# Projects and programs of physical activity for old in the public Brazilian universities: a general view

Alisson Vieira Costa 11, Feng Yu Hua2, Marisete Peralta Safons3

<sup>1</sup>Federal University of the Amapá – UNIFAP. Edilson Pinheiro street, 121 C, Goiabal, 68906-009, Macapá – AP, Brazil. <sup>2</sup>Mental Health - Psychiatry and Psychology Clinic. Centro Empresarial Brasília SRTVS 701 bloco C sala 204 - Asa Sul, 70340-907, Brasília, DF – Brazil.

<sup>3</sup>Faculty of Physical Education (FEF) of the University of Brasília (UnB). Campus Universitário Darcy Ribeiro - Asa Norte, 70000-000, Brasília, DF – Brazil.

\*Corresponding author. E-mail: alisson@unifap.br

ABSTRACT. The objective of this work was to describe a structure of projects/programs existing today in Brazilian public universities, to identify similarities and divergences and to point out indicators for changing new applications. Qualitative research of the descriptive exploratory type. Data were collected using an online instrument with 54 program coordinators, analyzed using the content analysis technique proposed by Bardin. Results: Found similarities regarding teaching strategies for elderly people according to what scientific literature prescribes. There was disagreement regarding the offer of activities in the different programs surveyed; there is no activity model to be followed. There was disagreement as to the type of physical activity offered in the programs. Not all regions have well-structured programs, there is a lack of resources, materials and personnel with experience in the area of physical activity for the elderly; built structures and places for carrying out activities are lacking. The offer of physical activities for the elderly in public universities is not yet a reality in all of them. Most programs increase through university extension and have been one of the maintainers of their legacy. We understand that there are indicators for the formulation of new proposals, such as: the experience of professionals in the field of Physical Education in offering and structuring the physical exercise offered; the need for teacher and continuing training; research and extension together in teaching; the importance of the evaluation as a subsidy for the continuity and prescription of the proposed exercises.

Keywords: Physical activity, Seniors, Systematization, University Extension.

**DOI**: http://dx.doi.org/10.33837/msj.v3i1.1235

Received May 20, 2020. Accepted May 28, 2020. Associate editor: André Gadelha

#### INTRODUCTION

The WHO extols the practice of the physical exercise like primordial for the maintenance of the health, principally in the aging (Who, 2010). In Brazil the public Brazilian Universities are basic for the offer of programs of physical regular activity for old, and it had beginning in a historical period known like Nova República, marked with the end of the military dictatorship and the beginning of the presidentialist period, characterized by the spacious political democratization in the country (Oliveira, 2018).

In 1984, the Federal University of Saint Maria (UFSM) was believing the first program of physical activity for old in a public Brazilian University, in the next year the Federal University of Saint Catarina

ext year the reactar onlycromy or built of

Copyright © The Author(s).

This is an open-access paper published by the Instituto Federal Goiano, Urutaí - GO, Brazil. All rights reserved. It is distributed under the terms of the Creative Commons Attribution 4.0 International License.



(UFSC), begin the second program and in 1989 the third program of the country appears in the State University of Saint Catarina (UESC). In 1993, more three initiatives appear: in the Federal University of Minas Gerais (UFMG), in the Federal University of Bullets (UFPel) and other in the Federal University of the Amazon (UFAM).

In the beginning, the implementation of new programs of physical activities for old in public Universities presented a slow rhythm, being only six in a period of eight years. Past this initial period, a quick growth takes place, with expansion for different regions of the country, and in the interval of 10 years understood between the years from 2009 to 2019, 62 new programs of physical activity were formed for old offered by public Brazilian Universities, consolidating these institutions like important agents for the improvement of the independence and autonomy of the old population, as a consequence of the practice of physical exercise (Eltz et al, 2014), who improves the physical, basic fitness for the maintenance of the functional capacity (Meneguci et al., 2016, Cavalcanti et al., 2016, Jesus et al., 2017).

The increase of the offer of programs structured to help the old ones to maintain an active life was possible in part for the implementation of programs of expansion of the public Universities like the Program of Restructuring and Expansion of the Federal Universities (REUNI), and also for allowances obtained by edicts of incitement set up in the public Universities through his departments of university extension (Sales *et al*, 2019).

The studies made a list to the practice of physical regular activity of old ones in public Brazilian Universities have been growing in the last years (Eltz et al., 2014, Squarcini et al., 2015, Adamo, 2017, Inouye et al., 2018). Meantime, somewhat is known on the systematization of the programs of practice of physical activity with old offered in the public Brazilian Universities. There is also a gap in the detailing of the programs of physical hard-working exercises and the recommendations of intensity, type of exercise, frequency, duration of the practice of physical activity systematized in this population (Acsm, 1993, Who, 1986, 2010, Sbme, 1996, Nobréga, 1999, Nahas, 2006, Brazil, 2014, Lima; Levy; Luiz, 2014, Pontes et al, 2019).

