

Original Article

Identification of occupational roles in adapted sport athletes

Identificação de papéis ocupacionais em atletas do esporte adaptado

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Abstract

Objective: The present study aims to define the occupational roles played by athletes from the Paraná Association of Physically Disabled - *ADFP*. **Method:** this is cross-sectional observational quantitative research. Individual interviews were carried out based on the Occupational Roles Identification List - ORIL, where the sample included athletes linked to the 6 modalities offered by *ADFP*. **Results:** The participants were 37 athletes, predominantly male, whose average age is 39 years old and the practice time varies between 1 month and 25 years. The occupational roles of caregiver, family member, and religious regarding the performance of the sport are highlighted with significance. **Conclusion:** The research had good participation by the participants, which enabled us to verify the occupational roles in the lives of the athletes and the dynamics of their relationship with their performance in the sport. Likewise, the need to encourage research related to the theme is emphasized, given the incipience of national literature.

Keywords: Athletes. Sports for Persons with Disabilities. Role Playing. Occupational Therapy. Task Performance, and Analysis.

Resumo

Objetivo: O presente estudo tem por objetivo descrever os papéis ocupacionais desempenhados pelos atletas da Associação dos Deficientes Físicos do Paraná – ADFP. **Método:** Trata-se de uma pesquisa quantitativa observacional transversal. Foram realizadas entrevistas individuais estruturadas com base em uma Lista de Identificação de Papéis Ocupacionais – LIPO, na qual a amostra contou com os atletas vinculados a 6 modalidades oferecidas pela ADFP. **Resultados:** Participaram 37 atletas, com predominância do sexo masculino, cuja média de idade foi de 39 anos e o tempo de

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prática variou entre 1 mês e 25 anos. Destaca-se com significância os papéis ocupacionais de cuidador, membro da família e religioso sobre o desempenho do esporte. **Conclusão:** A pesquisa contou com boa adesão dos participantes, o que tornou possível verificar os papéis ocupacionais na vida dos atletas e a dinâmica de relação destes com seu desempenho no esporte. Da mesma forma, ressalta-se a necessidade de fomentar pesquisas relacionadas à temática, visto a incipiência de literatura nacional.

Palavras-chave: Atletas. Esportes para Pessoas com Deficiência. Desempenho de Papéis. Terapia Ocupacional. Análise e Desempenho de Tarefas.

1 Introduction

The professional practice of the occupational therapist is based on the study of human occupation. The concept appears in one of the pillars of the Model of Human Occupation - MOHO described by Kielhofner (2002) in the 70s, and aims to rescue and describe the object of study of occupational therapy: human occupation. Within this, we understand that the needs of each individual are based on several intrinsic and extrinsic factors and that these same factors influence the sense of ability and are also linked to the feeling of frustration or even decision making when ceasing some activity (Kielhofner, 2002).

The MOHO considers the human as an open system, whose internal organization depends on three subsystems: the volition deals with values, interests, and the individual's knowledge related to their effectiveness in an activity; the habituation deals with the habit acquired by the repetition of behavior and the set of them; while the performance capacity delineates the musculoskeletal, neurological and cardiopulmonary systems, in addition to symbolic images, skills necessary for the achievement of behavior. These three concepts guarantee the satisfactory performance of occupational roles (Hagedorn, 2002).

Occupational roles are the “sets of behaviors expected by society and shaped by culture and context [...] that can be better conceptualized by the patient” (Cavalcanti et al., 2015, p. 8). According to Parkinson et al. (2006), they are also charged with these expectations, which depend on the individual's competence to fulfill them satisfactorily according to the circumstances experienced.

In this perspective, the occupational therapist can work activities such as to stimulate the balance and the performance of occupational roles with different populations. Based on the general reflection of Resolution N° 495 of December 18, 2017, of the Federal Council of Physiotherapy and Occupational Therapy - *COFFITO*, sports, and parasports as fields still little explored in the national scenario foresees the competencies of the occupational therapy professional as to evaluate, prescribe and guide the practice of parasports (Conselho Federal de Fisioterapia e Terapia Ocupacional, 2018).

