# Social Representations of the Body and Health for Physically Active and Inactive Individuals

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### **Abstract**

This study aimed to investigate the social representations of the body and health for physically active and inactive individuals. Fifty-five individuals who claimed to be physically active and 55 individuals who claimed to be inactive participated in the study. A questionnaire composed of free evocation questions about the body and health, characterization of the participants, health status and practice of physical activities, was used. The data were collected at a Private University and at a Gym in the city of Curitiba, Paraná. The free evocation data were treated through lexicographic analyses. Aspects of characterization, health status and physical activity practices were analyzed through descriptive and relational statistics using the Chi-squared and Student's *t* tests. The characterization data were considered explanatory variables for the analysis of the Social Representations of the body and health. It was found that both groups share common representations related to body care and health. In Social Representations of the body, elements related to physical activity play a key role. In Social Representations of health, they play a secondary role. Although concerns about esthetics stand out, participants recognize that regular physical activity can contribute to health promotion and quality of life.

**Keywords**: Social representations, health, body, physical activity.

## Representações Sociais do Corpo e da Saúde para Praticantes e Não Praticantes de Atividades Físicas

### Resumo

Este estudo teve como objetivo investigar as Representações Sociais do corpo e da saúde para praticantes e não praticantes de atividades físicas. Participaram do estudo 55 praticantes 55 não praticantes. Foi utilizado um questionário composto por questões de evocação livre sobre corpo e saúde, questões de

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caracterização, condições de saúde e prática de atividades físicas. Os dados foram coletados em uma Universidade particular e em uma academia de treinamento funcional da cidade de Curitiba, Paraná, Brasil. Os dados de evocação livre foram tratados por análises lexicográficas. Aspectos de caracterização, condições de saúde e práticas de atividade física foram analisados por estatística descritiva e relacional, utilizando os testes qui-quadrado e t de Student. Os dados de caracterização foram considerados variáveis explicativas para a análise das Representações Sociais do corpo e da saúde. Identificou-se que os dois grupos compartilham representações relacionadas aos cuidados com o corpo e a saúde. Nas Representações Sociais do corpo, os elementos relacionados à atividade física ocupam um lugar central. Nas representações sociais de saúde, ocupam um lugar periférico. Embora as preocupações com a estética se destaquem, os participantes reconhecem que a atividade física regular pode contribuir para a promoção da saúde e a qualidade de vida.

Palavras-chave: Representações sociais, saúde, corpo, atividade física.

## Representaciones Sociales del Cuerpo y de la Salud para Practicantes y no Practicantes de Actividades Físicas

### Resumen

Este estudio tuvo como objetivo investigar las Representaciones Sociales del cuerpo y de la salud para practicantes y no practicantes de actividades físicas. Participaron del estudio 55 practicantes 55 no practicantes. Se utilizó un cuestionario compuesto por cuestiones de evocación libre sobre cuerpo y salud, cuestiones de caracterización, condiciones de salud y práctica de actividades físicas. Los datos fueron recolectados en una Universidad particular y en una academia de entrenamiento funcional de la ciudad de Curitiba, Paraná, Brasil. Los datos de evocación libre fueron tratados por análisis lexicográficos. Los aspectos de caracterización, condiciones de salud y prácticas de actividad física fueron analizados por estadística descriptiva y relacional, utilizando las pruebas qui-cuadrado y t de Student. Los datos de caracterización se consideraron variables explicativas para el análisis de las Representaciones Sociales del cuerpo y de la salud. Se identificó que los dos grupos comparten representaciones relacionadas con el cuidado del cuerpo y la salud. En las Representaciones Sociales del cuerpo, los elementos relacionados con la actividad física ocupan un lugar central. En las representaciones sociales de salud, ocupan un lugar periférico. Aunque las preocupaciones con la estética se destacan, los participantes reconocen que la actividad física regular puede contribuir a la promoción de la salud y la calidad de vida.

Palabras clave: Representaciones sociales, salud, cuerpo, actividad física.

A population's healthcare generates different impacts, including individual, social, economic and cultural factors. Historically, health has been understood as the absence of disease; however, it encompasses different aspects of the human being. According to data from the Pan American Health Organization and World Health Organization (PAHO & WHO, 2016), health is composed of several factors, which are divided into physical, mental and social well-being, and not simply the absence of disease. Being healthy is one of the fundamental rights of all, without discrimination.

