RBCE
Revista Brasileira de Ciências do Esporte

Original Articles

Perceptions of primary health care professionals about training to promote physical activity

Percepções de profissionais da atenção primária à saúde sobre uma capacitação para promoção da atividade física

Percepciones de los profesionales de atención primaria de salud sobre la formación para promover la actividad física

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Keywords:
Exercise;
Counseling;
Healthcare workers;
Primary Health Care.

ABSTRACT
This study aimed to develop and apply, as well as identify the perceptions of health professionals about a training course to promote physical activity (PA). This is a qualitative and quantitative study, developed from an educational intervention with professionals from Primary Health Care (PHC) of SUS. Four categories were identified through content analysis in the professionals' speeches: (i) avoiding incentives to PA out of obligation; (ii) seeking to welcome/establish a bond with people to encourage PA; (iii) the little time for PA counts and is a possibility to stay active and (iv) the course provided personal and/or professional encouragement about PA. It is concluded that the training is an opportunity for promoting PA in PHC-SUS.

Palavras-chave:
Exercício;
Aconselhamento;
Profissional de saúde;
Atenção Básica.

RESUMO
Este estudo teve como objetivo desenvolver e aplicar, bem como identificar as percepções de profissionais de saúde sobre um curso de capacitação para promoção da atividade física (AF). Trata-se de um estudo quali-quantitativo, desenvolvido a partir de uma intervenção educativa com profissionais da Atenção Primária à Saúde (APS) do SUS. Por meio da análise de conteúdo, foram identificadas quatro categorias nas falas dos profissionais: (i) evitar incentivos à AF por obrigação; (ii) buscar acolher/estabelecer vínculo com as pessoas para incentivar a AF; (iii) o pouco tempo para AF conta e é uma possibilidade de se manter ativo e (iv) o curso proporcionou incentivo pessoal e/ou profissional sobre AF. Conclui-se que a capacitação é uma oportunidade para promoção da AF na APS-SUS.

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Received 18 February 2025; accepted 16 June 2026.

Responsible Editors:

Executive Editor: Pedro Otavio Pimpim Bezerra

Associate Editor: Fábio Lanferdini

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Chief Editor: Ari Lazzarotti Filho

DOI: https://doi.org/10.1590/rbce.48.e20250020

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Palabras clave:
Ejercicio;
Consejería;
Personal de salud;
Atención Primaria.

RESUMEN
Este estudio tuvo como objetivo desarrollar y aplicar, así como identificar las percepciones de los profesionales de la salud sobre un curso de capacitación para la promoción de la actividad física (AF). Se trata de un estudio cualitativo y cuantitativo, desarrollado a partir de una intervención educativa con profesionales de la Atención Primaria de Salud (APS) del Sistema Único de Salud (SUS). Mediante el análisis de contenido, se identificaron cuatro categorías en los discursos de los profesionales: (i) evitar incentivar la AF por obligación; (ii) buscar acoger y establecer vínculos con las personas para incentivar la AF; (iii) poco tiempo de AF también cuenta y constituye una posibilidad para mantenerse activo; y (iv) el curso proporcionó incentivo personal y/o profesional en relación con la AF. Se concluye que la capacitación constituye una oportunidad para la promoción de la AF en la APS-SUS.

INTRODUCTION

Basic Health Units (BHU) are the main access point for the population in the Unified Health System (SUS), through Primary Health Care (PHC). Most of the health demands related to the SUS are resolved in BHU (Brasil, 2020, 2022). Aiming to strengthen and organize Brazilian PHC, the Family Health Strategy is present in most BHU and is composed by multidisciplinary team (Brasil, 2000, 2017a, b; Pinto and Giovanella, 2018). This professional team is responsible for health actions in the specific territories, in order the care of the family and community, and not only of the individual and the disease (Carmo et al., 2023).

