Quality of Life of People with Motor Disabilities, Involved or not in Parasports
Calidad de Vida de Personas con Discapacidad Motriz, Practicantes o no en Para-deportes

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Abstract. Objective: To assess the influence of parasports on the quality of life of people with motor disabilities. Methodology: Cross-sectional quantitative study carried out with 351 para-athletes ( Mean = 30.9 ± 11.7 years) and 90 non-athletes, with motor disabilities ( Mean = 31.6 ± 9.3 years). It was approved by the Research Ethics Committee of the State University of Pará (CAAE n° 51930821.2.0000.5174), under protocol n°. Decree No. 5,012,266, of October 1, 2021. Data was collected using a Google Forms questionnaire. Quality of life was assessed through the application of the World Health Organization Quality of Life Questionnaire — WHOQOL-100. The data were presented using descriptive statistics and subjected to inferential analysis using non-parametric tests, where the continuous distribution of data differs from the normal distribution. The Mann-Whitney non-parametric test was applied for intergroup comparisons of continuous variables. For discrete and/or nominal variables, Pearson’s chi-square test was used, both with a significance level of p < 0.05 to reject the null hypothesis. Results: Para-athletes had a better quality of life than non-athletes (Δ% = 12.97%, p = 0.02), with the former achieving a general index of 14.20, classifying them as high (above 14 points). This result is mainly due to Domain 6 (Spirituality), where this group obtained an index of 16.90, higher than the group of non-athletes in this domain (Δ% = 16.69%). Conclusion: Regarding their physical disabilities, the para-athlete group had a better quality of life than their non-athlete counterparts. It can be inferred that the practice of parasport may have helped people with physical disabilities to overcome their limitations. Keywords: Para-athlete; Persons with disabilities; Quality of Life Indicators; Quality of Life.

Resumen. Objetivo: Evaluar la influencia del parardeporte en la calidad de vida de personas con discapacidades motoras. Metodología: Estudio cuantitativo transversal realizado con 351 para-atletas ( X = 30.9 ± 11.7 años) y 90 no atletas con discapacidades motoras ( X = 31.6 ± 9.3 años). Fue aprobado por el Comité de Ética en Investigación de la Universidad Estatal de Pará (CAAE n° 51930821.2.0000.5174) bajo el protocolo n°. Decreto n°. 5,012,266, de 1 de octubre de 2021. Los datos se recopilaron mediante un cuestionario de Google Forms. La calidad de vida se evaluó mediante la aplicación del Cuestionario de Calidad de Vida de la Organización Mundial de la Salud - WHOQOL-100. Los datos se presentaron utilizando estadísticas descriptivas y se sometieron a análisis inferenciales utilizando pruebas no paramétricas, ya que la distribución de los datos no presentó una distribución normal. Se aplicó la prueba no paramétrica de Mann-Whitney para comparaciones intergrupales de variables continuas. Para variables discretas y/o nominales, se utilizó la prueba de chi-cuadrado de Pearson, ambas con un nivel de significancia de p < 0.05 para rechazar la hipótesis nula. Resultados: Los para-atletas tuvieron una mejor calidad de vida que los no atletas (Δ% = 12.97%, p = 0.02), logrando un índice general de 14.20, clasificándolos como alto (por encima de 14 puntos). Este resultado se debe principalmente al Domain 6 (Espiritualidad), donde este grupo obtuvo un índice de 16.90, superior al grupo de no atletas en este dominio (Δ% = 16.69%). Conclusión: En relación con sus discapacidades físicas, el grupo de para-atletas tuvo una mejor calidad de vida que sus colegas no atletas. Se puede inferir que la práctica del parardeporte puede haber ayudado a personas con discapacidades físicas a superar sus limitaciones. Palabras clave: Para-atleta; Personas con discapacidad; Indicadores de Calidad de Vida; Calidad de Vida.

Introduction

The current inclusion of persons with disabilities (PWD) in Brazil occurred due to the attitudes, actions and political discourse that emerged in the 1990s. The issue involves NGOs, families and people with disabilities fighting for their rights. This has become more consolidated since the end of the 20th century, by legal means and political debate surrounding their inclusion in society. Despite all these legal victories, exercising citizenship remains difficult in Brazil and much of the world. However, advances in overcoming attitudinal, architectural and communication barriers have prompted additional measures (Williams et al., 2020).

