childhood. Physical therapists and other health professionals, such as physical education teachers, can integrate this knowledge into educational programs aimed at improving children's motor performance, with positive impacts on their functional abilities.
Keywords: Child, Motor skills, Physical therapy specialty

Conflict of interest: The authors declare no conflict of interest.
Funding: CAPES — Finance Code 001.
Ethics committee approval: CAAE: 69652123.8.0000.5208.
Registration: Not applicable.

https://doi.org/10.1016/j.bjpt.2025.101371

109

PARENTAL EXPERIENCES IN THE PARTICIPATION OF THEIR CHILDREN WITH ATYPICAL DEVELOPMENT IN A COMMUNITY AQUATIC STIMULATION PROJECT: AN INCLUSIVE PERSPECTIVE

Regina Alves de Oliveira[a], Maria Thereza Santos Rocha[b], Julia Carvalho De Almeida[a], Lucas Barbosa da Costa[a], Wellington Fabiano Gomes[b,c], Rosalina Tossige Gomes[a,b], Rosane Morais[a,b]
[a] *Programa de Pós-graduação em Reabilitação e Desempenho Funcional, Universidade Federal dos Vales do Jequitinhonha e Mucuri (UFVJM), Diamantina, MG, Brazil*
[b] *Departamento de Fisioterapia, Universidade Federal dos Vales do Jequitinhonha e Mucuri (UFVJM), Diamantina, MG, Brazil*
[c] *Programa de Pós-graduação em Saúde da Família, Universidade Federal dos Vales do Jequitinhonha e Mucuri (UFVJM), Diamantina, MG, Brazil*

Background: Some children may have significant motor delays or difficulties, impacting on their ability to participate in activities and interact in the community. The International Classification of Functioning, Disability and Health (ICF) defines participation as "involvement in life situations", highlighting its relevance to healthy development and its relationship with activities that favor social interactions. Various physical and environmental factors can limit this participation, and these restrictions can vary according to individual needs and the characteristics of the environment in which the person is inserted.
Objectives: This study aimed to understand the experience and point of view of parents of children with atypical development about the experience and participation of their children in an aquatic stimulation project for children.
Methods: This is a qualitative, descriptive case study carried out with participants in an aquatic stimulation project for children. Six participants were selected using the "sampling by type variety" technique to answer a semi-structured individual interview in January and February 2024. The data collected was analyzed using the "content analysis" technique, which allowed categories to be identified. The research was approved by the Research Ethics Committee.
Results: Data analysis resulted in eight categories: (1) the adaptation process and challenges faced; (2) interaction with other children; (3) facilitators in participation; (4) how other parents and children react; (5) involvement of the child in an integrated and equal way; (6) impact on cognitive, language and motor development; (7) impact on affective-social behavior; (8) affective bond. Parents reported benefits in their children's overall development, including motor gains and stronger emotional bonds.
Conclusion: The results indicate that participation in the aquatic stimulation project provides significant benefits for the children involved. The study identified both barriers and facilitators that impact participation, reinforcing the importance of adapted and inclusive practices that encourage greater social interaction.
Implications: This study suggests the need for continuous training for professionals who work with children, as well as the importance of public policies that promote inclusion in various contexts. Understanding the barriers and facilitators can help to create more effective strategies, guaranteeing access and participation for these children in social and recreational activities, which are fundamental for their development and integration into the community.
Keywords: atypical development, aquatic stimulation, facilitators and barriers

Conflict of interest: The authors declare no conflict of interest.
Funding: Not applicable.
Ethics committee approval: CAAE n.° 58267522.0.0000.5504.
Registration: Not applicable.

https://doi.org/10.1016/j.bjpt.2025.101372

110

EFFECTS OF NEUROFUNCTIONAL REHABILITATION ON FUNCTIONALITY, PERFORMANCE AND ACTIVITIES IN CHILDREN DIAGNOSED WITH CEREBRAL PALSY: A LONGITUDINAL STUDY