In our inquiry it was not possible to identify what caused the creation of first programs of physical activity for old in the public Brazilian Universities for his coordinators.

Meantime, the present study is the first one what it proposes to describe, at national educational level, the proposals, marks and the aspects - methodological of the offer of physical activity for old in the public Universities of different Brazilian regions, identifying similarities and divergences, detaching indicators for formulation of future proposals.

# MATERIAL AND METHODS

The study was characterized for a cross investigation of qualitative nature and of hallmark exploratory and descriptively (Andrade, 2014; Marconi and Lakatos, 2017), in what information were looked as to the Projects and Programs of physical activity for old persons offered in the public Brazilian Universities, as well as, questions made a list to the functioning of these projects / programs, time of existence, organization of the activities, infrastructure and used materials.

This study paid attention to the criteria of the Resolution 510 of April of 2016, of the National Council of Health - CNS and 3.148.984 was approved by the appearance in 15 of February of 2019.

Like criterion of inclusion for participation in the study, the programs should offer the practice of physical activity for old, and this program should be institutionalized in the form of teaching, inquiry or extension.

Also there were explored the pages of the Ministry of Education and Culture (MEC) and of the

National Centre of Scientific and Technological Development (CNPQ) in order that were obtained more information on the programs and his coordinators.

After identification of the coordinators of the programs for the criteria of inclusion and exclusion, the contact with same was carried out in four stages: initially it was done by way electronic (e-mail), subsequently for telephone, accepted connection you erase in announcing of the inquiry of way volunteer, after signature of the TCLE and finally I send of the instrument of collection of data.

The sample of the study was composed by 54 coordinators of programs of physical activity for old and the information on the programs were obtained in virtual environment, accessing the pages in the Internet of all the 109 public Brazilian Universities.

For getting the explored and analysed data, an instrument was used online built in the platform of the Google form undergone previously to the specialists of the area of physical activity for old persons for evaluation of the instrument.

After the approval of the instrument for the specialists with the agreements suggested by them, the final version of the instrument was constituted of 50 questions and sent to the coordinators for way electronic (e-mail) with a link that was giving access to the instrument with information on: used materials, the spaces been intended for the activities, structure, given on the physical activity, given of the coordinators of the projects/programs consulted for subsequent analysis and description of what it was found.

The answers of the questionnaires online directed for the coordinators of the programs were grouped using the analysis of content, through categorization, interpretation and informatization (Bardin, 2011), when five unities of register are identified: Identification and characterization of the projects / programs; Functioning; Projection of teaching; Importance of the work with old; Distribution and view for Brazil.

#### RESULTS AND DISCUSSION

# Identification and characterization of the projects/programs

At present, of 109 public Universities that exist in Brazil, 62 have programs of physical activity for old; 10 have Universities Opened for the Third Age - UNATIS (these were not an object of this study); and other 37 have no programs.

We obtained the participation of 54 coordinators of programs of physical activity for old of different regions of the country. The period of creation of these programs happened between 1984 up to the year of 2019.

In the period from 2010 to 2016, there was an increase in the appearance of programs of physical activity for old in the different public Brazilian Universities, the redemocratization of the Universities in this period and the arrival of the Program of Restructuring and Expansion of the Federal Universities (REUNI) that they can be some of the explanations for this increase in the creation of programs.

The REUNI it that it was in force from 2007 to 2012 been intended for the Public Federal Universities, had for principal I aim to increase the offer of waves in the degree courses, and the creation of new courses, besides the growth of the number of waves in existent courses (Sales *et al*, 2019).

Harnessed to this structure, financial incentives were linked to indicators of performance of the institutions in accordance with marks that own they had established. That made possible the enlargement of existent courses in the Universities and the creation of programs of physical activity for old through edicts of incitement (Sampaio apud Ribeiro and Cierco, 2018).

In this section we present general data on the structure of the programs and his characteristics, as well as, the academic Unities responsible for their maintenance. The programs are linked to the next courses and academic unities: Physical education (48); Medicine (02); Nursing (01); Pedagogy (01); Social Service (01) and Pro-presidency of Extension (01).

On the distribution of the programs in accordance with the academic unities which were linked, their most (48 programs) are tied to the courses of Physical Education and the least piece to other Unities I eat: course of Medicine, Nucleus of Social Service and Departments and Decanatos of Extension.