Unfortunately, deficiencies still occur in Brazil resulting from malnutrition of the mother (during pregnancy) or the child (after birth), infectious diseases (such as rubella, measles, infantile paralysis, meningitis, trachoma, and sexually transmitted diseases), lack of assistance or inadequate assistance to women during pregnancy and childbirth, lack of treatment or control of chronic diseases (such as high blood pressure or diabetes), lack of basic sanitation (piped water, sewage treatment, adequate disposal of waste, etc.), among others (Mate et al., 2021).

Another aspect to consider is their greater perception of poor quality of life (QoL) (Rengifo et al., 2024). This is due to the limitations and restrictions that are often imposed because of their disability, which may affect the interaction between environmental factors and PWD (Felix et al., 2023).

The World Health Organization (2012) defines QoL as an individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. The components of QoL contribute with a wide
range of assessment instruments, mainly cultural issues, which hinders a universal concept (Taylor, 2020).

Dantas et al. (2021) defined QoL as a complex multideterminant concept that should be continuously interpreted, not as a dichotomy (enjoying QoL or not), resulting from the correlation between factors that model and differentiate the day-to-day of individuals, in terms of their perceptions, relationships and experiences, that is, originating in a set of individual, sociocultural and environmental parameters that characterize the human condition, a community or a nation (Valero et al., 2023).

The literature reports the beneficial influence of regular exercise (Dauwan et al., 2021), and sports (Păunescu et al., 2018), including parasports (Felix et al., 2023) on QoL. Physical exercise has a direct influence on the autonomy and functionality of daily activities and even the self-esteem of people with disability (Doneddu et al., 2020). Another positive point of physical exercise is a healthy lifestyle; however, PWD must adhere to a PE program in order to obtain the benefits.

The positive effects of physical exercise are well documented in the literature, especially for PWD. Found that strength training reduces nerve lesions in patients with chronic inflammatory demyelinating polyradiculoneuropathy, due to muscle fiber hypertrophy, the anti-inflammatory effect of exercise or an increase in neural impulse.

Although practicing sports will not solve these public health problems of its own, it can help people with disabilities feel accepted in society (and accept themselves), help them interact with people and become proactive in seeking out information that can make your life easier (Alcaraz-Rodriguez et al., 2021). Practicing sports by people with disabilities or practicing Paralympic sports or even practicing any adapted sport can help reintegrate people with disabilities (Goh, 2020; Zapata et al., 2023).

Regular physical exercise is associated with better QoL perception by PWD. In addition to increasing functional capacity, it improves health and performance-related physical aptitude, depending on the intervention prescribed (Miranda et al., 2022).

It is important to encourage PWD to engage in planned physical activities, since they provide possibilities and resources that act as facilitators in recovering and promoting personal functions, functional autonomy and self-esteem, leading to greater propensity to exhibit a positive outlook on QoL (Herrera et al., 2024).

Hence, the primary goal of this study was to evaluate the impact of parasport on the quality of life of individuals with disabilities, conducted with both parasport participants and non-participants with disabilities.

Materials and Methods

Study design

Cross-sectional quantitative study conducted between October 2021 and January 2022. This type of study allows the researcher to adopt an observational approach, collecting data for a specific period (Zhang et al., 2023).

Universe and Sampling

According to data released by the Brazilian Institute of Geography and Statistics (IBGE) from the Brazilian Demographic Census conducted in 2022, Brazil had a population of 203,062,512 individuals as of July 31, 2022. Of this population, 8.4% were reported to have some form of disability (IBGE, 2022), with 38.9% being male and 61.1% female, totaling 17,057,251 individuals with disabilities (IBGE, 2022). This represents a significant portion of the population that must be considered in the planning and development of public policies and actions (Brito, 2021).

This demographic group is inherently rare due to the nature of disabilities and potentially diminished when considering para-athletes. This rarity enhances the qualitative representativeness of the studied population, thus even with a small sample size, the representativeness of the target population remains high.

The sampling was conducted by convenience, based on the following inclusion and exclusion criteria:

Included in the study were young adults with motor disabilities, aged between 18 and 39 years, and mature subjects (40 to 59 years), according to the WHO’s classification (Bull et al., 2020).

On the other hand, those with health complications, resulting or not from their disability, that could compromise their activities of daily living in the previous two weeks, were excluded.

