

"Our Voices, Our Meaning": The Social Representations of Sports for Brazilian Athletes With Disabilities

Samuel Lins

Cynthia F. Melo

University of Porto

University of Fortaleza

Sara G. Alves and Rúben L. Silva

University of Porto

This study aimed to identify the social representations of sports for Brazilian athletes with disabilities and to understand the extent to which sports can contribute to their empowerment. A total of 153 Brazilian athletes of various sports and with different types of disabilities took part in the study (122 men and 31 women; M = 31.91 years, SD = 9.46). The research was performed by an online survey by means of the free word association technique. All analyses were carried out using the Iramuteq computer program. The results indicated that the social representations of sports are related to individual and collective gains derived from practicing sports and that the representations are distinct according to the discipline practiced by the athlete. These results are discussed in light of the advantages of valuing the collective experience of athletes with disabilities as a group rather than as cases of individual overcoming. Social implications and possible future directions for research are presented.

Keywords: disability sports, free word association, Paralympic Games Rio 2016, social model of disability

The 2016 Paralympic Games hosted in Rio de Janeiro provided a context of increased social relevance of disability and disability sports. Disability sports can be defined as "sports that have been designed for or practiced by athletes with disabilities" (DePauw & Gavron, 2005, p. 8). Within this broad definition, three different types of disability sports can be identified: (a) activities in which people with disabilities (PWD) can participate on the same terms as people without disabilities with few or no changes (e.g., swimming); (b) existing sports that have been modified (e.g., wheelchair basketball); and (c) sports developed especially for PWD (e.g., goalball) (Chawla, 1994).

Lins, Alves, and Silva are with the Laboratory of Social Psychology of the Faculty of Psychology and Education Sciences, University of Porto, Porto, Portugal. Melo is with the University of Fortaleza, Fortaleza-CE, Brazil. Lins (samuellins@fpce.up.pt) is corresponding author.

The aim of this study was to explore the social representations of athletes with disabilities regarding sport. We contacted athletes who were at the time working to qualify for the Paralympic Games Rio 2016, and consequently for whom the meanings of sport and its importance were particularly salient. We addressed the collective component of those meanings and placed the athletes at the center of our research in two ways: by understanding disability in a wider social context and by placing the focus on the possibilities of empowerment for athletes with disability through the competitive practice of sports. To our knowledge, this line of research is novel both in methodology and focus: as of March 2018, a quick Scopus search yields only two results directly related to the social representations of sports, neither of which focus upon disability sports (Lacassagne, Bouchet, Weiss, & Jebrane, 2004; Lacassagne, Pizzio, & Jebrane, 2006).

Views of Disability

To better understand the representations and experiences of athletes with disabilities, it is important to perceive how disability in general, and particularly the athlete with disability, are seen in society. Historically, the prevailing views about disability have defined it as a problem confined to the individual sphere, as a personal "tragedy" that, out of charity, "nondisabled" people must try to correct, treat, or eliminate (Goodley, 2011). These are views that attribute to PWD an insignificant and passive role in society, picturing them as weak, needy, and dependent (Sullivan, 2011). These views can be traced back to certain models of disability that are still dominant in society today: most notably, the biomedical model, addressing disability as dysfunctionality, and deviation from the norm (Snyder & Mitchell, 2001).

A different view of disability diverges from the perspective of disability seen as an "impairment," shifting the focus toward the social conditions that structure disability as a form of oppression comparable and intertwined with that of other social categories (e.g., gender, ethnicity, or sexual orientation) (Barnes, 2012). This is the case of the social model of disability, which promotes a view of PWD "as valued members of society who have the right to full participation" (Sullivan, 2011, p. 4).

The media plays an important role in influencing people's view of athletes with disabilities (Hilgemberg, 2014; Pereira, Monteiro, & Pereira, 2011). On the positive side, the mediatic discourse on the Paralympic Games and athletes also influences the adherence of new athletes into disability sports, the professionalization of athletes and the empowerment of PWD (Marques et al., 2015). However, this discourse is often aligned with certain commercialization interests that tend to reinforce a focus on the life history and disability of the athlete, as a kind of emotional appeal to the readers or spectators (Beacom, French, & Kendall, 2016; Marques et al., 2015). As a result, the space given to the athletes' athletic abilities and sports achievements has become almost null.

Another consequence is that portrayals of athletes with disability often mimic the stereotypes of "poor thing" and "supercrip" that recurrently appear in journalistic writings (Hilgemberg, 2014; Howe, 2011; Marques et al., 2015; Pereira et al., 2011; Schalk, 2016). These contribute in part to the athletes' recognition and

empowerment, but also to the perpetuation of the *achievement syndrome* (the success *despite* the disability) (Silva & Howe, 2012). Furthermore, reports are often condescending, using inappropriate terms (e.g., "cripple," "handicapped"), reinforcing the medical model of disability (Beacom et al., 2016; Maika, 2014; Pereira et al., 2011).

Ultimately, the argument is that athletes with disabilities are both underrepresented and misrepresented (Howe, 2008; Marques et al., 2015). A Portuguese study showed that this is acknowledged by the athletes themselves, who want to be recognized as high-performance athletes, no different than other Olympic athletes (Marques et al., 2015). That said, a shift of focus toward the sports achievements of athletes with disabilities has been acknowledged, although the pace of such shift has been hampered by the pressures of marketing interests (Beacom et al., 2016; Hilgemberg, 2014; Pereira et al., 2011).

As this reformulation comes about and breaks down the impact of the medical model, it increases the potential for inclusion and empowerment of PWD and the benefits they can reap from sports. Next, we consider the potential benefits and consequences of sports for PWD.

