



## Contributions of social networks to the teaching of school physical education: an integrative review

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### 1 INTRODUCTION

Social networks can be understood as a connection of several different people, groups or institutions, which in turn have the same interest with more or less interactivity, sustainability and duration depending on the relationship that is triggered (DAVID *et al.*, 2018).

Social networking is any relationship between individuals, but this paper presents a focus on computer-mediated communication, which for Recuero (2009), this type of network not only connects computers, but also people from a social networking software.

For Lorenzo (2011) a social network is a personal or professional representation among users who form communities, and through this it is possible to share data, ideas, opinions, and common interests, which contribute to the formation of user identity.

Miranda Junior (2013) asserts by saying that social networking on the internet can be any web tool that has the capacity to enable mass or individual communication, thus falling under the category of social networking sites.

Under this press, it is necessary to understand and know how to differentiate some terms: **digital media** that for Lorenzo (2011) is an electronic media encompassing a digital technology, which does not need to present or produce some kind of content, such as the internet itself, the intranet, MSN among others; **social media** that is defined by Telles (2011) as sites within the internet created with the intention of collaboration among its users, enabling the creation of content, interaction and sharing; and finally the **social networks** that are software used for the creation of profiles or personal pages, in which users can communicate, expose themselves, make comments, among others (RECUERO, 2009). Social Networks are disseminated in a very fast way, since it is accessed by various audiences such as children, adults and by older people and even by people who do not have much facility in handling the internet (RIGONI; NUNES; FONSECA, 2017). The use of these networks facilitates the lives of



people and institutions, because they enable the creation of communities with common interests gathered in a single virtual space, and from this occurs the sharing of information and knowledge, which generates several proposals for applications, which can be subdivided into: personal network, professional, community, sale and exchange of learning and forums (RIBEIRO, 2013).

It is necessary to have a different look at the applicability of social networks in the teaching-learning process. Santos (2009) informs that, due to the rapid transformations of the information society, it is necessary to be open to the use of new technologies in the virtual world.

In this context, School Physical Education is seen as a subject that introduces and integrates the student in the body culture of movement, providing the development of their potential and enabling the construction of knowledge through reflection. In this perspective, it is important to emphasize that teachers should seek new ways to use the content according to reality, for this, it should consider the influence that the media exert on the daily lives of schoolchildren (DINIZ; RODRIGUES; DARIDO, 2012).

Carvalho Júnior (2015) corroborates by saying that it is rare to find a teacher who does not make direct or indirect use of some technology in their classes, because this artifice allows a range of dynamics and different teaching methodologies and can be used in the planning, structuring, and organization of content during the pedagogical practice.

In this vein, the development of digital culture in education has become a constant challenge for 21st century teachers, as there are platforms that can be used as virtual learning environments (VLEs) enabling a remote form of teaching (MATTAR, 2014).

The school as a social institution is directly linked to this whole context of development, because the media occupy an important space of time in the lives of students, which makes them need to problematize and reflect on these issues (DINIZ; RODRIGUES; DARIDO, 2012).

Ribeiro (2013) justifies that technology has been incorporated into the production of knowledge and the appropriation of knowledge, and this is confirmed in the scientific field by virtue of the investments made in all social segments, the author also concludes that new meanings for technology should be researched in the educational field and that these new interpretations should involve the producers, users, and also all others involved in the teaching-learning process.

Santos Junior (2012) states that it is necessary to reflect on the influence of media in the daily life of School Physical Education, because several works have been prepared showing the importance that the theme has as a possibility of study on the body culture of movement. Thus, even if the use of technologies is not frequent in this discipline, it is necessary that there is the appropriation of technological tools, since technological information is increasingly present in everyday life.

Most schools are still going through the process of appropriation of technology very slowly, and cannot try to prohibit the use of Social Networks, because they have great potential for teaching,



and the role of educators is to pass on to students how to use them consciously (SILVA; SERAFIM, 2016).

