

**Editorial**

It is our great pleasure to welcome you to the 18th European Congress of Adapted Physical Activity (EUCAPA) 2026, hosted in Prague. This volume reflects not only the breadth of contemporary research and practice in Adapted Physical Activity (APA), but also the deep historical roots and strong institutional foundations that continue to shape the field across Europe and beyond.

The Czech Republic holds a unique and often underappreciated place in the history of disability sport. Notably, the first organized sports games for individuals with disabilities pioneered by Vojmír SRDEČNÝ took place at the rehabilitation institute in Kladruba – three months prior to the now widely recognized Stoke Mandeville Games in the United Kingdom. This early initiative stands as a powerful reminder that the values of inclusion, rehabilitation, and empowerment through movement have long been embedded in our country.

EUCAPA 2026 is also closely connected to the ongoing “Czech support” for the work of the European Federation of Adapted Physical Activity (EUFAPA), as well as the European Journal of Adapted Physical Activity as EUJAPA plays a key role in disseminating high-quality research and advancing evidence-based practice in the field.

The hosting of EUCAPA in the Czech Republic follows a meaningful ten-year cycle – Olomouc in 2006, Olomouc again in 2016, and now Prague in 2026. This continuity reflects not only organizational commitment, but also the sustained growth of APA as a discipline within the country. The Czech Republic has developed a strong academic and professional tradition in APA, with established study programs in both Olomouc and Prague, a national professional association ČAAPA, and a vibrant culture of conferences, seminars, and publications.

This tradition is further exemplified by internationally recognized scholars whose contributions have been acknowledged through prestigious awards, including recipients of the IFAPA Elly D. Friedmann Professional Contribution Award. Their work continues to inspire new generations of researchers and practitioners.

Importantly, the Czech Republic is also at the forefront of implementing systemic support for inclusive physical education. Through initiatives such as the Center of APA in Olomouc and the introduction of professional positions like Adapted Physical Activity Consultants, we are witnessing meaningful steps toward embedding inclusion into everyday educational practice.

We hope that EUCAPA 2026 in Prague will serve as a source of inspiration, collaboration, and innovation for all participants. It is our sincere wish that the ideas shared here will contribute to a more inclusive and active society.

We look forward to welcoming you possibly again to the Czech Republic in 2036.

Martin Kudláček

Former EUFAPA president and Chair of the Scientific Committee of EUCAPA 2026

EUCAPA 2026: Book of Abstracts

Subtheme: Leisure Recreation and Psychosocial Aspects of APA	12
Keynote: Sport psychology for parasport	12
J. Martin	12
Subtheme: Physical Education and Inclusive Activities	13
Keynote: How universal design for learning may shape inclusive physical education: pathways, practices, and possibilities	13
N. Morgulec-Adamowicz.....	13
Subtheme: Psychomotricity as a part of APA	14
Keynote: Psychomotricity as a resource in challenging times: Insights into movement projects that overcome (language) barriers.....	14
M. Vetter	14
Subtheme: Rehabilitation and Exercise Therapy	15
Keynote: Safeguarding para athletes’ health: From injury risk to sustainable performance	15
K. Fagher	15
Subtheme: Sports from beginner to Paralympian.....	16
Keynote: Living in the presence, Honouring the past and shaping the future: The heart of APA in Europe – The Czech Story	16
M. Kudláček	16
Subtheme: Technology and Adaptive Equipment.....	17
Keynote: Paralympic classification – Eligibility, the border of disqualification.....	17
Y. Vanlandewijck	17
Oral Presentations.....	18
Common components of inclusive sport practices: a physical activity model analysis based on multi-country project results.....	18
P. Aksen ¹ , C. Ocete ² , J. Gutiérrez ³	18
The impact of dance on the motor development of children with ASD	19
I. Araújo ¹ , M. Gomes ²	19
Future training needs in adapted physical activity in Europe: Insights from a multi-country survey.....	20
U. Barrett ¹ , M. Reponen ² , O. Ješina ³	20
From disability to athletic identity: A qualitative exploration of the experiences of Turkish amputee football national team players.....	21
G. Beyazoğlu ¹ , Y. Altıparmak ¹ , E. Kara ¹ , Z. Kurt ¹	21
Perceptions on the use of 3D printing in adapted physical education	22
M. Bittner ¹ , S. Wogulis ² , C. Simpson ³ , B. Bittner ⁴	22
When evidence leads to action: Using SROI and pricing research to improve access to adaptive sports equipment	23
B. Blommestein.....	23
Supporting primary school teachers to include a child with a visual impairment in PE lessons.....	24
N. Boylan ¹ , F. Murphy ² , S. McCauley Lambe ³	24
Motor skill predictors of executive function in individuals with visual impairments.....	25
A. Brian ¹ , L. J. Lieberman ² , P. Beach ³ , A. Pennell ⁴	25
Motivation of Venezuelan refugees with physical disabilities to play wheelchair basketball	26
V. Cardoso ¹ , R. Bastilha ² , K. Richil ¹	26
Paralympic School Day: A mixed-methods systematic review.....	27