Potential Benefits of Disability Sports and Empowerment

The practice of sports can foster self-discipline, competitive spirit, and companionship, as well as physical and mental health, physical strength, and social integration (Chawla, 1994). Physically, PWD may in some cases experience improvement of body functioning issues (i.e., mobility-related ones). Other health benefits from the practice of sport may include reduced risk of the following: osteoporosis, colon cancer, high blood pressure, decreased endurance, decreased flexibility, weight problems, and among others (van der Ploeg, 2005). Nonetheless, it should be noted that these benefits are not applicable invariably to all forms of disability. For instance, quadriplegic athletes will not improve their mobility but could improve other health issues.

Sports can also promote the empowerment of PWD, both psychologically and socially. Empowerment represents "the process of gaining some control over events, outcomes, and resources of importance to an individual or group" (Fawcett et al., 1994, p. 472). The concept is advanced by Rappaport (1987) from an ecological point of view in which various levels of analysis are confronted in the interaction between individuals (or groups) and their communities. In this sense, to consider the empowerment of PWD by sports means also to frame from an ecological point of view the possibilities of self-determination and control over their lives at various levels (Pensgaard & Sorensen, 2002).

Psychologically, athletes with disability may experience increased motivation and self-efficacy through an orientation toward specific tasks and goals, as well as improved self-esteem (Scarpa, 2011) and a sense of belonging with fellow athletes (cf., Hutzter & Bar-Eli, 1993). Participation in disability sports is also associated with a higher satisfaction with life and quality of life (in terms of physical and mental health, and the establishment of social interactions) (Yazicioglu, Yavuz, Goktepe, & Tan, 2012). The same study has also shown that participation in

disability sports was considered by the participants the most influential factor in their participation in their community. Levels of anxiety and depression also appear to be lower in PWD who engage in sports, compared with PWD who do not (Gioia et al., 2006). Generally, there has been some evidence that athletes with disabilities have good levels of mental health (Teixeira, Labanca, Peña, & Lins, 2016).

PWD may also experience empowerment through sports as a group, with increased opportunities to establish relationships, social integration, social bonding, and friendships (Martin, 2013), while also providing for new experiences and defying stigma (Shephard, 1991). For instance, a study with female wheelchair basketball players (Hardin, 2007) showed that these women believed sports allowed them to leave the "disability ghetto," where they face social isolation and discrimination and defy cultural expectations for PWD. As such, sports can help decrease the amount of stigma and promote feelings of independence, strength, and self-efficacy (i.e., closer to the able-bodied standard). Ultimately, PWD as a social group may experience empowerment through sports as a platform to garner greater recognition and social inclusion, as well as the promotion of the involvement in civic and political movements.

In fact, a study with adult athletes with disabilities found that one of the meanings of sports to them was that of a space of resistance against the stigma and benevolence that is directed toward them, which has a potential of change at a societal level (Ashton-Shaeffer, Gibson, Autry, & Hanson, 2001). That is, disability sports can represent a context focused not on disabilities and stereotypes, but on the actual abilities, experiences, and achievements of athletes with disability (Scarpa, 2011). As previously discussed, this representation is not achieved by focusing on condescending stories of individual achievement and overcoming that end up reinforcing the marginalized place of disability in society. Instead, it is important to provide a first-person account of what sports mean to athletes with disabilities, to avoid ableist and skewed preconception and misconception. To achieve this purpose, we adopted the concept of social representations.

Social Representations

Social representations can be defined as "a type of knowledge, socially created and shared, with a practical purpose, and that contributes to the construction of a common reality for a social group" (Jodelet, 2001, p. 22). According to Moscovici (1963), social representations have two primary functions: to help individuals orient themselves in the social world where they are inserted by giving order to it, turning the unknown into something familiar; and to allow the existence of a linguistic code shared among group members, which classifies, categorizes, and gives a meaning that everyone knows about social objects. In this way, social representations influence how we perceive the social world in which we are inserted, leading us to act toward it in a certain way.

This study will be based on two perspectives of social representations: the structural perspective (Abric, 2001) and the positional perspective (Doise, 1990). The former seeks to describe social representations as structures of knowledge at the level of the elements that make up this structure, and focus on the process of

objectification; the latter seeks to emphasize the role of groups in the construction of social representations, thus focusing on the anchoring process (i.e., how the collective view of a given object or topic precedes and affects an individual's own perspective of the same object). These two perspectives are not mutually exclusive, because they focus on different processes; on the contrary, they are complementary.

Thus, the structural perspective (Abric, 2001) proposes that, as a structure, a social representation is formed by two distinct systems: the central core and the peripheral system. The first is composed of some key elements that give the global meaning to the representation and that organize the whole structure, being thus stable and consensual in the group. The peripheral system is more flexible, incorporating information that may not be consensual in the group with the objective of adapting the representation to specific situations and defending the core of contradictions (Wachelke, 2012).

On the other hand, according to the positional perspective (Doise, 1990) representations are formed in interactions, and consequently, representations are subject to the influence of the groups in which people are inserted (Breakwell, 1993). In this way, the groups define and maintain their social identity, make an object known to their members, and define and justify the practices related to that object (Wachelke, 2012). Thus, the members of a group acquire a perspective of the common world, helping to create a sense of identity and cohesion (Breakwell, 1993). Social representations and social identity have therefore a bidirectional relationship, because not only does the group influence the creation of the representations, but these representations also strengthen the feeling of belonging.

The positional perspective on social representations may explain why bona fide attempts at representing athletes with disability and disability sport in the media end up being inaccurate and potentially harmful. While making an effort to give visibility to a marginalized group in society, media platforms translate disability sport into a common biomedical system of representation that inevitably relegates disability to the realm of dysfunction and deviance. In other words, they represent an abled meaning of disability sport, and not the meanings of sport by athletes with disability. Our theoretical choice is then an attempt at providing this latter, more inclusive view. Our aim is to understand the subjective impact of sports on athletes with disabilities so that this knowledge can be used to improve the current conditions in which athletes with disabilities find themselves.

