

Development of EducaIndex: an innovative methodology for evaluating health-promoting communication

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Abstract: This article presents the development of EducaIndex as an innovative and dialogical methodological proposal, which allows the evaluation of communication campaigns on HIV/AIDS and viral hepatitis by young people aged 15 to 24, linked to schools, civil society, scholars, professionals and/or managers, enabling mediation between health education, information, and communication. Data was collected in Brasília-DF and Catalão-GO in the Central-West region; Manaus-AM in the North region; Vitória-ES in the Southeast region; Porto Alegre, Santa Cruz do Sul and Fontoura Xavier-RS in the South region; and Fortaleza-CE in the Northeast region, with young people aged 15 to 24, linked to schools, civil society, scholars, professionals and/or managers. The locations were selected for convenience, considering the displacement of the team of researchers and supporters who are part of the Brazilian Network for Information Management and Knowledge Translation in Health. The research interviewed 643 young people who evaluated three campaigns, including a poster, a jingle, and a video, selected from 475 analyzed campaigns. The quantitative methodology meets the EducaIndex, and the qualitative methodology meets the workshops that mediate the application of the instrument in the field. The EducaIndex instrument was reliable (Cronbach's alpha = 0.700), attesting the ability to reproduce results in time and space consistently. As for the workshops, they allowed interaction between researchers and participants, strengthening the importance of protagonism in the campaign evaluation process.

► **Keywords:** Methodological Study. HIV. Aids. Health communication. Health education.

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Introduction – Communication promoting health

Health communication establishes dialogical principles that permeate processes and methods capable of interconnecting knowledge and practices that enable the production of substantial evidence based on qualitative, quantitative, or mixed methodologies. As a strategy, health communication can be aimed at informing and influencing people, families, and communities, not only concerning health promotion but also the prevention of health problems and proactive reflection on the countless products and information that reach the population on the topic of health.

Teixeira (2004) outlines other purposes of health communication, including preventing risks, dealing with possible health threats, promoting behavioral changes, supporting screening tests, sharing information about health and diseases, disseminating data about tests and results, prescribing medications, and suggesting preventive and self-care measures.

In the context of the education, information, and communication triad, it is essential to emphasize that education is one of the strategies that strengthen health communication. It is recognized as fundamental in disease prevention and health promotion, playing a crucial role in physical and mental well-being at an individual and collective level. It is recommended that this education be conducted through clear and effective communication, adapted to the realities of each person (Sousa *et al.*, 2020).

Education, therefore, is conceived as a transformative process that involves interaction between two or more subjects, enabling the socialization of knowledge. When this is conducted vertically, from top to bottom, characterizing the "banking education" model, only one of those involved shares their knowledge, while the other is limited to receiving and memorizing the information. In this context, the student is reduced to the role of "receiver" of knowledge, with the sole responsibility of assimilating the information transmitted (Freire, 2014, p. 80).

Information and communication have different definitions and purposes because, despite being complementary terms, Wolton (2010) reminds us that not all information is communication. The author also informs us that information can be categorized into three types: oral, image, and text. Furthermore, it can be presented in different ways and on various media, deepening the fundamentals and production methods. For Araújo and Cardoso (2007, p. 31), "communication pays

more attention to the procedures by which information can be treated, circulated and transformed into knowledge by people and institutions”.

It is important to keep these conceptual and usage differences in mind, as communication seeks to bring closer and deeper relationships. It is present daily in our lives and encourages us to share and exchange knowledge, whether through reports or experiences. Dialogical exchange allows us to rescue the past, giving new meaning to the present and helping build the future we want to build (Wolton, 2010).

The combination of these three areas has been increasingly explored and stimulated in the field of Public Health, in which health-disease processes have promoted an increasing investment in health products and campaigns, especially on the topics of HIV/Aids and viral hepatitis, studied in the research that gave rise to this article. That is why it is essential to know the epidemiological scenario.

In 1981, in the United States, the first reports of acquired immunodeficiency syndrome, known as AIDS, appeared at the Centers for Disease Control and Prevention (CDC). In 1983, the human immunodeficiency virus (HIV) was identified, which is the etiological agent of the syndrome (Rachid; Schechter, 2017). In Brazil, the first cases of HIV infection were also recorded in the early 1980s, and since then, the country has faced significant challenges in AIDS control and prevention.

Data on HIV/AIDS obtained from the Notifiable Diseases Information System (SINAN) and the Laboratory Test Control System (Siscel) indicated that, from 2011 to 2022, 451,482 cases of AIDS were identified in Brazil. Of these diagnoses, 9.7% (43,850) were concentrated in 2013, and the Southeast Region was the one with the highest number of cases in the country (17,652), followed by the South (9,381), Northeast (9,269), North (4,440) and Midwest (3,108). Still concerning 2013, the states in the Southeast Region that had the highest number of diagnoses were São Paulo (48.4%), Rio de Janeiro (30.0%), Minas Gerais (16.7%) and Espírito Santo (4.9%) (Brazil, 2023).