V. Caron ¹ , L. Lieberman ² , V. Pittet ¹	27
Analysis of digital information quality regarding access for people with physical disabilities in the national parks of Spain and Croatia.....	28
A. Castro-Sancho ¹ , H. Esteve-Ibáñez ¹ , L. Jiménez-Monteagudo ¹ , A. Sánchez-Rodríguez ¹	28
Resistance training in elderly people with sarcopenia: Systematic review	29
S. Charitou ¹ , N. Zariopi ¹ , K. Asonitou ¹ , M. Skordilis ¹	29
Design of an inclusive hiking model using a mountain wheelchair to promote participation of people with disabilities in outdoor physical activities.	30
C. Climent-Oltra ¹ , L. Jiménez-Monteagudo ¹ , L. Ramos ¹	30
Feasibility and acceptability of a supervised physical activity program for mothers of children with developmental disabilities	31
L. Columna ¹ , J.-L. Concepción ¹ , C. Cuebas ¹ , T. S. Yadav ¹ , M. Barquero ¹ , G. Swarup ¹ , D. Schaefer ¹ , C. Padilla ¹ , B. Ku ² , J. Meyer ¹	31
Quality of life and life satisfaction in sitting volleyball players: A two-wave study from the czech republic	32
K. Daďová ¹ , D. Arnošt ¹	32
The 4 Dojos: A motor story workshop to foster positive attitudes toward inclusion in judo	33
G. Descamps ^{1,2}	33
Coaching para sport in ireland: Qualitative insights to guide a national coach development framework	34
A. Dineen ^{1,2,3,5} , B. Hughes ⁵ , P. Kearney ^{1,3} , E. Murtagh ^{1,2} , F. Nugent ^{1,3} , I. Sherwin ^{1,3,4} , S. Healy ^{1,2}	34
The effect of a traditional greek dance program on the social skills of adults with autism spectrum disorder.....	35
A. Doulkeridou ¹ , K. Mohoridou ¹ , Z. Mpalanou ¹ , E. Skordilis ¹	35
Feasibility and effect of a Nordic walking program for adults with intellectual and developmental disabilities.....	36
A. Dunsky ¹ , S. Barak ^{2,3}	36
The impact of physical activity on sleep in the context of alcohol use and abuse: systematic review and protocol of pilot study APhysOH.....	37
L. Duquet ¹ , A. Boitel ^{4,5} , S. Galli ^{1,3} , K. Charriere ⁶ , F. Mauny ^{4,5} , E. Haffen ^{1,2} , J. Giustiniani ^{1,2}	37
The impact of physical activity on sleep in alcohol users: a Systematic Review.....	38
L. Duquet ¹ , S. Galli ^{1,3} , E. Haffen ^{1,2} , J. Giustiniani ^{1,2}	38
High-intensity training for individuals with cerebral palsy using aquatic resistance training: A pilot study	39
I. Þ. Einarsson ¹ , J. Saavedra ¹ , H. R. Oddsson ¹ , B. Waller ²	39
Member commitment to wheelchair sports groups of the Swiss paraplegic association .	40
F. Epiney ¹ , L. Hany ^{2,3} , S. Denzler ^{1,4} , S. Nagel ¹ , C. Klenk ¹	40
Empowering inclusion in physical education and sport: barriers, practices, and systemic change for learners with intellectual disabilities in Malta	41
A. Farrugia	41
Methodological assessment of speed stabilization in an adapted 3-minute all-out swimming test in young para swimmers.....	42
A. Febles-Castro ^{1,2,3} , J. J. Ruiz-Navarro ^{1,4} , O. López-Belmonte ⁵ , A. Romarate ^{3,6} , R. Arellano ¹	42
How to increase the evidence supporting the effects of physical exercise on health and well-being of participants with neurodevelopmental disorders?	43
J.P. Ferreira ¹	43

Elite team composition as a factor for increased performance orientation! A comparison of Unified Sports competitions	44
T. M. Göb ¹ , S. Greve ² , J. Süßenbach ¹ , F. Kiuppis ³	44
From dystopia to utopia: attempting to re-imagine physical education for disabled students	45
J.A. Haegele ¹ , W.J. Wilson ² , M. Ichihara ¹ , L. Nowland ³	45
Transforming identities and active involvement: caregiving perspectives of adult children with CHARGE syndrome	46
A. A. Hazzan ¹ , P. Beach ² , L. Lieberman ³ , S. Leung ² , N. Ness ²	46
Match physical performance demands in footballers with coordination impairments	47
M. Henríquez ¹ , I. Errekagorri ² , M. I. Cornejo ^{1,3} , D. Castillo ⁴ , J. Yanci ^{2,5} , R. Reina ⁶	47
When “systematic” is only in the title: A methodological review of adapted physical education research	48
J. Kantor ¹ , L. Baloun ² , J. Wittmannová ² , O. Ješina ² , M. Kudláček ² , V. Osičková ² , J. Li ¹ , Z. Svobodová ¹ , L. Perimal-Lewis ¹ , M. Klugar ¹	48
Physical fitness assessment in adolescents with intellectual disability: Implications for physical education	49
A. Klavina ^{1,2,3} , N. Strazdina ⁴ , Z. Galeja ⁵ , E. Ozols ⁵ , R. Ansons ⁵	49
Intelligent assistive technologies to support inclusive physical education for students with visual impairments	50
P. Kornfeind ¹ , A. Baca ¹	50
Co-designing accessible assistive technologies to support safe physical activity in older adults with visual impairments	51
P. Kornfeind ¹ , S. A. Petter ¹ , A. Baca ¹	51
Self-efficacy of adapted physical activity students and graduates in teaching physical education to children after bone marrow transplantation in the Czech Republic	52
M. Kotz ¹ , K. Daďová ¹ , I. Pavlová ¹ , J. Vařeková ¹	52
Neurovisual and multisensory training for maintaining brain function and postural stability in older adults: a scoping review	53
M. Křivánková ¹ , K. Daďová ¹ , I. Starková ¹	53
What is taught within introductory adapted physical activity courses? The perceptions of US faculty	54
L. J. Lieberman ¹ , P. H. Warner ² , B. M. McMullen ³	54
Five-year follow up of a fundamental motor skill intervention for children with autism spectrum disorder: preliminary results	55
M. Lloyd ¹ , H. Lywood ¹	55
Leisure-time sport inclusion of athletes with intellectual disabilities: Perspectives of athletes and coaches	56
M. Lund Ohlsson ^{1,2} , J. Oskarsson ^{1,3} , E. Flygare Wallén ^{4,5} , K. Wickman ⁶	56
Sedentary behavior and physical activity levels in Swedish adolescents with and without intellectual disabilities	57
M. Lund Ohlsson ^{1,2} , C. A. Staunton ^{1,3} , E. Flygare Wallén ^{4,5} , E. P. Andersson ¹ , S. Fjellström ^{1,6}	57
Reconnecting research and practice in paralympic sport management: The ParaManager framework as an evidence-informed model of professionalisation	58
P. Marek	58
From the pitch to the workplace: The coach’s role in facilitating skills for employability for athletes with intellectual disabilities	59
C. Messiaen ¹ , R. Reina ¹ , A. Roldán ¹	59
Experiences of inclusion an exclusion by children and adolescents with social, emotional and mental health needs in physical education: A participatory research project	60