According to Weisz (2017), social representations can be used as a methodological strategy when the objective is to access the categories of understanding of individuals. These give meaning to the action from which they acquired, through socialization, the current conjuncture and future expectations. Knowing these meanings is the starting point to knowing how individuals act in their world, since social representations are not only reflected in speech, but also in the people's thoughts and actions.

In this study, we will seek to access the social representations of sports in the view of athletes with disabilities to better understand the subjective experience of sports as collectively shared by these athletes. Specifically, the study intends to identify the structure of the social representations of sports of Brazilian athletes with disabilities, as well as explore if the practice of different types of sports affects the social representations of these athletes. After all, if the group influences the

representations that its members acquire about a social object (Breakwell, 1993), then the practice of different sports, which is associated with different rules, values, and ways of being, may have an influence on the way each athlete experiences the sport. As such, both perspectives of social representations previously described will be addressed (structural and positional), allowing a richer and more complete knowledge about the meanings of sports for the athletes with disabilities.

Methods

Participants

A nonprobabilistic convenience sample of 153 Brazilian athletes with disabilities (122 men and 31 women) with ages varying between 18 and 56 years (M = 31.91; SD = 9.46) was used in the study. They are athletes with different types of disabilities (e.g., amputation or absence of limbs, paralysis, atrophies, visual, intellectual and auditory deficiencies), athletes of 17 different sports: swimming (N = 34), athletics (N = 25), basketball (N = 13), soccer (N = 9), rugby (N = 9), weightlifting (N = 9), volleyball (N = 8), canoeing (N = 7), archery (N = 7), tennis (N = 7), cycling (N = 6), bocce (N = 5), sailing (N = 5), combat sports (N = 3), fencing (N = 2), goalball (N = 2), and equestrianism (N = 2). Every athlete has participated in at least one official competition of their respective sport (such as a regional, national, or international competition); 34% of the participants (N = 52) have participated in at least one edition of the Paralympic Games.

Instruments

A biodemographic questionnaire was initially used containing questions about age, sex, type of sport, and disability; then, the Free Word Association Technique was applied. This technique is a classic method for studying the content of social representations, considering both the frequency of appearance and the average rank of appearance to determine the salience of certain elements of the representation (Lo Monaco, Piermattéo, Rateau, & Tavani, 2017). Thus, the free word association technique can be found in studies of the social sciences (e.g., Di Giacomo, 1980; Lins & Poeschl, 2015) and, more specifically, studies about sports (Lacassagne, Brouchet, Weiss, & Jebrane, 2004; Lacassagne, Pizzio, & Jebrane, 2006). Athletes were asked to answer the following question: "When you think of the word 'SPORT,' what are the first five words or expressions that spontaneously come to mind?" Finally, the athletes also indicated the degree of negativity/positivity for each word/expression mentioned (1 = very negative and 5 = very positive). The questionnaire also included other questions, but only those that are relevant to this study are described. To our knowledge, this is the first study to apply this technique to a sample of athletes with disability.

Procedures

The research was carried out from October 2015 to February 2016 through an online questionnaire applied months before the Paralympic Games Rio 2016, which took place in September 2016. Athletes with disabilities were contacted

through e-mail, social networks, and by telephone (in the case of the visually impaired). Many of the contacts were provided through a snowball sampling procedure, in which some athletes provided contacts of other athletes who might want to participate in the study. The athletes were informed about the objectives of the study, and the anonymity and confidentiality of their responses. After obtaining their informed consent, the participants answered the questionnaire. The inclusion criteria were being Brazilian, of legal age (18 years old), and having participated in some official competition of disability sports.

Data Analysis

First, reduction rules (e.g., transforming verbs into their infinitive form, reducing words to the singular masculine form) commonly used in free word association were applied (Rosenberg & Jones, 1972). Some expressions that were the target of these reduction rules have been, for instance, "my life" (reduced to "life"), "no pain, no gain" (reduced to "effort"), and "recognition by others" (reduced to "recognition"). This reduction was carried out independently by three different judges, and later cross-referenced for a final decision on which final forms best captured the information provided by the data.

To verify the structure of the social representation, a similarity analysis was performed. This allows the identification of the cooccurrence of words and their connectivity (the extent to which both words tend to be evoked by a same participant), and it also helps in the identification of the structure of the content of a textual corpus. A prototypical analysis was also conducted; this allows the identification of the central and peripheral system of the representation, through the consideration of the frequency of the words and their average order of evocation (to get this value, one attributes the value 1 when the word is evoked first, the value 2 when it is second, and so on, and then, for each word, the mean of these values is calculated; Wachelke & Wolter, 2011).

To examine the dimensions of the representations of sports, a descending hierarchical classification (DHC) and a factorial correspondence analysis (FCA) were performed. Through the DHC, a dendrogram that organizes the words into classes is created (Camargo & Justo, 2013). In each class, the quantity and lexical composition of the words is represented and each word is associated with a chisquare value (χ^2) such that the higher the value, the more significant is the word's association with its class. The FCA is an exploratory statistical method that uses the chi-square metric to process data frequencies, allowing the graphical representation of such data in two or more factors (Lo Monaco, Piermattéo, Guimelli, & Abric, 2012; Oliveira & Amaral, 2007). We also sought to identify if any dimension would be associated with the type of sport that the athlete practices. To name and interpret the classes of the DHC and the factors of the FCA, a similar process to that of the word reduction was adopted: the same three judges independently interpreted and named the classes and factors, and later the individual interpretations were cross-referenced, and a consensus on the final classification was negotiated.

All these analyses were carried out using the computer program Iramuteq—*R Interface pour les Analyses Multimensionnelles de Textes et de Questionnaires* (Ratinaud, 2009). The richness index (the ratio between the number of different

words evoked and the total number of words collected), which measures the integration of the information about an object, was also calculated. This can range from 0 (total consensus) to 1 (total divergence) (Deconchy, 1971; Poeschl, 1992).

