

# RIASE

REVISTA IBERO-AMERICANA DE SAÚDE E ENVELHECIMENTO  
REVISTA IBERO-AMERICANA DE SALUD Y ENVEJECIMIENTO

**PHYSICAL ACTIVITY AND AGING:  
FEELINGS SHARED BY PRACTITIONERS  
OVER 60 YEARS OLD**

**ATIVIDADE FÍSICA E ENVELHECIMENTO:  
SENTIDOS COMPARTILHADOS POR PRATICANTES  
ACIMA DE 60 ANOS**

**ACTIVIDAD FÍSICA Y ENVEJECIMIENTO:  
SIGNIFICADOS COMPARTIDOS POR PRACTICANTES  
MAYORES DE 60 AÑOS**

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## ABSTRACT

**Introduction:** Based on the structural approach of Social Representations Theory, this essay presents the meanings of physical activity shared in a convenience sample of 152 people aged over 60, regular practitioners of physical activity in Rio de Janeiro.

**Methods:** A questionnaire was applied with free word association test – the inductive term: *physical activity* –, open and closed questions, besides the identification of the socio-familiar status of the subjects. A combined analysis was performed about the frequency and medium orders of the performed evocations, to identify the structural contents of the studied social representation. For this, we relied on the help of the EVOC® software.

**Results:** There were identified the elements *Health*, *Well-being*, *Walking*, *Body* and *Fitness* as belonging to the central system and *Agility*, *Stretching*, *Running*, *Balance*, *Strength*, *Mind*, *Swimming* and *Enjoyment* as constituents of the peripheral system. However, only *Health* and *Walking* showed relevance regarding importance and were the main organizers of the representation. No negative categories were found in the meanings constructed and shared by the subjects.

**Conclusion:** Through global analysis of the *corpus* investigated, there is more interest in body aesthetics without overcoming concerns about health, autonomy and independence. This interest seems consistent for new elderly individuals, who seek new opportunities for recreation, socializing and learning, new romantic relationships, perhaps indicating a movement of change on the representations of old age.

**Descriptors:** Aging; Elderly; Physical Activity; Social Representations.

## RESUMO

**Introdução:** Fundamentado na abordagem estrutural da Teoria das Representações Sociais, este artigo objetiva apresentar os sentidos de atividade física compartilhados numa amostra de conveniência de 152 pessoas maiores de 60 anos, praticantes regulares de atividade física no Rio de Janeiro.

**Métodos:** Aplicou-se um questionário com teste de evocação livre de palavras – termo indutor: *atividade física* –, perguntas abertas e fechadas, além da identificação sociofamiliar dos sujeitos. Efetuou-se a análise combinada das frequências e ordens médias das evocações realizadas, para identificar os conteúdos estruturais da representação social estudada. Para isso, contou-se com a ajuda do *software* EVOC®.

**Resultados:** Identificaram-se os elementos *Saúde*, *Bem-Estar*, *Caminhada*, *Corpo* e *Ginástica* como pertencentes ao sistema central e *Agilidade*, *Alongamento*, *Corrida*, *Equilíbrio*, *Força*,

*Mente, Natação e Prazer* como constituintes do sistema periférico. Entretanto, somente *Saúde e Caminhada* mostraram-se relevantes quanto a sua importância e foram os principais organizadores da representação. Não foram encontradas categorias negativas nos sentidos construídos e compartilhados pelos sujeitos.

**Conclusão:** Na análise global do *corpus* investigado, sobressaiu o interesse demonstrado pela estética corporal sem, contudo, suplantando as preocupações com saúde, autonomia e independência. Esse interesse parece coerente com a postura dos novos idosos que buscam, além de novas oportunidades de lazer, convívio e aprendizagem, novos relacionamentos afetivos, talvez indicando um movimento de mudança nas representações da velhice.