Miranda Junior (2013) recommends that school directors, when analyzing which social networks are more favorable for use in their context, should register and explore the resources of the network in question, starting slowly and using educational devices as in a pilot project with some class. In this work, teachers and students could point and analyze, resulting in the use of different pedagogical practices such as simulations, assessments, participation in forums and groups, research, games, interaction between students, individual and group work, search for news in a particular area and search for renowned professionals in different areas.

When technology is mentioned in the classroom, the format of distance learning or Distance Education (DL) soon comes to mind, this educational modality is official in Brazil since 2005, and occurs when the didactic-pedagogical mediation in the teaching-learning processes is made with the use of technological means with qualified teachers, also with monitoring and assessments that contribute effectively so that the students are in different places at different times (PASINI, 2020). However, the appropriation of these technologies had its insertion process intensified in 2020, because the world population suffered from the respiratory disease popularly known as COVID-19, caused by the etiological agent called SARS-CoV-2, and before the pandemic scenario, preventive measures were taken against the spread of the virus, among which, the main one was the social isolation, which culminated in the suspension of classes and classroom activities of educational institutions (BRASIL, 2020). Given this, in March 2020, the Ministry of Education (MEC) in the use of its prerogatives, together with the National Education Council, assessed the applicability of remote teaching, because due to the pandemic, educational institutions would need to adopt another teaching model (BRASIL, 2020).

The pandemic installed compelled in a restructuring of education as a whole, the pain caused by the loss of loved ones and social isolation ended up causing a crisis in the regular education system, and this health crisis ended up forcing the adoption of the remote teaching method (PASINI, 2020). Taking into consideration exposed, the following question arose: how can physical education teachers use social networks in their pedagogical praxis?

## 2 OBJECTIVE

Point out the contributions of social networks as a teaching-learning tool in physical education classes



### 3 METHODOLOGY

The integrative literature review is a research method that consists of an open analysis of a given topic and seeks to facilitate the gathering of scientific evidence for reflections on methods, results, and even future studies (SOUZA; SILVA; CARVALHO, 2010).

The study followed the methodological rigor proposed by Mendes, Silveira and Galvão (2008), which consists of six steps: identifying the theme; establishing inclusion and exclusion criteria; defining the information to be extracted from the selected studies; evaluating the studies included in the integrative review; interpreting and discussing the results; and presenting the review.

The qualitative approach was adopted for the research, which for Souza, Silva, and Carvalho (2010), is an approach whose data analysis relates directly to the variety of articles that make up an integrative review, consisting of the reduction, exposure, comparison, conclusion, and verification of data.

In the first step toward conducting the study, the following hypothesis was defined: "In what ways do social networks contribute to the teaching-learning process of school physical education?"

The inclusion criteria adopted were: original articles, available in Portuguese, English and Spanish, which have the main focus on general digital media related to the school or educational environment, with adolescent or adult target audience, which have a correlation with physical education; that deal with social relationships via software, and that answered the research question. Narrative, systematic or integrative review articles, editorials, course completion papers, information from websites, *bloggers*, letters to the reader, news, theses, dissertations, and proceedings of scientific events were excluded.

The structure of the search and survey of publications occurred in the following databases: Latin American and Caribbean Literature on Health Sciences (LILACS), Online System for Medical Literature Search and Analysis (MEDLINE), *Scientific Eletronic Library Online* (SciELO), Virtual Library on Adolescent Health (ADOLEC), *SciVerse Scopus* (SCOPUS), and *Web Of Science*.

The keywords "social networks", "physical education", and "high school" were used in Portuguese, English, and Spanish according to the Descriptors in Health Sciences (DeCS), using the Boolean operator "AND/AND".

