/2021       | Por que o girassol acompanha a luz solar?          | P11  | 10/05/2021       | Como os cactos resistem à seca?           |
| P4   | 22/03/2021       | Como as abelhas produzem mel?                      | P12  | 17/05/2021       | O que são órgãos vestigiais?              |
| P5   | 29/03/2021       | Como os vírus sofrem mutação?                      | P13  | 24/05/2021       | Por que choramos quando cortamos cebola?  |
| P6   | 05/04/2021       | Qual a diferença entre surto, epidemia e pandemia? | P14  | 31/05/2021       | Como as plantas carnívoras se alimentam?  |

|           |            |   |            |            |   |
|-----------|------------|---|------------|------------|---|
| <b>P7</b> | 12/04/2021 | <b>Por que suamos quando estamos com calor?</b> | <b>P15</b> | 07/06/2021 | <b>Por que a água do mar é salgada?</b>           |
| <b>P8</b> | 19/04/2021 | <b>Como funcionam as vacinas?</b>               | <b>P16</b> | 14/06/2021 | <b>Quais são as piores pandemias da história?</b> |

To identify the postage, the letter P + the ordinal number of the postage is used, faithful to the real order. Ex: P1 = Post one. Source: Own authorship, 2021.

### 3.4 Qualitative data collection

At the end of the 15-day period, the statistical data of each post was collected and recorded. They are: Number of likes, comments and shares; Rescues; Reach; Profile visits; and Impressions (Table 2). The metrics provided by Instagram can be accessed by clicking on the “see insights” option on the post you want to analyze.

**Table 2:** Description of the interactions that make up the Instagram metrics.

| <b>Interaction</b>   | <b>Description</b>   |
|----------------------|--|
| <b>Likes</b>         | It is the interaction that indicates how many users “liked” the publication.   |
| <b>Comments</b>      | They are messages left by the public in the posts. In this space, the user usually expresses opinions about what is being seen.  |
| <b>Shared</b>        | It is about sending a publication of the profile to other people, whether they can be followers or not.  |
| <b>Post Saving</b>   | Serves as a “see later”. The person who saves a post intends to see it more calmly at some point. The status of a saved post is only removed by the person who saved it. |
| <b>Reach</b>         | It is the data that shows how far the publication has reached Whether or not the audience has interacted.  |
| <b>Profile Views</b> | Tracks the number of times your profile has been viewed following a specific post.   |
| <b>Impressions</b>   | Total number of times the publication has been viewed  |

Source: Own authorship, 2021 (Data obtained from the Instagram app).

### 3.5 Followers opinion

At the end of the posting cycle, a virtual questionnaire (<https://forms.gle/HfU4iJQU3CyDkZoY6>) containing twelve multiple choice and three open-ended questions, totaling fifteen questions, in addition to the Informed Consent Form (ICF) for the research was sent via direct message to 229 followers (total as of the date of sending). The questionnaire aimed to collect data on the followers and their opinions on the created profile. The





questionnaire was available for accessing during two weeks, from July 21st to August 4th 2021.

## 4 RESULTS AND DISCUSSIONS

### 4.1 Quantitative Analysis

The data below corresponds to the individual analysis of the metrics of each post, distributed in chronological order, from the oldest to the most recent (Table 3).