Sample

The sample consisted of two groups: 351 adult para-athletes ($\bar{X} = 30.9 \pm 11.7$ years) participants of the Caixa Lotérica Paralympic Meeting, whose data were collected on December 4, 2021. The para-athletes participating in the meeting were from the following sports disciplines: Track and Field, Powerlifting, and Swimming, and 90 adult non-athletes with motor disabilities ($\bar{X} = 31.6 \pm 9.3$ years), members of the Association of Persons with Motor Disabilities of Sergipe, whose data were collected between January 3 and 15, 2022. In both groups, the disabilities presented were motor, visual and auditory.

Research Ethics

The present study was approved by the Research Ethics Committee of the University of the State of Para – (CAAE nº 51930821.2.0000.5174), under protocol no. 5.012.266 of October 1, 2021, complying with the human research guidelines of National Health Council Resolution no. 466/12 of December 12, 2012, and the Declaration of Helsinki (Verniero et al., 2022).

Preliminary Procedures

A prior contact was made with people with disabilities and participating entities, so that the entire research procedure was adequately explained. The necessary precautions
have been taken to ensure the ethics of the research - regarding the anonymity and confidentiality of the data that will be provided, and the participants have given their consent by signing the Free and Informed Consent Form, relating to participation in the investigation – individual data from research participants will be collected using a Google form.

Through anamnesis, sociodemographic data will be collected from research participants. The variables to be researched will be gender, age, self-reported ethnicity, education level and income (according to IBGE criteria, 2022).

Assessment of quality of life

The instrument used to identify QOL levels was the World Health Organization Quality of Life - WHOQOL-100, developed by the World Health Organization (WHO). This validated instrument is composed of 100 questions, which evaluate six domains: physical, psychological, level of independence, social relationships, environment and spiritual aspects, religion and personal beliefs (Kim, 2021). The instrument with 100 questions has 24 facets, each facet has four questions. In addition to these, the instrument has a 25th facet, made up of 40 general questions about quality of life. Answers to Whoqol questions are given on a Likert-type scale. Questions are answered using four types of scales, depending on the content of the question: intensity, capacity, frequency and evaluation. The questionnaire will be self-administered using an electronic spreadsheet, created using the Google Drive application.

The WHO considers that subjectivity, multidimensionality and positive and negative dimensions are fundamental aspects for understanding this construct (Kim, 2021). It is based on the assumptions that QoL is a subjective, multidimensional construct composed of six dimensions: Domain 1 – Physical; Domain 2 – Psychological; Domain 3 – Social Relations; Domain 4 – Environment; Domain 5 – Independence; Domain 6 – Spirituality.

This instrument meets the Likert scale, in which five responses are presented, with: 1 being the strongest in disagreement and 5 being the highest degree of agreement. The final result will be through obtaining scores, in which 4 corresponds to the lowest level, 20 to the highest level and 14 to the minimum satisfactory level of quality of life. The instrument with 100 questions has a facet that identifies body image, appearance, work ability, negative feelings, sexual capacity, social support and the environment (Puce at al., 2023). The questionnaire will be self-administered using an electronic spreadsheet, created using the Google Drive application.

The assessment of QoL using WHOQOL 100, in addition to quantifying each of its dimensions, already mentioned above, allows the identification of a general QoL index, a numerical index with a maximum value of 20. This index can be classified into levels, as shown in Figure 1 (Mello, 2008).

This instrument also served as the basis for the development of the QoL Questionnaire, with construct validity in Brazilian samples and composed of 100 questions, two of which refer to individual perception regarding QoL with six domains, which make up the original instrument (WHOQOL-100), such as: Domain I – Physical, with emphasis on pain and discomfort, energy and fatigue, sleep and rest, mobility, activities of daily living, dependence on medication or treatments and work capacity; Domain II – Psychological, emphasizing positive feelings, thinking, learning, memory and concentration, self-esteem, body image and appearance, negative feelings; Domain III – Social relationships, addressing personal relationships, social support, sexual activity; Domain IV – Environment, home environment, financial resources, health and social care: availability and quality, participation in, and recreation/leisure opportunities, physical environment: pollution, noise, traffic, climate and transport; Domain V – Independence, referring to physical safety and protection, opportunity to acquire new information and skills; Domain VI – Spirituality, addressing spirituality, religion and 35 personal beliefs.