The development of these actions is anchored by the process of continuing education in health, in order to articulate learning with daily practice, based on the discussion of cases/situations in a collective and transversal manner (Brasil, 2018), avoiding overlapping knowledge and professional positions. Furthermore, in view of certain demands, it is expected that these professionals will receive updates through training, to strengthen the technical-scientific knowledge and the continuing education process of the health team.

There are several agendas that deserve attention for the provision of educational actions on 'how to best do it' in public health, since diverse demands (content) are inherent to the work process in BHU. Physical inactivity is recognized as a global public health problem, due to its social, health and economic repercussions for health systems (WHO, 2018; Santos et al., 2023; Guthold et al., 2018; Brasil, 2023), and is related to personal, social and environmental barriers (Vieira and Silva, 2019).

Furthermore, the physical activity agenda in the SUS is aligned with the objectives of the PHC and is one of the objectives of the National Health Promotion Policy (Vieira and Carvalho, 2024), which advocates community outreach, counseling and professional training. In addition, the World Health Organization strongly recommends actions to address physical inactivity in the health sector and suggests professional training as one of the strategic actions (WHO, 2018).

Therefore, the preparation of professional qualifications must be permeated by scientific knowledge, but must avoid only content that reproduces concepts, epidemiological data and goals that are not transferable to people using health services. For example, guidelines and advice on physical activity based solely on recommendations regarding time, intensity, and weekly frequency (Netherway et al., 2021; Hollman et al., 2022), disregarding people's preferences and existing barriers.

In this way, seeking support from current scientific knowledge on the best approach to develop training that helps health professionals to promote physical activity through actions and advice, the self-determination theory was used in the present study, which studies human motivation, based on a continuum between controlling and autonomous motivations and their relationships with the basic psychological needs of autonomy, competence and relatedness (Ryan and Deci, 2000, 2017).

Based on this knowledge, health professionals can implement strategies to support basic psychological needs, leading to a more autonomous motivation to practice physical activities (Teixeira et al., 2020), which is related to freedom of choice and the pleasure that the activity can offer. Thus, considering the importance of strengthening the process of continuing education in the PHC-SUS health teams, in addition to the fact that we are not aware of training courses linked to official health agencies and that are aimed at BHU professionals on promoting physical activity, with a focus on directing counseling (Sposito et al., 2026), a training course was designed to contribute to the qualification of health professionals in different territories, as well as, to be potentially adapted, replicated and offered in large scale. Therefore, the objectives of this study were: (i) to develop a training course on physical activity promotion, train teams of health professionals and, from this, (ii) to identify the perceptions of these professionals about the training.

METHODS

STUDY DESIGN AND SETTING

This article was based on the evaluation of an educational intervention directed at health professionals from Primary Health Care (PHC-SUS) and focused on physical activity promotion. The central assumption of this study was that the content offered at different moments, based on Self-Determination Theory, could be congruent across different Basic Health Units (BHU) and health professionals.

The study used qualitative and quantitative techniques to evaluate the educational intervention, taking as references the guidelines proposed by the EQUATOR Network and recommendations for reporting qualitative research (Tong et al., 2007; Simera et al., 2008; O'Brien et al., 2014). The research project was directed at Family Health Strategy teams linked to three BHU and was conducted in a medium-sized municipality in the state of São Paulo, Brazil, between May 2021 and January 2022.

The BHU were selected by convenience because they had not previously received training on physical activity promotion.

PARTICIPANTS

Health professionals from the participating BHU were invited to take part in the training activities. As an inclusion criterion for the analysis of this study, we considered those health professionals who were able to participate in all the meetings offered for training.

DEVELOPMENT AND IMPLEMENTATION OF THE TRAINING COURSE (OBJECTIVE 1)

The educational intervention lasted three months in each BHU and was conducted through monthly face-to-face meetings held on Friday afternoons after the BHU had closed to the public. The intervention was implemented sequentially across the health units according to local preferences and organizational demands.