**Table 3:** Individual result, and by post, of the analyzed metrics.

|              | Likes | Comments | Shares | Post Saving | Reach | Profile Views | Impressions |
|--------------|-------|----------|--------|-------------|-------|---------------|-------------|
| <b>P1</b>    | 61*   | 1        | 22     | 4           | 241*  | 26*           | 291*        |
| <b>P2</b>    | 66*   | 0        | 27     | 5           | 307*  | 16*           | 359*        |
| <b>P3</b>    | 35    | 0        | 8      | 5           | 132   | 10            | 165         |
| <b>P4</b>    | 31    | 4*       | 4      | 6           | 131   | 10            | 172         |
| <b>P5</b>    | 58    | 4*       | 41*    | 9*          | 184   | 14            | 228         |
| <b>P6</b>    | 40    | 0        | 11     | 5           | 140   | 9             | 179         |
| <b>P7</b>    | 42    | 0        | 9      | 5           | 237   | 1             | 292*        |
| <b>P8</b>    | 35    | 2        | 11     | 7           | 146   | 9             | 183         |
| <b>P9</b>    | 57    | 0        | 46*    | 9*          | 188   | 9             | 226         |
| <b>P10</b>   | 66*   | 3        | 32*    | 7           | 238*  | 22*           | 280         |
| <b>P11</b>   | 35    | 0        | 10     | 1           | 116   | 10            | 147         |
| <b>P12</b>   | 25    | 1        | 6      | 3           | 126   | 7             | 162         |
| <b>P13</b>   | 30    | 1        | 15     | 3           | 118   | 10            | 143         |
| <b>P14</b>   | 17    | 4*       | 6      | 2           | 111   | 6             | 152         |
| <b>P15</b>   | 47    | 2        | 17     | 7           | 162   | 14            | 207         |
| <b>P16</b>   | 57    | 1        | 18     | 9*          | 198   | 10            | 240         |
| <b>Total</b> | 509   | 10       | 164    | 60          | 1989  | 119           | 2484        |

The asterisk (\*) marks the three posts that stood out the most in a given metric. P = Post + Numerical number that indicates the chronological order of the post (Ex. P1 = Post one). Comp. = Shares. Source: Own authorship, 2021.

#### 4.1.1 Likes

When a user likes what they are seeing on Instagram, it is common for them to leave a like on that content. The more likes a publication accumulates the greater its approval tends to be among those users meaning the likes can be compared to an approval thermometer. The three

publications with the largest amount of likes during the observed period stood out, they are: P2 “O que é esse bichinho na minha parede??” (What is this little animal on my wall?) with 66 likes; P10 “Por que sentimos sono logo após o almoço??” (Why do we get sleepy after a meal?) with 66 likes and P1 “Todos os gatos tricolores são fêmeas?” (Are all three coloured cats female?) with 61 likes. The three outstanding themes correspond to questions that can arise from people’s curiosity in daily life events suggesting that most users approved this type of publication.

#### 4.1.2 Comments

The space dedicated to comments is a democratic place. In this space, the public can give a positive or negative opinion about the content being offered. It can also serve as a recommendation space where users can tag others (usually a non-follower) to draw their attention to a specific publication or suggesting them to follow the page.

Public interaction through comments expresses the feelings and opinions of the followers. The possibility of registering a free message opens space for a democratic interaction that enables the page to have an indication of what the public has been thinking.

#### 4.1.3 Shares

Sending a publication to another Instagram user allows new people to view the content that was posted and, consequently, have access to the information that is being disclosed. The three posts that obtained the highest number of shares were: P9 “Como os vírus sofrem mutação?” (How do viruses mutate?) with 46 shares; P5 “Por que sentimos sono logo após o almoço?” (Why do we get sleepy after a meal?) with 41 shares; and P10 “Por que animais são usados como cobaias?” (Why animals are used as guinea pigs?) with 32 shares.

It is interesting to mention that P9 was published at a time when the media was frequently addressing the cause of variants of the Coronavirus (Covid-19) emergence, which may have been a crucial factor for this post to have been the most shared on the page. Following the same line of reasoning, it can be implied that the reason for P10 to be among the most widespread is the fact that at the time of it posting the online campaign #SaveRalph, which had as a symbol a rabbit named Ralph recounting his horrible experiences as a guinea pig in a laboratory, was trending on social media. P5 has an enormous facility to make a connection to the general public because it is a common everyday situation but only a few people are curious to look for the cause.

#### 4.1.4 *Post Savings*

A post seen while scrolling down the Instagram feed can be saved by users. This way they can easily access it and read its content at any time, or just have the publication marked as interesting to be reviewed at some other time. There were three publications that were most saved by users: P5 “Como os vírus sofrem mutação?”; P9 “Why are animals used as guinea pigs?” and P16 “Quais são as piores pandemias da história??” (What were the worst pandemics in history??) with 9 saves each.

The Covid-19 pandemic, experienced during the creation and sharing of the posts, suggests an interest of the followers in the theme. Postings about COVID-19 increased in volume as the disease spread around the globe and more cases were confirmed daily, becoming one of the main topics in the media, including the internet (Pessanha & Fidelis, 2020).