Results

In Table 1, an overview of the key sociodemographic characteristics of the study participants is presented. This table summarizes data related to age, gender, marital status, ethnicity, and educational background. The information presented in this table is essential for understanding the profile of the participants and establishes the foundation for the subsequent analysis of their quality of life in the context of parasport.

The final column in the table, labeled 'Sig. p,' is a crucial component of the data presentation. It represents the statistical significance (p-value) associated with the comparisons and analyses performed in this study. The p-value is a fundamental statistical measure that helps us determine whether observed differences or associations in the data are statistically meaningful. A p-value below a certain threshold (often 0.05) indicates that the findings are statistically significant, implying that the observed differences are unlikely to have occurred by chance. In this context, the 'Sig. p' column aids in identifying whether the variations in sociodemographic characteristics or quality of life among the groups...
are statistically significant or not. A low p-value suggests a stronger likelihood that the observed differences are real and not due to random variation.

Table 1. Distribution of Sociodemographic Variables

<table>
<thead>
<tr>
<th></th>
<th>No Athletes</th>
<th>Disabled Sports Participants</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>204 (90)</td>
<td>574 (237)</td>
<td>778</td>
</tr>
<tr>
<td>Female</td>
<td>50% (65)</td>
<td>84% (147)</td>
<td>144</td>
</tr>
<tr>
<td>Male</td>
<td>49% (35)</td>
<td>26% (91)</td>
<td>126</td>
</tr>
</tbody>
</table>

Table 2 categorizes the reasons for physical disability within the study cohort, encapsulating the diverse factors contributing to these disabilities. This comprehensive breakdown offers valuable insights into the underlying causes that have led to disability among the participants, allowing for a deeper understanding of the factors at play in the parasport community.

Table 2. Reason for Physical Disability.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Sport Practice</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dom1 - Physical</td>
<td>No</td>
<td>90</td>
<td>11.05</td>
<td>1.40</td>
<td>0.44</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>351</td>
<td>12.52</td>
<td>1.44</td>
<td>0.23</td>
</tr>
<tr>
<td>Dom2 - Psychological</td>
<td>No</td>
<td>351</td>
<td>12.68</td>
<td>2.13</td>
<td>0.67</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>19</td>
<td>15.12</td>
<td>1.40</td>
<td>0.22</td>
</tr>
<tr>
<td>Dom3 - Social Relationships</td>
<td>No</td>
<td>351</td>
<td>12.25</td>
<td>1.43</td>
<td>0.45</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>19</td>
<td>13.28</td>
<td>1.23</td>
<td>0.20</td>
</tr>
<tr>
<td>Dom4 - Environment</td>
<td>No</td>
<td>315</td>
<td>11.13</td>
<td>2.89</td>
<td>0.91</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>19</td>
<td>13.53</td>
<td>1.72</td>
<td>0.28</td>
</tr>
<tr>
<td>Dom5 - Independence</td>
<td>No</td>
<td>315</td>
<td>12.14</td>
<td>2.28</td>
<td>0.72</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>19</td>
<td>13.82</td>
<td>1.35</td>
<td>0.22</td>
</tr>
<tr>
<td>Dom6 - Spirituality</td>
<td>No</td>
<td>315</td>
<td>15.90</td>
<td>4.89</td>
<td>1.55</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>19</td>
<td>16.90</td>
<td>3.09</td>
<td>0.50</td>
</tr>
<tr>
<td>Overall Index</td>
<td>No</td>
<td>315</td>
<td>12.57</td>
<td>2.17</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>19</td>
<td>14.20</td>
<td>1.71</td>
<td>0.31</td>
</tr>
</tbody>
</table>

As for the reason for incapacity, we observed the predominance of birth problems for DSP (48.7%) and disease sequelae for non-athletes (40%). Regarding the level of education, it can be seen that the majority of the sample group had incomplete secondary education, with an advantage for DSP (Δ% = 40.1%).

The quality of life of the sample was assessed using the World Health Organization Quality of Life - WHOQOL-100 questionnaire. The results were divided into six domains and an overall index (OI), as presented in Table 1.

Table 2 shows that the para-athletes exhibited better quality of life than their non-athlete counterparts (Δ% = 12.9%), reaching an OI of 14.20, classified as high (above 14 points), primarily due to the result of Domain 6 (Spirituality), where the group obtained an index of 16.90, also higher than the result of the non-athletes in this domain (Δ% = 16.69%).