Results

The words most cited by the athletes were overcoming (N = 53), determination (N = 41), dedication (N = 37), focus (N = 32), strength (N = 26), training (N = 24), discipline (N = 23), health (N = 22), and love (N = 22). The richness index, which represents the diversity of the evoked corpus, was .18, which is considered a low value. This indicates that there is a highly consensual view of sports among the participants. The words evoked were very positive (M = 4.70; SD = 0.41), not showing variation, neither according to sex, t(151) = 0.47, p = .535, d = 0.09, nor according to the sport practiced, $F(16, 136) = 0.46, p = .959, \eta^2 = .05$.

The similarity analysis showed that the word *overcoming* was the central element, and it is linked to four main words, namely, *determination*, *focus*, *dedication*, and *training*. At the extremities of the ramifications, there is a relation between "discipline" and "commitment," "emotion," "exhaustion," and "pain" (see Figure 1).

In turn, the prototypical analysis based on the criteria of frequency and order of evocation of the words coming from the free word association technique allowed to identify the representational structure (central and peripheral system). To establish the minimum frequency for the cut-off point of evocations, as proposed by Wachelke and Wolter (2011), two criteria were considered: the average frequency between responses greater than 15% (total number of text segments (TS) divided by the minimum frequency chosen [153/10]) and the maintenance of 30% of the evocations in the zone of high frequency (Quadrant 1). Therefore, the maintenance of words with a minimum frequency equal to or greater than 10 was established.

The four column table represents the four dimensions of the structure of social representations (see Table 1). The first column (upper left) indicates the words that have a frequency above the average and that were more readily evoked (with a lower average order of evocations, meaning that the words were generally evoked in the top positions), which would be the probable indicators of the central core of the athletes' representation of sports: overcoming, determination, dedication, training, discipline, health, and love.

In the second column (upper right) is the first periphery with words that have high frequency, but which were not so readily evoked (with a higher AOE, meaning that the words were generally evoked in the bottom positions): focus and strength. The third column (lower left), the contrast zone, contains elements that were readily evoked but often below average: competition, life, and effort. The words of these two quadrants reinforce the central core. Finally, the second periphery, in the fourth column (lower right), indicates the elements with less frequency and greater order of evocation: joy, stamina, objective, medal, commitment, will, and happiness.

The dimensions of the social representation of Paralympic athletes about sports can be observed in Figure 2. The total corpus of the analysis was composed

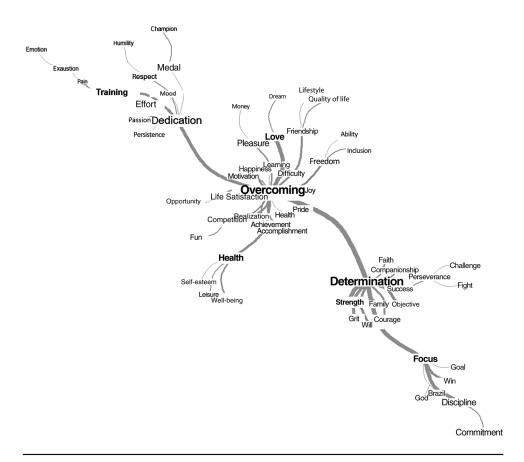


Figure 1 — Similarity tree of the social representation of sports.

of 153 TS with use of 113 TS (73.86%). There were 765 occurrences (words or forms), being 140 distinct words and 59 with a single occurrence. The DHC produced two major ramifications. The first branch associates Classes 1 and 2, while the second branch associates Classes 4 and 5 first, and more distantly, Class 3 (see Figure 2). The classes' denomination was derived from the words included in each of them, per the assessment of three independent judges.

Class 1—Individual Gains

It is the largest class, consisting of 37 TS, corresponding to 34.74% of the total corpus analyzed. It is composed of the words: health ($\chi^2 > 30.00$), passion, happiness, dedication ($\chi^2 > 10.00$), learning, pain, self-esteem, and life ($\chi^2 > 5.00$). These refer to the benefits gained by athletes through the practice of sports that are manifested in an individual basis and thus contribute to their psychological empowerment. There was no predominance of a single sport modality.

Table 1 Prototypical Analysis of the Social Representations of Paralympic Athletes for the Inducing Term Sport (N = 153)

Elements central	Frequency ≥ 22	AOE ≤ 2.8	First periphery	Frequency ≥ 26	AOE ≥ 3.0
Overcoming	53	2.4	Focus	32	3.3
Determination	41	2.8	Strength	26	3.0
Dedication	37	2.5			
Training	24	2.1			
Discipline	23	2.7			
Health	22	2.3			
Love	22	2.4			

Elements contrasts	Frequency ≤ 16	AOE ≤ 2.7	Second periphery	Frequency ≤ 17	AOE ≥ 3.2
Competition	16	2.4	Joy	17	3.8
Life	16	2.7	Stamina	15	4.0
Effort	10	2.6	Objective	15	3.5
			Medal	13	3.6
			Commitment	12	3.6
			Will	12	3.2
			Happiness	10	3.7

Note. AOE = average order of evocation.

Class 2—Collective Gains

This class represents 15.04% (17 TS) of the total corpus analyzed. This class consists of words such as freedom ($\chi^2 > 54.88$), satisfaction ($\chi^2 > 30.00$), achievement, inclusion ($\chi^2 > 10.00$), joy, and lifestyle ($\chi^2 > 6.00$). These words refer to the benefits that contribute to the societal empowerment of athletes, also acquired through sports. The evocations of athletes practicing athletics ($\chi^2 = 8.49$) and canoeing ($\chi^2 = 3.96$) predominated.

Class 3—Sociability

This is the smallest class, comprising 13.27% (15 TS) of the corpus analyzed. It was composed of the words: companionship ($\chi^2 > 70.00$), friendship ($\chi^2 > 15.00$), and joy and competition ($\chi^2 > 4.00$). It was observed that the words included in this class refer to the consequences of the practice of the sport in interaction with other people. The evocations of athletes practicing soccer ($\chi^2 = 8.25$) and rugby ($\chi^2 = 4.39$) predominated.