The concepts of health and health promotion are related to the care necessary to reduce health risks and improve quality of life. In this sense, disease prevention can be defined as targeted intervention, which aims to avoid the appearance of specific diseases, with the purpose of reducing their incidence and prevalence in different populations. Preventive actions are intended to control the transmission of infectious diseases and reduce risks of degenerative illnesses and other specific health aggravating factors. When discussing health promotion, more broadly than prevention, the fundamental

objective is to increase life expectancy and overall well-being, which means strengthening individual and collective capacity regarding health determinants. Health promotion means awareness, health care information and change in harmful habits (Czeresnia, 2009).

The Ottawa Charter (WHO, 1986) points out important aspects related to health promotion: Health promotion is the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy life-styles to well-being. (p. 1)

Regular physical activity can promote health. WHO (2018) indicates that physical activity can be understood as every bodily movement that results in energy expenditure, and recommends that it should be performed two to three times a week, with an average of 50 minutes daily, totaling 150 minutes per week. In addition, there are other benefits associated with such practices. Among them are changes related to physical fitness and body esthetics, which can act as a motivator for adherence to the practice. However, excessive concern with physical fitness, regardless of health benefits, may cause physically active individuals to exceed their limits, putting their own health at risk in the search for the ideal body, ignoring benefits that are not reflected in their weight or in the mirror (Castro et al., 2016).

Rodrigues (2015) emphasizes that when one thinks about the body, the idea of a body structure is linked to the standards established by society. However, by following such standards, people create a socially shared ideal body model, leaving no room for individual exceptions. This social construction of the ideal body makes

people try to fit into a standardized model, denying individual differences or the effects of the passage of time.

According to Jodelet (2000), body image is a mediator in social relations and serves three purposes. The first, from an instrumental perspective, is to allow social interactions; the second, is to meet the social rules of presentation; and the third, acts as a bridge to the achievement of affection in relationships. In this sense, Justo and Camargo (2013) reaffirm that the body image serves as an instrument of status and social acceptance, which directly impacts the individual's self-esteem, but these influences vary according to the group in which the subject is inserted.

Social Representations Theory (SRT) provides theoretical and methodological bases to understand socially shared thoughts and practices concerning body and health. Social Representations (SR) "are complex phenomena that are always activated by an act in social life", with the purpose of sharing knowledge about the objects of the social environment, based on the appropriation of socially formed and elaborated ideas. Moreover, the act of representing concerns the way of thinking and acting in regards to a particular object. In this sense, it can be said that the formation of representations materializes the construction, creativity and autonomy that relate to the way an individual expresses themselves and is understood in a collective context (Jodelet, 2001, p. 21).

Jodelet (2001) defines Social Representation as "a form of knowledge, socially elaborated and shared, with a practical objective that contributes to the construction of a reality in common with a social group" (p. 22). Social representations enable interaction between individuals and their actions, and allow the assimilation of knowledge in a collective and individual way, contributing to an understanding of the reality of individuals, thus allowing the establishment of a set of ideas and behaviors that form common sense.

The individuals who make up a society cannot be seen only in a separate way, there must be a broad view, considering that people are influenced by other actors who share the social environment. Communication and the active participation of subjects in society have a significant impact on the thoughts of individuals and their interaction within the various social groups to which they belong (Jodelet, 2009).

In order to understand the organization of the elements that make up a social representation, Abric (2011) proposed the Central Core Theory. This theory postulates that every social representation is organized by the central core, which regulates its significance and internal organization (Abric, 2011). The central core is defined by the content of the represented object, based on the interaction that a certain group has with the object and its meaning, as well as the values and principles that are established and attributed to them. This understanding is due to the fact that representations are a phenomena of socially shared thoughts, aimed at ensuring that a social group is able to preserve its identity and share deeply rooted beliefs and ideologies (Mazzotti, 2002).

The Central Core is defined by the historical, sociological and ideological conditions of a group that is anchored in its collective memory, and by its set of rules and values. In this way, several groups can have the same representation of a given object when they share the same central core, because it is not enough to have only the same content for social representations to be shared, if the central core is different, the representations will also be different (Abric, 2001, 2011).