The frequency and duration of the training were planned according to the local reality of the health system and aimed to provide sufficient opportunities for strengthening the bond between participants and the trainer/researcher. The total duration of the training ranged from 4.5 to 6 hours.

The intervention was structured according to Self-Determination Theory, which emphasizes supporting the basic psychological needs of autonomy, competence, and relatedness (Ryan and Deci, 2017; Teixeira et al., 2020).

Training content included physical activity surveillance (Brasil, 2023), public health recommendations (Bull et al., 2020; Brasil, 2021a, b), public policies for physical activity promotion in Brazil (Brasil, 2019), and the role of the health sector in promoting physical activity (ISPAH, 2021).

Different learning strategies were used throughout the meetings, including guided discussions, active learning games, collective production of educational materials, presentations, and case studies. Educational resources were also developed, including a summary of counseling strategies for professional practice (Supplementary Materials A and B).

Table 1 presents a detailed description of the contents and activities developed during each training session.

Table 1. Description of the content of the educational intervention on promoting physical activity.

Below are the provocative questions for discussions, actions and practices developed during the proposed training sessions.
Meeting 1:
1. How is your physical activity practice?
2. Discussion of the following perspectives: "Being physically active can add years to life and life to years" (Tedros Adhanom Ghebreyesus, Director-General of the WHO) and "Doing what you enjoy actively can add life to years and consequently years to life".
3. Do you consider physical activity important?
4. What do you know about the physical activity recommendations?
5. What is your opinion about the recommendations? Does talking about them increase people's physical activity?
6. Understanding the physical activity surveillance data and its inequalities.
7. Presentation of the National Health Promotion Policy and what it advocates.
8. Presentation of the Academia da Cidade Program and the Academia da Saúde Program: main characteristics and operating structure.
9. Recognizing that the health sector is part of the 8 investments that work to promote physical activity.
10. Presentation of the brief counseling strategy.
11. Differentiating between body practices, physical activities and physical exercises.
12. Recognizing the domains of physical activity.
13. What reasons motivate you to practice physical activity?
14. Music dynamics: Explaining with music. Imagine that physical activity is like your playlist. Do you choose to listen to what you don't like, or do you select and change songs according to your interests? (emphasizing the importance of the population having the opportunity to choose).
15. Presentation of the motivation continuum - Self-Determination Theory.
16. Conceptualizing basic psychological needs.

Source: Own authorship.

Table 1. Continued...

Below are the provocative questions for discussions, actions and practices developed during the proposed training sessions.
17. What is self-determination?
18. Motivation dynamics. Exemplifying with stories and videos the difference between controlled and autonomous motivations.
Between the moments (month), the professionals received a personalized message that sought to meet basic psychological needs, considering their stage of readiness to practice physical activity (Prochaska et al., 1996**).**
Stages: Pre-contemplative stage (does not intend to practice physical activity in the next 6 months), contemplative (intends to practice physical activity in the next 6 months), preparation (intends to start in the next 30 days), action (practices physical activity for less than 6 months) and maintenance (practices physical activity for more than 6 months).
Meeting 2:
1. Memory dynamics: Recalling the content of the previous month through an activity called "hunt". The game consisted of spreading several questions throughout the available rooms of the BHU and professionals should look for them in accordance with the proposed order.
2. After the dynamics, the questions were answered and discussed.
3. Construction dynamics: Based on the established concepts of basic psychological needs, each group was tasked with thinking of strategies in their daily professional lives that would help strengthen these needs with health service users. Each group received a poster and was able to discuss and structure their ideas, with subsequent presentation.
Between the moments (month), the professionals received educational material (ruler/highlighter indicating the motivation continuum) with guidelines for actions to make physical activity more enjoyable (Supplementary Material A**).**
Meeting 3:
1. Dynamics of basic psychological needs: The professionals were divided into 3 groups and each group received a bag with 21 strategies that can favor basic psychological needs (Teixeira et al., 2020). Each group had to organize the strategies appropriately within their respective categories: autonomy, competence and relationships, in the shortest possible time. Afterwards, the content was discussed and organized together with the trainer.
2. Finally, case studies were discussed to train the possibilities of action and brief advice on physical activity.
Afterwards, professionals received a summary for brief counseling (supplementary material B), together with printed material summarizing the physical activity promotion course.