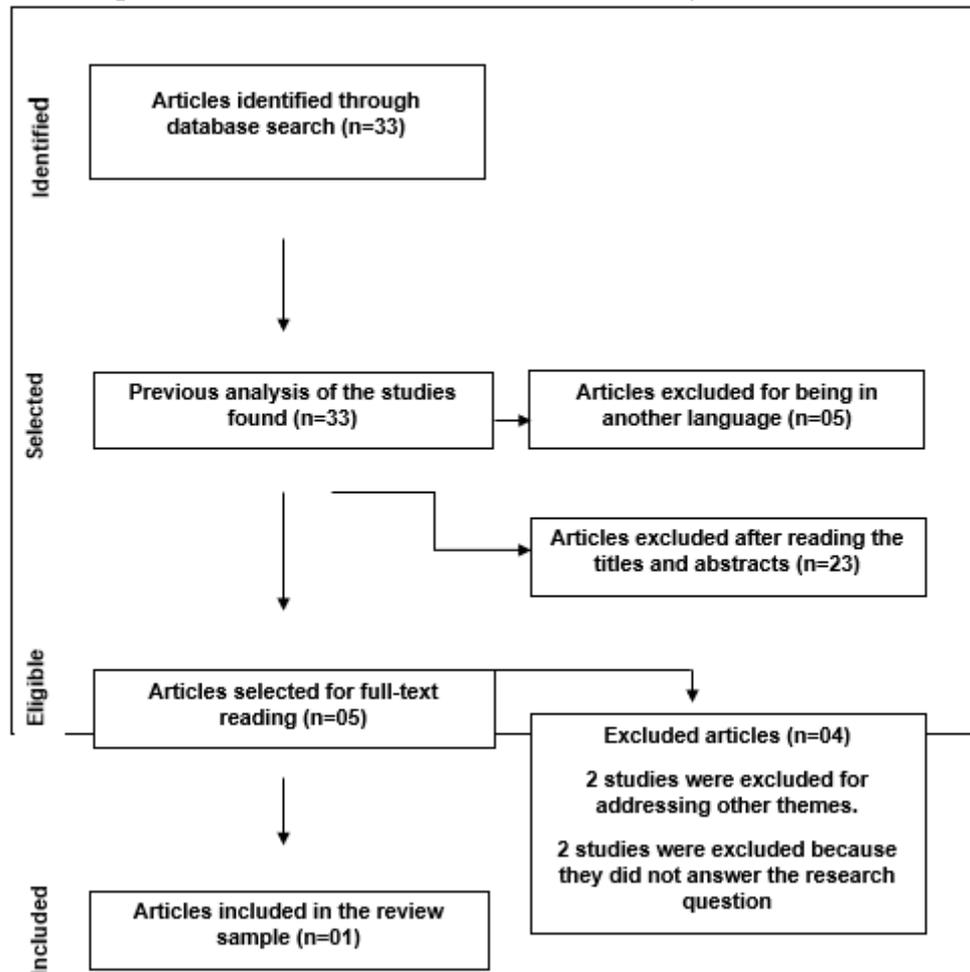
Cross-referencing the data yielded 33 results found in the databases searched. Of these, 25 were only from MEDLINE, 5 were excluded because they were in another language, 18 were excluded after reading the titles and abstracts because they did not meet the inclusion criteria, leaving only 2 articles to be read in full. In the *Web of Science*, 3 articles were found and only 1 was selected for reading, but it was excluded because it did not answer the research question. In the LILACS database, 5 articles were found, 3 of which were excluded for not being related to the school or educational environment.

To better understand the search for publications, a flowchart adapted from the Recommendation



Main Items for Reporting Systematic Reviews and Meta-Analyses (PRISMA) was outlined (Figure 1).

Figure 1 - Flowchart of article search and selection, adapted from PRISMA.



Source: Research data, 2020.