The table 3, presents the results of statistical comparisons conducted using the Mann-Whitney test to assess variations in the quality of life among different groups. It provides an overview of the statistical significance (p-values) associated with these comparisons, allowing us to identify whether there are statistically significant differences in the quality of life measures between the groups. This analysis offers valuable insights into the impact of parasport on the quality of life of individuals with disabilities, highlighting any noteworthy disparities among various subpopulations.

Table 3. Quality of life levels by domain and overall index

<table>
<thead>
<tr>
<th>Domain</th>
<th>Non-Athletes</th>
<th>Disabled Sports Participants</th>
<th>Total</th>
<th>Sig. p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth</td>
<td>20% (18)</td>
<td>48.7% (171)</td>
<td>42.9% (189)</td>
<td>0.002</td>
</tr>
<tr>
<td>Spastic paraplegia</td>
<td>20% (18)</td>
<td>7.7% (27)</td>
<td>10.2% (45)</td>
<td>0.153</td>
</tr>
<tr>
<td>Disease sequelae</td>
<td>40% (36)</td>
<td>15.4% (54)</td>
<td>20.4% (90)</td>
<td>0.001</td>
</tr>
<tr>
<td>Trauma sequelae</td>
<td>20% (18)</td>
<td>28.2% (99)</td>
<td>26.3% (117)</td>
<td>0.005</td>
</tr>
</tbody>
</table>

Based on the QoL, the para-athletes exhibited significantly better QoL (p = 0.002) than their non-athlete counterparts. Although the greatest difference was observed in Domain 6 (Spirituality), it was not statistically significant (p = 0.913 <0.05).

On the other hand, differences were detected in Domains 1 (Physical), 2 (Psychological) and 5 (Independence), with p= 0.022 and 0.001 and 0.014, respectively. These three domains were considerably influenced by motor disabilities, which clearly shows the para-athletes’ satisfaction in overcoming their limitations.

The differences in these dimensions are illustrated in figures 2, 3, 4 and the table 4.
Table 4

<table>
<thead>
<tr>
<th>Variable</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dom 1 – Physical</td>
<td>0.022*</td>
</tr>
<tr>
<td>Dom 2 – Psychological</td>
<td>0.001*</td>
</tr>
<tr>
<td>Dom 3 – Social Relationships</td>
<td>0.122</td>
</tr>
<tr>
<td>Dom 4 – Environmental</td>
<td>0.015</td>
</tr>
<tr>
<td>Dom 5 – Independence</td>
<td>0.014*</td>
</tr>
<tr>
<td>Dom 6 – Spirituality</td>
<td>0.913</td>
</tr>
<tr>
<td>Overall/General Index</td>
<td>0.002*</td>
</tr>
</tbody>
</table>

Legend: * significant intergroup difference.
Source: 2022 survey data.

Index 12 predominates in the para-athletes’ responses to Domain 1 (Physical), obtained using the WHOQOL-100 questionnaire (Figure 2).

Figure 3 demonstrates the clear prevalence of index 15 for Domain 2 (Psychological) and a significant advantage for the para-athletes over their non-athlete counterparts.

Figure three analyzes the results of Domain 5 (Independence), showing near-normal distribution in indices 12, 13, 14 and 15 for the para-athletes.

The other variables showed no significant intergroup differences.

Discussion

It is worth highlighting that the sample size of the present study, although it may seem small, is fully compatible with studies of the same nature (Rodrigues, 2019; Solera et al, 2021; Bundon et al, 2022; Papailiou et al, 2023) due to the natural rarity of the sample universe, due to the disability itself, which corresponds to approximately 10% of the total population and, potentially, reduced in the case of para-sportsmen (Quinn; Misener; Howe, 2022; Storli, Aune & Lorås, 2022; Papailiou et al, 2023).

Measuring the quality of life of Paralympic athletes, we found that PWDs who play sports evaluate their QOL favorably as found in the literature (Freire et al, 2019a; Wellichan; Leung et al, 2021; Calheiros et al, 2021; Szeliga et al, 2022; Mira et al, 2022).