This fact demonstrates the importance of the area of the Physical Education in the structuring of projects turned to a public of old ones, guaranteeing the offer of physical activity of organized form and with direction described as a professional of the area (Squarcini *et al*, 2015, Trapé *et al*, 2018).

As for the form of institutionalization, 53 programs are linked to the university extension and you punish 01 to the inquiry. The objectives of the programs were: quality of life (11); aspects biopsychosocial (28); promotion of the health (08) and physical fitness (07).

In the scientific literature we find similar data to that of our study, in which the objective of the programs of physical activity is to contribute to the promotion of the health and production of the care and of healthy ways of life of the population from the introduction of poles with infrastructure and qualified professionals (Maciel; Couto, 2018).

The days of functioning in 22 programs were two days in the week; 12 work three days in the week and 20 of them four or more days in the week. On the collection of taxes to participate, 16 of them collect taxes and 38 do not collect.

Of the investigated programs 52 receive pupils of graduation and 02 do not receive. Besides, 52 programs receive pupils of postgraduation and 02 do not receive.

For Martins; Gonçalves (2018) activities must be the base for the constant education, being an ideal basis of the education directed to the old ones, respecting the personal history, the knowledges constituted along the life and it is waited that the programs of physical activity for old in Brazil are shaped like spaces of promotion of education, socialization, health and well-being for same.

On the profile of the participants of the programs, and the quantity of attended old ones, 32 receive from 05 to 99 old ones; 13 from 100 to 249 old ones; 04 from 250 to 499 old ones and 05 from 500 to 1200 old ones.

The age group of the participants in two (02) programs was between 50 and 59 years of age, an exception, since in Brazil, the least age to be considered old is 60 years; there was bigger presence (46 programs) of old ones in the age group from 60 to 69 years and in six (06) of them the average of age was from 70 to 79 years of age.

With the time some programs will have that to be prepared to attend a public with more and more advanced age and the age is known while to advance the problems resulting from the natural process itself of aging will be going to make presents (Confortin *et al*, 2017).

As for the restriction to announce of the program 18 of them be no restriction and in 36 programs there is, since the individual was attacked of Parkinson and / or Dementia. There were similarities in the programs in they did not receive old with any type of deficiency. We realize that the professionals' number still has not been sufficient for this service type, there is specialists' lack for the treatment with these diseases in the work with old in the programs in the Public Brazilian Universities.

It is important the mechanisms investigate more and more behind these diseases to understand them better and knowledge as it will deal with this specific public, besides proposing strategies so that it is possible to include programs of physical activity in which these persons could participate.

On the other side, the studies have been advancing principally for old those attacked with high blood pressure, diabetes, cardiac problems (Silva *et al*, 2018, Borba *et al*, 2018, Damázio *et al*, 2019), but when it the question is persons with any type of physical deficiency, the studies are still scarce.

Costa et al. (2020) 47

### **Functioning**

The activities offered in the programs were organized in five blocks: 1-Gymnastics: weight-training, functional training, hydrogymnastics, pilates, yoga, training of balance; aquatic jogging; exergames. 2-Rhythmical Activities: activities made a list to the dance. 3- Recreational Activities: activities of playful hallmark and plays. 4- Walked and run: walk, athletics and race. 5- Sports: all the collective, individual and aquatic sports.

There was divergence as for the offer of activities; there is no a model being followed, the offered activities are to criterion of the programs, what they offer in accordance with the structure that has links it. There is divergence as for the type of physical offered activity, in some programs the activities are same there is enough time, as soon as adaptations were done along the years.

There is not any training for the practice of physical activity with old, as for the methodology and loads of the offered activities, which is observed in the scientific literature, is which activities with different approaches are used bringing satisfactory results to the old thing (Silva *et al.*, 2018).

The activities as: when it walked, gymnastics, weight-training, sports, dance and hydrogymnastics were common in many investigated programs and activities I eat: Yoga, jogging aquatic and run they appeared in few ones. This fact shows that there is a predominance in the offer of some types of physical activities that already have scientific proof in the literature on his benefits (Lima; Levy; Luiz, 2014, Galloza; Castillo; Micheo, 2017, Mazo, 2018).

The types of physical activities recommended for old are the activities aerobic and of muscular strengthening, which they have with intention to improve the aptitude cardiorespiratory and muscular, the bone and functional health and to reduce the risk of chronic diseases, depression and cognitive decline. The biggest evidences for the benefits exist with programs that include training of strength, and the training of high intensity is more beneficial and an insurance of what the training of low intensity. (Mazo, 2018).

There was similarity in the programs as for the permanence in the direction of same. The coordinators of the most ancient programs are teaching of his institutions themselves, fulfilling other functions inside the University.