The selected study was read thoroughly and for data extraction the following assessments were considered: Clarity of information, comprehensiveness, ease in understanding, length and the format of presentation. The data evaluation instrument was used, following the points of the Melnyk and Fineout-Overholt (2005) protocol, which consists of the verification of pertinent and relevant data that must be extracted from a given study, with items referring to identification, theoretical/methodological reference, methodological characteristics, data analysis, results, conclusions, presence of bias, and level of scientific evidence. It is important to emphasize that the most appropriate aspects were extracted to meet the objective of this research.

## 4 DEVELOPMENT

### 4.1 RESULTS AND DISCUSSIONS

In the included article, entitled "School Physical Education in High School: The use of social networks in teaching-learning processes from the perspective of open classes" authored by Matias *et al.* (2018), and



published in the journal *Pensar a Prática*, the researchers reveal the great importance of access to information and communication media and consider that it is the school's role to promote the appropriation of this digital culture, and Kaieski, Grings, and Fetter (2015) state that one of the benefits of using technology in the education process is the expansion of learning possibilities beyond the physical space of the school.

In the article, the authors developed an interventional pedagogical action in Physical Education classes with High School students, and because of the characteristic of the open class approach, it was defined together with the students the contents to be worked on and the teaching strategy for these learnings. The face-to-face classes lasted 45 minutes, and after each meeting, activities and moments of discussion and reflection were proposed through social networks.

Hildebrandt-Stramann (2011) argue that an open class is when students participate in decisions regarding objectives, content selection, and transmission scopes or within this decision complex, this way students have the possibility to form their groups and participate in the methodology, so in this approach the teacher must allow students to act autonomously.

The researchers' choice for open classes makes it clear that the purpose of the research has as its starting point the students themselves, who have the right to freely express their conceptions in the classroom, directly influencing the degree of the teacher's planning that can be modified according to the students' needs, in the case of Physical Education classes, the teachers can make changes in the objectives and in the content selections, besides taking into consideration the students' opinion. It is also necessary to have a well-directed and well-founded pedagogical action.

Physical Education is the subject that deals with body practices, and seeks to value playful learning situations, expand the world of experiences, knowledge, and skills of individuals, acting in a complementary way with their experiences, aiming to develop body culture through pedagogical work (BRASIL, 2018).

The authors of the analyzed article chose to use as method of analysis the thematic organization and content analysis of Bardin. The data analysis was done in three themes: the social networks in the educational process of School Physical Education, the diversification of content as a pedagogical strategy and also the open classes as a means to facilitate the teaching-learning process.

The contents of body culture, especially sport, have gained emphasis in the media and in this context, Physical Education teachers need to consider the dissemination of information through technologies, and appropriate them to expand the teaching-learning process (DINIZ; RODRIGUES; DARIDO, 2012). Rigoni, Nunes and Fonseca (2017) justify that the insertion of Social Networks in the school environment depends on teachers, because they need to think of strategies that enable the use of these tools as a re-signification of knowledge.

Therefore, it is necessary to understand the scenario between Physical Education and the media, in order to highlight the changes inserted in students who are connected in the world of news and virtual dynamism, wondering how technologies can be a didactic tool capable of contributing to a more



critical perception of reality (DINIZ; RODRIGUES; DARIDO, 2012).

Given this technological scenario, the teacher has resources that can be used to encourage the participation of the student, and once the student starts to take possession of this technology, he can become more collaborative and participatory, which enables the socialization of their learning for all those who are in the same network (SILVA, 2010). Thus, considering the use of media in School Physical Education is essential, because through the available platforms, students and teachers can dialogue with the contents about the subject, besides the effectiveness in communication that if inserted in the educational environment can bring great results.

The Social Networks did not emerge with the teaching-learning purpose, however, with the proliferation of mobile devices, communication between people has been undergoing changes, and the school environment needs to adapt to this reality, appropriating these networks to use them as learning tools (MATTAR, 2014).