R. Meyer ¹ , M. Giese ²	60
Influence of the school integration program (PIE) on body composition and physical performance in schoolchildren.....	61
F. Muñoz-Hinrichsen ¹ , M. Socias Marfan ¹ , C. Pardo Tamayo ² , J. Pérez-Tejero ³	61
Developing an inclusive physical education resource guide for south african educators: A multi-stage mixed-methods study	62
R. Naidoo ¹ , X. McCreanor ¹ , V. Chetty ¹	62
Differences in perceptions of the inclusion of students with autism and ADHD in physical education classes	63
D. Nemček ¹ , Z. Zacharová ²	63
Challenges in the inclusion of students with autism from the perspective of Slovak physical education teachers across different educational level	64
D. Nemček ¹ , Z. Zacharová ²	64
Age of starting sports among Finnish adolescents with disabilities	65
K. Ng ^{1,2,3} , V. Pikkupeura-Riikilä ⁴ , A. Pohjavirta ⁴ , R. Hämylä ⁴	65
Self-efficacy toward teaching disabled children across instructional settings: psychometric properties of a scale's spanish version among Colombian pre-service physical educators.....	66
L. Nowland-Christmas ¹ , F. Arroyo-Rojas ² , B. Ramirez-Forero ³ , X. Zhu ⁴ , L. Prieto ⁵	66
The role of sporting abilities in inclusive processes: A qualitative study with people with visual impairments from an ableism-critical perspective	67
F. Oldörp ¹	67
Alpine skiing in athletes after transplantation and with chronic kidney disease – Movement as courage and therapy	68
I. Pavlová ¹ , A. Mahrová ¹	68
Talent identification in paralympic sport in Germany: Structures, stakeholders, and challenges.....	69
S. Radtke ¹ , A. Vogel ¹	69
Promoting inclusive competition from the grassroots level: the case of the Spanish school age championships	70
A. Redondo-Fernández ¹ , J. Pérez-Tejero ¹	70
Inclusion and accessibility in local mass-participation running events: Practical implications for inclusive event design	71
R. Reina ¹ , L. González ¹ , A. Roldán ¹	71
Retrospective and prospective analysis of the Spanish paralympic ADOP programme: Key challenges and strategic priorities for LA 2028	72
R. Reina, A. Roldán	72
Attitudes, beliefs, and self-efficacy expectations of prospective teachers for inclusive physical education. Results of a theory-practice-based professionalization concept	73
C. Reuter ¹ , J. Prechtl ¹ , C. Kreinbacher-Bekele ²	73
Feasibility of ChatGPT for translating educational documents into easy-to-read language for students with specific educational support needs.....	74
A. Roldán, R. Reina	74
Feasibility of smartphones and smartwatches to support self-monitoring of physical activity in university students with intellectual disabilities	75
A. Roldán ¹ , S. Healy ² , D. Van Biesen ^{3,4} , D. Pastor ¹ , R. Reina ¹	75
Exploring exercise motivation in people with intellectual disabilities: A qualitative study	76
K. E. Sakalidis ¹ , A. Klavina ^{2,3} , W. De Luna ⁴ , K. Ng ^{5,6,7} , M. Khudair ⁸ , Á. Redondo ⁹ , J. Pérez-Tejero ⁹ , F. J. Hettinga ¹⁰	76

The effects of aquatic exercise on motor skills and social behaviors in children and adolescents with autism spectrum disorder: A systematic review.....	77
S. Salar ¹ , B. Jorgic ² , S. Ruin ³ , S. Stojanovic ⁴ , M. Pourgholi ⁵	77
Defining wheelchair skills education in physiotherapy curricula.....	78
A. Saltan ¹ , F. Mutluay ¹ , K. Karinharju ² , R-K. Kuusiluoma ² , F. Dokuztuğ Üçsular ³ , B. Molik ⁴ , J. Marszałek ⁴ , G. Kaya Aytutuldu ⁵ , D. Nalci ^{6,7} , H. Keser ⁶ , Y. Ş. Akgül ⁶ , M. Bahçekapılı ⁸ , V. Pokvytyté ⁹ , K. Skucas ¹⁰	78
Stress and recovery assessment in Deaflympic athletes	79
R. Schliermann ¹ , A. Markov-Glazer ²	79
Developing the 2026 Germany's first para report card for children and adolescents	80
S. Seemüller ¹ , F. Bükers ² , F. Beck ¹ , Y. Demetriou ³ , S. Eghbalpour ⁴ , I. El-Rajab ⁵ , C. Feldhaus ⁶ , N. Schott ⁵ , A. K. Reimers ¹	80
Bringing science live to the stage: Young people’s reflections on inclusive and adapted physical education through creative performance	81
L. Sharpe ¹ , S. Sanchez ² , J. Baker ²	81
Motor competence in children aged 6–12 years: Cross-sectional associations with age, sex, and skill component.....	82
A. Skiadopoulos, Ch. Evaggelinou.....	82
Adaptive sport as a pathway to inclusion: Stakeholder perspectives from wheelchair and frame sports in malta.....	83
L. Tonna Grima ¹ , A. Borg Amaira ¹ , N. Aquilina ¹	83
Effects of aquatic intervention on gross motor function and water orientation skills in children with cerebral palsy	84
E. Vodáková ¹ , A. Hořín ¹ , J. Wittmannová ¹ , O. Ješina ¹ , M. Kudláček ¹	84
Parents in competitive sport – A comprehensive literature review on similarities and differences between disability and non-disabled sport	85
A. Vogel ¹ , S. Radtke ²	85
Feasibility and impact of a low-threshold 12-week supervised exercise program on physical fitness and quality of life in oncology patients.....	86
A. Vokurka ¹ , V. Knappová ¹ , L. Čepička ¹ , G. Kavalířová ¹ , P. Kalistová ¹ , M. Dědičová ¹ , A. Mazurek ¹ , Š. Strejcová ² , M. Málková ² , S. Šípová ² , S. Vokurka ²	86
Healthy? Lifestyle of Czech school aged children with hearing impairment.....	87
J. Wittmannová ¹ , L. Hornová ¹	87
Youth unified at universities: Special Olympics pilot project at Eurasia region.....	88
J. Wittmannová ¹ , J. Hakkinen ² , A. Hořín ¹ , K. Kucharčuková ¹	88
Psychomotor interventions in physical education for students with ADHD: A review of inclusive approaches	89
Z. Zacharová ¹ , A. Kirillov ² , D. Nemček ²	89
Do lower-limb passive mechanical properties influence postural stability? Innovative use of biofeedback-based intervention in children with cerebral palsy	91
L. Zaliene ¹ , K. Zemguliene ¹	91
Pre-teaching in physical education as experienced by youth with visual impairments....	92
K. Zamberlin ¹ , L. J. Lieberman ¹ , A. Samalot ¹ , M. Perreault ¹	92
School for parents of persons with disabilities: Enhancing family quality of life through increased knowledge, engagement, and practical skills, including adapted physical activity	93
E. Zheleva ¹ , D. Kanchev ¹ , Z. Stankov ² , E. Neshev ³	93
Physical literacy, autism, and inclusion in physical education: Preliminary findings from a uk primary schools pilot study	94
E. Zjawiony ^{1,2} , A. Kosmol ¹ , N. Morgulec-Adamowicz ¹	94
Poster Presentations.....	95