In the study of Martins; Gonçalves (2018) the authors noted that most of the groups are coordinated by teacher of the institution itself, but one of the groups investigated by her did not leave clearly this question, taking the Coordinator of the Extension as a person in charge, not explaining if teacher or not.

As for the professionals wrapped in the programs there was diversification, in 30 of them

presence only of teachers of Physical Education, in the rest there was the presence of this professional accompanied by others, I eat: nurses, physiotherapists, pharmacists, doctors, psychologists, nutritionists, social workers and in only a program it was noticed that there was no the teachers' presence of Physical Education.

This diversification of wrapped professionals corroborates with the finds of the study of Martins; Gonçalves (2018), in which the authors said in his study that the team of work was composed by teachers, academics, technical servants, teachers of Physical Education; and multidisciplinal teams, who wrap teachers of other areas.

The biggest presence of students of the course of Physical Education in the programs indicates another similarity between them, in spite of the physical activity to be the focus of the investigated programs. This find shows that the practice of the physical activity for old persons today in the country is a reality and the apprentice number only grows to each day, with that, the proposition of programs in which the presence of the professional of Physical Education is made outstanding, it seems that be essential for the success of a great deal of the investigated programs.

# **Projection of teaching**

In this section, we indicate similarities and differences between the programs as for the projection of teaching and in accordance with the directions of the analysis of content proposed by Bardin (2011).

As for the *periodicity of the projection* there was similarity in 28 programs that carry out it every six months; thirteen (13) monthly; other seven (07) annually and six (06) to each 15 days. The projection is important because it makes easy the distribution, description, foresight and the pedagogic sequence of the activities, making possible the correction and revision along the semester with objective to make them safer.

On the *organization educational-methodology* of the activities all the investigated programs have, showing that same they have been having this preoccupation with the strategies of teaching for the development of his activities and present similarities as for this item.

In the recommendations for the practice of physical activity, 48 programs follow someone and six (06) do not follow any recommendation. Of what they follow some recommendation, 17 follow the recommendations of the American College of Sport Medicine (ACSM), 14 follow the recommendations of the Brazilian literature on practice of physical activity with old, 12 follow the international consensus for the practice of physical activity and 11 programs follow other recommendations.

As for the use of *some model* of existent program in Brazil or abroad for the practice of physical activity with old, there was similarity in 44 programs that they are not still any model and in ten (10) there was divergence. Among what they diverged: one (01) follows the Sweet Methodology Challenge, other (02) follow actions turned to the training of balance, other (01) develops own methodology and six (06) are still a model, but they did not specify qual.

Our study revealed what in Brazil, most of the programs do not follow a model of practice of physical activity with old, but the organization of same happens in agreement with the teams of work and his experiences in this area.

On the *periodicity of the physical evaluations*, six (06) do not carry out, nine (09) carry out annually, 32 carry out every six months and seven (07) quarterly. The evaluations are important because they will give subsidies and parameters for the prescription of the activities during the semester in the program of physical activities.

As for the *objective of the physical fulfilled* evaluations, in six (06) programs this question is not applied, since they do not carry out physical evaluations, in 26 the principal objective is the improvement of the quality of life and of the aspects biopsychosocial, in 20 the objective went to improvement of the performance and of the elements of the physical fitness, and in two (02) of them improvement of the aspects biopsychosocial and promotion of health.

Some of the principal objectives of the evaluation with the old ones are: to diagnose and to check the efficiency of the programs as for the physical fitness, the aspects psychosocial and at the level of physical activity; to check the evolution of the physical fitness and of the functional capacity; to determine the variables that must be prioritized in the preparation of the programs (Safons; Pereira, 2007, Martins; Gonçalves, 2018).

The item of the *protocols/tests used* in the physical evaluations was what there was bigger divergence between the coordinators, 22 programs use only the Senior Fitness Test (Rikli and Jones) as reference. Another (17) programs use the Senior Fitness Test associated to other tests. Nine (09) programs use the Rate of Katz next to other tests. It checked that (06) programs do not use any protocol since they do not carry out periodic evaluations.

These tests are necessary, because it is possible through them, to value the losses and profits that can take place along the time, and since the essential functions are known for the realization of the Activities of Daily Life (ADL) like, muscular strength, resistance, static and dynamic balance and amplitude of movement so that there is a good functioning biomechanical from the body to the solicited movements (Mazo, 2018).

Regarding the *scientific inquiries* carried out with the participants of the programs, 51 carried out already and (03) three never carried out, revealing similarity in the preoccupation of the majority you erase with this item.