For this suitability, teachers of Physical Education and other areas can use the following social networks with highlighted functionalities (PASINI, 2020):

- *Moodle System*: in this program you can create online courses, course pages, work groups, and learning communities. This platform is free to use and accepts videos and various files;
- *Google Classroom*: This is a free service for teachers and students. Once connected, the class can do assignments online, and has the same functionalities as the *moodle* system;
- *Youtube*: On this platform it is possible to make *lives* or publish recorded videos, the lecturer can create his channel and be followed by his students;
- *Facebook*: Best used for high school and college students, it is possible to create a closed group where questions can be asked to identify the users, thus allowing a better control of the administrator. In this network the teacher can include content and also conduct *lives* that are automatically recorded.
- *Stream Yard*: is a free online studio for *lives* with one or more professionals, very similar to *YouTube* and *Facebook*, with a paid version with more features, but the free version already helps with school activities.
- *OBS Studio*: Can be translated as *Open Transmission Software*, it performs practically the same activity as *Stream Yard*, but with recording functionality.
- *Google Drive*: A little different from the ones mentioned above, it is a cloud platform with a function of storing files, also allowing them to be shared to students via the internet. An example, after uploading some kind of file to the cloud, the teacher can create a shareable *link*. *Google Drive* provides 15 *gigabytes* of memory for free making it an excellent file storage tool.
- *Google Meet*: A platform in which it is possible to hold online videoconferences, with up to 100 participants in the free version, with a maximum time limit of 60 minutes per meeting. In



the paid version, the time is free and the number of participants is 250.

- *Jitsi Meet*: Also a free online video conferencing network that works in conjunction with *Moodle* and has the same features as *Google Meet*.

The National Common Curricular Base (BNCC) stresses that Physical Education offers a range of possibilities to improve the experiences of children, youth, and adults in Basic Education, because this subject has a vast cultural universe that comprises body knowledge that is not restricted to the scientific rationality that is commonly present in school pedagogical practices (BRASIL, 2018).

Because it has varied content, skills, and abilities that are immensely important to be developed, School Physical Education brings knowledge that goes beyond simple practice, that is, doing for doing's sake, and this practice can be enriched with the support of different technologies, such as the computer, radio, TV, internet, among others (CARVALHO JÚNIOR, 2015).

As a mandatory curricular component, Physical Education is very important in the training of young people, so it also fits into a social order, since it directly receives influences from the technological movement (DINIZ; RODRIGUES; DARIDO, 2012).

Also in the study, Matias *et al.* (2018) there is the statement in the analysis that social networks promote space for discussion and favor the appropriation of knowledge, favoring the completion of tasks by allowing students to reflect on the lessons, that the diversity of the content motivates students and drives discussions about the topics, and the open classes generate reflections and allow for greater communication.

The school can be present in social networks, in a controlled scope, forming virtual study groups or even creating pages in which it can disclose information and school projects that students are developing. In this way, students of different levels and even students from other schools can interact in this virtual environment, which will enable a range of knowledge.

The social networks are instruments that allow a greater diversification of the contents in the classroom and help directly in the teaching-learning process (SILVA; COGO, 2007). The differentiated pedagogical practices have been studied in order to improve the teaching-learning process based on the use of the internet. In this aspect, the educator's biggest challenge is to direct the use of these technologies in educational actions, in order to provide the opportunity of expression, socialization and effectively motivate students to use these technologies (MIRANDA JÚNIOR, 2013).

Even though social networks are increasingly present in the daily lives of teachers and students, they are still not seen as tools and are not explored as much as they should be in the classroom, and most of the time schools end up prohibiting access to these networks for fear that the student will end up being interested in content that has no connection with the studies in the classroom (SILVA; SERAFIM, 2016).

Finally, the article denotes innovation for the educational field, showing to be effective, as it



facilitates the teaching-learning process of the subject in high school, through the use of social networks in the mediation of activities from open classes.

The student's learning can occur in various ways, whether formal or not, in this aspect, social networks come to have a significant value, because through them the student has free expression and contact with other colleagues, thus becoming a more interactive individual (SILVA, 2010).