Class 4—Dedication

It is composed of 22.12% of the segments (25 TS). The class is characterized by the words: training ($\chi^2 > 30.00$), courage ($\chi^2 > 20.00$), determination, perseverance,

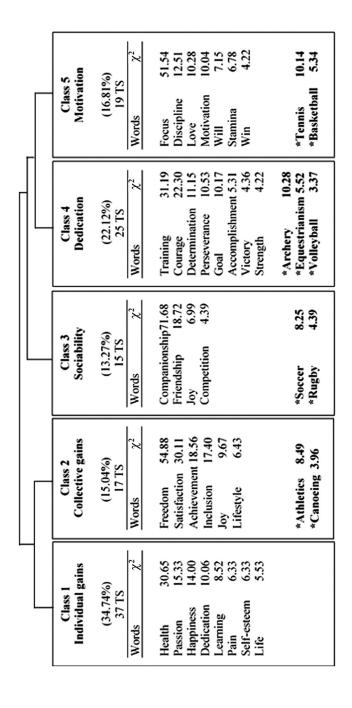


Figure 2 — Dendrogram of the descending hierarchical classification. TS = text segment. *Significance level .05.

objective ($\chi^2 > 10.00$), achievement, victory, and strength ($\chi^2 > 4.00$). It was observed that this class contemplates words about the components of the effort that athletes need to perform during sports. The class is related to the athletes practicing archery ($\chi^2 = 10.28$), equestrianism ($\chi^2 = 5.52$), and volleyball ($\chi^2 = 3.37$).

Class 5—Motivation

It comprises 16.81%, with 19 TS. It is made up of the words focus ($\chi^2 > 50.00$), discipline, love, motivation ($\chi^2 > 10.00$), will, stamina, and win ($\chi^2 > 30.00$). The words included in this class refer to the volitional aspects that stimulate the efforts that these athletes apply constantly in this context. The class is related to athletes practicing tennis ($\chi^2 = 10.04$) and basketball ($\chi^2 = 5.34$).

Finally, the FCA, made it possible to carry out an association of the text between the words, considering the frequency of incidence of words and classes, representing them in a Cartesian plane (see Figure 3). It is observed that the words of all classes are positioned in a centralized segment that expands toward peripheral points, with emphasis on Class 3 (Sociability), which expands through all quadrants of the plane. The words of Classes 4 (Dedication) and 5 (Motivation), such as "discipline" and "determination," are closer. In the opposite side are the words of Class 1 (Individual gain: "health" and "happiness"), and Class 2 (Collective gains: "freedom" and "inclusion").

Considering the position of the classes and what they represent, it is pertinent to classify the axes of the Cartesian plane for a better understanding of the position of the classes in it. Thus, the *x*-axis is considered the "outputs–inputs" axis. Thus, in the quadrants on the left side are the outputs (e.g., "health," "satisfaction," "accomplishment"), while in the right-hand quadrants are the inputs (e.g., "focus," "training," "perseverance"), that is, what athletes should apply in their sporting practice to obtain the corresponding outputs.

The y-axis can be called the "individual-collective" axis. Thus, the two upper quadrants encompass both *inputs* and *outputs* that are more related to the individual (e.g., "health," "training"), to what the athlete alone applies and receives from the practice of sports. Finally, the two lower quadrants encompass both *inputs* and *outputs* that are more related to a collective aspect (e.g., "inclusion," "companionship"), because they depend on the relation between the athlete and other people. It should be noted that the poles of each axis are not mutually exclusive, but rather complementary. As such, both collective and individual aspects of both inputs and outputs may simultaneously be included in the representation of sports.

Discussion

This study had the aim of accessing the social representations about sports shared by athletes with disabilities, considering the potential for physical, psychological, and societal empowerment through sports practice and competition. Social representations are a collectively shared form of knowledge that establishes a common frame of reference for the individuals of a group or a society, orienting them toward common attitudes and behaviors in response to stimuli (both new

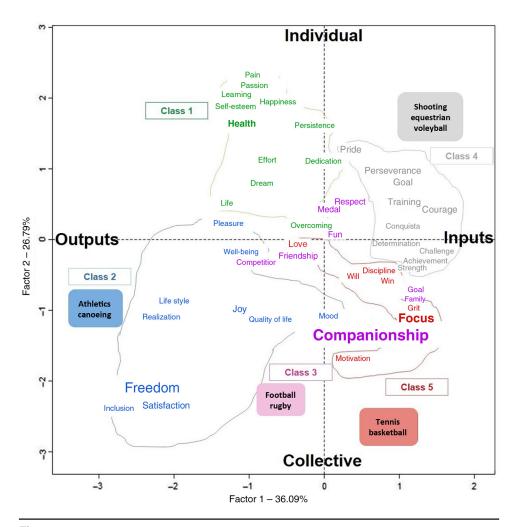


Figure 3 — Factorial correspondence analysis.

and familiar) (Moscovici, 1963). These representations can be seen from the perspective of the structure of their content (Abric, 2001) or according to their specificities in relation to their social group (Doise, 1990).

The structural analysis of the social representation of sports by athletes with disabilities showed, through the similarity and the prototypical analyses, that its central core consists of the words "overcoming," "determination," "dedication," "training," "discipline," "health," and "love." For athletes with disabilities, it appears sports reflect predominantly psychological elements of empowerment regarding self-efficacy and motivation toward goals.

On the other hand, the peripheral system consists of words like "joy," "stamina," "objective," and "medal," showing sports in a more instrumental

way, regarding elements of achievement and emotional well-being. These results are in line with a study by Teixeira and Lins (2017) found that the social identity of athletes with disabilities can be associated not only with a trajectory of overcoming, but also with the need for achievements and for exhibiting them.