Effects of a multicomponent intervention on physical fitness, cognitive function, anxiety, quality of life, and health in children and adolescents with autism spectrum disorder – A study protocol 95
 S. Ataíde¹, M. J. Campos^{1,2}, M. Castelo-Branco^{3,4}, J. P. Ferreira^{1,2} 95

Physical health changes following a supervised physical activity program for mothers of children with developmental disabilities 96
 M. Barquero¹, J.-L. Concepción¹, C. Cuebas¹, T. S. Yadav¹, G. Swarup¹, D. Schaefer¹, C. Padilla¹, B. Ku², L. Columna¹ 96

Motor development in CHARGE syndrome: The role of environmental affordances and parent teaching competence 97
 P. Beach¹, P. Aksent², M. Perreault³, L. Lieberman³ 97

The future of adapted physical activity in rehabilitation: Perspectives, applications and impact on the quality of life of people with disabilities 98
 D. E. Bekada¹, Y. Zenati² 98

Exploring the psychometric properties of the physical activity self-advocacy inventory for use with youth with visual impairments 99
 A. Brian¹, L. J. Lieberman², R. Childs², P. Beach³ 99

Psychometric evaluation of the VISIONS QL brief instrument 100
 A. Brian¹, P. Beach², A. Taliaferro¹, L. Lieberman³ 100

MASBLOX European project - Promoting mixed ability games through roblox communities 101
 M. J. Campos¹, L. Batista¹, H. Sarmiento¹ 101

Exploring the impact of a program based on judo falls on health and injury prevention of adults with intellectual and developmental disabilities 102
 M. J. Campos¹, H. Ângelo¹, A. Massart¹, J.P. Ferreira¹ 102

The participation of african countries in the Paralympic games from 1960 to 2020: The case of Mozambique 103
 M. d. Carvalho¹, A. J. Fogão¹, B. C. Machado¹, E. B. Corrêa¹, P. A. d. S. Lins¹, M. L. T. Alves¹ 103

Implementation of exercises developing the habit of correct body posture in physical education classes – An innovative preventive and compensatory program for students in an inclusive classroom 104
 D. Celebańska¹, B. Rosołek¹, A. Zwierzchowska¹, A. Żebrowska¹ 104

An investigation of inclusive physical education practices in suburban middle schools 105
 M. Cho¹, J. Kim¹ 105

Relevance and knowledge of classification among Paralympic athletes and support personnel in a global south context 106
 M. I. Cornejo^{1,2}, M. Henríquez¹, K. P. Sadarangani^{3,4}, S. Hernández-Jaña⁵, F. Muñoz^{6,7}, R. Kons⁸, R. Reina⁹ 106

“I am black, i am an athlete, i am a woman”: Intersectionality of black disabled women in Brazilian Paralympic sport 107
 E. B. Corrêa¹, I. d. S. Alves², J. V. S. Rodrigues¹, M. d. Carvalho¹, P. A. d. S. Lins¹, M. L. T. Alves¹ 107

Biopsychosocial evaluation of a 6-month activity-based therapy program in chronic spinal cord injury: Insights from three case studies 108
 S. Cudré¹, J. Wegrzyk², B. Leger³, J. Barral¹ 108

Physical education experiences of autistic Puerto Rican teens 109
 C. F. Cuebas Garcia¹, J. Haegele², K. Pickett¹, M. Fernández-Vivó³, L. Columna¹ 109

Czech translation and content validation of the AISDPE questionnaire 110
 L. Dolívková, J. Vařeková, I. Pavlová, K. Dařová, K. Kotlík, A. Mahrová 110

An eTwinning-based pedagogical approach in adapted physical education: Traditional dances and games 111