In this context, there is the Paraná Association of Physically Disabled - *ADFP*, a philanthropic institution, headquarters of a Reference Center in Physical Rehabilitation with dance, nursing, physiotherapy, psychology, social service, and occupational therapy services, and the adapted sports sector. This sector has 7 of the 25 modalities recognized by the International Paralympic Committee - IPC (Comitê Paralímpico Brasileiro, 2019) and they are athletics, basketball, bocce, fencing, swimming, table tennis, and shooting sports; contemplating a total of 59 athletes. Some of them stand out for their performance, participating in the Paralympics. We also notice the promotion in partnerships with some universities, supporting the rehabilitation process and the practice of parasports.

For further analysis of the impact of occupational therapist interventions on the practice of adapted sports, we initially need to characterize the occupational roles played by these athletes. Given the bibliographic context and the research scenario, this study aims to describe the occupational roles played by athletes from the Paraná Association of Physically Disabled.

2 Methodology

This is a quantitative, observational, analytical cross-sectional research, which is an integral part of a research project entitled “Parasport, Physical Rehabilitation and Occupational Therapy”, approved by the Research Ethics Committee on Human Beings under the opinion n° 2495358, on 02/15/2018, which guarantees the confidentiality and anonymity of the research for scientific purposes and the signing of the Informed Consent Form - ICF, according to Resolution N° 466/12 of the National Health Council - CNS.

The participants of the research were 37 athletes from 6 sports: athletics, basketball, fencing, swimming, table tennis, and shooting sports, which were chosen using convenience sampling. For data collection, we used two instruments: a sociodemographic questionnaire and the Occupational Roles Identification List - ORIL.

The authors developed the first questionnaire as semi-structured, which seeks to describe the individual in personal, occupational, and interests related to parasports. ORIL is a validated instrument and its purpose is to obtain the individual's perception about his participation in the main occupational roles developed throughout his life and his relevance. It is configured in 10 occupational roles identified by the student, worker, volunteer, caregiver, domestic service, friend, family member, religious, hobby/amateur, a participant in organizations and with the option of “other”, which allows the individual to identify a role not previously mentioned (Cordeiro, 2005). The same author guides to complete the instrument, which is divided into two parts: the first part assesses the occupational performance throughout the present (since contact with sport), the past (before contact with sport), and the future (which waiting for the future from the moment of the interview), allowing the participant to assign more than one variable per role; while the second part determines the importance of these roles – not important, little important or very important –, limiting the assignment of one variable by role.

We collected data in individual interviews at the training sites of each modality, during the first semester of 2019, requiring a meeting with an average of 20 minutes per participant. The same interviews with the coaches and depending on the availability of each athlete, we gave preference to what happened before the training to avoid that the fatigue interfered in the result and that did not harm the post-training personal organization.

For data analysis, we considered considerations and orientations of the scale and we performed a statistical exposure of the data through the Computational Program Statistical Package for Social Sciences - SPSS, version 22.0. We analyzed the quantitative variables by means, medians, minimum values, maximum values, standard deviations, and significance ($p > 0.05$), according to Pearson's chi-square test.

3 Results

When referring to the sociodemographic data (Table 1), we obtained the following results from 37 athletes participating: 8 women and 29 men, aged between 21 and 67 years old and an average of 39 years old, with greater participants of table tennis with

17 athletes. Among all athletes, 43.2% are married, 51.4% have children, with an average of 1 child, and live in Curitiba. Of them, 59.5% have a diagnosis of spinal cord injury and use a wheelchair as an exclusive means of locomotion. We observed that 86.48% of the participants had a paid job before coming to practice the adapted sport. The practice time varies between 1 month and 25 years, with 1 year as the highest frequency, which corresponds to 16.2%.

Table 1. Sociodemographic data.

	Minimum value	Maximum value	Mean	Median
Age	21 years old	67 years old	39,70 years old	40 years old
Children	0	4	1	1
Time in the sport	0,1 year	25 years	7,41 years	6 years

Source: the authors.

As for ORIL, the data collected are presented in two parts: 1- occupational roles played in the past, present, and future; 2- importance in its performance.

In the first part (Table 2), it is possible to note the student role in the past as the only one of the 11 listed papers that obtained maximum score (N = 37) and, in contrast, the participant in organizations was the least scored with 7 indications. In the present, the most scored roles were: domestic service and family member; and the least indicated were students, volunteers, and participants in organizations. In the future, the most pointed roles were as family members, caregiver, domestic service, and hobby, and the least indicated is a participant in organizations. The option “other” was considered by 04 athletes.

Table 2. Occupational roles played in the past, present, and future.