The dendrogram showed that sports are associated with several gains (Classes 1 and 2) and also with driving forces (Classes 3, 4, and 5) that can be collective or individual for PWD. The FCA confirms these results, indicating that the effective practice of sports, from the point of view of athletes with disabilities, can have a double role: on the one hand, sports mean both the dedication invested into the practice and the competition, and the gains and achievements that result from them; on the other hand, sports are simultaneously an individual and a social experience, as reflected by the evocation of words like "companionship," "friendship," and "family." In general, these results are in agreement with the literature (Ashton-Shaeffer et al., 2001; Chawla, 1994; Gioia et al., 2006; Lundberg, Bennett, & Smith, 2011; Özer et al., 2012; Scarpa, 2011; Yazicioglu et al., 2012), which highlights the several psychosocial benefits of practicing sports by PWD and their impact on their psychological and societal empowerment.

From a positional analysis of social representations, it was also seen that some classes are more associated with certain sports than with others, corroborating the perspective that the group in which a person is inserted shapes the social representations of a certain social object (in this case, sports) (Breakwell, 1993). It is notable that Class 3, referring to sociability, is significantly more present in athletes practicing soccer and rugby, both team sports. It makes sense that companionship and friendship are important for players from these sports, since training and team work is a fundamental characteristic of these sports. Indeed, team sports promote feelings of acceptance (Boone & Leadbeater, 2006), and less social isolation (Barber, Eccles, & Stone, 2001). However, it is worth noting that there were also other team sports that showed no association with this class. This could be due to a variety of factors, such as the extent of the team's cohesion, the amount of time a participant has been part of a team, or the extent to which the athlete identifies with their team (e.g., Levine & Moreland, 2011). While this was not the focus of this study, future studies comparing representations of athletes from different sports should consider these factors.

We initially pointed out how media representations of disability sport often overemphasize personal histories of achievement and overcoming of athletes with disability, reinforcing negative preconceptions about disability and inducing an achievement syndrome. While "overcoming" was among the central core of the representations, the DHC showed a much more complex picture.

From the point of view of the athlete with disability, sports are just as much (or perhaps even more) about "freedom," "companionship," "satisfaction," "happiness," and "health." This prompts the question of whether the shared meanings of sports by athletes with or without disability are as different as the mainstream media coverage would suggest. In this regard, future research could adopt a positional analysis of the social representations of athletes with or without disability to ascertain whether there are any meaningful differences. Based on our results, we predict the shared meanings of athletes regardless of any (dis)ability judgments are probably deeper than any observable differences.

As for this study, we found it most important to put athletes with disability at the center of our research, and we hope to have presented a much more human and genuine account of this group's shared meanings and experiences. To that end, comparisons were also made that focused on the different sports that athletes with disabilities practiced. This comparison allowed to account for the richness and diversity of experiences and meanings of sports and competition for these athletes, beyond the common representations they share as a social group.

Finally, it is also worth noting the predominantly positive picture in which disability sport is presented does not reflect the universal experience of PWD regarding sports. The timing of this study on the months leading up to the Paralympic Games Rio 2016 could have contributed to the special salience of the topic and for the bias toward positive representations. Future studies could analyze representations during or after such an important event.

In addition, it is possible that the cultural context could have also influenced the answers of our sample. For this reason, it could also be interesting to compare our results with those of studies conducted in other countries.

Moreover, Howe (2008) points out that the representation in the media of disability sport comes with the danger of creating an "elite of (people with) disabilities," and not everyone may find sports equally accessible or beneficial. Future studies should investigate the social representations of sports by a more diverse group of PWD, to account for a more complete picture of the meaning of sports, including more negative dimensions. Furthermore, it could also bring to light possible dangers of the creation of expectations and a restricted space in society for the inclusion of disabilities that exclude people to whom sports do not have this same empowering meaning.

Conclusion

In short, our results indicate that the structure of the social representations of sport for Brazilian athletes with disabilities incorporates gains and driving forces, at both an individual and collective level. The core system emphasizes the overcoming of obstacles, while the peripheric system includes aspects of achievement. On the other hand, and in line with the positional perspective, we have also found evidence that belonging to different groups (in this case, practicing different sports) leads to different social representations for the same social object (i.e., sports).

The main contribution of this study to the current literature is in the defense of a different perspective on the relationship between sports and athletes with disabilities, but not in the sense of replacing the more individual perspective. It is important to value the experiences and feelings of each disabled athlete, but also to recognize that these athletes are not individual cases of "success" or of "restored normality." Instead, they are part of a wider social movement where a social group conquers and rebuilds a place within that normality.

In this sense, it was possible to understand how sports are collectively represented by athletes with disabilities. The choice to use a level of analysis that breaks with individualizing and pathologizing models of disability—and with the ableist stereotypes that accompany them—makes it possible to move toward

the affirmation of a social model that frames disability sport as a means for the empowerment and social inclusion of PWD.