Diniz, Rodrigues, and Darido (2012) point out that the use of the media in Physical Education classes, despite difficulties of implementation and resistance from students, can indeed mean advances for the field, since it is possible to build new perspectives for School Physical Education, and also suggest that studies be developed so that the media can be better used in the school environment to benefit the construction of strategies capable of helping the teacher's work.

Teachers can also benefit from the use of social networks, because through them they can share their reflections, discoveries, and even uncertainties, and create a continuous circle of learning with other teachers (SILVA, 2010).

Every teacher must be updated regarding technological changes, otherwise he/she runs the risk of getting lost in the current pedagogical scenario, arising difficulties in the relationship with the students, who in turn are natives in the virtual world (CARVALHO JÚNIOR, 2015). The teacher is no longer seen as the center of knowledge or knowledge. The entire contemporary learning process happens with the participation of students and the teacher must use the varieties of communicational and media resources to promote a teaching in which all involved are responsible for their own learning (SILVA, 2010).

In this sense, the influence of the media in the formation of students who are connected with information and with these contents, can be a didactic instrument for Physical Education classes, which can enable a more critical view of reality (DINIZ; RODRIGUES; DARIDO, 2012).

## 5 CONCLUDING REMARKS

The technologies and especially the social networks are present in the lives of young people, so the school environment should promote within it, the debate about these media and also provide the students with explanations on how to use them on a daily basis in the teaching-learning process, so that students can understand that social networks are not only made for entertainment, but also to search, publish, and share knowledge received in the classroom.

The study analyzed presents innovation for the educational field because it uses social networks in the teaching-learning process of Physical Education in high school, as a promoter of the space for discussion and favoring the appropriation of knowledge through the use of these networks.

It is notable that there are barriers to be broken that range from the difficulty in implementation to the teachers' lack of knowledge and training on the use of social networks. However, it was possible



to realize that the use of social networks can be effective in Physical Education classes, because besides stimulating and facilitating learning, these networks are increasingly prevalent in the students' daily lives.

Classes directed from a technological medium can be very interesting and interactive, since it allows the teacher to make a different class, but without failing to pass the content, in addition to adding these forms of teaching in their planning, the teacher can further instigate the attention of students, keep them focused on the content of the subject, in an environment that is often of their reality as is the case of a social network platform.

It is important to emphasize that a well mediated relationship between teachers and students can bring several benefits, and if this relationship happens in a healthy way with all individuals involved in the school, including parents and guardians, it may end up being the key to success in the teaching-learning process. Through social networks it is possible to get to know the most varied opinions, have access to feedback from complaints, thus enabling intellectual growth, correcting mistakes, and further improving the educational process.

As already noticed, the use of these networks can be done in many different ways, besides being advantageous to the school, because through a single network it is possible to bring together parents, students, teachers, employees and the community, and it is also possible that former students can share knowledge with veterans and even newcomers of the same school or another teaching unit, there is the possibility of the school management to mediate study groups, provide extra content for students, organize a chat to answer questions, prepare a virtual calendar of school events accessible to all, as well as promote discussions and share good examples.

The pandemic caused by the New Coronavirus (COVID-19) is an example of the need for the insertion of social networks in the teaching-learning process, because teachers all over the country had to adapt to these technological tools due to remote teaching. Teachers had to create new possibilities to teach their subjects, and most of them record videos, create their own channels in social networks, have WhatsApp groups with each class to guide students, parents or guardians about the activities, and also use platforms such as Google Meet.

Therefore, considering the increase in access to social networks by teachers and students, school Physical Education, as well as education in general, must adapt to technological advances, especially when it comes to social networks that are increasingly prevalent in the daily lives of students.

Even though the use of these technologies in the school environment is very useful, it is important to emphasize that in order for the interaction goals not to get out of control, the school's entire pedagogical staff must be able to handle these tools and constantly monitor the use of these networks.



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