Deaths due to HIV, extracted from the Mortality Information System (SIM) database from 2011 to 2020 totaled 118,880, of which 10.7% (12,667) occurred in 2015. Taking 2015 as the year with the highest number of deaths due to HIV, it is possible to observe that just under half of the deaths were concentrated in the Southeast Region (42.9% - 5,437), but specifically in São Paulo (47.2% - 2,567) (Brazil, 2023).

Concerning AIDS cases identified in Brazil, from 2011 to 2022, according to sex, data from Siscel (2023) indicate that men (305,461) concentrate a more significant

number of cases compared to women (145,931), that is, 67.7% and 32.3%, respectively. Regarding the age group, the young population aged 20 to 34 was the most affected between 2011 and 2022, representing 40.4% (182,195) of confirmed cases.

Analyzing the epidemiological data, we find the funds approved from 2015 to 2022 to produce campaigns that help prevent HIV/AIDS. In 2015, 41,519 cases of HIV/AIDS were registered, and R\$850,354.59 were invested in campaign production. In 2016, there was a reduction in cases – 39,916 cases, with R\$899,614.55 invested. In 2017, R\$21,285,348.20 were approved, and the number of confirmed cases was 39,095. In 2018, more funds were approved for prevention campaigns when R\$23,265,141.79 were allocated, and the number of confirmed cases was reduced to 38,627. In 2019, there was a reduction in the amount applied, which dropped to R\$5,674,746.30. About 2020 and 2021, the amount invested was lower - R\$ 13,500 and 117,040, respectively, and it is believed that due to the arrival of the COVID-19 pandemic, sanitary measures were prioritized (Brazil, 2023).

As for 2022, it is important to highlight that the data on confirmed cases extracted from Siscel (2023) may not have been fully accounted for due to the platform's limitations, which present a delay. Therefore, it cannot be said that 2022 has seen a significant drop in cases, nor can it be related to the funds approved in the period.

The correlated analyses between cases and the budget allocated to communication campaigns supported the study in question, to seek, in the campaigns developed by the Ministry of Health between 2009 and 2019, the perception of young people between 15 and 24 years old about the educational, informational and communicative elements, when displayed and evaluated using a quantitative evaluation instrument explicitly developed for this objective, called EducaIndex and which this article focuses on.

Thus, this article aims to develop the EducaIndex as a methodological proposal for evaluating health communication pieces, such as those on HIV/AIDS and viral hepatitis, with young people aged 15 to 24, linked to schools, civil society, scholars, professionals, and/or managers, enabling mediation between the segments of health education, information, and communication.

Methodology

The challenge of an innovative methodology lies in the need to establish an effective dialogue with the perception of the receiving participants in the

communication process. In a context where education and communication play crucial roles in disseminating information and promoting healthy behaviors, it is essential that any methodological approach considers the complexity of individual and collective perceptions of recipients (Mendonça, 2021).

This implies recognizing the cultural, social and cognitive differences of the participants, as well as their values, beliefs and previous experiences. An innovative methodology must be able to adapt to these nuances, ensuring effective and meaningful communication that resonates with the public, thus promoting greater adherence to educational and communicational messages, constituting a web of concepts, methods and techniques that challenge plurality and complexity of systems, their interactions and interferences, as Morin (2005) teaches us.

Although the instrument presented is primarily quantitative, Minayo and Sanches (2021) reiterate the importance and need for a meeting between qualitative and quantitative studies that complement, triangulate, and promote the integration of methods, data, techniques, instruments, and theories that strengthen studies such as the one presented in this article. Therefore, procedures of both natures will be indicated here, providing an innovative process that dialogues with people and their plural and quantifiable interpretative possibilities.

The methodological proposal

The methodological proposal developed here is intended for the evaluative study of advertising campaigns in the health field, through the application of the EducaIndex instrument, developed in national research that dealt with Health Promoting Communication: Strategies for Coping with Epidemics of STIs, HIV /AIDS and Viral Hepatitis in the Young Population, with funding from the National Council for Scientific and Technological Development (CNPq), and carried out in partnership with other public and private higher education institutions in the five Brazilian regions.

The instrument was applied in workshops developed from January 2023 to September 2023 in Brasília-DF and Catalão-GO, in the Central-West Region; Manaus-AM, in the North Region; Vitória-ES, in the Southeast Region; Porto Alegre, Santa Cruz do Sul and Fontoura Xavier-RS, in the South Region; and Fortaleza-CE, in the Northeast Region, involving 643 young people aged 15 to 24 years.

The locations were selected for convenience, considering the displacement of the research team to present the methodology and carry out training workshops for

multipliers and supporters who are part of the Brazilian Network for Information Management and Knowledge Translation in Health.

To compose the EducaIndex instrument, three campaigns produced by the Ministry of Health were evaluated, selected from the 475 produced over a 10-year period (2009-2019). The campaigns were produced by non-governmental organizations (NGOs), institutes, and the Ministry of Health and Health Departments.