A. Doukeridou ¹ , P. Albanidou ²	111
Exploring the concordance between critical speed from an adapted 3-minute all-out test and 100-m performance in young para swimmers.....	112
A. Febles-Castro ^{1,2,3} , J. J. Ruiz-Navarro ^{1,4} , O. López-Belmonte ^{1,5} , A. Romarate ^{3,6} , R. Arellano ¹	112
Physical activity program based on the constraints-led model: Effects on motor competence, functional capacity, and executive functions in children with autism spectrum disorder.....	113
G. A. Figueiredo ^{1,2} , A. C. A. Tobias ² , L.B. Chacon ² , M.L.T. Alves ²	113
UN CRPD and sport: A comparative analysis of european states parties reports and the progressive realisation gap.....	114
A. Geppert ^{1,2} , E. M. Smith ³ , M. MacLachlan ^{1,2,4,5}	114
Feasibility of a supervised physical activity program for psychological well-being in mothers of children with developmental disabilities	115
J. L. Jaime-Concepción ¹ , C. Cuebas ¹ , T. S. Yadav ¹ , M. Barquero ¹ , G. Swarup ¹ , B. Ku ² , J. Meyer ¹ , L. Columna ¹	115
Reliability of the Brockport physical fitness test (BPFT) measuring instrument in girls, boys and adolescents with intellectual disabilities in Chile.....	116
C. Jeréz Cofre ¹ , F. Muñoz-Hinrichsen ^{1,2} , D. Camargo ³	116
Older women’s experiences with baduanjin in an adapted physical activity program: A qualitative study	117
N. Ježová ¹ , S. Liu ¹ , J. Vařeková ¹ , K. Daďová ¹	117
Self-development group for parents of children with disabilities as part of occupational therapy support: A case study	118
M. Koželská ¹ , J. Vařeková ¹	118
Inclusive physical and sport education in Czechia and Slovakia: A school-based paralympic programme with follow-up monitoring of attitudes and inclusion readiness	119
L. Zmeškal ¹ , M. Kudláček ¹ , O. Ješina ¹ , T. Vyhřídál ¹ , M. Korhelíková ¹ , M. Dunová ² , P. Harminec ² , P. Billík ² , D. Augustovičová ³ , S. Kraček ⁴ , D. Nemček ⁴ , M. Cambal ²	119
Caregiver assessment of adaptive movement programs (CAAMP): Development and pilot testing	120
A. Mahrová ¹ , J. Vařeková ¹ , L. Jirchářová ¹ , K. Daďová ¹ , I. Pavlová ¹	120
Design and implementation of an inclusive hiking program to promote social inclusion for people with intellectual disabilities.....	121
D. Martínez Cormenzana ¹ , L. Jiménez-Monteagudo ¹	121
We belong here: Female athletes challenging stigma through wheelchair basketball ...	122
C. McKay ¹ , K. Holland ² , T.N. Kirk ³	122
“As a wheelchair user, that's too difficult”: Participation in sport from the perspective of German boccia players with physical disabilities.....	123
C. Mihajlovic ¹ , M. Schoo ¹	123
Differences in the perception of factors influencing feelings in inclusive physical education classes in neurodivergent pupils.....	124
D. Nemček ¹ , D. Švecová ¹ ,	124
Evaluating the impact of inclusive sport practices for individuals with intellectual disabilities in Europe	125
C. Ocete ¹ , P. Aksen ² , J. Gutiérrez ³	125
The impact of real-time video analysis and cloud-based data services on boccia competition management : A case study of the 2025 Seoul World boccia cup.....	126
J. Oh ¹ , S. Hong ² , S. Kim ³	126

Subjective concepts of inclusion and their role in evaluating sport settings – An interview study in blind tennis and para alpine skiing.....	127
F. Oldörp.....	127
“Whaaaat....I have all 2 legs but I cannot do that...what an inspiring young man”- Exploring the public’s views toward Musa Motha, a disabled dancer	128
B. Ollila, Y. Mamo, J. A. Haegele.....	128
Education of children with emotional and behavioural difficulties through physical activity in small non-formal education groups: A psychologist–coach support model	129
V. Ostaseviciene ¹ , A. Vengale ¹ , R. Naujoke ² , A. Pauliukonyte ²	129
The European Masters in adapted physical activity master study program at Lithuanian Sports University	130
V. Ostaseviciene ¹ , K. Ng ^{1,2,3} , A. Klavina ^{1,4} , J. Pozeriene ¹ , D. Reklaitiene ¹	130
The well-being and lived care experiences of family care partners of people living with dementia: the case study of photovoice practice in Lithuania	131
I. Petkutė ^{1,2} , D. Reklaitiene ¹ , S. Karpavičiūtė ²	131
Analysis Of barriers to physical activity participation among persons with physical disabilities	132
J. Pozeriene ¹ , M. Valentukonyte ¹ , D. Reklaitiene ¹ , V. Ostaseviciene ¹	132
Outdoor adventure programme for students at a special needs school: teachers' and families' opinions	133
A. Redondo-Fernández ¹ , V. Gómez-Barrios ² , L. Mediavilla-Saldaña ² , J. Pérez-Tejero ¹	133
Digital innovation in adapted physical activity: Evaluating the influence of the "sport, disability and inclusion" MOOC for physical activity and sport professionals.....	134
A. Redondo-Fernández ¹ , J. Pérez-Tejero ¹	134
Mindfulness and emotional intelligence as predictors of psychological well-being in athletes with disabilities.....	135
D. Reklaitiene ¹ , J. Vveinhardt ²	135
Perception of inclusion in physical education questionnaire - Validation of the tool among students with special educational needs.....	136
B. Rosolek ¹ , M. Kalbarczyk ² , E. Zjawiony ³ , A. Komosa ⁴ , A. Zwierzchowska ¹ , L. Lieberman ⁵ , N. Morgulec-Adamowicz ⁴	136
Colonizing parasport repertoires? Extension projects and the dominance of classical modalities in Brazilian adapted physical activity	137
T. G. Santos ¹ , A. C. A. Tobias ² , G. A. Figueiredo ^{2,3}	137
Evidence-informed network governance for adapted physical activity in Finland: scaling inclusion through club and regional implementation pathways	138
T. Siivonen, N. Peltonen.....	138
Preparing physical fitness testing (EUROFIT) for students with special education needs in mainstream schools.....	139
N. Strazdiņa ¹ , A. Kļaviņa ²	139
APA consultant for the South Moravian region Czechia	140
J. Tomišková ¹ , K. Palečková ¹	140
HOPE - Horses for opportunity, participation, and empowerment	141
J. Tomišková ¹ , O. Miçoğulları ² , S. Akpınar ² , K. Özcan ² , U. Odek ² , M. Slottheden Olivemark ³	141
Content validity assessment of the FaB-PA questionnaire: facilitators and barriers to physical activity	142
J. Vařeková ¹ , A. Mahrová ¹ , M. Barcalová ² , E. Liptáková ² , K. Dařová ¹ , S. Majorová ¹ , P. Nováková ¹	142
Accelerometry-based 24-hour movement behaviour in manual wheelchair users: Insights into differences by disability onset	143