Source: Own authorship.

EVALUATION OF PROFESSIONALS' PERCEPTIONS REGARDING THE TRAINING (OBJECTIVE 2)

To evaluate participants' perceptions regarding the training experience, focus groups were conducted after the intervention. Focus groups were selected because they allow the exploration of meanings, beliefs, attitudes, and perceptions emerging from group interactions (Minayo, 2001; Bauer and Gaskell, 2008), resulting in discursive material for subsequent analysis.

The central questions explored whether the educational approach adopted during the course made sense to participants and whether the proposed strategies could be incorporated into their professional practice.

Although Self-Determination Theory has its own psychometric capacity, the nuances of educational actions can be better observed and reported through qualitative methodology, since it seeks to answer specific research questions that cannot be fully operationalized through numerical variables (Minayo, 2001). Therefore, focus groups were used to provide a methodological approach coherent with the intervention proposal and the dynamics developed in that context, considering collective perceptions without aiming for extrapolation or generalization.

Focus groups were conducted in each participating in BHU approximately one month after completion of the training course. Sessions were moderated by the principal researcher, who also served as the course facilitator. Although the researcher participated in all stages of the project, no previous close relationship existed with participants before the beginning of the study.

Each focus group lasted approximately 35-45 minutes and included five to six professionals from different occupational categories, including physicians, nurses, dentists, oral health assistants, nursing technicians, and community health agents. When necessary, participants were selected by random draw among the latter two professional categories, as they are the most frequent in Brazilian BHU. No invited participant refused to participate.

Additionally, to contribute to the evaluation of the educational intervention, participants completed the Learning Climate Questionnaire (LCQ), a 15-item instrument based on Self-Determination Theory designed to assess autonomy support in learning environments. Responses were recorded using a 7-point Likert scale, and the final score was calculated as the mean of all items, with higher scores indicating greater perceived autonomy support (LCQ, 2024).

Four additional closed-ended questions using the same response scale were also applied. All responses were collected anonymously.

DATA ANALYSIS

Focus group discussions were audio-recorded, transcribed verbatim, and analyzed using content analysis procedures (Bauer and Gaskell, 2008). Initially, tables were developed for each BHU summarizing participants' statements. Subsequently, repeated readings of the material allowed the identification of four thematic categories. Quantitative data from the LCQ and additional questions were analyzed descriptively through calculation of means and standard deviations. Data organization and analyses were performed using Microsoft Excel.

ETHICAL CONSIDERATIONS

The study was approved by the Research Ethics Committee under protocol numbers 3.911.148 and 5.239.077.

RESULTS

Fifty health professionals from three BHU participated in this study, of which 52% were between 40 and 59 years old and 88% were female. In total, 35 professionals attended the three moments of the educational intervention and were able to answer the closed-ended questionnaire, and 16 were selected and/or drawn to participate in the focus group. Table 2, 3 and 4 present the perceptions reported by health professionals who received the educational intervention to promote physical activity. Based on the content analysis, four themes were identified that are related to the constructs of self-determination theory (autonomy, competence and relationship), and were cited in the three BHUs in which the professionals participated in the training process, namely: (category a) avoiding encouragement to practice physical activity out of obligation; (category b) seeking to welcome/establish a bond with people to encourage the practice of physical activity; (category c) the little time spent on physical activity counts and is a possibility to stay active and, (category d) the course provided personal and/or professional encouragement regarding physical activity.