The 475 pieces of communication identified were evaluated and ranked according to criteria used by Rothberg *et al.* (2022). When evaluating the campaigns, the three best evaluated and produced by the Ministry of Health were selected, considering different formats. Therefore, a video produced in 2017 about Viral Hepatitis, available at <<https://www.youtube.com/watch?v=ZjQENcSnQmg>>; a jingle produced during Carnival 2013, in partnership with the Oswaldo Cruz Foundation (FIOCRUZ), available at <<https://portal.fiocruz.br/audiovisual/campanha-dst/aids-carnaval-2013-jingle-samba>>, and a 2018 poster on the theme of AIDS, shown in Figure 1.

Figure 1. Poster used for evaluation using EducaIndex



Source: Ministério da Saúde, 2017.

To apply the instrument in the field, a script was prepared to carry out mobilizing and dialogical workshops, which mediate the EducaIndex, scheduled for development in approximately 1h30-2h, with a minimum of three and a maximum of 20 participants. These were identified as leaders, groups of young people, friends or family, in school and university environments, or in alternative spaces in the community, such as squares, gardens, churches, and community centers.

To carry out the workshops, the group in the field had to be composed of at least three people: one who would play the role of coordinator of the activity, responsible for conducting and moderating; the other as a reporter, to observe and record relevant speech, behaviors, and body expressions; and finally, a supporter, who helped with documentary, ethical aspects, and participants' doubts.

The workshop was divided into five moments, carried out in a sequenced manner, as they were complementary. The first step was to guide people to divide themselves into groups with at least three participants so that each one could evaluate a campaign. If the group has more members, they must be separated into subgroups, as long as the number is a multiple of three, so that campaigns can be evaluated once or twice by different subgroups.

After this separation, the supporter distributed paper and pen, read and provided guidance on the Terms of Consent, clarifying possible preliminary doubts. Soon after, the coordinator instructed participants to insert on paper the first word that came to mind when they saw or heard the following terms: HIV/AIDS, sexually transmitted infection or STI, and viral hepatitis. The activity allowed us to find out what the participants think, know, or associate about the topic. In the workshop, words were not shared due to time, however, if the group is available for debate, it is up to the session coordinator to open the space or not to share. The roles remain with the groups.

For the post-workshop, in the case of this first warm-up approach, at the end, the group quantified the words that emerged, categorized them according to the objectives of the research in question and even represented them by clouds. For this research, it was decided to create word clouds for subsequent in-depth analysis of the presented and associated themes.

The second moment was dedicated to the application of EducaIndex, which will be presented in depth later. Each group received campaign material (mentioned previously) along with the instrument.

After the campaigns' implementation and evaluation, the third moment of the workshop arrived. The coordinator instructed the participants to prepare a campaign proposal by inserting the words on the back of the sheet used previously.

The campaign proposal was created with the aim of attracting other young people in the same age group, addressing the research theme. The coordinator instructed participants to think about the widest variety of elements, such as which audience is the campaign for (15 to 24 years old)? Where will it be broadcast (Instagram, Television, WhatsApp, radio, action in schools or communities)? How long? Will it have a famous representation or not? If so, who will this representation be? What will the campaign call be? What other elements would be needed in campaigns in your perceptions? And others that arise through the creativity of the responses received.

The campaign proposal uses a qualitative approach, which helps researchers identify what the research public evaluates as ideal for carrying out health education and communication actions on the topic addressed. Preparing the communication proposal also allows the group to participate in the co-creation process and feel represented in disease prevention and health promotion actions.

The fourth moment of the workshop was the dialogue between the participants and the session coordinator. He, in turn, instructed the participants to sit in a circle. They were then invited to a dialogue circle, with five guiding questions to start the debate. The guiding questions focused on knowledge about internal and external condoms and access to and search for information about sexuality, prevention, and sexually transmitted diseases.

The first question was whether they knew about condoms and their types. In this question, specifically, the coordinator presented the materials so that participants could see, touch and learn about them. When starting the conversation, the coordinator informed that the objective of demonstrating condoms is not to encourage sexual practice but to present ways of preventing STIs and provide guidance on where they are available, highlighting the importance of seeking out health professionals for more information.

The next four questions were aimed at accessing and searching for information on the topic. They were: Through which means of communication do you prefer to receive information about the prevention of STIs, HIV/AIDS, and viral hepatitis? What do you think are the most used means of communication to convey this information? What means do you prefer to receive this information and are they the same ones in

which it is usually transmitted? By what means is the information conveyed and does the language used guarantee young people's access to these materials? The questions are only guidelines for the development of the dialogue; they can be replaced, and some can be answered indirectly during the interaction, as researchers can repeat them, whenever necessary, to identify the participants' understanding.