The inquiry has been to the base of the production of the knowledge in the Universities and the realization of studies with the old persons, it has been a necessity, in the search of the improvement of the production, discussion and knowledge in the area of the physical activity for this population (Soares, 2018, Trentin; Rocha; Silva, 2018).

Besides the physical activities knowledge was looked they exist *other actions* in the programs, in 39 of them there was similarity in this item and in 15 not. Among the developed actions one has: conversations and educative meetings; you debate on the benefits of the physical activity; you discipline how: computer science, right of the old one, foreign language, Portuguese; memory and apprenticeship; choral corner. Activities in commemorative dates; walks; travels of end of year; you visit to places gone with the group; parties of fraternization; medical direction; organization of academic events; cycle of cinema; Program of Multidisciplinal Evaluation (Geriatric Spacious Evaluation).

As for the performance of *interdisciplinary surveys* and with which areas of knowledge occur, there were similarities in 26 programs and 28 not. Of the areas of the knowledge in which these inquiries happen, they stand out: medicine, nursing, nutrition, social service, speech therapy, psychology, physiotherapy, pedagogy, occupational therapy and in one of the programs there are inquiries with medicinal plants.

The interdisciplinary inquiries will be able to bring near areas of you know different on behalf of a ordinary good, since it will improve the quality of life of the persons through their discoveries originating (Fernandes, 2018, Silva, 2019).

Besides, the finds of this study go against what the American College of Sport Medicine (1993) recommends as for the practice of physical activity for the old population and his strategies of teaching, in which it is necessary to contemplate exercises aerobic, of resistance, flexibility and balance.

We find similarities as for the strategies of teaching for old persons in accordance with which it prescribes the scientific literature (Safons; Pereira, 2007, Galloza; Castillo; Micheo 2017) as: description step by step of the exercise; the demonstration of the exercises for part of the teacher; the attention to the pupils to know what it happens to each one, without of losing the notion the set; stimulation (reinforcement) during the execution, observations and sincere praises; these strategies give opportunity to a pupil a better apprenticeship and quality in the realization of the exercises.

In a study carried out on the organization educational pedagogic of projects of university extension with old persons with 10 coordinators of the south region of Brazil, it was realized that the characteristics of the projects are similar, as well as, the motives that gave rise to the actions of extension: institutional demand; demand of the community and mixed demand, University and community (Martins; Gonçalves, 2018).

#### Importance of the work with old

In this item, we detach the words of the coordinators indicating similarities and differences, according to one of the objectives of our study and in accordance with the directions of the analysis of content proposed by Bardin (2011). We use the techniques of categorization (treatment of the data) through the unities of register; interpretation of the data, from the words (the motive that took each participant to use determined word or expression) of the coordinators and informatization (inferences).

After analysis of the words of the coordinators, we identify 05 unities of register: Education; social Paper; personal and professional Growth; Curriculum of the extension and other (Table I) and from them there was possible the realization of the interpretation of the data and the realization of inferences.

In the perspective of Bardin (2011), the analysis of content must be developed, in continuous

and progressive way, in three phases: daily payanalysis; exploration of the material; treatment of the results, inference and interpretation.

The table below shows the statements of the coordinators within each record unit, identified by the caption *Coord*.

According to the statements of the coordinators, we identified similarities and divergences when we analyzed the registration units, regarding the first unit analyzed, *Education*, only one coordinator understands that his program serves as a reference in education and an opportunity for the elderly to increase their knowledge.

In *Social Paper*, there were similarities in the statements of some coordinators, they understand that the physical activity program offered to the elderly at their respective Universities, favors the formation of social bonds between the participants and fulfills their social representation in the community.

There was a similarity in *personal and* professional growth, some coordinators understand that their program serves as a training place for teachers and academics.

In the *Curriculum of extension*, the coordinator understands the importance of extension as a tool capable of expanding teaching actions in front of the community and contributing positively to the proposal of physical activity with the elderly.