Understanding how a virus mutates makes it easier to understand the mutations suffered by the new coronavirus and its variants. Experiencing a pandemic can generate curiosity about past pandemics, and how populations view this issue. Testing on animals is a controversial subject that raises a search for clarification on the practice.

#### 4.1.5 *Reach*

Reach refers to how many times a given post has been seen by users who are followers and non-followers. Reach counts the times a unique user has viewed a certain post. The three publications that recorded the greatest reach were: P2 “What is that little bug on the wall?” with 307 accounts reached, P1 “Todos os gatos tricolores são fêmeas?” with 241 accounts reached, and P10 “Why are animals used as guinea pigs?” with 238 accounts achieved.

The high reach of these three publications can be associated with the fact that they stood out in other metrics (likes, shares and impressions). When Instagram detects above average activity in a post, it tends to contribute to a wider range.

#### 4.1.6 *Profile Views*

A publication can act as a business card, serving as an attraction for users to visit the page that owns that publication. The three publications that attracted the most visitors were: P1 “Todos os gatos tricolores são fêmeas?” with 26 visits, P10 “Por que sentimos sono logo após o almoço?” with 22 visits, and P2 “O que é esse bichinho na minha parede??” with 16 visits. A high number of

visits received by the page due to a publication indicates that it instigated the person who received the content, generating curiosity and a search for more content from the same source.

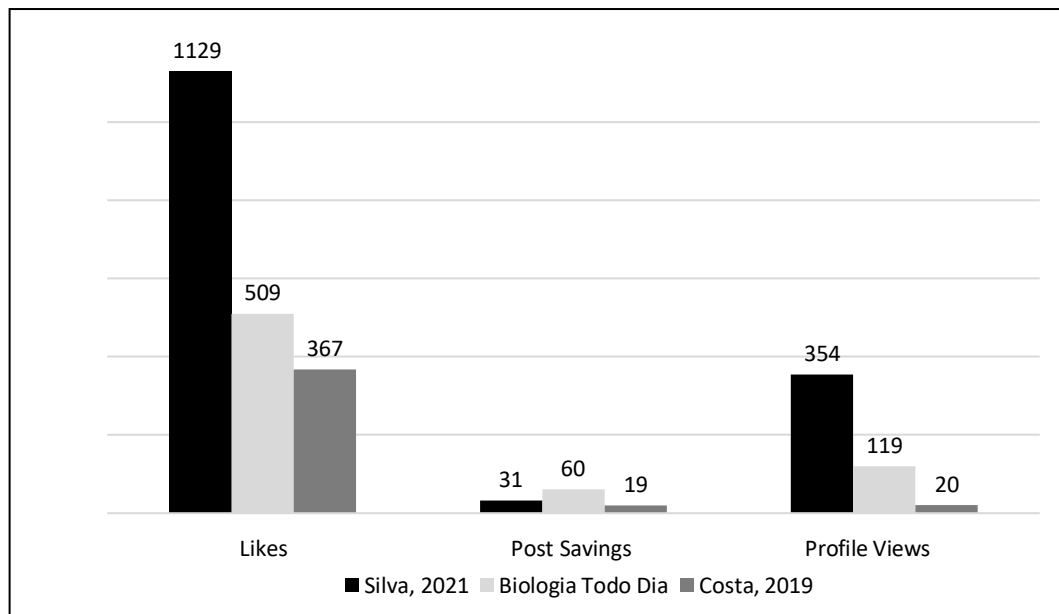
#### 4.1.7 Impressions

The number of times a post is accessed can be expressed in the form of impressions. If it has been viewed twice by the same user, two impressions will be counted. The publications that added the highest number of impressions were: P2 “What is that little bug on the wall?” with 359 impressions, P7 “Por que suamos quando estamos com calor?” (Why do we sweat when we feel hot??) with 292 impressions, and P1 “Todos os gatos tricolores são fêmeas?” with 291 impressions.