The Peripheral System is organized around the central core and is made up of more accessible and contextual elements. This system is responsible for three important functions: materialization, which is directly linked to what is concrete or real, and is responsible for the connection between the central core and the concrete situation in which the representation is inserted; the regulation function, which is necessary to guarantee the adaptation and framing of the representation and the flexibility of its elements; and finally the defense function, by which the peripheral system acts as protector of the representation. Therefore, any change in

social representations begins with changes in the peripheral elements (Abric, 1998, 2011).

Thus, according to Abric (1998), the peripheral system is related to the particular characteristics of the individuals within the context in which they are inserted, which allows for "adaptation and differentiation, as a function of what they lived integrated with everyday experiences" (p. 33). It is an adaptable and effective system to preserve representations, contributing to the integration of their content, standing out as a key element in the process of evolution and transformation of representations.

In the Psychology field, there are not many studies on body/health related to the practice of physical activities. Some studies (Costa & Machado, 2014; Justo, Camargo, & Alves, 2014; Miranda, Almeida, Oliveira, Souza, & Abranches, 2017; Passos, Gugelmin, Castro, & Carvalho, 2013) have sought to investigate concerns with body care among people of different age groups. Results indicate that adults express less concern about their appearance, while youngsters seem to be more concerned with body esthetics. In adults, the body mass index (BMI) is higher than in young people. Even so, adults are more satisfied with their body image (Justo et al., 2014). In turn, Miranda et al. (2017) found that adolescents seek esthetic results when they perform physical activities, leaving health concerns in the background.

The ideal body image among adolescents is characterized as thin and with muscles (Passos et al., 2013). The same occurs with groups of photographic models, for whom the main reason to seek physical activity is related to esthetics (Schlösser & Camargo, 2015). Among the people assisted by the Núcleo de Apoio à Saúde da Família - NASF (Family Health Support Center), concerns with the body are both esthetic and health-related (Santos et al., 2016). For the elderly, the practice of physical activities is health-oriented, and their motivation is related to the prevention of diseases and health care of body and mind. Based on these data, it is possible to perceive that elderly women are more concerned with health when compared

to other groups (Cavalli et al., 2014; Costa e Silva & Menandro, 2014). Souza, Vilela e Souza, Barroso, and Scorsolini-Comin (2013) found that concerns about, and dissatisfaction with body image, are motivational factors for beginning the practice of physical activities. In addition, adherence to physical activity and changes in eating habits may be related to socially established requirements.

Vasconcelos (2016) points out two motivational factors related to the practice of physical activities. The first are extrinsic factors, in which the stimulus of the practice is given by socialization or competitiveness. Intrinsic factors are the search for body esthetics, pleasure, health, stress control, well-being, and physical fitness. The author states that "improving health creates a willingness to perform daily tasks, improving quality of life" (p. 23). Moreover, the practice of physical activities, in addition to the extrinsic and intrinsic motivations described by Vasconcelos (2016), is influenced by the environment in which the person lives. Some neighborhoods have higher indices of social development, where residents have greater adherence to the practice of physical activities (Boclin, Faerstein, & Leon, 2014).

Although esthetic concerns are mentioned as the main motivation factors for adherence to the regular practice of physical activities, it is important to consider that besides the benefits to physical appearance, the practice of physical activities can provide gains in relation to health. Taking that into account, this study considered that social representations make it possible to understand factors related to the practice and maintenance of physical activities. Thus, the present study aimed to identify social representations of the body and health among people who perform and people who do not perform physical activities.

### Method

The participants of this research belong to two distinct groups. The first group consists of 55 people who attend a bodybuilding and fitness gym. The second group consists of 55

people who do not do any physical activity. Among the 110 participants, 45 (40.9%) were male and 65 (59.1%) were female, aged between 18 and 75 years, and the mean age was 32.48 years (SD = 11.92). The individuals considered as physically active were those who claimed to perform activities two or three times a week, with an average duration of 50 minutes, which is equivalent to a total of 150 minutes per week, according to the WHO (2018) guidelines.