References

- Abric, J. (2001). Las representacionessociales: Aspectosteóricos (J.D. Chevel & F.F. Palacios, Trans.). In J. Abric (Ed.), *Prácticas sociales y representaciones* (pp. 11–32). Mexico: Ediciones Coyoacán.
- Ashton-Shaeffer, C., Gibson, H.J., Autry, C.E., & Hanson, C.S. (2001). Meaning of sport to adults with physical disabilities: A disability sport camp experience. *Sociology of Sport Journal*, 18(1), 95–114. doi:10.1123/ssj.18.1.95
- Barber, B.L., Eccles, J.S., & Stone, M.R. (2001). Whatever happened to the jock, the brain, and the princess? Young adult pathways linked to adolescent activity involvement and social identity. *Journal of Adolescent Research*, 16(5), 429–455. doi:10.1177/0743558401165002
- Barnes, C. (2012). Understanding the social model of disability: Past, present and future. In N. Watson, A. Roulstone, & C. Thomas (Eds.), *Routledge handbook of disability studies* (pp. 12–29). New York, NY: Routledge.
- Beacom, A., French, L., & Kendall, S. (2016). Reframing impairment? Continuity and change in media representations of disability through the games. *International Journal* of Sport Communication, 9, 42–62. doi:10.1123/ijsc.2015-0077
- Boone, E.M., & Leadbeater, B.J. (2006). Game on: Diminishing risks for depressive symptoms in early adolescence through positive involvement in team sports. *Journal of Research on Adolescence*, 16(1), 79–90. doi:10.1111/j.1532-7795.2006. 00122.x
- Breakwell, G.M. (1993). Social representations and social identity. *Papers on Social Representations*, 2(3), 198–217. doi:10.1017/CBO9781139136983.010
- Camargo, B.V., & Justo, A.M. (2013). IRAMUTEQ: um software gratuito para análise de dados textuais. Temas em Psicologia, 21(2), 513–518. doi:10.9788/TP2013.2-16
- Chawla, J.C. (1994). ABC of sports medicine. Sport for people with disability. *BMJ: British Medical Journal*, 308(6942), 1500–1504. PubMed ID: 7802770 doi:10.1136/bmj.308. 6942.1500
- Deconchy, J. (1971). L'orthodoxie religieuse. Paris, France: Les Editions Ouvrières.
- DePauw, K.P., & Gavron, S.J. (2005). *Disability sport* (2nd ed.). Champaign, IL: Human Kinetics.
- Di Giacomo, J.P. (1980). Intergroup alliances and rejections within a protest movement (analysis of the social representations). *European Journal of Social Psychology*, 10(4), 329–344. doi:10.1002/ejsp.2420100402
- Doise, W. (1990). Les représentationssociales. In R. Ghiglione, C. Bonnet, & J.F. Richard (Eds.), *Traité de psychologie cognitive* (pp. 113–174). Paris, France: Dunod.
- Fawcett, S.B., White, G.W., Balcazar, F.E., Suarez-Balcazar, Y., Mathews, R.M., Paine-Andrews, A., ... Smith, J.F. (1994). A contextual-behavioral model of empowerment: Case studies involving people with physical disabilities. *American Journal of Community Psychology*, 22(4), 471–496. PubMed ID: 7754999 doi:10.1007/BF02506890
- Gioia, M.C., Cerasa, A., Di Lucente, L., Brunelli, S., Castellano, V., & Traballesi, M. (2006). Psychological impact of sports activity in spinal cord injury patients. *Scandinavian Journal of Medicine & Science in Sports*, 16(6), 412–416. PubMed ID: 17121643 doi:10.1111/j.1600-0838.2005.00518.x
- Goodley, D. (2011). Disability studies: An interdisciplinary introduction. London, UK: SAGE Publications.

- Hardin, M. (2007). "I consider myself an empowered woman:" The interaction of sport, gender and disability in the lives of wheelchair basketball players. *Women in Sport and Physical Activity Journal*, 16(1), 39–52. doi:10.1123/wspaj.16.1.39
- Hilgemberg, T. (2014). Do coitadinho ao super-herói: Representação social dos atletas paralímpicos na mídia brasileira e portuguesa. *Ciberlegenda*, 11(30), 48–58.
- Howe, D.P. (2011). Cyborg and supercrip: The Paralympics technology and the (dis) empowerment of athletes with disabilities. *Sociology*, 45(5), 868–882. doi:10.1177/0038038511413421
- Howe, P.D. (2008). From inside the newsroom: Paralympic media and the production of elite disability. *International Review for the Sociology of Sport*, 43(2), 135–150. doi:10.1177/1012690208095376
- Hutzter, Y., & Bar-Eli, M. (1993). Psychological benefits of sports for disabled people: A review. *Scandinavian Journal of the Medical Sciences of Sport*, *3*, 217–228. doi:10.1111/j.1600-0838.1993.tb00386.x
- Jodelet, D. (2001). Representaçõessociais: um domínioemexpansão. In D. Jodelet (Ed.), As representações sociais (pp. 17–44). Rio de Janeiro, Brazil: UERJ.
- Lacassagne, M., Bouchet, P., Weiss, K., & Jebrane, A. (2004). Analyse comparative des représentations sociales du sport en France et au Maroc: valeurs modernes et postmodernes chez des étudiants en sciences du sport. *Staps*, 65(3), 97–109. doi:10.3917/ sta.065.0097
- Lacassagne, M.F., Pizzio, L., & Jebrane, A. (2006). La représentation du sport: visions d'étudiants sportifs et non sportifs. Sciences et Motricité, 58(2), 116–134. PubMed ID: 29787219 doi:10.3917/sm.058.0117
- Levine, J.M., & Moreland, R.L. (2011). Group socialization: Theory and research. *European Review of Social Psychology*, 5(1), 305–336. doi:10.1080/147927795430 00093
- Lins, S.L.B., & Poeschl, G. (2015). Gastar dinheiro em roupas no shopping: os significados de "comprar" para adolescentes brasileiros e portugueses. *Temas em Psicologia*, 23(2), 355–369. doi:10.9788/TP2015.2-06
- Lo Monaco, G., Piermattéo, A., Guimelli, C., & Abric, J.C. (2012). Social representations, correspondence factor analysis and characterization questionnaire: A methodological contribution. *The Spanish Journal of Psychology*, 15(3), 1233–1243. PubMed ID: 23156928 doi:10.5209/rev_SJOP.2012.v15.n3.39410
- Lo Monaco, G., Piermattéo, A., Rateau, P., & Tavani, J.L. (2017). Methods for studying the structure of social representations: A critical review and agenda for future research. *Journal for the Theory of Social Behaviour*, 47(3), 306–331. doi:10.1111/jtsb. 12124
- Lundberg, N., Bennett, J., & Smith, S. (2011). Outcomes of adaptive sports and recreation participation among veterans returning from combat with acquired disability. *Therapeutic Recreation Journal*, 45(2), 105–120.
- Maika, M.A. (2014). The "other" athletes: Representations of disability in Canadian print media during the London 2012 Paralympic Games (Electronic Thesis and Dissertation Repository). Paper 2594. Retrieved from http://ir.lib.uwo.ca/cgi/viewcontent.cgi? article=4135&context=etd
- Marques, R., Marivoet, S., Almeida, M., Gutierrez, G., Menezes, R., & Nunomura, M. (2015). A abordagem mediática sobre o desporto paralímpico: Perspetivas de atletas portugueses. *Motricidade*, 11(3), 123–147. doi:10.6063/motricidade.4704
- Martin, J.J. (2013). Benefits and barriers to physical activity for individuals with disabilities: A social-relational model of disability perspective. *Disability and Rehabilitation*, 35(24), 2030–2037. PubMed ID: 23781907 doi:10.3109/09638288.2013.802377
- Moscovici, S. (1963). Attitudes and opinions. *Annual Review of Psychology, 14*(1), 231–260. doi:10.1146/annurev.ps.14.020163.001311