**Palavra-chave:** Atividade física; Envelhecimento; Idosos; Representações Sociais.

## RESUMEN

**Introducción:** A partir del enfoque estructural de la Teoría de las Representaciones Sociales, este artículo tiene como objetivo presentar los significados de la actividad física compartidos en una muestra de conveniencia de 152 personas mayores de 60 años, practicantes habituales de actividad física en Río de Janeiro.

**Métodos:** Se aplicó un cuestionario con un test de asociación libre de palabras – término inductor: *actividad física* – preguntas abiertas y cerradas, además de la identificación sociofamiliar de los sujetos. Se realizó el análisis combinado de las frecuencias y el orden promedio de las evocaciones realizadas para identificar los contenidos estructurales de la representación social estudiada. Para ello, se contó con la ayuda del software EVOC®.

**Resultados:** Los elementos *Salud, Bienestar, Caminata, Cuerpo y Gimnasia* fueron identificados como pertenecientes al sistema central y *Agilidad, Estiramiento, Correr, Equilibrio, Fuerza, Mente, Natación y Placer* como componentes del sistema periférico. Sin embargo, solo *Salud y Caminata* se consideraron relevantes en cuanto a su importancia y fueron los principales organizadores de la representación. No se encontraron categorías con connotación negativa.

**Conclusión:** En el análisis global del *corpus* investigado, se destacó el interés mostrado por la estética corporal sin suplantando las preocupaciones por la salud, la autonomía y la independencia. Este interés parece estar en consonancia con la actitud de los nuevos ancianos que buscan, además de nuevas oportunidades de ocio, convivencia y aprendizaje, nuevas relaciones afectivas, indicando quizás un proceso de cambio en las representaciones de la vejez.

**Descriptores:** Actividad Física; Ancianos; Envejecimiento; Representaciones Sociales.

## INTRODUCTION

The essay aims to present the results of a research on the meanings of physical activity (PA) created by a group of regular practitioners – men and women – over 60 years-old, in the city of Rio de Janeiro, Brazil.

The growing aging of the population has been the object of attention in several fields of society, it is not only due to the expressive demographic increase, but due to the new habits of behavior and the most recent conceptions about this phase of life, linked to different activities, learning, satisfaction personnel, among others<sup>(1)</sup>.

PA is one of the activities that is most encouraged by health professionals and sought after by the elderly people; it is the main example of what is considered the practical dimension of individual strategies used to postpone or to avoid the effects of aging<sup>(2)</sup>.

There is a consensus on the benefits of PA at this age, including the functional aspects necessary for maintaining autonomy and independence in activities of daily living, as well as improving the quality of life by decreasing physical changes in old age<sup>(3,4)</sup>, as well as improving balance and muscle strengthening, which are important in preventing falls<sup>(5,6)</sup>.

Among the motivations mentioned for the regular practice of PA among people over 60 years-old, there are the promotion and maintenance of health<sup>(7)</sup>, the development of physical condition, sociability and pleasure in the practice of exercises, in addition to medical recommendations<sup>(8)</sup>. These motivations are consistent with the concept of PA proposed by Piggin<sup>(9)</sup> and which was considered in this study.

### *Theoretical framework*

In the last decades, the exponential growth of the elderly population in Brazil has evidenced the importance of this phenomenon<sup>(10)</sup> and the social relevance of the aging of the population arouse the interest of the field of social representations theory (SRT), such as the study about old age and family relationships<sup>(11)</sup>, among others.

Being a social construction of knowledge, social representations (SR) have the function of creating conventions about objects, so that they are shared in the social relationships that occur in the community. They function as a translation of reality, a tool to accommodate new information in the pre-existing universe<sup>(12)</sup>, in a process of transforming the non-family member into a family member, who fulfills their main function<sup>(13)</sup>.

SRs organize opinions, attitudes, beliefs and information about a situation and are generated by individuals as a way of adapting to the world in which they live. They can be in people's minds and in their social relationships, since they are individual thought and social practice at the same time and considered both as a theory and as a phenomenon, hence the main interest is centered on the investigation of everyday knowledge<sup>(13)</sup>. As a theory, it investigates and tries to explain the reciprocity of the relationships between individual and society and as a phenomenon it re-signifies the knowledge shared by the group<sup>(14)</sup>. It should be noted that Moscovici's theoretical construction<sup>(12)</sup> takes into account the individual and the collective simultaneously in the historical and cultural context<sup>(13)</sup>.