The present study coincides only with the age group investigated by Jacinto et al., 2022, consisting of 127 volunteers aged between 18 and 50 years. The authors evaluated the domains of quality of life (QoL), revealing that physical activity tends to benefit social aspects. On the other hand, a comparison of the results by domain with the findings of the present study showed agreement in Domains 3 (Social Relations) (13.79 in Rafael and 13.28 in this study) and 6 (Spirituality), with 16.82, practically the same result found in the para-athletes evaluated here (16.90).

From Aquino et al. 2021 aimed to evaluate the perceived QoL of 22 individuals from the state of Pernambuco involved in para-aerobics. The WHOQOL-100 questionnaire was applied to the age group of young adults, with Domain 4 (Environmental) obtaining the lowest result. The authors attribute this result to difficult access to public facilities. This was not observed in the present study, since
this domain scored higher than many others (13.53). Although QoL should not be investigated exclusively through questionnaires, with many studies doing so qualitatively, the WHOQOL-100 focuses on all six domains, allowing for a more effective approach to the variable and resulting in a more detailed study.

In fact, Freire et al (2019b) compared the QOL of Brazilian athletes and para-athletes (n=127) and found a lower perception of Quality of Life in the physical and general Quality of Life domains among groups of athletes and para-athletes. There was no significant difference in the comparison between genders in the researched groups, but they found significant differences in the perception of Quality of Life between athletes with and without sponsorship, contrasting with the study carried out exclusively with para-athletes (n=30; Freire et al, 2019a ), in the same year, when they found no significant differences between the perception of QoL between para-athletes with and without sponsorship, and the socio-economic factor also did not interfere in the perception of QoL of the para-athletes evaluated.

Freire et al (2019b) also found significant differences in athletes and para-athletes in the physical, psychological and general Quality of Life domains. They concluded that there was no causal evidence about the impact of Quality of Life on athletes and para-athletes, but they called attention to sports entities improving the conditions of transportation, housing, security and financial resources for both athletes and para-athletes (all related to the Domain WHOQOL Environment).

In our study, 49.5% of Brazilian para-sportsmen have practiced the sport for 1 to 5 years and 28.6% have practiced the sport for between 6 and 10 years. In the study by Mira et al, 51.6% have been practicing for 12 years or more and 35.5% have been practicing between 8 and 11 years. The vast majority of Brazilians (41.7%) train 3x/week and 29% train 2x/week.

In the research, QoL was positively evaluated by Brazilian para-sportsmen in the following domains: psychological, independence, environment and spirituality, being worse evaluated in the physical and social relationships domains. In the study by Mira et al (2022), para-athletes showed high values of life satisfaction, a result that corroborates older studies cited in the article. Silva, Monteiro and Sobreiro (2020) state that subjective well-being is positively affected by the sports participation of people with disabilities, reinforcing the findings of our work.

Conclusions

Quality of life is an individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. The initial hypothesis of this study was that motor disabilities, often debilitating, would result in a group with low QoL. However, this is not what occurred. The para-athlete group exhibited better quality of life than their non-athlete counterparts (Δ% = 12.97%, p = 0.02), reaching an overall index of 14.20, classified as high (above 14 points).

The findings of this study, focusing on individuals with motor impairments, predominantly para-athletes, have allowed us to challenge prevailing stereotypes and replace them with a vivid sense of optimism. Interacting with individuals who have motor disabilities, including wheelchair users, amputees, and prosthetic wearers, all exuding motivation, positivity, and joy, has compelled us to reconsider the prior paradigm surrounding this community. This reevaluation is particularly remarkable given the current global backdrop of immeasurable losses resulting from the ongoing pandemic. Para-athletes serve as a beacon of resilience and remarkable fortitude. Alongside their rigorous training regimens, they juggle work and education while enjoying unwavering support from their families. Their unwavering commitment, infectious smiles, and their unwavering dedication to the world of sports are a testament to their enduring spirit.

This study underscores the importance of recognizing and celebrating the exceptional qualities of para-athletes, providing valuable insights for the formulation of policies and support systems that can improve the lives of people with disabilities, particularly during challenging times like the current global health crisis. The study’s findings shed light on the need for more inclusive policies and the promotion of parasports, not only for enhancing the quality of life for individuals with disabilities but also for changing societal perceptions and fostering a more inclusive and compassionate world. This insight is instrumental in guiding the development of public policies that can better cater to the needs and aspirations of individuals with disabilities, ultimately fostering a more equitable and inclusive society.

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Conflict of interest

None of the authors have conflicts of interest

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