Data were collected at a functional training center located in the city of Curitiba, Paraná, Brazil, and at a private university located in the same city. At the university, questionnaires were applied to students, professors and employees who are physically inactive. At the gym, physically active participants were approached.

A self-administered questionnaire was used, with free evocation questions related to body and health (inductive terms), and open-ended and closed-ended questions for the characterization of participants. In addition, questions to survey health status were presented, including questions on their self-perception of health, illness diagnosis, and physical activity practices, such as the type and frequency of activities performed, perceived benefits, and reasons for practice among physically active individuals, as well as the reasons for not practicing and possibility of practicing among inactive individuals. Two questionnaires containing the same questions were used, but with an inverted order of presentation, so that the order of presentation would have no influence on free evocation.

In order to perform data collection, authorization from those responsible for the research sites was requested. Participants were approached at the locations described above and agreed to participate in the study. After reading and signing the *Termo de Consentimento Livre e Esclarecido* - TCLE (Free and Informed Consent Form), the questionnaire was given to them. Participants were informed that the information filled in the questionnaire would be used only for academic purposes, and the data would be published as a group, preserving their identity.

The research project kept participants' personal information confidential and protected,

emphasizing that under no circumstances would there be any type of discrimination. This research was authorized by the Research Ethics Committee, according to Resolution no. 466/2012 of the *Comissão Nacional de Ética em Pesquisa* — CONEP (National Commission of Ethics in Research), under Consolidated Opinion no. 2.131.009.

The free evocation data were analyzed based on the Central Core Theory of Social Representations. In this way, a lexicographic analysis was carried out, taking into account the frequency and the average order of evocation of the words used by the participants to determine the central and peripheral elements of Social Representations. In addition, a confirmatory analysis was conducted.

Participants' characterization data, health status and physical activity practices were statistically analyzed with the aid of the SPSS software (Statistical Package for the Social Sciences). A descriptive and relational analysis using the Chi-squared test and Student's t test was performed. The results provide information about the characteristics of the participants, their physical activity practices, health status and the relationships between some variables and the practice of physical activities or the lack of such practice. These pieces of information were considered explanatory variables to analyze the content of Social Representations.

### **Results and Discussion**

## Variables Related to the Practice of Physical Activities

Variables related to adherence or maintenance of activities were investigated. The goal was to identify the reasons that lead physically active individuals to maintain their practice. It was found that 25 participants (22.7%) have esthetics and health combined as a motivation factor; 26 (21.8%) have health care alone as their goal; and 21 participants (19.1%) sought physical fitness. It was also observed that the main factors related to physical activity adherence were physical fitness (27.3%), health

(21.8%) and health and body esthetics combined (21.8%).

The reasons mentioned by the group of physically inactive individuals for non-adherence to physical activities were lack of time (61.81%) and lack of interest (10.86%). When asked about a motivation factor that could lead them to become physically active, it was possible to identify concerns related only to health (43.6%), and to esthetics and health combined (52.7%), whereas reasons related only to esthetics were not mentioned.

Participants were asked what they believed their health status was. Fifty participants (45.5%) said their health was great and 60 participants (54.5%) said it needed to improve. Of the 110 participants, 36 reported having some sort of health concern, 15 (41.66%) of whom belonged to the group of physically active individuals and 21 (58.33%) belonged to the group of inactive individuals. The most mentioned health concerns were: respiratory diseases (13%), hypertension (10%), followed by obesity, diabetes/cholesterol and orthopedic conditions (8%).

Statistical tests were performed to verify if there were significant relationships between being physically active or inactive and some of the variables described. One of the goals was to identify if the age group of the participants is related to the practice of physical activities. It was found that physically active individuals have a lower mean age (M = 30.10, SD = 9.93) than the group of inactive individuals (M = 35.13, SD = 13.40), according to the result of Student's t test [t (108) = 7.92; p<.005].

The analysis to identify if the practice of physical activities is related to participants' gender was performed through the chi-squared test, and the results obtained showed statistical significance [ $\chi^2$  (1) = 7.98; p< .005]. However, this relationship can be considered weak (C = 0.26). Although the number of female participants was higher than males, it was found that most physically active individuals were male. Regarding the declared income of the participants, a statistical analysis was performed to verify if it would be an influential factor for the practice of physical activities or the lack of

it. The results obtained with the Chi-squared test [ $\chi^2$  (3) = 6.55; p = .88] showed no statistical significance.