Currently, the excessive appreciation of physical and mental performance ends up reinforcing beliefs regarding changes, seen mainly as losses associated with old age, despite the existence of gains in this process, due to the use of selective optimization mechanisms of individual resources, in addition to adaptive compensations for successful aging<sup>(15)</sup>.

In this study, it was decided to adopt a more comprehensive concept of PA in order not only to highlight the biomechanical and physiological aspects of body movement produced by skeletal musculature, which is insufficient to contemplate the complexity involved in this process. In a recent article, Piggin<sup>(9)</sup> proposes that the definition of PA emphasizes several aspects such as the psychological processes involved in the motivation and decision-making of this activity, which considers the benefits of the social interaction provided by PA and that cannot be underestimated when it is compared to health benefits. Other factors must also be considered, such as the influence of the cultural spaces used and political decisions, which can contribute to improving people's lives. It is worth checking what was indicated by the author:

*"Physical activity involves people moving, acting and performing within culturally specific spaces and contexts, and influenced by a unique array of interests, emotions, ideas, instructions and relationships."*<sup>(5,9)</sup>.

The raw material of SRT is the common sense knowledge, so the research participants refer to the PAs that practice with the body as a moving instrument, whether they are regular gymnastics classes, dance, weight training or even activities done during leisure time like hiking and swimming, for example.

Due to the intense dissemination of values related to youth, the meanings to life before the age of 60 have been incorporated and they also contribute to the construction of the SRs that the elderly people have about themselves and about old age; however, showing the contradictory feeling that the older population have on the subject, since they have a representation of old age that they do not want to assume, but perhaps the time has come<sup>(11)</sup>.

Moscovici's inaugural work seeks the process that considers scientific knowledge and common sense knowledge<sup>(16)</sup>. In this perspective, PA are chosen from a body of practical knowledge systematized and inserted in the fields of education and sports and health sciences<sup>(17)</sup>.

The changes in Brazilian social thinking regarding the new forms of aging and the diverse and controversial elaborations<sup>(18)</sup> can be extended to the practice of PA, as it is a current and constant subject in the media, in addition to being an attraction for consumption, evidencing its strong rooting in the urban way of life and becoming an object of social interest. The habit of practicing PA regularly is debated socially, without being restricted to specialized means, and ends up providing the preparation of new collective knowledge about it.

Thus, considering the progressive increase in life expectancy of the Brazilian population, the need to promote the health of the elderly people and prevention, it was relevant to investigate how SR of PA in men and women over 60 years-old, with the aim to apprehend the meanings shared by them and consider the object of regular physical practices.

## METHODOLOGY

In this investigation, the structural approach of the SRT was chosen, which makes it possible to identify the content and organization of the SR, which consists of two main systems, one central (CS) and the other peripheral (PS), which fulfill different functions<sup>(19)</sup>.

The SRs are organized around the CS, which has a generating function and another organizer of the contents in its structure. The first one gives meaning to the elements that compose it, the second one unifies and allows the stabilization of SR. Because it is based on consensus, history and the group's memory, this system is very important for determining and maintaining the original characteristics of SR<sup>(19)</sup>.

The PS promotes the mediation between the CS and reality, being responsible for the daily social exchanges, promoting an individualized adaptation to representational expression. It is through it that the elements of the SR are anchored and where possible transformations in its structure begin. It is also worth noting the permanent interdependence between these two systems in their functioning<sup>(19)</sup>.

Although the central system is responsible for the unity of meaning and stability of SR, it is subject to change. When this happens, the SR changes<sup>(19)</sup>.

A questionnaire containing a free evocation test (FET) with the expression physical activity was used; open and closed questions aimed at identifying beliefs, norms, values, attitudes and practices related to PA and aging, in addition to the subjects' social and family situation.