A. Vernerová, J. Dygrýn, F. Chmelík	143
Comparison of scoring patterns between WH1 and WH2 players in para-badminton matches	144
S. Woo, H. Kim, J. Kim, Y.-G. Yoon, S-Y. Lee	144
Physical activity, menopause, and quality of life among mothers of individuals with and without disabilities	145
T. S. Yadav ¹ , J. L. Jaime-Concepción ¹ , M. Barquero ¹ , B. Ku ² , C. Yamnia I. ³ , L. Columna ¹	145
Effects of aquatic rehabilitation exercise on physical and cognitive function in older adults with physical disability.....	146
H. Yang ¹ , Y. Lee ²	146
Not one story: Diverse-eyed seeing and intersectional lived experiences of disabled people in physical activity	147
K. J. Yi.....	147
From story to movement: Narrative-based psychomotor activities in inclusive education	148
Z. Zacharová ¹ , L. Bundová ² , D. Nemček ³	148
Is supported standing metabolically demanding in children requiring palliative care? A feasibility study protocol	149
L. Zaliene	149
Digital assessment technologies as optimization tools in adapted physical activity for children in schools and sports clubs	150
L. Zaliene	150
Adapted physical activity and parental involvement as an innovative approach in kinesiotherapy for children with disabilities.....	151
E. Zheleva ¹ , D. Kanchev ¹ , N. Manova ¹ , K. Dobrev ¹ , Z. Stankov ² , E. Neshev ³	151
Professional and Video Presentations	152
Promoting inclusive values and professional skills through adapted physical activity: The INEFC Barcelona experience	152
A.M. Bofill-Ródenas ¹ , R. Tarragó ¹	152
Inclusive hiking project in physical education	153
L. Jiménez-Monteagudo, C. Climent-Oltra, L. Ramos-López, V. Sánchez-Sanz, M. Martín-Rodríguez, A. Castro-Sancho, H. Esteve-Ibáñez	153
Self-advocacy in the community for youth with visual impairments.....	154
L. Lieberman, R. Childs, G. Orzel.....	154
Monoski days – Awareness event.....	155
D. Mikeška, G. Hanzlíčková	155
Symposium.....	156
Disabled lived experience.....	156
M. Giese ¹ , A. J. Maher ² , S. Ruin ³	156
Storying the experiences of running with a tracheostomy.....	157
F. Arroyo-Rojas ¹ , A. J. Maher ²	157
Storying the lived experience of a blind climber.....	158
M. Giese ¹ , S. Meier ² , A. J. Maher ³	158
Let's talk about sex – the desexualization and dehumanization of disabled youth in PE	159
J. Haegele ¹ , S. Ruin ²	159
Participatory design of a digital sound ball in PE: Lived experiences of BVI students.	160
B. Höger ¹ , B. Sandbichler ¹ , S. Meier ¹ , M. Giese ² , K. Weiß ¹	160
Opportunities and limitations of participatory research in the field of APA.....	161
J. Wibowo ¹	161
Epistemic Injustice and participatory methods: A critical reflection	162

J. Coates¹, L. Sharpe²	162
Participatory research exploring facilitators and barriers for at-users' engagement in sport	163
A. Geppert¹, J. Kavangh¹, E. Smith¹, M. MacLachlan¹	163
Lessons learned utilizing participatory research methodologies	164
A. Keene¹	164
Participation in investigations of spatial accessibility of sports facilities	165
J. Wibowo¹, J. Haut², L. Müller³	165
Czech Paralympic development: Reflections, projects, and best practices	166
M. Kudláček¹, R. Suda², J. Hadrava³, Š. Cagaň⁴, J. Šindler⁵	166
Authors Index	167

Subtheme: Leisure Recreation and Psychosocial Aspects of APA

Keynote: Sport psychology for parasport

J. Martin

Wayne State University, Detroit, USA

In the current presentation I will discuss sport psychology research that has practical implications for athletes, coaches, support staff and families. I use a personal developmental model as a guiding framework (Martin, 1999; 2005; 2012; 2016; 2017). Research findings and practical implications will be discussed across three lines of research and multiple studies that I and my colleagues have conducted in the areas of: personality (e.g., Big 5 personality factors) and mood (i.e., Profile of Mood States), positive psychology (e.g., grit, hardiness, resilience), mental skills (e.g., goal setting, coping), and competitive emotions (i.e., basic emotion theory).

Examples of specific findings are provided next in each of the three areas. First, Olympic Gold Medal winning USA women's basketball players have more favorable psychological profiles (stronger tough mindedness and vigor and lower anxiety, depression and confusion) relative to elite USA women not making the Olympic team. Second, athletes with strong coping skills are more likely to be engaged in their sport compared to athletes with weaker coping skills. Athletes who are more resilient and with more grit are also more likely to be more engaged in sport compared to less resilient and less gritty athletes. Third, athlete's post-race anger is grounded in time judgements more than place evaluation. For instance, swimmers who swam slower than their previous best time were angrier than Paralympian's who swam faster. Coaching suggestions (e.g., autonomy supportive coaching practices) and competition environment management suggestions (e.g., sleep) will be provided. Last, for researchers I will make suggestions for conducting sound research. For instance, researchers should reduce their reliance on statistical significance and the p value. A power analysis should always be standard practice in order to ensure an adequate sample size and to address the replication crisis. Effect sizes and confidence intervals should also be reported.

Subtheme: Physical Education and Inclusive Activities

Keynote: How universal design for learning may shape inclusive physical education: pathways, practices, and possibilities

N. Morgulec-Adamowicz

Jozef Pilsudski University of Physical Education in Warszawa, Faculty of Rehabilitation, Warsaw, Poland

Over the past two decades, education systems around the world have begun to use Universal Design for Learning (UDL) as part of their education policy towards inclusion in education. UDL is a philosophical framework based on cognitive neuroscience research investigating how the human brain learns. Within physical education (PE) UDL offers opportunities to reduce barriers and create accessible learning environments for individuals with diverse abilities, needs, and backgrounds. This lecture explores what we know about UDL in PE, how UDL principles may shape inclusive PE. The presentation highlights the growing importance of inclusive pedagogies in contemporary PE and discusses how UDL can support meaningful participation, motivation, and social belonging, but also what are the challenges in implementation of UDL in PE. The lecture is based on a narrative review of interdisciplinary literature concerning UDL and inclusive PE. Contemporary theoretical frameworks, policy documents, and selected empirical studies published in education, disability studies, and sport pedagogy were analyzed to identify strength, weaknesses, threats and opportunities in implementation of UDL in PE. The analysis suggests that UDL contributes to inclusive PE by promoting multiple means of engagement, representation, and action and expression. Flexible instructional strategies differentiated movement tasks, accessible communication methods, and technology-supported adaptations were identified as key facilitators of participation. Findings also indicate that UDL may improve learner autonomy, self-efficacy, social interaction, and motivation among diverse participant groups. However, SWOT analysis showed that scientific evidence about UDL in PE and PE teachers' preparation in this topic is still limited. UDL has significant potential to reshape inclusive PE by fostering equitable access, participation, and meaningful engagement for all learners. Integrating UDL principles into PE programs may support more responsive, adaptable, and socially inclusive practices. Future research should focus on PE teachers' preparation and knowledge about UDL, the effectiveness of UDL implementation in PE, and how students view UDL in PE.