An analysis was conducted to understand how physically active and inactive individuals feel about their health. To this end, responses classified as excellent or still needs improvement were analyzed. The chi-squared test result showed that there was statistical significance [ $\chi^2$  (1) = 35.96; p< .001], indicating that this relationship can be considered medium (Vcramer = 0.57). It was sought to identify if physically active individuals presented lower disease indices compared to the group of physically inactive individuals. When the chi-squared test was performed, the result showed no statistical significance [ $\chi^2$  (1) = 037; p = .54].

### Social Representations of the Body

In response to the question on what they think about their body, 549 evocations with 213 different words were made. The evoked words were remembered, on average, in the third position (average order of evocation = 3.0). The results obtained can be visualized by the distribution in the quadrants (see Table 1), in which the horizontal axis divides the words by frequency of evocation. Words evoked six times or more are above the axis, and words evoked between three and five times are below it.

The words most readily evoked are shown on the first column (in the first or second position, on average), and the words evoked later are on the second column (between the third and fifth position, on average). In this way, the upper left quadrant shows the words with the highest frequency of evocation and evoked in the first positions, suggesting that these words possibly belong to the central core of the representation. The elements of the upper right quadrant make up the first periphery of the representation, formed by the elements that are hierarchically closer to the central core and represent zones of potential changes. The third quadrant (lower left) composes the contrast zone of the representation. The fourth quadrant (lower right) consists of words that belong to the peripheral system of the representation and are further away from the central core.

The confirmatory analysis of the elements belonging to the central core, performed based on the words respondents considered as having greater relationship with the body, confirmed the centrality of four of the seven words of the central core: health, healthy, body fat and muscles. Besides these words, the centrality of eight words indicated as probably belonging to the first periphery was confirmed: exercise, movement, strength, fitness, life, food, self-esteem and weight.

Based on the composition of the quadrants, it is possible to arrange the elements of the central core into three groups: the first consists of words related to health: health, healthy, life, food, body fat, weight and self-esteem; the second group consists of words related to esthetics: muscles, self-esteem, body fat and weight; and the third group consists of words related to physical activity: exercise, movement, strength and fitness. It is important to point out that some of the words are repeated because they are also related to the health and esthetics groups.

This central core points to an understanding of the body as related to health, a concept that stands out as the most remembered item in evocations that refer to the body. The concern with health is tied to the body, because complete physical well-being is only possible if there is a balance between the two of them.

The words related to health: health, healthy, life, food, body fat, self-esteem and weight, which belong to the central core, may indicate the potential consequences of body care. These contents are in line with those described by Czeresnia (2009), where the author emphasizes that in order to promote health, actions that contribute to changes and improvements in quality of life are needed. Health is also described in the Ottawa Charter (WHO, 1986) as a positive concept emphasizing social and personal resources, as well as physical capacities.

In the second group, the words are related to esthetics: *muscles, self-esteem, body fat and weight*. The presence of these elements in the central core may suggest that body image is

Table 1
Elements that Make Up the Social Representations of the Body

	OME**≤2		OME**≥3			
Words	Freq.	AEO**	Words	Freq.	AEO**	
*Health	51	2.2	Esthetics	22	3.0	
*Healthy	15	2.0	Beauty	19	2.9	
Thin	12	2.4	*Exercise	24	3.2	
Appearance	8	2.4	Care	20	2.9	
*Body Fat	7	1.4	Well-being	12	3.6	
*Muscles	9	2.3	*Movement	11	3.0	
Beautiful	6	2.3	*Strength	9	3.0	
			*Fitness	9	3.0	
			*Life	8	3.2	
			*Food	8	3.5	
			Fat	8	3.0	
			*Self-esteem	7	3.4	
			Diet	7	3.6	
<i>F</i> ≥6			*Weight	6	3.3	
F<6						
Words	Freq.	AEO**	Words	Freq.	AEO**	
Form	5	1.8	Media	5	4.4	
Physical	5	2.2	Discipline	4	4.5	
Hygiene	4	2.8	Balance	4	4.0	
Fitness	3	2.3	Sport	3	4.0	
Organs	3	2.7	Training	3	3.0	
Structure	3	2.3	Athletic	3	3.7	
Running	3	2.7	Happiness	3	4.7	
			Legs	3	3.3	
			Disposition	3	3.0	
			Members	3	3.0	
			Satisfaction	3	5.0	
			Eyes	3	3.7	