According to the information presented in Table 5, the learning climate offered by the trainer was positive, above 6 points (maximum 7 points), indicating that the professionals received support for autonomy during the training process. Regarding the supplementary questions, it was found that all questions presented positive scores (six or more), in which the professionals believe they have received new information, consider the information received relevant, indicated that they intend to use the information acquired in the coming months and are interested in learning more at a future time.

DISCUSSION

This study sought to report and evaluate the perceptions of health professionals about participation in an educational intervention to promote physical activity. When analyzing the central themes raised by the participants, it was possible to perceive agreement between the participants' reports and the theoretical framework used to construct the training.

The importance of promoting physical activity for more autonomous reasons is related to greater chances of maintaining the practice (Teixeira et al., 2012;

Table 2. Perceptions of health professionals about the educational intervention to promote physical activity in Primary Health Care (BHU1, n=5).

Main expressions of Health Professionals
"...P1. When we come to the idea that we have to do an activity that we demand from the person, I don't think it works. We saw that it doesn't have to be that way. We can, mainly, encourage and praise (cat a).
P2. I thought so too. You encourage the person, if the person is interested, I think everything works out. It's better not to demand it, without that obligation (cat a).
P3. I think it's much easier than trying to force or impose it. Even showing as you said, it doesn't have to be a gym, but a walk or instead of driving to the bakery, go on foot. It's much easier for you to try to start like that, to try it out (cat a-c).
P4. And the welcome too, right? It's very important to invite people to participate and to welcome them well, because if they come one day to participate in the exercise and don't fit in, they aren't well received, sometimes they don't come back (cat b).
P5. We always invite people to come and participate, but without any obligation to do so, just to learn more. But if they like it, they can participate; if not, they can just watch. In the end, the person is participating, so it's rewarding and enjoyable. We need to welcome people so that they feel comfortable, so that they have the autonomy to start practicing (cat a-b).
P3. I thought it was cool, different, but good. It's easier to say it using the idea of: "you're walking, you're going from here to there, it's a physical activity" (cat c-d).
P4. The content gave us an insight to encourage people to practice without forcing them. So I thought it was cool (cat a-d).
P5. It's about making them reflect, right? Don't force the person and make them reflect on whether or not it's really good for them, without forcing them (cat a).
P3. Every time you keep harping on something that people don't like, instead of bringing them closer to you, they move away. You can't bring the person close to having this exchange of conversation, of introducing yourself. They'll probably never come back, depending on the place..." (cat a-b).

Legend: cat = category.
Source: Own authorship.

Table 3. Perceptions of health professionals about the educational intervention to promote physical activity in Primary Health Care (BHU2, n=5).

Main expressions of Health Professionals
"...P6. I found it very interesting, in fact, I have already used it with some patients in relation to doing physical activity to improve blood pressure (cat d).
P7. I think it was important, because before we had this idea that we had to walk 40-50 minutes a day and on the course, I realized that even a little bit, each day, helps with the beginning, that it doesn't need to be that labeled, that time. You start little by little and you will get results. I really liked this part, because I also had in my head that it had to be 1 hour of walking, I had to follow that for it to work, so I thought that part was cool (cat c-d).
P8. I agree with everything they said.
P9. I thought that when they launched the dynamic, of searching, people relaxed more, the dynamic made them interact better and brought a connection. For me, this part of the course was very positive, very good. When there was interaction, it seemed like they were more willing to work on the content themselves, rather than just listen. The interaction during the activity was cool. I thought it was essential and made a big difference. The non-aggressive dialogue. If I was too aggressive, she wouldn't even want to come back to me because she was embarrassed. She felt intimidated (cat a-d).
P7. I think it was cool for me. It opened my mind to the issue of labeling (time). That was something I didn't know either, and I thought the course was cool (cat c-d).
P9. I don't know if you noticed, but at some point, during the activity, she (professional) had to be motivated by something in order to go and look for it. So that was really, cool. Super important. Even that question about how we can approach our patients with case study examples, because each one has a different performance, right? And when you go back to discussing that, you see that each person (professional) has a different perspective on it, and it's cool because when you bring this up in the course, you think: "is there a right answer?" No, there isn't, but we can try to move towards a different path and try to bring that patient in, not push them away. So that's cool, too (cat d).
P8. It's having that vision that each person is different. Sometimes, the way you talk to one person is not the same way you talk to another. I realize these things, the way I can talk to one person, the way I can talk to another person, if I talk this way I'll hurt them, if I talk this way it'll be better (cat b).
P10. Yeah, sometimes you're talking one way, then you say: "no-no", then you think of a new way to talk (cat b).
P9. You must talk calmly to reach an ideal point in the conversation...".