Subtheme: Psychomotricity as a part of APA

Keynote: Psychomotricity as a resource in challenging times: Insights into movement projects that overcome (language) barriers

M. Vetter

Ludwigsburg University of Teacher Education, Ludwigsburg, Germany

This keynote explores how psychomotor approaches can meaningfully enrich qualitative research, especially in the context of migration, displacement, and inclusion—key themes at EUCAPA 2026. Drawing on pilot projects with children and youth facing language barriers, the lecture demonstrates how movement- and play-based methods offer innovative pathways to access subjective experiences when traditional interviews are limited.

Empirical examples—including so-called movement landscapes in the sports gym and human shadow theatre—illustrate how psychomotor tools can reveal latent meanings, facilitate expression beyond language, and support participation for vulnerable groups. These approaches are particularly relevant in European contexts, where diversity and inclusion are central, and where language differences often pose significant research challenges.

The keynote will highlight the dual benefit of psychomotor methods: they both generate valuable research data and offer participants personal growth and empowerment. Theoretical frameworks of psychomotricity will be introduced, emphasizing how bodily movement can be interpreted as meaningful expression.

Practical insights will be shared on how to design inclusive, culturally sensitive research settings in sports and movement environments, resonating with EUCAPA's mission of advancing adapted physical activity across Europe. The lecture aims to inspire researchers, practitioners, and educators to adopt movement-based, participatory, and body-focused methods—broadening the horizon for qualitative research in education, integration, and health.

Join to discover how psychomotor science can act as a bridge between disciplines and as a catalyst for innovation in research and practice at the intersection of physical activity, inclusion, and diversity.

Subtheme: Rehabilitation and Exercise Therapy

Keynote: Safeguarding para athletes' health: From injury risk to sustainable performance

K. Fagher

Department of Health Sciences, Faculty of Medicine, Lund University, Lund, Sweden

Para athletes demonstrate extraordinary resilience and performance, yet they face unique and often under-recognized health risks shaped by impairment type, equipment demands, challenges in daily life, and unequal access to medical and training resources. This speech, *Safeguarding Para Athletes' Health: From Injury Risk to Sustainable Performance*, explores the evolving landscape of health protection in Para sport and argues for a proactive, systems-based approach that moves beyond injury treatment toward long-term athlete well-being and performance sustainability.

Drawing on current research and best practices across high-performance sport, the presentation examines common injury patterns and health challenges among Para athletes—including overuse injuries, secondary complications related to impairment, equipment-related risks, and the cumulative effects of training and daily life activities. It highlights the importance of individualized management, accessible medical screening and interdisciplinary collaboration.

The session further emphasizes equity in sports medicine provision, the integration of mental health support, and the ethical responsibility of sporting organizations to create safe, inclusive environments. By reframing health protection as a cornerstone of performance rather than a reactive response to injury, this talk outlines practical strategies for coaches, clinicians, researchers, and sport leaders to foster resilience, longevity, and excellence in Para sport.

Subtheme: Sports from beginner to Paralympian

Keynote: Living in the presence, Honouring the past and shaping the future: The heart of APA in Europe – The Czech Story

M. Kudláček

Faculty of Physical Culture, Palacký University Olomouc, Czech Republic

Breathe in, breathe out. This is now. This moment is our presence, and the only life we truly live exist here and now. In this moment, we listen, think, and remember our professional past. We honor the founding mothers and fathers of Adapted Physical Activity (APA), reflect on our professional journeys, and consider the meaning of our work. We recognize the impact of our research, our daily interactions with students, and our contribution to the quality of life of all people, regardless of ability. Through every action we take today, we shape the future of APA. The most powerful way to influence that future is through our everyday professional practice. The purpose of this keynote is to share the story of APA in the Czech Republic, place it within European and global perspectives, and reflect on current practice to better understand future possibilities.

The roots of Czech APA can be found in remedial physical education, which emerged during the 20th century to address health impairments in children through adapted forms of physical activity. Key figures of this period included František Škvára (1907–1985), Vojmír Srdečný (1919–2019), and František Kábele (1913–1998). Their work established important theoretical and practical foundations. Over time, the field expanded beyond a health-oriented focus to embrace social, educational, and inclusive dimensions of movement and participation. A major turning point came after 1989, when political and social changes brought new perspectives on disability, inclusion, and education. APA became established within professional discourse, particularly through the Faculty of Physical Culture at Palacký University Olomouc and the Faculty of Physical Education and Sport at Charles University in Prague. The contributions of Hana Válková and Jaroslav Potměšil were instrumental in advancing research, education, and professional practice.

The Czech Adapted Physical Activity Association (ČAAPA) strengthened cooperation among universities, schools, practitioners, and the non-profit sector while promoting international collaboration. Professional events have also played a significant role in the field's development. National APA conferences and EUCAPA hosted in Olomouc and Prague, have enhanced knowledge exchange and increased the international visibility of Czech research and practice. Czech legislation supports inclusive education and ensures equal access and individualized support for students with special educational needs. Physical education curricula emphasize not only motor development and health but also participation, social competence, and positive attitudes toward lifelong physical activity. Research in APA and Adapted Physical Education has focused on inclusion, teacher competencies, attitudes toward disability, quality of life, and the evaluation of inclusive programs. Current studies also examine teacher self-efficacy and the impact of initiatives such as Paralympic School Day.

Today Czech APA combines strong historical foundations with modern inclusive approaches. Its research and practice contribute to health, education, and social inclusion, positioning the country as an important contributor to APA development in Europe and beyond. As we look ahead, important questions remain: Where do we stand in shaping the future of APA? How can the Czech experience contribute to Europe and the world? What role does each of us play in this ongoing story? Let us celebrate our APA presence, learn from history, and work together to shape a bright future for APA—one that transforms how we live, work, interact, and understand one another while helping make the world a better place.