Note. \* Element confirmed as belonging to the core. \*\* AEO - Average evocation order.

linked to socially constructed esthetic standards. These aspects were also identified in the study by Castro et al. (2016), which mentions esthetics with emphasis on weight and the muscular pattern. Justo and Camargo (2013) point out the existence of a male and female body pattern, according to which the female body is portrayed as thin, which was also confirmed by Santiago, Oliveira, Bulhões, and Simões (2012), who confirm this female body pattern. The male body

pattern is described as a muscular body. Jodelet (2000) points out that the body pattern dictated by society is seen as a mediator of social bonds, that is, it influences social status and integration, potentially interfering with subjects' self-esteem.

In group three, the words are related to physical activity: *exercise, movement, strength and fitness*. Concerns and dissatisfaction with the body and body image are the key factors for motivation and adherence to physical activities

(Souza et al., 2013). The presence of words related to health and esthetics in the central core of the Social Representations of the body seems to indicate that both factors are associated with the practice of physical activities.

### Social Representations of Health

In response to the question on what they think about health, 547 evocations were made

with 186 different words. The results obtained are expressed by the distribution in the quadrants (see Table 2). Above the horizontal line are the words evoked six times or more, and below, the words evoked between three and five times. The first column shows the words evoked in the first or second position, and the second column shows the words evoked between the third and the fifth position, on average.

Table 2
Elements that Make Up the Social Representations of Health

	A	AEO **≤2		AEO **≥3			
Words	Freq.		AEO **	Words	Freq.		AEO **
*Food	61	2.2		Disposition	15	3.0	
* Well-being	51	2.5		Doctor	11	4.0	
*Quality of life	20	2.5		*Care	8	3.0	
Exercise	60	2.6		Longevity	7	3.4	
Life	13	2.8		Diet	7	3.6	
Water	11	2.5		*Sleep	6	3.8	
*Healthy	7	2.1		Fitness	6	3.3	
Sport	6	2.5		Recreation	6	4.3	
<i>F</i> ≥6							
F<6							
Words	Freq.	AEO **		Words	Freq.	AEO **	
Joy	5	2.6		Happiness	5	3.6	
Medicine	5	2.8		Prevention	5	4.2	
Quality	4	2.2		Energy	4	3.0	
Body	3	2.3		Rest	4	4.0	
Running	3	2.7		Balance	4	3.8	
Good habits	3	2.7		Strength	3	3.7	
Family	3	2.0		Mental	3	4.0	
Fruits	3	1.7		Nutrition	3	3.7	
				Hygiene	3	3.3	
				Self-esteem	3	4.7	
				Mind	3	3.0	
				Disease	3	3.3	
				Gym	3	3.0	
				Hospital	3	3.3	

*Note.* \* Element confirmed as belonging to the core. \*\* AEO - Average evocation order.

The confirmatory analysis of the words belonging to the central core, which are more related to the health theme, confirmed the centrality of four of the eight words of the central core: food, well-being, quality of life and healthy. Besides these words, the centrality of two words, indicated as probably belonging to the first periphery: care and sleep, was confirmed.

The constitution of this central core demonstrates that the concern with health can be related to a set of determining factors, so that a complete state of well-being is possible. Based on the distribution in the quadrants and the confirmatory analysis, it was possible to identify that the elements belonging to the central core are related to health promotion: food, well-being, quality of life, healthy, care and sleep. These evocations suggest that the participants recognize that healthy lifestyles and the choices of individuals affect health, and it is necessary to maintain daily health care habits. According to a study carried out by Almeida and Athayde (2016) on health and quality of life, behavioral and cultural patterns direct the way of life of individuals, which leads to a greater clarification of what would be the best ways to take care of health.