- Oliveira, A., & Amaral, V.R. (2007). A análise factorial de correspondências na investigação em psicologia: Uma aplicação ao estudo das representações sociais do suicídio adolescente. *Análise Psicológica*, 25(2), 271–293. PubMed ID: 29787218.
- Özer, D., Baran, F., Aktop, A., Nalbant, S., Ağlamış, E., & Hutzler, Y. (2012). Effects of a special olympics unified sports soccer program on psycho-social attributes of youth with and without intellectual disability. *Research in Developmental Disabilities*, 33(1), 229–239. PubMed ID: 22093669 doi:10.1016/j.ridd.2011.09.011
- Pensgaard, A.M., & Sorensen, M. (2002). Empowerment through the sport context: A model to guide research for individuals with disability. *Adapted Physical Ability Quarterly*, 19, 48–67. doi:10.1123/apaq.19.1.48
- Pereira, O., Monteiro, I., & Pereira, A.L. (2011). A visibilidade da deficiência: Uma revisão sobre as representações sociais das pessoas com deficiência e atletas paralímpicos nos media impressos. Sociologia: Revista da Faculdade de Letras da Universidade do Porto. 22. 199–217.
- Poeschl, G. (1992). L'Intelligence: un concept à la recherche d'un sens (Doctoral thesis). University of Geneva, Geneva, Switzerland.
- Rappaport, J. (1987). Terms of empowerment/exemplars of prevention: Toward a theory for community psychology. *American Journal of Community Psychology*, 15(2), 121–148. doi:10.1007/BF00919275
- Ratinaud, P. (2009). *Iramuteq: Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires* [Computer Program]. Retrieved from http://www.iramuteq.org
- Rosenberg, S., & Jones, R. (1972). A method for investigating and representing a person's implicit personality theory: Theodore Dreiser's view of people. *Journal of Personality and Social Psychology*, 22, 372–386. doi:10.1037/h0032891
- Scarpa, S. (2011). Physical self-concept and self-esteem in adolescents and young adults with and without physical disability: The role of sports participation. *European Journal of Adapted Physical Activity*, 4(1), 38–53.
- Schalk, S. (2016). Reevaluating the supercrip. *Journal of Literary & Cultural Disability Studies*, 10(1), 71–86. doi:10.3828/jlcds.2016.5
- Shephard, R.J. (1991). Benefits of sport and physical activity for the disabled: Implications for the individual and for society. *Scandinavian Journal of Rehabilitation Medicine*, 23(2), 51–59. PubMed ID: 1832786.
- Silva, C.F., & Howe, P.D. (2012). The (in)validity of supercrip representation of Paralympic athletes. *Journal of Sport and Social Issues*, 36(2), 174–194. doi:10.1177/0193723511433865
- Snyder, S.L., & Mitchell, D.T. (2001). Re-engaging the body: Disability studies and the resistance to embodiment. *Public Culture*, *13*(3), 367–390. doi:10.1215/08992363-13-3-367
- Sullivan, K. (2011). The prevalence of the medical model of disability in society. 2011 AHS Capstone Projects. Paper 13. Retrieved from http://digitalcommons.olin.edu/ahs_capstone_2011/13
- Teixeira, A., Labanca, L., Peña, L., & Lins, S. (2016). Indicators of mental health in Brazilian paralympic athletes. In I. Salazar, & V. Caballo (Eds), Avances 2016 en Psicología Clínica y de la Salud. Paper presented at VIII Congreso Iberoamericano de Psicología Clínica y de la Salud, San Juan (p. 133). Madrid, Spain: Ediciones Piramides. doi:10.13140/RG.2.2.15595.95520
- Teixeira, A., & Lins, S. (2017). Evaluando variables psicosociales y la identidad social de atletas paralímpicos brasileños. *Liberabit*, 24(1), 45–60. doi:10.24265/liberabit.2018. v24n1.04
- van der Ploeg, H.P. (2005). *Promoting physical activity in the rehabilitation setting* (Master thesis). Vrije Universiteit, Amsterdam, The Netherlands.

- Wachelke, J. (2012). Social representations: A review of theory and research from the structural approach. *Universitas Psychologica*, 11(3), 729–741.
- Wachelke, J., & Wolter, R. (2011). Critérios de construção e relato da análise prototípica para representações sociais. *Psicologia: Teoria e Pesquisa*, 27(4), 521–526. doi:10. 1590/S0102-37722011000400017
- Weisz, C.B. (2017). La representación social como categoría teórica y estrategia metodológica. *Rev CES Psicologia*, 10(1), 99–108. doi:10.21615/cesp.10.1.7
- Yazicioglu, K., Yavuz, F., Goktepe, A.S., & Tan, A.K. (2012). Influence of disability sports on quality of life and life satisfaction in sport participants and non-sport participants with physical disabilities. *Disability and Health Journal*, 5(4), 249–253. PubMed ID: 23021735 doi:10.1016/j.dhjo.2012.05.003