Franciele Zardo, Fernanda Cechetti, Carlos Guilherme de Oliveira Menestrino, Daiane Bridi, Monique Schorn, Isabelle Cousseau, Ketlyn Leal, Sabrina Rosa De Oliveira
Universidade Federal de Ciências da Saúde de Porto Alegre (UFCSPA), Porto Alegre, RS, Brazil

Background: Long-term physiotherapeutic follow-up is essential for optimizing motor and functional development in children diagnosed with cerebral palsy. As a highly heterogeneous condition, cerebral palsy significantly impacts mobility, social participation, and independence in diverse ways. Understanding the long-term effects of neurofunctional rehabilitation is crucial for improving therapeutic interventions and patient outcomes.
Objectives: This study aims to evaluate the effects of neurofunctional rehabilitation on gross motor function, self-care, mobility, and social function in children with cerebral palsy. A secondary objective was to analyze how different severity levels classified by the Gross Motor Function Classification System (GMFCS) influence rehabilitation outcomes.
Methods: A prospective longitudinal cohort study was conducted with 29 children aged 0 to 12 years diagnosed with cerebral palsy. Assessments were performed at four time points over nine months. Gross motor function was measured using the Gross Motor Function Measure (GMFM), while self-care, mobility, and social function were evaluated using the Pediatric Evaluation of Disability Inventory (PEDI). Participants were classified according to the GMFCS and analyzed in two groups: levels I-II-III and levels IV-V.
Results: Significant improvements in gross motor function were observed across all GMFCS levels. Children classified as levels I-II-III showed significant progress in standing and walking-related scales, whereas those at levels IV-V demonstrated improvements mainly in seated posture stability. Regarding mobility and social function, only children in levels I-II-III exhibited significant advancements. No substantial changes were found in the need for assistance among children or caregivers in levels IV-V.
Conclusion: Neurofunctional rehabilitation proved effective in improving gross motor function across all GMFCS levels, particularly enhancing mobility and social function in children with milder impairments. For those with more severe motor limitations, the

primary gains were related to postural stability in the seated position. These findings highlight the necessity of personalized rehabilitation programs and long-term follow-up to maximize functional independence.
Implications: This study underscores the fundamental role of combining multiple evidence-based rehabilitation methods and techniques to optimize functional outcomes in neurofunctional rehabilitation. The findings emphasize that a multimodal approach—integrating different therapeutic strategies—enhances functional independence and social participation more effectively than isolated interventions. Future research should further explore the synergy between various rehabilitation techniques and advocate for their broader integration into healthcare and educational policies, ensuring expanded access to specialized and comprehensive care.
Keywords: Cerebral Palsy, Neurological Physiotherapy, Rehabilitation, Motor Activity, Patient Participation, Longitudinal Studies

Conflict of interest: The authors declare no conflict of interest.
Funding: Not applicable.
Ethics committee approval: CAAE: 67426223.4.0000.518.
Registration: Not applicable.

https://doi.org/10.1016/j.bjpt.2025.101373

111

DEVELOPMENT OF MOBILITY PERFORMANCE IN BRAZILIAN CHILDREN AND ADOLESCENTS WITH CEREBRAL PALSY

Beatriz Bicalho Saraiva, Elton Duarte Dantas Magalhaes, Ana Cristina Resende Camargos, Kennea Martins Almeida Ayupe, Maria Eduarda De Araujo Almeida Muniz, Letícia Vicente Menigatti, Paula Silva de Carvalho Chagas, Hércules Ribeiro Leite
Universidade Federal de Juiz de Fora (UFJF), Juiz de Fora, MG, Brazil