The fifth and final moment was the process evaluation, which aimed to validate the methodology and approaches used to present and discuss the topic. The assessment has 14 questions, seven of which are closed questions, about achieving the objective, meeting expectations, workload, whether the approach was appropriate and attractive, as well as the language. The eighth question, also closed (very little, little, moderate, and a lot), seeks to measure the level of mastery/knowledge of young people on the workshop topic. The other six questions are discursive and seek to find out what the experience of participating in the workshop was like, what it was like to evaluate the material from the Ministry of Health, the facilities, and difficulties encountered throughout the process, what they would do differently and what they liked most about the workshop.

The evaluation was answered individually, anonymously, and returned at the end. The evaluation responses were quantified and analyzed, enabling us to understand how young people evaluate the workshop and their perceptions of the activity as a health education and communication strategy.

All research instruments were approved by the Research Ethics Committee of the Faculty of Health Sciences of the University of Brasília, under opinion no. 4,548,238. The research team used the Free and Informed Consent Form (TCLE) for those over 18 years of age and the Free and Informed Assent Form (TALE) for those under 18 years of age, adopting the necessary and recommended ethical precautions.

EducaIndex

It is a quantitative instrument whose objective is to evaluate advertising campaigns in different formats and themes. It can be applied to any communication or educational material, whether in the health area or not.

The EducaIndex is divided into three axes and has seven variables and 18 evaluation criteria. These criteria are subjected to a binary analysis, in which the values "yes" and "no" are assigned. The "yes" value is weighted with one point, while the "no" value is assigned as zero. This aggregation results in quantifying the degrees

and parameters associated with each variable, which, in turn, determine whether the respective axis receives a high, medium, or low evaluation, as shown in Chart 1, referring to the evaluation matrix.

Chart 1. Evaluation Matrix for Education Materials – EducaINDEX

Analyzed material: _____
 Date of participation: _____ Place: _____

EVALUATION MATRIX FOR EDUCATION MATERIALS'		CRITERIA	UNDERGRADUATION / PARAMETERS
AXES CONCEPTUAL Max.: 6 points	VARIABLES IMPORTANCE (0-3 points)	a) Is the material suitable for use in teaching activities? () Yes - 1 point () No - 0 point b) Does the educational material present information or data that justify the relevance of the topic? () Yes - 1 point () No - 0 point c) Does the language used allow a quick understanding of the content covered in the material? () Yes - 1 point () No - 0 point	() High importance of the material: all positive () Average importance of the material: two positive () Low importance of the material: none positive Total of "IMPORTANCE": _____ points
	CONTENT (0-3 points)	a) Is the content easy to understand? () Yes - 1 point () No - 0 point b) Is the content of the material based on the knowledge produced on the topic? () Yes - 1 point () No - 0 point c) Does the content have an adequate volume of information for the strategic audience? () Yes - 1 point () No - 0 point	() High suitability of content: all positive () Average suitability of content: two positive () Low suitability of content: only one or none positive Total of "CONTENT": _____ points
PEDAGOGICAL Max.: 7 points	USABILITY/EASE OF USE (0-2 points)	a) Does the material allow learning in different contexts and situations? () Yes - 1 point () No - 0 point b) Can the material be used in different spaces of educational practices? () Yes - 1 point () No - 0 point	() High usability: all positive () Average usability: only one positive () Low usability: none positive Total of "USABILITY": _____ points
	APPLICABILITY/APPLICATION (0-2 points)	a) Does the approach to the topic favor changing attitudes and behaviors on the part of the public? () Yes - 1 point () No - 0 point b) Does the material encourage the target audience to seek more information, guidance or content related to the topic covered?	() High applicability: all positive () Average applicability: only one positive () Low applicability: none positive Total of "APPLICABILITY": _____ points



	<p>() Yes - 1 point () No - 0 point</p> <p>a) Did the educational material address sexuality (sex, gender, identity, sexual orientation, sexual affections)? () Yes - 1 point () No - 0 point</p> <p>b) Did the educational material address cultural aspects (customs, beliefs, values, language, religion, race and ethnicity)? () Yes - 1 point () No - 0 point</p> <p>c) Did the educational material consider socioeconomic conditions (income, education, occupation, family composition, access to health services, housing)? () Yes - 1 point () No - 0 point</p>	<p>() High suitability for the public: all positive () Average suitability for the public: two positive () Low suitability for the public: only one or none positive</p> <p>Total of "SUITABILITY FOR THE TARGET AUDIENCE": _____ points</p>	<p>() High suitability for the public: all positive () Average suitability for the public: two positive () Low suitability for the public: only one or none positive</p> <p>Total of "AVAILABILITY": _____ points</p>
	<p>AVAILABILITY (0-2 points)</p>	<p>a) Is the material easily accessed in different media and communication channels (websites, links, print)? () Yes - 1 point () No - 0 point</p> <p>b) Is the material accessible to people with disabilities (hearing, visual or intellectual)? () Yes - 1 point () No - 0 point</p>	<p>() High availability: all positive () Average availability: only one positive () Low availability: none positive</p> <p>Total of "AVAILABILITY": _____ points</p>
<p>COMMUNICATIONAL Max.: 5 points</p>	<p>LANGUAGE (0-3 points)</p>	<p>a) Does the language enable interaction with the public, favoring learning about the topic covered? () Yes - 1 point () No - 0 point</p> <p>b) Does the educational material contain information or statements that promote acceptance, social inclusion and respect for diversity? () Yes - 1 point () No - 0 point</p> <p>c) Are the images, illustrations, characters, drawings and verbal and/or textual expressions used appropriate to the target audience? () Yes - 1 point () No - 0 point</p>	<p>() High suitability of language: all positive () Average suitability of language: two positive () Low suitability of language: only one or none positive</p> <p>Total of "LANGUAGE": _____ points</p>
<p>TOTAL SCORE OF THE EDUCATIONAL MATERIAL</p>			