Legend: cat = category.
Source: Own authorship.

Table 4. Perceptions of health professionals about the educational intervention to promote physical activity in Primary Health Care (BHU3, n=6).

Main expressions of Health Professionals
"...P11. I thought it was interesting because we were able to see the motivations for people to have a healthier life through physical exercise. There are many ways to encourage people to move (cat d).
P12. For me, it was an incentive for me to go after it so I could organize the group to do something, to think more about the benefits, because everything is movement (cat d).
P13. I wasn't very interested in asking (the user) about physical activity, it was something that went unnoticed during visits. We have so many things to ask, but now we emphasize it. We ask, sometimes the patient is in pain, we see if he is doing activity, we give referrals. So, we can better guide the patient (cat d).
P14. It helps both in professional and personal life.
P13. I think it's like this, from my point of view I wouldn't mind encouraging others to exercise, even myself. So, it was good, because now we have this vision of inviting people to do it (cat d).
P15. And I think that from the moment we start to approach and guide the user about physical activity, we bring this to ourselves: "Wow, I'm guiding you to do it, but am I doing it? What am I doing with physical activity?". From the moment we are doing a physical activity or have already done it, we can even encourage the users in a different way, right? So, we add our health, and we can also give them more assertive guidance. And for me, the course brought some approaches, not very different from what I imagined, but that I didn't do. Then, during the course, the discussions, the case studies that I found super pertinent that you brought in the meetings, we were able to reflect: look, according to this characteristic, with this context of the user, I can use this other type of approach, right? It was cool (cat d).
P11. Yes, I thought the content was like this, we already know the importance of physical activity, but the content helped improve the approach with people and to value, for example, even if it's just a little, so that the person is later encouraged to do more activities. So, I think that also contributed (cat b-c-d).
P15. For me, it's valid. I didn't ask about the means of transportation like we normally ask about some characteristics. "What is your means of transportation to work? Do you go by car or bike, do you go on foot? Which way do you go?" So, these are things that we really didn't think about, at least I wasn't used to asking this question (cat c).
P11. It's applicable, it encourages people to adhere to physical exercise. I think this content helps with this approach with the person. Just like "Px" (professional) said and the same as in the case studies, we approach it in a way that doesn't force people to do physical exercise, but rather value what the person already does, such as transportation, something like that. So, I think it's quite applicable like that (cat a-b-d).

Legend: cat = category.
Source: Own authorship.

Table 4. Continued...

Main expressions of Health Professionals
P16. Brief counseling is something new, right? No one from nutrition, psychology, speech therapy, occupational therapy, no one has brought this brief counseling model. You give that little push. And in our rush, it ends up making a difference, it ends up making the person realize that they have a need. I found it very valid. If you don't have training to know everything about the person, how are you going to do brief counseling, right? You taught me that there is this way of approaching it..." (cat d).

Legend: cat = category.
Source: Own authorship.

Table 5. Evaluation of the educational intervention to promote physical activity in Primary Health Care (n=35).