Table 1. Summary of statements by coordinators and registration units

Registration unit	Speech by the coordinators
Education	[]Our project today in the state is a reference in education for the elderly [] - Coord 01
Social role	I believe, from my experience in this area, that Universities have been fulfilling their social role in relation to working with the elderly [] - Coord. 02
	[]UDESC as a public, free and quality University has fulfilled its role of social representation in the community [] – Coord. 05
	What strikes me the most in these 21 years of the project, is that the physical activity program offered, favored the formation of social bonds between the project participants, making this characteristic a strong stimulus for many to attend the project. [] - Coord 11
Personal and professional growth	[]it provides personal and professional growth, as it advises on the care we should have with the elderly in all aspects [] - Coord. 03
	Coordinating and working with physical exercise programs for the elderly brings great personal and professional satisfaction while we can observe an improvement in the quality of life[] - Coord. 06
	[]the experience of working with this audience is extremely fantastic, both for teachers and academics, especially with institutionalized elderly [] - Coord. 08
Extension Curriculum	[]with the extension Curriculum, Goal 12.7 of the National Education Plan 2014-2024 - Federal Law 13.005 / 2014 that defines ensuring at least 10% of the total curricular credits required for graduation in university extension programs and projects can we extensionists expand our activities and serve more people in the community [] - Coord. 04
Other	[]we still have a long way to go to get where we want to go. Ex: resources, administration, interns, support from agencies, among others [] - Coord. 07
	[] we have difficulties in finding interns or monitors on a regular basis with grants that give them sustainability, the 2 teachers are effective in the program and have their own resources to maintain the project - Coord. 09
	[] the hiring of Physical Education teachers belonging to the Program, which contributes a lot as a result of it. We try to stimulate our academics and few are interested in working with the elderly[]- Coord 10

In *Other*, the improvement of working conditions within the University, the need for institutional support for the continuity of the program and its maintenance within the Institution was something similar in the speeches of some coordinators, and that the government may assume its responsibility in this process.

In general, there was no consensus among the coordinators as to the importance of their programs in offering physical activity to the elderly at the national level, however, the findings of this study are in line with what the scientific literature recommends about offering physical activity to the elderly. , as an action of university extension, in the fulfillment of its social role, in the contribution to the education of people, as well as in the professional training of academics (Adamo *et al.*, 2017, Borges; Pessanha; Miranda, 2018).

# Distribution and overview throughout Brazil

As can be seen in Figure 1, the programs are divided by region of the country. In the northern region, no programs were identified in the state of Rondônia and in this particular state there is no state university, only a federal one.

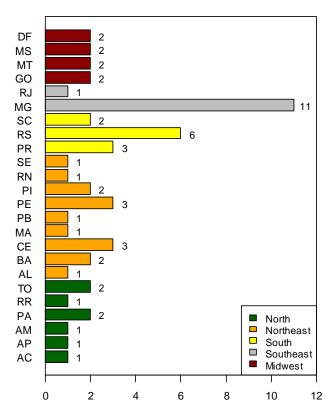


Figure 1. Programs by federative unit

In the northeastern region there was the participation of all states in the region, in the states of Pernambuco and Ceará it was where we identified the presence of more physical activity programs for the elderly.

In the southern region, there was the participation of all states in the region, it is observed that in the State of Rio Grande do Sul it was where there was the presence of more programs in that region. A peculiarity of the southern region was the presence of the oldest programs in the country, over 30 years old.

In the southeastern region, it was not possible to have the participation of all states, we believe that due to the demands and workload of the coordinating professors, we did not have the participation of programs in the city of São Paulo, while in Espírito Santo we did not identify programs at the Universities public.

In the Midwest region, programs were identified in all public universities surveyed. There are programs that have existed for a long time, such as UnB, which has two programs that have been in operation since 1997.

The distribution of programs throughout Brazil and their permanence seem to be related to the University's existence in the region, its internal extension policies and the individual effort of each coordinator to maintain the program. Not all regions have well-structured programs, there is a lack of resources, materials and personnel with experience in the area of physical activity for the elderly; built structures are lacking and there is still a lack of programs in public universities.

The results of this research confirm the data in the scientific literature (COELHO; VERDI, 2015; ALMEIDA; MOURÃO; COELHO, 2018) in which the positive aspects, the identification and the satisfaction of people in participating in these programs is always great.

Finally, we understand that there are indicators for the creation of new proposals for physical activity for the elderly in Brazilian public universities, as we found in this study and among these we highlight: the experience of professionals in the area of Physical Education in offering and structuring the offered physical exercise; the need for teacher and continuing education; research and extension together in teaching; the importance of the evaluation as a subsidy for the continuity and prescription of the proposed exercises.

## **CONCLUSION**

The data presented in this study point to the diversification in the offer of physical activities within Brazilian public universities, in the framework of professionals and volunteers involved and in the didactic-pedagogical organization of each program surveyed.

Consider the regional and local realities in the provision of physical activities for the elderly as something that should be considered by the

coordinators when organizing and planning their activities, due to the different realities and peculiarities that prevent the creation of a standard model at the national level.

Hiring specialist professionals and further studies on intervention strategies for elderly people with some form of dementia and Parkinson's so that more people can be included in the programs.

That the offer of physical activities for the elderly should be based on international and / or national health consensus and on scientific evidence in the literature on the benefits of physical exercises offered.

The offer of physical activities for the elderly in Brazilian public universities is not yet a reality in all of them. Most programs come through university extension and have been one of the maintainers of their continuity.