ROLE	PAST	PRESENT	FUTURE
STUDENT	37	06	23
WORKER	32	11	20
VOLUNTEER	12	09	27
CAREGIVER	24	25	31
DOMESTIC SERVICE	29	34	31
FRIEND	29	28	30
FAMILY MEMBER	32	32	35
RELIGIOUS	30	18	28
HOBBY/AMATEUR	28	26	31
PARTICIPANT IN ORGANIZATIONS	07	09	19
OTHER	02	02	04

Source: the authors.

Table 2 shows that the roles of caregiver, domestic service, and hobby/amateur were scored equally by all participants in the future, that is, 31.

As for the second part of ORIL (Table 3), the roles highlighted as “very important” were those of family members, student, friend, and worker, with 26 participants in the second and third roles.

We observed that most of the parathletes participating in the research point to the score of “very important” to the roles whose execution requires/allows the presence of third parties.

Table 3. Relation of the importance of occupational roles in little important, some important and very important.

ROLE	LITTLE IMPORTANT	SOME IMPORTANT	VERY IMPORTANT
STUDENT	03	08	26
WORKER	05	08	24
VOLUNTEER	09	13	15
CAREGIVER	06	08	23
DOMESTIC SERVICE	05	09	23
FRIEND	02	09	26
FAMILY MEMBER	01	03	33
RELIGIOUS	08	09	20
HOBBY/AMATEUR	-	18	19
PARTICIPANT IN ORGANIZATIONS	09	15	11
OTHER	-	-	03

Source: the authors.

There is a greater discrepancy in the answers for the role of domestic service in the past, present, and future performance (Table 2) when compared to its level of importance in Table 3.

Table 4. Crossing the variables of the roles performed in the present vs. very important.

ROLE	PRESENT		VERY IMPORTANT		P-VALUE (>0.05)
	n	%	n	%	
STUDENT	06	16.21	5	83,3	0.30
WORKER	11	29.72	10	90,9	0.08
VOLUNTEER	09	24.32	5	55,6	0.46
CAREGIVER	25	67.56	20	80	0.00
DOMESTIC SERVICE	34	91.89	23	67,6	0.06
FRIEND	28	75.67	21	75	0.47
FAMILY MEMBER	32	86.48	30	93,8	0.01
RELIGIOUS	18	48.64	16	88,9	0.00
HOBBY/AMATEUR	26	70.27	16	61,5	0.05
PARTICIPANT IN ORGANIZATIONS	09	24.32	3	33,3	0.47
OTHER	02	5.40	2	100	-

Source: the authors.

In the data analysis by the SPSS program, we could identify that the most relevant roles ($p < 0.05$) were those of religious ($p < 0.01$), caregiver ($p < 0.01$) and family member ($p = 0.01$) and, on the other hand, the roles with less relevance were the participant in organizations ($p > 0.05$), friend ($p > 0.05$) and volunteer ($p > 0.05$).

4 Discussion

Regarding sociodemographic data, this study has a predominantly male sample, with 29 men for 8 women. Camargo & Kessler (2017) consider sport as a male world that presents gender barriers that hinder the entry and permanence of female bodies or, still, of homosexuals or in gender transition. Corroborating this finding, the Instituto Noos de Pesquisas Sistêmicas e Desenvolvimento de Redes Sociais (2007) shows that, for a long time, women were banned from playing sports because they were considered incompatible and unsuitable for the gender. Although many paradigms have been broken, remnants are still found, making this still an aspect to be discussed and explored.

Regarding the diagnosis, we observed that more than half of the sample (59%) has Spinal Cord Injury - SCI, a condition that ends up subjecting the individual to several deficits that can vary from structural to functional due to a series of circumstances from the pathology or as secondary injuries such as inadequate positioning. Also, a serious injury can hinder or even cease the performance of occupational roles, requiring the individual to undergo a process of readjustment and acquisition of new ways of being and doing (Souza et al., 2013; Luzo et al., 2004; Kielhofner, 2009).

There are several benefits with sports practice for people with SCI, with emphasis on gaining aerobic capacity and maximum oxygen consumption, reducing the risk of cardiovascular diseases and respiratory infections, and decreasing the incidence of medical complications. These gains enhance the levels of community integration and participation, intensify independence and self-image, helping to cope with a disability, and favoring increased satisfaction and life expectancy (Silva et al., 2005; Medola et al., 2011).