Notes:
 †The maximum score is 18 points. These will correspond to the sum of criteria points (coming from their respective variables and axes). After that, each score obtained will follow the following score, ranging from 0 to 18 points:
 • Low quality (0-5 points)
 • Average quality (6-9 points)
 • Good quality (10-14 points)
 • Excellent quality (15-18 points)

Source: Projeto Comunicação Promotora de Saúde, 2022.

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After quantifying the individual parameters of each axis, the total scores are added. The total score represents the evaluation of each piece based on participants' responses. These evaluations can be categorized according to the quality of the material analyzed, assigning the following ranges: low quality for total scores between 0 and 5 points; regular quality for scores between 6 and 9 points; good quality for scores between 10 and 14 points; and optimal quality for scores between 15 and 18 points.

The first is focused on conceptual elements, which total 6 points out of 18. The axis is made up of two variables and six criteria. The first variable evaluates the importance of the material, with the following criteria: whether the material is suitable for use in teaching activities; whether the educational material presents information or data that allows justifying the relevance of the topic; and whether the language used allows quick understanding of the content covered in the material. The second variable evaluates the content of the pieces: whether the content is easy to understand; whether the content of the material is based on the knowledge produced on the topic; and whether the content has an adequate volume of information for the strategic audience.

The second axis is focused on pedagogical elements, which total seven points. The axis is made up of three variables and seven criteria, with the first variable concentrating on the usability/ease of use of the pieces, with the following questions as criteria: whether the material allows learning in different contexts and situations and whether the material can be used in various spaces of educational practices. The second variable is the applicability/application of the material, questioning whether the approach to the topic favors changing attitudes and behaviors on the part of the target audience; and whether the material encourages the public to seek more information, guidance or content related to the topic covered.

The third axis totals five points and is aimed at communication elements, consisting of two variables and five criteria. The first variable is focused on the availability of access to the pieces, evaluating whether the material is easily accessed in different media and communication channels (websites, links, printed materials); whether the material is accessible to people with disabilities (hearing, visual or intellectual); the second variable is intended for the language used in the pieces, and seeks to evaluate whether the language allows interaction with the public, favoring learning about the topic covered; whether the educational material contains information or statements

that promote acceptance, social inclusion and respect for diversity; and whether the images, illustrations, characters, drawings and verbal and/or textual expressions used are appropriate for the audience to which the materials are aimed.

The EducaIndex assessment can be carried out individually or collectively, generating a debate among participants on how each interprets and relates to the material assessed. For this research, we chose to work in groups, in which participants discussed the axes and variables and reached an assessment consensus for each question. Although the instrument achieved validation and statistical consistency when applied nationally to 643 young people, this article is dedicated to its methodological development.

Results and Discussions

During the development of the “Health Promoting Communication: Strategies for Coping with Epidemics of STIs, HIV/AIDS and Viral Hepatitis in Young Populations” project, carried out from 2020 to 2023, after the necessary theoretical reviews, the methodological design and the elaboration of instruments, ethical procedures and fieldwork, the researchers spoke to 643 young people distributed across the five Brazilian regions, which resulted in 159 evaluations through EducaIndex. Of these, 384 evaluated the workshop methodology and the instruments used for collection, since not all participants responded to the final form.

The EducaIndex instrument, in turn, showed good reliability (Cronbach's alpha = 0.700), demonstrating the ability to consistently reproduce the results obtained in time and space (Souza; Alexandre; Guirardello, 2017). The results of the evaluation of the materials used in research on HIV/Aids and STIs (video, jingle and poster) using EducaIndex revealed similar quality between them ($p=0.077$) at national level and by region. However, in relation to the axes that make up the instrument (Conceptual, Pedagogical and Communicational), it was observed that the Conceptual axis, referring to the importance and content of the material, presented a better evaluation, while the Communicational axis was worse evaluated ($p<0.001$).

Regarding the evaluation of the workshops, in the first question, “if the workshop achieved the proposed objective”, 325 people said yes (85%); eight said it was not (2%) and 51 said it was only partial (13%). As for expectations, 318 rated it as being met (83%), 10 rated it as not (3%) and 56 rated it as partial (14%).