Today, there are physical activity programs for the elderly in all regions of the country, investigating the social role of Brazilian public universities in offering these activities to this population is also important in future studies.

#### **REFERENCES**

- ACSM (American College of Sports Medicine). (1993) Position stand: physical activity, physical fitness, and hypertension. *Medicine and Science in Sports and Exercise*, 10:ix.
- Adamo, C. E.; Esper, M. T.; Bastos, G. C.; Sousa, I. F.; Almeida, R. J. (2017). Universidade aberta para a terceira idade: o impacto da educação continuada na qualidade de vida dos idosos. *Revista Brasileira de Geriatria e Gerontologia*. Rio de Janeiro; 20(04):550-560.
- Almeida, E.; Mourão, I.; Coelho, E. (2018). Saúde mental em idosos brasileiros: efeito de diferentes programas de atividade física. *Psicologia, Saúde & Doenças*, 19(02):390-404.
- Andrade, M. M. (2014). Introdução à metodologia do trabalho científico. 10. ed. São Paulo: Atlas.
- Bardin, L. (2011). Análise de conteúdo. São Paulo: Edições 70.
- Borba, A. K.; Marques, A. P.; Ramos, V. P.; Leal, M. C.; Arruda, I. K.; Ramos, R. S. (2018). Fatores associados à adesão terapêutica em idosos diabéticos assistidos na atenção primária de saúde. *Ciência & Saúde Coletiva*, 23(03):953-961.
- Borges, J. S. M.; Pessanha, G. R. G.; Miranda, A. R. A. (2018). Extensão Universitária: uma análise das práticas desenvolvidas na UNIFAL – MG. *Caderno de Estudos Interdisciplinares (CEI) - Edição Especial*. III Congresso ICSA – VIII Semana PIEPEX.
- Brasil. *Vigitel* 2013. (2014). Vigilância de fatores de risco e proteção para doenças crônicas por inquérito telefônico. Brasília: Ministério da saúde.
- Coelho, C. S.; Verdi, M. I. (2015). Políticas e programas de atividade física: uma crítica à luz da promoção da saúde. *Sau. & Transf. Soc.*, 6(03):96-108.
- Confortin, S. C.; Schneider, I. J. C.; Antes, D. L.; Cembranel, F.; Ono, L. M.; Marques, L. P.; Borges, L. J.; Krug, R. R.; D'orsi, E. (2017). Condições de vida e saúde de idosos: resultados do estudo de coorte EpiFloripaIdoso. *Epidemiol. Serv. Saúde*, 26(02):305-317.
- Damázio, L. C. M.; Souza Filho, G. R.; Pereira, A. C. L.; Leão, T. L. O.; Ferreira, L. C.; Mourão, F. N. (2019).Os efeitos de um programa de atividade física na pressão arterial e frequência cardíaca de pacientes hipertensos e deficientes físicos. Rev. Aten. Saúde, São Caetano do Sul, 17(59):81-87.
- Eltz, G. D.; Artigas, N. R.; Pinz, D. M.; Magalhães, C. R. (2014).