#### 4.1.8. Considerations for all metrics

After the final analysis of all metrics, it is possible to observe similarities with data available in the literature (Graph 1). Silva's work (2021) made 49 posts with a theme aimed at protecting primate species on the North Coast of Paraíba. For comparison purposes, the metrics of the first 16 posts were analyzed. In their outcome, some values exceeded while other were below the results obtained in the present study. The better performance obtained by Silva (2021), compared to the study addressed in this work, can be attributed to the total number of followers at the end of the research, marking a difference of 360 users. In the research carried out by Costa (2019), the author shared 32 posts focused on the theme of cell biology and the metrics rate referring to the first 16 posts marked lower values (total of followers not disclosed), being surpassed by the metrics obtained with the 16 posts shared by the profile “Biologia every day” and analyzed in this work.

**Graph 1:** Comparison between the results obtained, in the first 16 posts, by Silva (2021), Costa (2019), with data from the profile “Biologia todo dia”.



Source: Own authorship, 2021.

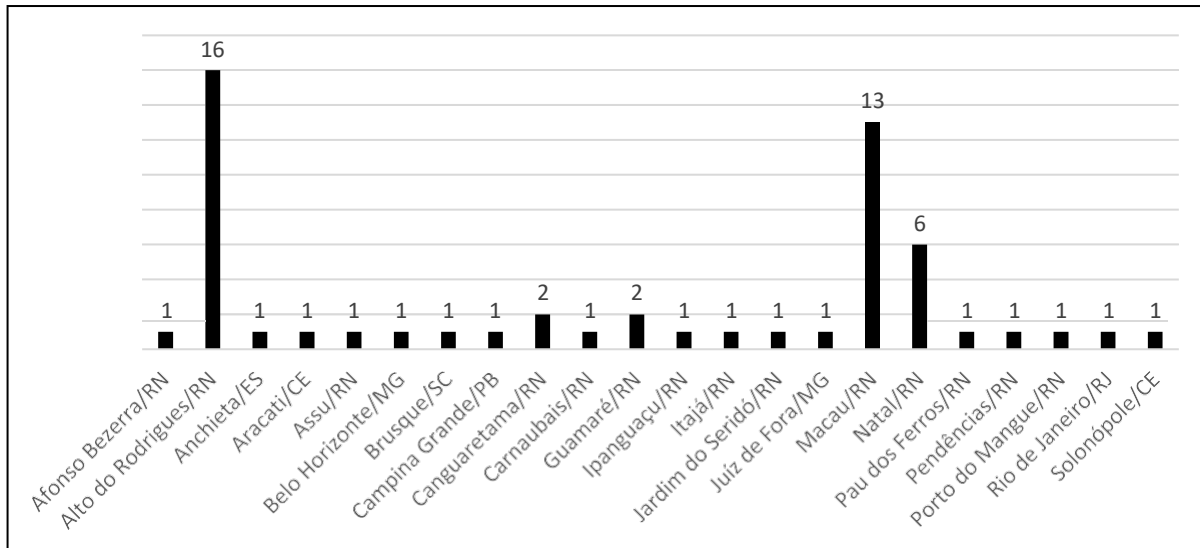
#### 4.2. Questionnaire analysis

A questionnaire in digital form was sent to the 229 followers of the profile with a set deadline for submitting responses. Following the time limit the responses were counted. Fifty-seven (57) users participated in the survey, the equivalent of approximately 25% of total followers.

##### 4.2.1. Personal information

Of the participating followers, 58% are aged between 15 and 25 years old and 37% between 26 and 35 years old. The others (5%) belong to older age groups. As for the city where they live in, the five locations that stood out the most in number of followers were: Alto do Rodrigues/RN (16), Macau/RN (13), Natal/RN (6), Guamaré/RN and Canguaretama/ RN (both with 2 users each) as shown in Graph 2.

**Graph 2:** Number of followers of the “Biologia Todo Dia” profile by city.



Source: Own authorship, 2021.

It is worth noting that user participation from other cities within the state of Rio Grande do Norte, as well as from other states, was recorded. This is the case of the cities of: Afonso Bezerra/RN; Anchieta/ES; Aracati/CE; Assú/RN; Belo Horizonte/MG; Brusque/SC; Campina Grande/PB; Carnaubais/RN; Ipanguaçu/RN; Itajá/RN; Jardim do Seridó/RN; Juiz de Fora/MG; Pau dos Ferros/RN; Pendências/RN; Porto do Mangue/RN; Rio de Janeiro/RJ; Solonópole/CE.