Background: Parents of children with cerebral palsy (CP) have desires for changes in their children's mobility. Knowing the level of mobility of these children is crucial for guiding the prognosis and aligning family expectations.
Objectives: To identify the development of mobility performance in Brazilian children and adolescents stratified by each level of the Gross Motor Function Classification System (GMFCS).
Methods: This is a multicenter study, which included 313 Brazilian children and adolescents with CP (aged 2 to 18 years). Mobility performance was assessed by the Gross Motor Function Family Report (GM-FR), and the classification level was determined by the GMFCS. To identify mobility performance, the nonlinear regression model developed by Palisano (2000) was used.
Results: A total of 368 evaluations were performed, with a mean age of 7.21 years ($\pm$3.746). The GMFCS level proved to be a strong predictor and explained 78% ($R^2 = 0.78$; $p < 0.001$) of the variation in mobility, while age was not a predictor ($R^2 = 0.23$; $p < 0.061$). The predicted GM-FR scores differed across the five mobility curves: [level I (N = 63) = 89.1; level II (N = 70) = 80.6; level III (N = 40) = 56.7; level IV (N = 60) = 32.8; level V (N = 128) = 13.9]. The difference in the predicted GM-FR score between the GMFCS levels was, on average, 19.88 points, with the smallest difference between levels I and II (8.9 points). The age at which the children reached 90% of the predicted GM-FR score was: GMFCS I: 4 years; GMFCS II: 6 years and 1 month; GMFCS III: 3 years and 6 months; GMFCS IV: 3 years and 9 months; GMFCS V: 3 years and 11 months.
Conclusion: The classification of children with CP based on abilities and functional limitations is predictive of mobility. Children with GMFCS levels I and II exhibit less variation in mobility between them, while the other levels show greater variation. Additionally, children with higher GMFCS levels take longer to reach the expected limit.
Implications: The implications of this study highlight that the functional classification of children with cerebral palsy, based on the GMFCS, is a strong predictor of motor performance and mobility. Children in GMFCS levels IV and V reach the expected mobility limit more quickly, in contrast to children with GMFCS levels I and II, who show less variation in performance. This suggests that, for children with higher GMFCS levels, therapeutic interventions should focus on maximizing functional capacity within their level of mobility, given that they face greater limitations. Furthermore, everyday performance skills, as reflected in the GM-FR, emerge as stronger predictors of mobility than chronological age. This finding underscores the need for rehabilitation strategies that consider functionality in real-life contexts, not just motor skills in clinical settings, and highlights the importance of public policies that promote inclusion and accessibility for all children with CP, especially those with GMFCS levels IV and V.
Keywords: Cerebral palsy, Mobility, Capacity, Performance

Conflict of interest: The authors declare no conflict of interest.
Funding: CAPES - Finance Code 001, CNPq and FAPEMIG.
Ethics committee approval: CAAE: 75664923.3.0000.0003.
Registration: Not applicable.

https://doi.org/10.1016/j.bjpt.2025.101374

112

CEREBRAL PALSY AND EQUINE-ASSISTED SERVICES: EXPLORING THE BENEFITS OF EQUINE STIMULATION

Marieli Matias Ramos, Aline Aparecida Ribeiro, Marli Nabeiro
Departamento de Educação Física, Faculdade de Ciências, Universidade Estadual Paulista "Júlio de Mesquita Filho" (UNESP), Campus Bauru, Bauru, SP, Brazil

Background: Cerebral palsy (CP) is a movement and posture disorder caused by a non-progressive brain injury. Various interventions can support children with CP, including equine-assisted services, which have demonstrated positive effects on motor function.
Objectives: This study aimed to evaluate changes in the functional abilities of a child with CP following participation in an equine-assisted services program.
Methods: A case study was conducted with a 4-year-10-month-old male child, using a quantitative research approach. The intervention comprised weekly 45-minute sessions over 12 weeks, totaling eight sessions. Functional assessment was conducted through pre- and post-testing using the Pediatric Evaluation of Disability Inventory (PEDI), which measures performance across three domains: self-care, mobility, and social function. The PEDI also assesses the level of independence, the need for assistance, and the use of environmental modifications to facilitate performance.
Results: Post-intervention, the child exhibited notable improvements. The self-care score increased from 21 to 84, mobility improved from 12 to 17, and social function rose from 10 to 13. These findings suggest a positive impact on functional abilities, as evidenced by the score advancements.
Conclusion: Participation in the equine-assisted services program contributed to enhanced functional performance in a child with CP, as reflected in the post-test results. These findings underscore the potential of equine-assisted interventions as a valuable therapeutic modality for children with CP. Future studies should explore the effects of increased session frequency and duration.