- Panorama atual das Universidades Abertas à Terceira Idade no Brasil. *Revista Kairós Gerontologia*, 17(04):83-94.
- Fernandes, A. M. (2018). Interdisciplinaridade no ensino e aprendizagem: novas perspectivas e desafios na atualidade. *Id on Line Rev. Mult. Psic.*, 12(40):101-115.
- Galloza, J.; Castillo, B.; Micheo, W. (2017). Benefits of Exercise in the Older Population. Physical Medicine & Rehabilitation Clinics of North America, 28(04):659-669.
- Inouye, K.; Orlandi, F. S.; Pavarini, S. C.; Pedrazzani, E. S. (2018). Efeito da Universidade Aberta à Terceira Idade sobre a qualidade de vida do idoso. *Revista Educação e Pesquisa*, São Paulo, 44(21):1-19.
- Lima, D. F.; Levy, R. B; Luiz, O. C. (2014). Recomendações para atividade física e saúde: consensos, controvérsias e ambigüidades. Pan American Journal of Public Health, 36(03):164-170.
- Maciel, M. G.; Couto, A. C. P. (2018). Programas governamentais de atividade física: uma proposta de política pública. *Perspectivas em Políticas Públicas*. Belo Horizonte, 11(22):55-79.
- Marconi, M. A.; Lakatos, E. M. (2017). Fundamentos de metodologia científica. 8ª Ed. São Paulo: Atlas.
- Martins, V. F.; Gonçalves, A. K. (2018). O trabalho com o idoso: organização didático-pedagógica dos projetos de extensão universitária do curso de Educação Física. Revista Kairós Gerontologia, 21(01):293-315.
- Mattos, E. B. T. (2008). *O significado do grupo de convivência para idosos.* (90f.). Fortaleza, CE: Dissertação de mestrado. Universidade de Fortaleza.
- Mazo, G. Z. (2018). Recomendações de atividade física para idosos. *Biomotriz*, Unicruz, Cruz Alta, 12(03):1-4.
- Nóbrega, A. C. L. *et al.* (1999). Posicionamento Oficial da Sociedade Brasileira de Medicina do Esporte e da Sociedade Brasileira de Geriatria e Gerontologia: Atividade Física e Saúde no Idoso. *Rev. Bras. Med. Esporte*, 5(06):207-211.
- Nahas, M. V. (2006). Atividade física, saúde e qualidade de vida: Conceitos e sugestões para um estilo de vida ativo. Londrina: Mediograf, 4ª edição.
- Oliveira, R. P. (2018). A debacle da nova república brasileira: da desilusão ao encerramento de um ciclo democrático. Estudos Sociopolíticos e Internacionais da América do Sul. *Espirales*, 2(03):25-42.
- Pontes, S. S.; Silva, A. M; Santos, L. M. S.; Sousa, B. V. N.; Oliveira, E. F. (2019). Práticas de atividade física e esporte no Brasil. *Rev. Bras. Promoç Saúde*, 32(06):1-9.
- Safons, M. P.; Pereira, M. M. (2007). Princípios Metodológicos da Atividade Física para Idosos. Brasília, DF: CREF/DF-FEF/UNB/GEPAFI.
- Sales, E. C. S.; Rosim, D.; Ferreira, V. R. S.; Costa, S. H. B. (2019). O programa de apoio a planos de Reestruturação e Expansão das Universidades Federais (REUNI): uma análise de seu processo de avaliação. Avaliação, Campinas, SP, 24(03):658-679.
- Sampaio, H. (2018). Ensino superior no Brasil no século XXI: avanços locais e desafios globais. In.:RIBEIRO, Cláudia Pinto; CIERCO, Teresa (Coord.). Unidos por um oceano: o ensino superior no espaço Ibero-Americano. Porto: CITCEM Centro de Investigação Transdisciplinar Cultura, Espaço e Memória, pp-67.
- Sbme (Sociedade Brasileira de Medicina Esportiva). (1996). Atividade Física e Saúde: Posicionamento Oficial da Sociedade Brasileira de Medicina do Esporte. *Revista Brasileira* de Medicina Esportiva, 2(04):79-81.
- Silva, R. S.; Bezerra, J. A.; Silva, K. V.; Silva, N. N.; Lopes, D. T. (2018). A importância da atividade física em idosos com diabetes: revisão bibliográfica. Revista Diálogos em Saúde, 1(02):144-158.
- Silva, C. R. (2019). Interdisciplinaridade: conceito, origem e prática. *Revista Artigos.Com*, 1107(03):1-6.
- Soares, P. C. (2018). Contradições na pesquisa e pós-graduação no Brasil. *Estudos Avançados*, 32(92):289-313.
- Squarcini, C. F.; Rocha, S. V.; Munaro, H. L.; Benedetti, T. R.; Almeida, F. A. (2015). Programas de atividade física para idosos: avaliação da produção científica brasileira utilizando

52

- o modelo RE-AIM. *Revista Brasileira de Geriatria e Gerontologia*. Rio de Janeiro, 18(4):909-920.
- Trapé, A. A.; Lizzi, E. A.; Jacomini, A. M.; Bueno Júnior, C. R.; Franco, L. J.; Zazo, A. S. (2018). Exercício Físico Supervisionado, Aptidão Física e Fatores de Risco para Doenças Cardiovasculares em Adultos e Idosos. Revista Brasileira de Ciências da Saúde, 22(4):291-298.
- Trentin, E. C.; Rocha, I. L.; Silva, M. M. (2018). O avanço da pesquisa científica e qualificação dos cientistas brasileiros. *Multi-Science Journal*, 1(10):1-3.
- Who (World Health Organization) (1986). The Ottawa Charter for Health Promotion: first International Conference on Health Promotion, Ottawa, 21 November 1986. WHO, Genebra.
- Who (World Health Organization) (2010). Global recommendations on physical activity for health. Genebra: WHO.

To cite this paper:

Costa, A. V., Hua, F. Y., Safons, M. P. (2020). Projects and programs of physical activity for old in the public Brazilian universities: a general view. *Multi-Science Journal*, 3(1): 44-52. DOI: http://dx.doi.org/10.33837/msj.v3i1.1235