When preparing the workshop script, the research group sought to adapt the time for all stages of the process, so that all participants could get involved in the proposed dynamics. Therefore, the assigned workload was positively evaluated by 329 participants as well distributed (86%), 18 considered it not (5%) and 37 considered it partial (9%). In this sense, it is observed that the completion time can be readjusted depending on the availability and interaction of participants during the activity.

As it was a workshop aimed at young audiences, the researchers sought to use an appropriate and attractive approach. In this sense, 327 participants, corresponding to 85%, evaluated the approach as attractive, 12 evaluated it as not (3%) and 45 evaluated it as partial (12%). When asked whether the approach was appropriate, 362 (94%) said yes, 20 said it was partial (5%) and only two said it was no (1%).

A challenge for the group was the use of attractive language that would involve young people and bring them closer to dialogue. This was one of the points addressed in the evaluation, which had 338 participants (88%) evaluating that the language was attractive, while 33 (9%) evaluated it as partial and 13 (3%) that it was not attractive.

When trying to approach young people through language, we break sharing in an imposed way, whether by representing a health or education professional. Thus, participants become part of the educational process by sharing similar thoughts and moments. Young people become subjects in the construction of knowledge and the educator, in this case, the moderator, becomes an observer (Guimarães, 2012).

According to Braungart and Braungart (1996), young people have a distinct culture that differs from the predominant culture, manifesting itself through symbols, beliefs and behaviors that reflect the uniqueness of their youthful condition.

The evaluation also sought to determine the level of mastery/knowledge of young people on the workshop topic. In this regard, 270 participants (70%) said they had moderate knowledge, 55 (14%) said they knew a lot, 18 (5%) knew very little and 41 (11%) knew little. Lima *et al.* (2024) consider “dialogue as a meeting of knowledge, in which there is respectful sharing of the most diverse knowledge, expanding critical knowledge and contributing to the process of autonomy and emancipation of subjects” (p. 8).

Participants were also asked what the experience of participating in the workshop was like, and so that they could express themselves freely, they could enter their opinions. Among the 384 responses, we found the experience defined in one word:

“Great”; “Very good”; “Positive”; “Nothing”. And experiences with more detailed reports, such as those of three young people from Vitória-ES, who shared:

I liked it, the conversation was light and fun.

I really enjoyed participating in the workshop, I found the method interesting.

It was a very remarkable experience as it opened up a debate between people of similar ages with different perspectives.

In the South, one participant evaluated it as: “Interesting, but there could ultimately be a group intervention as a whole”. The opinion of a young man from Catalão-GO, in the Midwest, was similar: “It was very interesting to be able to present my perspectives on the advertisements and express my opinion”. Just like in the North, in Manaus-AM: “It was interesting, I hadn't participated in an activity like this before, dealing with the topic so openly”.

Seeking to meet the objective of the national survey – “Health Promoting Communication – Strategies for Coping with Epidemics of STIs, HIV/AIDS and Viral Hepatitis in Young Populations”, the question was asked how young people felt when evaluating the campaigns? Among the responses, “fast”; “easy”; “interesting”; “different”.

The young people also shared that it was:

Interesting, as it is something that affects thousands of people and me too (Vitória- ES);

It was important to evaluate the material, sometimes they make super cool material, but they are not in line with the target audience. Having evaluated it, perhaps the material is more suitable for consumption by the target audience (Vitória-ES).

Evaluating the material in groups was a moment in which we were able to really think about how that instrument would affect people's daily lives and whether people could access it. It was a moment of discussion about health, but also a concern for the democratization of information for all audiences, which already characterizes one of the purposes of a tool from the Ministry of Health to raise awareness. It was very important to go through this experience, to remember the characteristics of our society and see others who do not have the privilege of having access to information as we often do (Vitória-ES).

It was interesting, because I have never looked at the advertisements I see in an evaluative way (Porto Alegre-RS).

In this sense, it is highlighted that access to information is not equal, influenced by socioeconomic, geographic and cultural factors. People from different socioeconomic contexts may have unequal access to educational and communication resources, directly impacting their ability to understand, interpret and evaluate health communication campaigns aimed at them.

Furthermore, access to information may also be limited by physical barriers, such as a lack of communications infrastructure in rural or remote areas, as well as technological barriers, such as a lack of access to the internet or digital devices. Therefore, any innovative methodology must take into account these disparities in access to information when developing and implementing health communication strategies, aiming to ensure an inclusive and equitable approach that meets the diverse needs and realities of participants.

For Araújo and Cardoso (2007), it is essential to think about communication and information based on the principles and guidelines of the Unified Health System (SUS), so that they contribute to improving the health system, enabling citizens to participate in the construction of public policies.

Young people identified the following as ease:

Open language and available time (Porto Alegre-RS).

Know about condoms and diseases (Vitória-ES).

Evaluating in a small group, but with very similar ages, really made me relax and then share and discuss my ideas on the topic covered (Vitória-ES).

Evaluate the materials, talk about the topics and think about new strategies for disseminating information (Catalão-GO).

In addition to the facilities, it is also important to identify the difficulties. They were:

Reach agreement on opinions with my colleagues (Vitória-ES).