The peripheral elements allow the formation of a second group related to physical activities: exercise, sports, recreation and fitness. These evocations suggest that health care encompasses many factors, but when practicing physical activity the added benefits to health are even greater. In this sense, it is possible to understand that social thought is influenced by the motivation to keep the body active, physically fit, and to obtain through the practice of physical activities a higher quality of life. In the study conducted by Freire, Lélis, Fonseca, Nepomuceno, and Silveira (2014), it was found that performing physical activities was considered as a positive and satisfying way to obtain the necessary benefits for a better quality of life. Also in this study, significant improvements were observed in all aspects of physical and mental health among physically active individuals, showing that active people have lower disease prevalence.

It is important to emphasize that the peripheral elements mentioned in the group related to physical activities characterize only part of the respondents, and is not consensual.

Through the analysis of the evocations made by respondents, it was found that there were no differences in relation to the social representations of the body and health between research groups, that is, the same thought is shared by both physically active and inactive individuals.

### Social Representations of the Body and Health

When comparing the elements of the central system of two social representations, it is possible to identify the relationships between them. The social representations of the body share some central elements with the social representations of health, which makes it possible to affirm that the two representations have a connection. With respect to health, it is one of the central elements in the social representations of the body. However, the body is not a central element in the social representations of health, which disrupts the mutual relationship between the two representations. Figure 1 illustrates the connection between these elements.

The social representations of health and the body are linked to the elements *healthy* and *food*. These items stand out as central in both representations, which demonstrates that food is considered a very important element for the body and for health, and that participants consider that being healthy is related to body care. This can be confirmed by the presence of *health* as a central element in the social representations of the body. Thinking about the body makes you think about health, the body must be healthy. However, when thinking about health, the element *body* is not central. The body is indirectly evoked in the social representations of health, by elements such as *food* and *sleep*.

The elements that make up the central and peripheral system in the representations are not all the same, which shows that representations have different aspects, but share some elements.

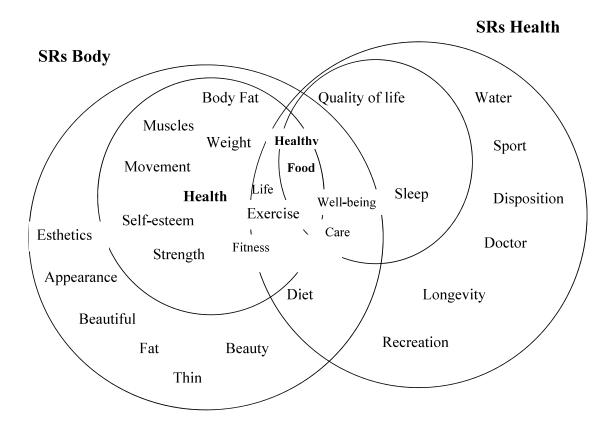


Figure 1. Relationships between elements of the Social Representations of the Body and Health

Body and health have their own social representations and both are socially relevant objects. Therefore, it can be perceived that both physically active and inactive individuals establish relationships between health and the body.

Camargo, Justo, Alves, and Schlösser (2013) identified the fundamental role that health plays when thinking about the body, being a central element of the SRs of the body both in health and beauty contexts. Costa and Machado (2014) and Passos et al. (2013) also found that health is a central element in SRs of the body among adolescents. In addition to health concerns, adolescents also related the body to esthetics and physical beauty.

Miranda et al. (2017) found that university students related the body to socially imposed esthetic standards, considering that beauty and thinness obtained through diet and physical activity represent success and happiness. Passos et al. (2013) and Schlösser and Camargo (2015) also found that the so called ideal body is the

thin body, and that esthetic concerns stand out compared to health concerns.

Physical activity seems to be more present when one thinks about the body. This is indicated by the presence of elements related to such practice in the central core of the social representations of the body (*Exercise, Fitness, Movement, and Muscle*). When thinking about health, the elements related to the practice of physical activities are peripheral (*Exercise, Sport, and Fitness*). This organization of social representations indicates a greater approximation of the practice of physical activities with esthetic concerns than with health concerns.