Assessment (mean±sd)	BHU 1 (n=12)	BHU 2 (n=13)	BHU 3 (n=10)	All (n=35)
Summary of the questionnaire consisting of 15 questions: Learning Climate – support for autonomy provided by the trainer to health professionals.	6.7±0.4	6.2±0.8	6.5±1.0	6.4±0.8
1. How much new information do you believe you have received?	6.7±0.5	6.6±0.7	6.1±1.1	6.5±0.8
2. How relevant do you consider the information you received?	6.8±0.4	6.6±0.5	5.9±1.4	6.5±0.9
3. How likely would you be to use the information you learned in your profession in the next six months?	6.3±0.9	6.5±0.7	6.5±0.7	6.4±0.8
4. How interested would you be in learning more about the issues presented in the training at a future point?	6.0±1.7	6.2±1.1	5.7±1.7	6.0±1.5

Legend: BHU = Basic Health Unit.
Source: Own authorship.

Rodrigues et al., 2018; Ntoumanis et al., 2021), which opens possibilities for people to experience the various benefits of physical activity. However, in the context of PHC, it seems unusual for people to seek out physical activity for more autonomous reasons (Polo et al., 2020), which can be justified by several factors, such as socioeconomic and demographic conditions (income, education, and gender), and even realizing that leisure time is not a reality for everyday life, for example. Although the practice of physical activity is not yet directly included in national and international guiding documents as a human right, it is possible to understand it as such, and its official inclusion could potentially contribute to laws and policies so that people recognize the practice as a right in their lives (Messing et al., 2021).

Furthermore, health professionals, faced with a routine of different demands, eventually end up developing more technical and less autonomous advice, which involves prescribing specific physical exercises/physical activities and their dosage, related to frequency, duration and intensity (Moraes et al., 2024; Sposito et al., 2023), which indicates the need to encourage professional qualification through periodic training, in order to facilitate the process of continuing education, offering professionals knowledge that enhances the promotion of physical activity in PHC.

Regarding the perceptions indicated by professionals, one of them concerns the importance of avoiding incentives to practice physical activity out of obligation. Current scientific literature recognizes that the constant reinforcement of a behavior out of obligation can frustrate basic psychological needs (Ryan and Deci, 2020), therefore, more autonomous advice, that is, non-authoritarian, endowed with positive incentives and encouragement to practice physical activity based on preferences, pleasure and fun may be essential for an active behavior for life, unlike controlling motivations, which do not predict long-term maintenance (Teixeira et al., 2012; Rodrigues et al., 2018).

Therefore, professional training may be promising to align the actions and dialogues of health professionals, so that controlling approaches (incentives due to obligation, guilt, compensation and aesthetics, for example) are overcome by actions and advice that favor the autonomy (strengthening of bonds, mental well-being, moments of pleasure and fun) of health service users. Healthcare professionals can be guided to offer choices, address individuals' feelings and perspectives, recognize and minimize pressure, and provide meaningful thinking, supporting people's autonomy (Williams and Deci, 2001; Williams et al., 2006).

At the same time, health professionals discussed in the focus group the importance of welcoming/establishing a bond with people to then approach and advise them on physical activity. Clearly, welcoming/establishing a bond in the communication process is a highly required tool in PHC work and is important for advancing in the promotion of physical activity. From this perspective, it is possible to mitigate external pressure, consider barriers and establish long-term goals, avoid controlling language and actions, which can frighten and blame people. It is reasonable to consider that users have knowledge about their health conditions, which can be improved, but without a bond, they may become distant, which can

interfere with the health care process. In a qualitative study that sought to understand the perceptions of a group of people with chronic musculoskeletal pain treated at a BHU, the authors identified that moments of listening, relaxation and the possibility of exchanging experiences were relevant for the frequency of activities and the emotional well-being of people (Jesus et al., 2019).