Seeing other people's difficulties in understanding the message passed (Catalão-GO).

Some words used (Brasília-DF).

Closing the workshop evaluation form, they were asked what they liked most, and some of the responses recorded were:

Evaluate the campaign and the conversation circle (Porto Alegre-RS).

The one I got the condom from (Vitória-ES).

Building an ideal campaign (Catalão-GO).

Create advertisements to raise awareness (Fortaleza-CE).

The most practical part was the presentation of condoms and the debates that arose (Brasília-DF).

Regarding the process of evaluating health communication materials, Vasconcelos, Oliveira-Costa and Mendonça (2016), when analyzing 14 campaigns produced by the Ministry of Health, observed that disease prevention was prioritized, to the detriment of health promotion. Therefore, health-promoting communication provides principles that will certainly allow, in the future, changes in scenarios resulting from research that incorporate strategies, processes, methods, and techniques that enable health-promotion actions with people, families, and communities.

Final considerations

Mediating the use of EducaIndex through workshops for field collection is a strategy that allows interaction between researchers and participants, strengthening the need and importance of interpersonal communication applied throughout the process.

These spaces allow us to reinforce the importance of dialogue and the exchange of knowledge and experiences, regardless of the age group of the participants. As health professionals and researchers, we do not hold workshops to teach imposingly but rather to learn from participants what they know and together build new knowledge in co-creation.

One of the most challenging aspects of the workshop was approaching young people to talk about a topic that is still seen as taboo. Proof of this was that, at times, they were afraid to talk about it, even with many doubts, or even because they didn't know who to talk to out of fear.

The development of EducaIndex to evaluate Ministry of Health campaigns allowed young people's observational process to be expanded since, in several situations, they overlooked the campaigns produced simply because they did not feel represented in the images, formats or languages such as advertising pieces reach them.

Complementing the campaign evaluation process, it is essential to give young people a leading role so that they can present what they would like to see in major media and campaigns. By including them in the co-creation process, we encourage the role of multipliers of the care process in the different scenarios and environments in which they find themselves, whether in person or virtually, materializing quality information and contributing to evidence-based health decision-making produced from health-promoting education, information, and communication actions.¹

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References

- ARAÚJO, I. S.; CARDOSO, J. M. *Comunicação e saúde*. Rio de Janeiro: Editora FIOCRUZ, 2007.
- BRASIL. Ministério da Saúde. *Sistema de Controle de Exames Laboratoriais - SISCEL*. Brasília: MS, 2023.
- BRAUNGART, R. G.; BRAUNGART, M. M. Cultura da juventude. In: OUTHWWAITE, W.; BOTTOMORE, T. *Dicionário do pensamento social do século XX*. Rio de Janeiro: Jorge Zahar, 1996, p. 167-168.
- DOMINIQUE, W. D. *Informar não é comunicar*. Porto Alegre: Sulina, 2010.
- FARIAS, H. S. O avanço da Covid-19 e o isolamento social como estratégia para redução da vulnerabilidade. Espaço e Economia. *Revista brasileira de geografia econômica*, n. 17, 2020.
- FREIRE, P. *Pedagogia do oprimido*. Rio de Janeiro: Paz e Terra, 2014.
- GUIMARÃES, J. S.; LIMA, I. M. S. O. Educação para a Saúde: discutindo uma prática pedagógica integral com jovens em situação de risco. *Saúde e Sociedade*, v. 21, p. 895-908, 2012.
- INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. *Censo de 2022*. Disponível em: <https://agenciadenoticias.ibge.gov.br/agencia-noticias/2012-agencia-de-noticias/noticias/37237-de-2010-a-2022-populacao-brasileira-cresce-6-5-e-chega-a-203-1-milhoes>
- LIMA, P. da C. *et al.* Enfrentamento de epidemias de ISTs em população jovem: caracterização da linguagem dos materiais educativos. *Cien Saude Colet.*, v. 29, e13762022, 2024. DOI: 10.1590/1413-81232024292.13762022
- MENDONÇA, A. V. M. O papel da Comunicação em Saúde no enfrentamento da pandemia: erros e acertos. In: SANTOS, A. O.; LOPES, L. T. *Competências e Regras - Coleção Covid-19*. Vol. 3. Brasília: OPAS; CONASS, 2021. p. 164-178. Disponível em: < <https://www.conass.org.br/biblioteca/volume-3competencias-e-regras/> > Access on: Jan. 2024.
- MENNA, T.; ALI, A.; WORKU, A. Efeitos da intervenção educativa entre pares nos comportamentos sexuais relacionados com o VIH/SIDA de estudantes do ensino secundário em Adis Abeba, Etiópia: um estudo quase experimental. *Saúde reprodutiva*, v. 12, p. 1-8, 2015.

Disponível em: <https://reproductive-health-journal.biomedcentral.com/articles/10.1186/s12978-015-0077-9> . Access on: Jan. 2024.