Regarding education level, 23% had at least completed high school and 77% ranged between incomplete higher education to complete doctorate, demonstrating that the Biologia Todo Dia profile reaches a most varied audience coming from all degrees of academic education. It was observed that most of the profile's followers are students (54% of respondents). In addition, it was noted the page's audience comprises 30% of people who work in the education field, either formally or informally.

#### 4.2.2. How the followers discovered the profile

The profile under study did not get any type of advertising in order to make the page known. The profile grew organically. A total of 77% of the followers found out about the page through friends and 23% found out about the page through other means (by random searches on Instagram; Recommendation from Instagram itself, or by suggestion of friends).

The vast majority of content disclosure occurred among followers and their friends



therefore demonstrating the followers themselves found the material interesting and worth disseminating to their acquaintances.

#### 4.2.3. Evaluation of the visual identity of the profile

The visual identity is about the organization and disposition of symbols following criteria and theories that seek the representation, communication and promotion of the identification of a brand. (Rossi, 2017 as cited in Mozota, 2009, p.18). Respondents were asked how they evaluated the visual identity of the profile. After analyzing the questionnaires, it was possible to state that: 75% rated it as excellent; 23% rated it as good, and only 2% rated it as regular. These data show that followers like the visual identity used in the profile indicating that the colors, graphics and writing elements were well received by the public.

#### 4.2.4. The profile as a source of information

According to Barbosa, Bulhões, Zhang & Moreira, 2017, the insertion of clear and objective texts, together with the technological field of digital media, allow for inclusion and interactions, proposing discussions on specific topics.

Of the total number of followers who responded to the questionnaire, approximately 80% rated the clarity of the information contained in the posts as excellent; and 20% rated it as good. Regarding knowledge acquisition, almost all respondents (98%) claim to have learned something new after seeing the posts on their feed.

#### 4.2.5. Potentiality of the "Biologia Todo Dia" profile as a tool for scientific dissemination

With the aim of measuring the ability to use the profile under study as a tool for scientific dissemination, three specific questions were asked. The results of the analysis of these data are shown in the table below (Table 4):

**Table 4:** Questions asked with the objective of verifying whether the Everyday Biology profile has the capacity to be used as a scientific tool, according to the interviewees.

| Question   | Answer Options/<br>Number of answers |    |     |
|--|--------------------------------------|----|-----|
|  | Yes                                  | No | NTC |
| Do you believe that the "Biologia Todo Dia" profile is an important tool?<br>in the dissemination of scientific knowledge? | 57                                   | 0  | 0   |

|  |    |   |   |
|--|----|---|---|
| Do you believe that scientific dissemination, in a simple and popular way, has the power to make people interested in science? | 57 | 0 | 0 |
| Would you recommend the "Biologia Todo Dia" profile to others?   | 57 | 0 | 0 |

Source: Own authorship, 2021. NTC = Not sure.

The three questions had 100% of positive responses from the followers participating in the survey. With this result, it is possible to conclude that the Biologia Todo Dia page has an excellent acceptance as a science dissemination tool and is capable of generating interest in science not only in its loyal audience/followers but also in those who come by to follow the profile as a result of voluntary shares by followers.

## 5 CONCLUSION

The analysis of the metrics provided by Instagram demonstrated that the profile under study reached a considerable audience with its publications. The scope included people residing in several cities in Brazil, mostly in the state of Rio Grande do Norte, encompassing users of the most varied age groups and education levels.

Corroborating with the author's research, the analysis of the data obtained from the survey, especially in relation to questions 13, 14 and 15 - which dealt with the importance of the profile as a tool for scientific dissemination, its ability to generate interest in science and the tendency of the profile to be shared voluntarily by the followers - indicate, quite satisfactorily, the approval of the profile by the surveyed participants. The results therefore suggest the page has great potential to be used as a tool for scientific dissemination, promoting scientific learning in a clear and meaningful way, democratizing and translating information for a general and diverse audience.

It is important to emphasize the importance of continuing this work. Increasing the posting interval, exploring other available resources, and even testing the use of the Biologia Todo Dia profile in other areas of education could further enrich the research, diversify the range of digital tools, and modernize the significant exchange of knowledge. These initiatives could help establish the Biologia Todo Dia profile as a reference in scientific dissemination in the field of biology.

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