Furthermore, the perception that "a little physical activity counts" was reported by professionals in a homogeneous manner across the BHU and listed as a positive possibility. It is worth noting that both the World Health Organization (Bull et al., 2020) and the Brazilian Ministry of Health (Brasil, 2021a, b) summarize the evidence of the benefits of physical activity by life cycle and convey the main message that a little physical activity counts and is better than its total absence. The evidence also indicates that the practice of regular physical activity contributes to human development, if it is practiced based on people's choices. These issues, such as access, opportunity and choice, raise the importance of promoting physical activity in free time. Previous studies indicate negative associations between the practice of physical activities in the occupational and domestic domains and health indicators (Loch et al., 2024; Ramirez Varela and Hallal, 2024), a phenomenon known as the "physical activity paradox".

Finally, professionals reported that the educational intervention provided personal and/or professional encouragement regarding physical activity, which is a highly desirable component of the training process. It is known that there is a relationship between positive personal behaviors of health professionals and greater chances of advising health service users about physical activity and other health-related topics (Florindo et al., 2015; McCormick et al., 2023). Therefore, the training process had the characteristic of encouraging professionals in their personal practices based on the constructs and assumptions of self-determination theory and instrumentalizing them, avoiding "cake recipes" during the training process, but stimulating reflection for decision-making in professional practice.

In a collaborative manner, the objective questions reinforced that the health professionals received new, relevant information and that they are interested in using the information in the coming months and learning more at a future time. The professionals felt that they were supported autonomously by the trainer during the training process, which may have favored positive perceptions. Support for basic psychological needs during the training process is very important for more autonomous motivations regarding the practice of physical activity to be awakened, generating well-being and learning outcomes (Tjin A Tsoi et al., 2018), as could be identified by the categories reported and identified in this study.

As for limitations, it is important to note that the main researcher was one of the organizers of the course and the development of this research. The participation of only three BHU may be a limiting factor, since more contexts of action could further enrich the analysis of this study. However, the strengths of this study lie precisely in the production of the course for the context of PHC and in the qualitative analysis, to provide authenticity about the training process, presenting the perceptions and details that cannot be captured in quantitative research.

CONCLUSIONS

This study developed and evaluated a training course on physical activity promotion for Primary Health Care professionals based on Self-Determination Theory. The findings demonstrated that participants positively perceived the educational intervention and understood the theoretical assumptions addressed throughout the training, indicating coherence between the proposed content and the professionals' reports.

Health professionals also recognized possibilities for applying the knowledge and strategies discussed during the course in their daily practice, suggesting the potential of this type of educational initiative to support professional development and continuing education processes within PHC-SUS.

Considering the strategic role of Primary Health Care in health promotion and the need to strengthen actions aimed at increasing physical activity levels in the population, training initiatives focused on physical activity promotion appear to be a promising strategy for qualifying health professionals. Future studies should investigate the applicability and effectiveness of this approach in different teams, services, and territorial contexts.

FUNDING

None.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

DATA AVAILABILITY

The data are not publicly available due to ethical restrictions but may be obtained from the corresponding author upon reasonable request.

AUTHORS' CONTRIBUTION

Letícia Aparecida Calderão Sposito participated in the preparation and design of the study; acquisition, analysis, interpretation of data and writing of the manuscript; Paulo Henrique Guerra participated in the preparation and design of the study; analysis, interpretation of data, review and approval of the manuscript; Hassan Mohamed

Elsangedy participated in the preparation and design of the study; analysis, interpretation of data, review and approval of the manuscript; Fabio Fortunato Brasil de Carvalho participated in the analysis, interpretation of data, review and approval of the manuscript; Cassiano Ricardo Rech participated in the analysis, interpretation of data, review and approval of the manuscript; Marilia Velardi participated in the analysis, interpretation of data, review and approval of the manuscript; Douglas Roque Andrade participated in the analysis, interpretation of data, review and approval of the manuscript; Eduardo Kokubun participated in the preparation and design of the study; analysis, interpretation of data, review and approval of the manuscript.

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SUPPLEMENTARY MATERIAL

Supplementary material accompanies this paper.
Supplementary Material A
Supplementary Material B
This material is available as part of the online article from https://doi.org/10.1590/rbce.48.e20250020