MINAYO, M. C. de S.; SANCHES, O. Quantitativo-Qualitativo: oposição ou complementaridade? In: MENDONÇA, A. V. M.; SOUSA, M. F. (Org.). *Métodos e Técnicas de Pesquisa Qualitativa em Saúde*. Vol. 1 Brasília: Editora ECoS, 2021. Available at: <https://ecos.unb.br/publicacoes/>

MORIN, E. *Introdução ao pensamento complexo*. Trad. Eliane Lisboa. Porto Alegre: Ed. Sulina, 2005.

RACHID, M.; SCHECHTER, M. *Manual de HIV/aids*. Thieme Revinter Publicações, 2017.

ROTHBERG, D. *et al.* Qualidade da comunicação promotora da saúde: como avaliar? Proposta de instrumento de avaliação de campanhas de prevenção de infecções sexualmente transmissíveis (ISTs). *Interface-Comunicação, Saúde, Educação*, v. 26, p. e220004, 2022. Available at: <https://www.scielo.org/article/icse/2022.v26/e220004/>

SOUSA, R. G. *et al.* Educação em saúde como estratégia de prevenção e promoção da saúde de uma unidade básica de saúde. *Brazilian Journal of Health Review*, v. 3, n. 3, p. 5811-5817, 2020. Available at: <https://ojs.brazilianjournals.com.br/ojs/index.php/BJHR/article/view/11122> Access on: 10 Jan. 2024.

SOUZA, A. C.; ALEXANDRE, N. M. C.; GUIRARDELLO, E. de B. Propriedades psicométricas na avaliação de instrumentos: avaliação da confiabilidade e da validade. *Epidemiol. Serv. Saúde*, Brasília, v. 26, n. 3, p. 649-659, set. 2017. Available at <http://scielo.iec.gov.br/scielo.php?script=sci_arttext&pid=S1679-49742017000300649&lng=pt&nrm=iso>. Access on: 20 Jan. 2024. <http://dx.doi.org/10.5123/s1679-49742017000300022>.

TEIXEIRA, J. A. C. Comunicação em saúde: relação técnicos de saúde-utentes. *Análise Psicológica*, p. 615-620, 2004. Available at: <https://repositorio.ispa.pt/bitstream/10400.12/229/1/AP%2022%283%29%20615-620.pdf>

VASCONCELOS, W. R. M. de; OLIVEIRA-COSTA, M. S.; MENDONÇA, A. V. M. Promoção ou prevenção? Análise das estratégias de comunicação do Ministério da Saúde no Brasil de 2006 a 2013. *Rev Electron Comun Inf Inov Saude*, v. 10, n. 2, p. 1-11, 2016.

Note

¹ N. F. Andrade: field research, data collection, conceptualization, methodology, field collection, data validation, formal analysis, investigation, data curation, writing the original draft, visualization, review and editing of the article. M. F. Sousa: validation, formal analysis, and final writing of the manuscript. AVM Mendonça: field research, data collection, conceptualization, methodology, field collection, visualization, validation, formal analysis, investigation, data curation, writing of the original draft, review and editing of the article, and supervision of the research that originated the manuscript.

Resumo

Desenvolvimento do EducaIndex: uma metodologia inovadora de avaliação de comunicação promotora de saúde

Este artigo apresenta o desenvolvimento do EducaIndex como proposta metodológica inovadora e dialógica, que permite a avaliação de campanhas de comunicação sobre HIV/Aids e hepatites virais por jovens de 15 a 24 anos, vinculados a escolas, sociedade civil, estudiosos, profissionais e/ou gestores, possibilitando a mediação entre educação, informação e comunicação em saúde. A coleta de dados foi realizada em Brasília-DF e Catalão-GO, na Região Centro-Oeste; Manaus-AM, Região Norte; Vitória-ES, Região Sudeste; Porto Alegre, Santa Cruz do Sul e Fontoura Xavier-RS na região Sul; e Fortaleza-CE, Região Nordeste, com jovens de 15 a 24 anos, vinculados a escolas, sociedade civil, estudiosos e profissionais. Os locais foram selecionados por conveniência, considerando o deslocamento da equipe de pesquisadores e apoiadores que integram a Rede Brasil de Gestão da Informação e Tradução do Conhecimento em Saúde. A pesquisa conversou com 643 jovens que avaliaram três campanhas diferentes, sendo um cartaz, um *jingle* e um vídeo, selecionados entre 475 campanhas analisadas. A metodologia quantitativa atende ao EducaIndex, e qualitativa, às oficinas mediadoras da aplicação do instrumento em campo. O instrumento EducaIndex apresentou boa confiabilidade (alfa de Cronbach = 0,700), demonstrando capacidade de reprodução consistente dos resultados obtidos no tempo e espaço. As oficinas permitiram a interação entre pesquisadores e participantes, fortalecendo a importância do protagonismo no processo avaliativo de campanhas.

► **Palavras-chave:** Estudo Metodológico. HIV. Aids. Comunicação em Saúde. Educação em Saúde.