For the identification of the structural contents, a combined analysis of the frequencies and average orders of the evocations performed was carried out, taking into account the respective collective (frequency) and individual (evocation order) dimensions. To do this, it relied on the help of EVOC<sup>®</sup> software.

Thus, the various elements were distributed in a scatter plot, where the vertical axis is that of frequencies ( $f$ ) and the horizontal axis is that of mean evocation orders ( $meo$ ). After this procedure, the average of the frequencies ( $Af$ ) and the average of mean evocation orders ( $MEO$ ) were calculated, and the intersection of these lines divides the graph into quadrants.

The elements with the highest frequencies and lowest average evocation orders are located in the upper left quadrant, that is, there is what was quickly remembered by a significant number of subjects. For that reason, they probably make up the CS. In the lower right quadrant, the elements with the lowest frequencies and highest average evocation orders are located, corresponding to the PS. In the other quadrants are the elements that alternate these attributes, constituting the intermediate system (IS) or the nearby periphery.

In order to investigate the internal organization of the constituent elements of the structure, similarity analysis was carried out, where each vertex is one of the evocations and each edge represents the number of co-occurrences between the two categories involved. The thicker these lines are, the greater the density of the connection between them<sup>(20)</sup>.

Answers to closed questions were analyzed according to their frequency and proportion. The analysis of the material of the open questions was made based on the thematic categorization of its content<sup>(21)</sup>.

It consisted of a convenience sample formed by 152 regular gym members, gym groups in public squares, students from the Open University of the Third Age (Universidade Aberta da Terceira Idade – UnATI) and the project “Elderly people in Motion: Maintaining Autonomy” at the Institute of Physical Education and Sports, both from the State University of Rio de Janeiro (Universidade do Estado do Rio de Janeiro – UERJ) and who accepted the invitation to participate in this research. The inclusion criteria considered were individuals of both sexes, aged 60 or over and regular practitioners of physical activity.

The project was approved by the Research Ethics Committee of the Institute of Studies in Collective Health at UFRJ, according to opinion number 179.998. All subjects, when accepting to participate in the research, signed a free and informed consent term containing the data related to the project, the researchers and the institution. The recommendations of the current legislation were obeyed, in particular those related to the confidentiality of information, to the autonomy and non-maleficence to the participants with the investigation procedures.

## RESULTS AND DISCUSSION

### *Description of the subjects*

The range of age corresponded to the range of 60 to 93 years-old, with a mean of 73.6 years-old, a median of 72.5 years-old, and the age distribution was shown to be bimodal, with a greater concentration at ages 67 and 84, which occurred nine times each (Table 1<sup>a</sup>).

In this group, 88.2% of the subjects were retired. As for education, higher education predominated with 45.4% (27.6% men), followed by high school with 34.9% (22.4% women), elementary school with 17.8% (11.8% women) and only 0.7% reported having no schooling. The respondents' marital status was distributed as follows: 42.1% married, 30.9% widowed (21.7% women), 12.5% single (9.9% women) and 11.8% divorced or separated. These data corroborate those found by studies that analyzed the sociodemographic profile of elderly Brazilians<sup>(22)</sup>.

### *Social representations of physical activity*

The set of evocations comprised a corpus of 555 words, with an average of 3.65 evocations per subject. To calculate the average frequency per word and the average evocation orders, only words with a minimum frequency of 7 were considered, corresponding to 75% of the total. The average frequency (Af) was equal to 19 and the average of mean evocation orders (MEO) corresponded to 2.5 (Table 2<sup>a</sup>).

In the initial analysis, it was found that the ten elements that were most evoked – *health* (76), *well-being* (37), *gymnastics* (29), *disposition* (28), *walking* (28), *friendship* (21), *body* (21), *joy* (19), *determination* (16) and *exercise* (15) – accounted for 69.4% of all material.