The reflection developed here had a background in the sport since the sample is closely linked to this scenario, enabling a dialogue of their daily life. Thus, the first part of ORIL was directed based on the past as before the contact with the sport; present as from the first contact; and future as from the moment of the interview. However, as this study presented a cross-sectional design, we could establish a cause-and-effect relationship between occupational roles and sport.

Based on the analysis of the crossing of data from ORIL parts I and II (Table 4), the roles of caregiver, family member, and a religious are significant through the p-value ($p < 0.05$).

From the perspective of the roles reported with a greater emphasis on research, Aizava (2011) argues that these enable social support because they have the involvement in activities carried out with a certain frequency as the main characteristic and that comprise the co-participation of peers who may or may not have a family bond.

The same author describes this support as made up of communication networks in which mutual values are used and influencing the individual's performance in adapted sports under a variation of 24%, and the impacts caused by the reduction of stress, behavioral, cognitive, and affective manifestations (Aizava, 2011). The finding corroborates the study by Cruz (2012), which highlights the family as an enhancer of this support.

The volition as the first forming concept of MOHO is directly linked to the meaning that the individual gives to the activity and is strongly influenced by cultural and family contexts (Kielhofner, 2002). In a study carried out with 114 young people of school age who practice different modalities of adapted sports, the family is considered one of the main factors for the entry and permanence of the individual as an athlete, which has been enhanced in the current world scenario, in which Paralympic sports are gaining more and more space in the media. Such incentive is directly linked to the individual's self-image and motivation due to the feeling of being proud in the family (Resende et al., 2019).

According to Mizoguchi et al. (2013) and Aizava (2011), family relationships are directly associated with what they call emotional support: it comes as a performance enhancer in everyday life and encourages support self-confidence. In this study, they also present a positive correlation between this and the individuals' performance in sports, and the opposite (Aizava, 2011; Mizoguchi et al., 2013).

According to Haiachi et al. (2016), we need to consider other factors interconnected to this dynamic. For the authors, the sports environment has three types of barriers: environmental (architectural), structural (financial and inherent to the sport), and emotional conditions, which are associated with family relationships and also with those that are built in this context. In the practice of performance, the scenario in which this study was constituted opposes the last two barriers as being also facilitators as the athlete improves in the modality.

Another role in which we found expressive results was religiosity. It is linked to the proximity between the values and principles entrusted to the role with the sport (Ferreira, 2010). Through the p-value ($p = <0.01$), we observed that the extreme significance may also be related to what the author says about the attribution of the meaning of sanctuary to the body, becoming a common subject of care between sport and religion (Ferreira, 2010). Subjectively, this role is also included in the ideas presented by Aizava (2011) and Mizoguchi et al. (2013) when the analysis starts from the point of view of the support offered by social groups created in religious practice environments, which strengthen and are strengthened by sports practice.

Occupational therapy can contribute in the field of Sport and Parasport besides the skills training, prescription, preparation, and training of assistive technologies, becoming a fundamental professional area for the constitution of the multidisciplinary team as a catalyst for occupational performance and, also, for the strengthening of these support networks.

5 Final Considerations

Paralympic sport started to gain importance as an object of study in Brazil in the 90s. In 2001, according to Gorla & Nogueira (2016), physical education professionals began to dedicate continuously to professionalization in the modalities in the country. Even though occupational therapists had been developing actions with sports previously adapted, only in 2017, COFFITO legitimized the occupational therapist as a

professional working in the field. However, due to this still recent regulation, scientific productions are still incipient, making professionals end up basing their practices on similar sciences.

In the context of people with physical disabilities or reduced mobility, adapted sports athletes, in this case, end up facing architectural and attitudinal barriers, deficits related to occupational performance and the direct influence on their idiosyncrasy, and their way of interacting with the world, in the relationship with their body and with the other, identifying several possibilities for acting in occupational therapy.

Considering this dimension and believing in the occupational and social participation of these people, the occupational therapy service, in this context, seeks to promote integration at different moments to use sport as a facilitator of occupational performance, based on the principle that their practice enhances the development of skills, the therapeutic process and the performance of occupational roles. Therefore, we need to map/identify the current and desired occupational roles (present and future), to later develop and correlate the actions of occupational therapy with the sport.

As for the development of the research, we consider that the objective has been achieved. Also, we emphasize the concern with the description of occupational roles by the evaluator at the time of the interview since the practice of sports, in this case, was interpreted as the role of a worker, hobby/amateur, and also as “other”. The same can happen with other roles played by the participant, compromising the analysis of the results.

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