The results indicate that different levels of importance are attributed to the elements related to the practice of physical activity in the two SRs investigated. When thinking about the body, which refers to esthetics, the practice of physical activities gains a central space. When thinking about health, which refers to quality of life, physical exercises are peripheral. Considering the consensual nature of SRs, it can be said that

for the group of people who participated in this study, physically active or not, physical activity is mainly focused on esthetic concerns, whereas health concerns are secondary. It is important to take into account that it is not a problem to associate physical activity with concerns about physical esthetics (as long as harmful practices are not adopted). However, it would be desirable that when thinking about health, physical activities could take center stage. This would indicate that participants consider the regular practice of physical activities as important for the promotion and maintenance of health, which was not found in this study.

The structural approach to SRT makes it possible to understand the dynamic character of SRs. By occupying a peripheral place in the SRs of health, physical activities may become central in the future, because the process of changing SRs happens slowly, first incorporating elements into the peripheral system, so that later these elements may occupy the central core, transforming the SRs (Abric, 1998).

Although the participants answered that the main reasons for adherence to physical activity are related to health and esthetics, it is necessary to consider that it is socially more acceptable to seek to be healthy than to try to be beautiful, which may have influenced the answers given to the objective questions. This would explain the differences found between the answers of the objective questions and the social representations found. It is important to take into account that the participants in this study are mostly young (mean age = 32.48, SD = 11.92). Even though comparative studies between people of different age groups were not found, research on physical activity indicates that the concern with esthetics is more present among young people (Miranda et al., 2017; Passos et al., 2013; Schlösser & Camargo, 2015) than among adults and the elderly (Cavalli et al., 2014; Santos et al., 2016).

It is expected that in young people, who usually have an adequate health status, esthetic concerns surpass health concerns. At this stage of life, there is a need for identity affirmation,

and to search for the establishment of love relationships and group acceptance, factors that are favored by physical appearance in several social and cultural contexts. It is important to take into account that adherence or maintenance of physical activity practices related to the search for body esthetics will also lead to health benefits, provided these activities are properly developed and with professional follow-up.

### **Conclusions**

Physical activity contributes to aspects related to the promotion of health and is an essential strategy for a healthy lifestyle. The general objective of this study was to identify what the body and health represent for physically active and inactive individuals. The results found in this study emphasize that concerns with the body and health are shared between groups, which demonstrates that the concept of health is not underestimated. There is individual and social understanding about the importance of regular physical activity practices.

Thus, the reasons for adherence to the practice of physical activities range from health care, concerns with body esthetics, and the search for physical fitness. Provided that such concerns do not compromise the health of participants, such as when there is excessive physical activity, the use of steroids, or adherence to diets without professional follow-up, for example, then the search for a beautiful body can help promote health.

Both groups of participants demonstrated full understanding of the need to adopt habits that are most important for a complete state of well-being and quality of life. This understanding is also present even in the group of inactive individuals, who, when asked about the possibility of future adhesion, did not show any form of rejection.

The participants of this study should be considered as young people, and those who claimed not to practice physical activities regularly are, in general, university students, which justifies the fact that the main argument for non-adherence to physical activity is lack of time. The profile of the participants may have contributed to the fact that there were no significant differences in the SRs of physically active and inactive individuals, which shows a limitation of this study, and indicates that future studies could seek to understand SRs among physically active and inactive individuals with different profiles, and especially of different age groups, since no studies with these characteristics were found.

Considering the context of this study, it can be seen that the participants recognized that the regular practice of physical activities provides benefits that contribute to improved quality of life and impacts many aspects of the life of a human being. It is extremely important to discuss and raise topics related to health promotion as a way to increase knowledge about the problems that can be avoided by having a healthy lifestyle. Health professionals should be involved in this process of raising the awareness of the population, and helping in the development of preventive practices to minimize the appearance of health problems as well as the reduction of sedentary lifestyles.

### Authors' Contributions

Substantial contribution in the concept and design of the study: Gislei Mocelin Polli.

Contribution to data collection: Sandra Cristina Stankel de Souza; Renato Duarte Ribeiro.

Contribution to data analysis and interpretation: Sandra Cristina Stankel de Souza; Renato Duarte Ribeiro; Gislei Mocelin Polli.

Contribution to manuscript preparation: Sandra Cristina Stankel de Souza; Renato Duarte Ribeiro; Gislei Mocelin Polli.

Contribution to critical revision, adding intelectual content: Ana Claudia Wanderbroocke.

### Conflicts of interest

The authors declare that they have no conflict of interest related to the publication of this manuscript.

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