The analysis based on the frequency and average order of evocation allowed to evidence a CS composed by *well-being*, *walking*, *body*, *gymnastics*, and *health* and a PS composed by *agility*, *stretching*, *running*, *balance*, *strength*, *mind*, *swimming* and *enjoyment*.

Regarding the composition of the CS, it should be noted that only *health* and *walking* scored above 50%, when marked as the most important words<sup>(23)</sup>, thus constituting another central attribute of these elements.

The composition of the PS, where cognitions associated with the subjects' practices or the physical qualities developed by them predominate, reveals the process of anchoring the shared meanings of PA. Out of the eight categories that comprise it, seven refer to some type of PA or aspects related to body activities: *stretching*, *running*, *swimming*, *agility*, *balance*, *strength* and *mind*. They are physical and mental qualities coveted by the older adults and worked on regularly with the aim of improving them. In addition to them, *enjoyment* is distinguished, referred not only to the satisfaction provided by the practice, but also to the social interaction with peers<sup>(8)</sup>. Possibly, *enjoyment* symbolizes a synthesis of the anchors of the meanings of PA, in view of the practices and objectives intended by the elderly people.

In the nearby periphery, *joy*, *friendship* and *disposition* are found in the upper right quadrant and *dancing*, *determination*, *exercise*, *fitness*, *movement* and *weight training* in the lower left quadrant.

Observing the IS, it can be divided into two subsets, each one corresponding to a different dimension. *Dancing*, *exercise* and *weight training* correspond to specific types of PA that require systematic movement to achieve physical shape. *Joy*, *friendship*, *disposition* and *determination*, with more abstract features, show equivalence to the broader categories, such as *well-being*, *health* (CS), *mind* and *enjoyment* (PS), whose definitions can be tangent, when referring to a subjective state of dynamic harmony between the body, the mind and the social environment in which the subjects live.

In order to explore the internal organization of the representational elements and ratify the symbolic value of the central contents, a similarity analysis was carried out to verify the degree of connectedness between the central and peripheral components<sup>(19)</sup>. This technique makes it possible to confirm the functions that generate meaning and, therefore, are considered organizers of SR, a property of the central elements (Fig. 1<sup>7</sup>).

It is observed that *health* is connected with a large number of CS components, being the center of the single star of the matrix. It is directly linked to all others, with the exception of *exercise*, to which it is indirectly linked through *agility*. The three cognitions that stand out for establishing denser connections with *health* are *joy*, *fitness* and *disposition*. From these elements, one could also think of a subset related to the psychological gains from health investment through the routine of physical practice, formed both by the intrinsic pleasure of the activity, and by the joy of being in full physical shape, with a dis-

position for life and living with old and new friendships, many of them recently built in the spaces frequented for this purpose<sup>(8)</sup>. In addition, the ability of the subjects, motivated by regular exercises, to maintain and even to improve their mental and physical balance should be emphasized. Regarding the *balance* element, it is worth highlighting the polysemy that it presents, encompassing the physical and mental dimensions and highly valued by the subjects, given the concern shown by them in avoiding falls and maintaining their current levels of lucidity and awareness. In addition, it refers to the feeling of harmony that the exercises provoke, in search of an increase in their quality of life<sup>(6,24,25)</sup>.

A single triangle was found, consisting of *well-being*, *health* and *determination*. This configuration is one of the forms of schemes that appear on the cognitive map, detailing certain relationships, which are the foundation of the mental processes of the information received and an integral part of the socially elaborated representations<sup>(20)</sup>. In this case, it can mean the feeling of well-being achieved, as a benefit for the effort undertaken and the determination necessary to interact with the object of representation, only possible when one is healthy.

When justifying the choice of the most important words, they considered it essential to have discipline, understood as determination, to achieve a state of well-being, including their concerns regarding quality of life:

*"Without determination, nothing is done"* (man, 66).

*"Well-being is the satisfaction of doing gymnastics, it is the result"* (man, 81).

*"(...) physical activity provides the best physical conditioning to have quality of life"* (woman, 71).

They also stated that it is necessary to engage in this type of behavior, to create the habit of regular physical exercises, a custom that 30.9% said they cultivated since they were at school. It is worth mentioning that 33.6% answered that they started after the age of 60.

*"If you have discipline to do gymnastics and have [sic] a regular daily life, you will be healthy"* (male, 78, a practitioner since childhood).

*"Because I do everything for this to improve health and because I think that the person has to have the willpower to come every day"* (woman, 68, started in the third age).

The relevance of PA for autonomy in the tasks of daily life, which includes balance, agility and flexibility, expanding movements, has to be highlighted. This search also produces satisfaction and the feeling of well-being that comes from the progressively acquired exercises and physical conditioning.

The subset formed by *agility, exercise, body, movement, strength* and *health*, content related to the results achieved with PA, was essential for the maintenance of daily activities that require sufficiently preserved body movement<sup>(2)</sup>.

*"Because it lowers the blood pressure and gives me body strength"* (woman, 79).

*"When a person practices exercise, they have more agility and, with agility, more security to walk, to get on the bus, to deviate from their backpacks, etc."* (woman, 85).

An interesting observation provided by the similarity analysis is the fact that the different types of PA – *stretching, dancing, and running* – are organized around *walking* – an element with some centrality attributes – in a set without connection with the star around *health*, suggesting the existence of a process of change in the studied representation.

The practice of PA is valued by the elderly person for all the benefits it brings, associated with health, not only of the body, but also as a device to be used to keep the mind healthy, to preserve memory and to stimulate intelligence, in addition to help to ward off depression and sadness, as they are fun and pleasurable activities, done in a group. Social interaction is considered important because it gives them emotional support to want to live more and with quality the years of old age that still lie ahead.

This interpretation corroborates a study<sup>(26)</sup> regarding the benefits of PA on the cognitive functions of the elderly population by identifying an association with agility and balance, attributes evaluated in a systematic six-month program. In a survey in the literature<sup>(10)</sup>, it was found that social participation resulting from an active lifestyle is able to reduce cognitive decline in old age, in addition to the activities practiced can refer to the occupation of free time in order to enjoy life, as well as escape from loneliness.

In this study, 92.8% of the subjects presented a favorable view of old age, explaining the relationship between active aging and functional independence, as illustrated by the answer to what it would be like to age well:

*"Being healthy, being independent and living well, always having physical exercise and good food"* (woman, 60).

Despite their age and although it is not the main interest expressed, responding about what led them to do PA did not fail to mention the care with their body shape, through weight control, reaching and maintenance of physical shape:

*"It was the concern that I always had to maintain the weight. I started after I had a son, some 35 years ago"* (woman, 65).

*"The need to be more in shape, to be better [sic] with life" (man, 72).*

Likewise, the concern with aesthetics is observed when listing the reasons for choosing the modalities they practice or what motivates them the most to continue practicing:

*"The desire to improve aesthetics" (man, 84).*

*"Health, sexual development and aesthetic beauty too" (man, 60).*

By characterizing someone over 60 and still in shape, they maintained the association between physical shape and body aesthetics, without forgetting the importance of health:

*"Ah! This guy is in shape, he's worried about his health" (man, 65).*

*"You are in shape; you manage to keep your shape, without a fat belly" (man, 69).*

They point out that they are proud of the compliments received due to their physical form:

*"My friends' opinion is that I always maintain an infinite joy and 'remains elegant'. This compliment massages my ego" (woman, 60).*

*"Everyone admires (...). It is good for people to say: well, you're doing fine, dude! It is the reward for activities, for sacrifice" (man, 77).*

Such statements express the attention they give to vanity and satisfaction with their own image, meanings that are also related to health.

The construction of SR of old age as opposed to youth has been reported, containing the characteristic stereotypes associated with the respective images. While the old is associated with negative aspects such as illness, weakness, ugliness, the young are attributed qualities such as healthy, strong and beautiful<sup>(41)</sup>. They are broader, lasting senses and may end up apprehended by the elderly people, in a process of internalizing existing prejudices against them.

As SR are forged and shared in social relations and communication, from the most comprehensive to those circumscribed to groups and in line with individual histories, these subjects, being active, independent elderly person and regular PA practitioners, seem to have anchored to their own SR aesthetic concerns not found in other researched groups. This can be seen, not only by the statements previously described, in which the subjects express the value they give to physical appearance, but also by the presence of the peripheral elements *fitness* (nearby periphery) and *body* (not confirmed centrality), which can be understood as determinants in the process of anchoring those concerns, through personal experiences dedicated to efforts to build and maintain a fit body, still capable of exercising seduction:

*"(...) we have to improve the physical body, it has to look good!" "Without a fat belly, without a fat stomach, a buff body, in a good shape." "Because nowadays a 60-year-old woman is young" (woman, 62).*

This affirmative attitude sounds like taking a stand before the stigmatized image of old age, which, for the vast majority of research participants, seems a motivating factor for them to attest to their vitality, as well as their potential, probably because they do not perceive old people, but adults who have passed the age of 60, denying stereotyped old age and the social prejudices attributed to it<sup>(10)</sup>.

## CONCLUSION

This investigation sought to apprehend the meanings of PA constructed by subjects of both sexes, using the structural approach of SR as theoretical and methodological guidance.

The contents identified as central by the prototypical analysis were *Health, Well-Being, Gymnastics, Walking and Body*; however, only *Health* and *Walking* were relevant in terms of their importance and were the main organizers of the representation.

It is noteworthy the absence of categories with negative meanings in the constructed SR. The subjects, despite their age, are all functionally independent and, for the most part, make the practice places a meeting point where they exercise sociability and the feeling of belonging to the group. The appearance of words like old age, illness and falls is more associated with a preventive sense, for which the practice of PA is considered relevant and, therefore, they serve as a guide for the development of attitudes and practices in order to delay the deleterious effects of aging and of seeking to conserve the youth.

In the overall analysis of the investigated corpus, the interest shown by body aesthetics stood out more sharply than expected without overcoming concerns about health, autonomy and independence. Perhaps this concern is consistent with the posture of the members of the third age category, who seek, in addition to new opportunities for leisure, socializing, learning, practices and care, new experiences, new affective relationships, perhaps indicating a movement of change in the stereotyped representations of the old age.

The further deepening of the analysis and interpretation of the subjects' social knowledge about the aging body and how they relate to physical practices can offer subsidies for the identification of other senses, in this case, how these elderly people feel the body aging process itself and how and for what purposes they use collective knowledge in this regard.

#### Authors Contributorship

JG: Study design, data collection, storage, data analysis, review and discussion of results.

LT: Study coordination and design, data collection, data analysis, review and discussion of results.

IB: Study coordination and design, data analysis, review and discussion of results.

All authors read and agreed with the published version of the manuscript.

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Confidencialidade dos Dados: Os autores declaram ter seguido os protocolos da sua instituição acerca da publicação dos dados de doentes.

Proteção de Pessoas e Animais: Os autores declaram que os procedimentos seguidos estavam de acordo com os regulamentos estabelecidos pelos responsáveis da Comissão de Investigação Clínica e Ética e de acordo com a Declaração de Helsínquia de 2013 da Associação Médica Mundial.

Proveniência e Revisão por Pares: Não comissionado; revisão externa por pares.

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Table 1 – Distribution of respondents according to age group and sex.<sup>κ</sup>

| Age group     | Female |      | Male |      | Total |       |
|---------------|--------|------|------|------|-------|-------|
|               | f      | %    | f    | %    | f     | %     |
| 60 to 69      | 25     | 16,4 | 30   | 19,7 | 55    | 36,2  |
| 70 to 79      | 23     | 15,1 | 24   | 15,8 | 47    | 30,9  |
| 80 to 89      | 24     | 15,8 | 12   | 7,9  | 36    | 23,7  |
| 90 to 93      | 4      | 2,6  | 1    | 0,7  | 5     | 3,3   |
| Didn't inform | 4      | 2,6  | 5    | 3,3  | 9     | 5,9   |
| Total         | 80     | 52,6 | 72   | 47,4 | 152   | 100,0 |

Table 2 – Distribution of elements according to frequency and average evocation order.<sup>κ</sup>

|         | MEO < 2,5       |    |       | MEO ≥ 2,5   |    |       |
|---------|-----------------|----|-------|-------------|----|-------|
|         | Elements        | f  | meo   | Elements    | f  | meo   |
| Af ≥ 19 | Health          | 76 | 1,605 | Joy         | 19 | 2,895 |
|         | Well-being      | 37 | 2,405 | Friendship  | 21 | 3,048 |
|         | Walking         | 28 | 2,429 | Disposition | 28 | 3,000 |
|         | Body            | 21 | 2,333 |             |    |       |
|         | Gymnastics      | 29 | 1,759 |             |    |       |
| Af < 19 | Dancing         | 12 | 2,250 | Agility     | 07 | 2,714 |
|         | Determination   | 16 | 2,250 | Stretching  | 11 | 2,545 |
|         | Exercise        | 15 | 2,267 | Running     | 10 | 2,700 |
|         | Fitness         | 13 | 2,462 | Balance     | 09 | 3,111 |
|         | Movement        | 11 | 2,364 | Strength    | 10 | 2,700 |
|         | Weight Training | 15 | 2,267 | Mind        | 12 | 2,583 |
|         |                 |    |       | Swimming    | 10 | 3,200 |
|         |                 |    |       | Enjoyment   | 08 | 3,250 |

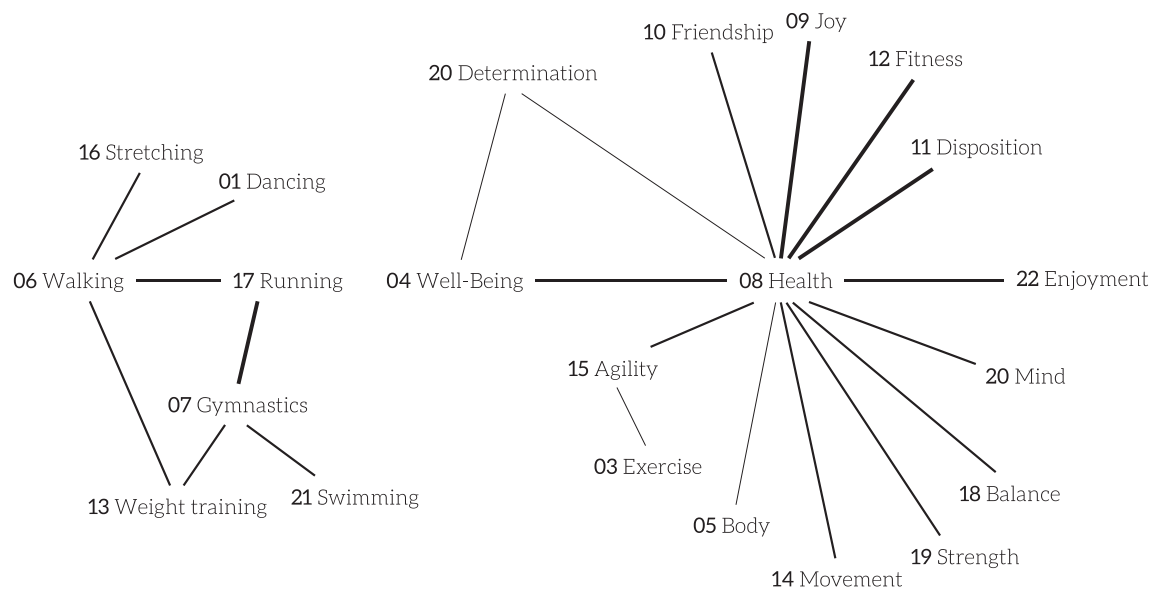


Figure 1 – Similarity tree of physical activity.<sup>κ</sup>