Subtheme: Technology and Adaptive Equipment

Keynote: Paralympic classification – Eligibility, the border of disqualification

Y. Vanlandewijck

The Swedish School of Sport and Health Sciences (GIH), Stockholm, Sweden

“The line of eligibility is a very hard border as it is the border of disqualification”. This statement was made by Dr. Karl Quade during the first VISTA conference in Jasper, Canada in 1993. Gold (Seoul 1988) and silver (New York 1984) medallist in standing volleyball Karl Quade, travelled to Barcelona as a shot putter in 1992, where he was denied participation; he was “not classified” locally.

Based on theoretical and realistic cases, this keynote on classification reviews the history, philosophy and science behind the current criteria determining eligibility in Paralympic sport; zooms in on potential personal consequences of disqualification; and debates different pathways towards fair equality of opportunity.

Oral Presentations

Common components of inclusive sport practices: a physical activity model analysis based on multi-country project results

P. Aksen¹, C. Ocete², J. Gutiérrez³

¹Kırıkkale University Faculty of Sport Sciences, Kırıkkale, Türkiye; ²GICAF Research Group. Education, Research Methods and Evaluation Department. Pontifical Comillas University, Madrid, Spain; ³Down Spain, Madrid, Spain

Introduction: Although inclusive sport projects are widely implemented across different countries and contexts, the core components that make these practices effective are rarely identified systematically. Recent evidence shows that inclusive sport contributes to physical, social, and psychological outcomes for individuals with disabilities (Hassett et al., 2024). However, the structural elements underlying successful inclusive practices remain underexplored. This study aims to analyze the shared and distinctive elements of physical activity practices developed for individuals with intellectual disabilities based on a multi-country project.

Method: The study employed a qualitative document analysis of project outputs, including inclusive sport model documents, training materials, pilot implementation reports, and impact evaluation results. A thematic content analysis was conducted using a systematic coding procedure. Documents were categorized by country and type, followed by open coding to identify recurring concepts. Codes were grouped into themes through iterative comparison to ensure analytical consistency. Cross-national comparisons enabled the identification of both common principles and context-specific variations, particularly regarding environmental and organizational barriers (Ashadi et al., 2025).

Results: Findings indicate that effective inclusive sport practices are built around three key components: (1) restructuring sport environments to promote active participation, (2) providing systematic support for practitioners in applying inclusive principles, and (3) designing pilot activities as structured learning processes rather than isolated events. These findings align with recent conceptual and applied research emphasizing contextual and program-based approaches to inclusion (Oldörp, 2025; Nemananzhe, 2025).

Conclusions: Inclusive sport should not be understood as a standardized model, but rather as a flexible framework grounded in shared principles adaptable across contexts. This study highlights that inclusive sport practices, when informed by project-based evidence, can be conceptualized as transferable and scalable physical activity models.

References:

- Hassett, L., McKay, M. J., Cole, J., Moseley, A. M., Chagpar, S., Geerts, M., Wing, S Kwok, Jenson C, Sherrington, C. & Shields, N. (2024). Effects of sport or physical recreation for adults with physical or intellectual disabilities: a systematic review with meta-analysis. *British Journal of Sports Medicine*, 58(5), 269-277.
- Oldörp, F., Mihajlovic, C., & Giese, M. (2025). Inclusion in and through disability sport? A scoping review using the examples of goalball and wheelchair basketball. *JSAMS Plus*, 5, 100096.
- Ashadi, K., Ariani, L. P. T., Pulungan, K. A., Womsiwor, D., Sandi, N., & Zolkafi, M. A. A. (2025). Towards Inclusive Physical Activity: A Systematic Review of Scopus Evidence on Multidimensional Barriers in Physical and Intellectual Disabilities. *Physical Education Theory and Methodology*, 25(4), 983-991.
- Nemananzhe, K., Mulibana, P. K., Matshovhana, K., & Mululuma, A. (2025). Developing Inclusive Sports and Recreational Programs for Learners with Disabilities in Rural Limpopo: Barriers, Facilitators, and Impact on Well-Being. *International Journal of Environmental Research and Public Health*, 22(12), 1855.

The impact of dance on the motor development of children with ASD

I. Araújo¹, M. Gomes²

¹University of Campinas, Campinas, Brazil; ²University of Campinas, Campinas, Brazil

Introduction: This study frames autism through the lens of the neurodiversity paradigm, contrasting the medical deficit model with a perspective of political and social agency. Grounded in Walker (2021), autism is understood as a natural neurological divergence characterized by high synaptic reactivity rather than pathology. Addressing the scarcity of literature on motor skills in Autism Spectrum Disorder (ASD), this research investigates the impact of dance on motor development. The practice is proposed not as normative correction, but as a strategy for bodily organization and sensory regulation.

Method: A quantitative case study was conducted with two five-year-old participants diagnosed with ASD and motor coordination deficits. Assessment used the KTK (Körperkoordinationstest für Kinder) protocol (Gorla et al., 2014), evaluating backward balance, single-leg jumps, side jumps, and lateral transposition. The intervention comprised eight 50-minute sessions structured around playful warm-ups, ballet/jazz techniques, and choreographic creation. Visual aids (pictograms) ensured predictability and facilitated communication.

Results: The participants' Motor Quotient (MQ) progressed from "insufficient" to "impaired" coordination. The backward balance task achieved statistical significance ($p = .01$). Interpreting this through Walker (2021), such postural stability contributes to reduced sensory overload and increased somatic security. Conversely, the lack of statistical significance in other tasks is attributed to intervention volume, suggesting that complex neural adaptations may require longer durations (Krüger et al., 2019). Qualitatively, high adherence and choreographic retention validated that flexible approaches prioritizing intrinsic motivation and error tolerance engage executive functions more effectively than rigid models.

Conclusions: Dance promoted significant improvements in balance and positive trends in overall coordination. We conclude that interventions grounded in neurodiversity foster superior engagement. Future research should expand sample sizes and duration. Ultimately, we advocate democratizing access to physical practices for autistic individuals, framing dance not as corrective therapy, but as a fundamental right to artistic expression and embodiment.

References:

- Gorla, J. I., Araújo, P. F., & Rodrigues, J. L. (2014). *Avaliação motora em educação física: Teste KTK* (3rd ed.). Phorte.
- Krüger, G. R., Garcias, L. M., Hax, G. P., & Marques, A. C. (2019). O efeito de um programa de atividades rítmicas na interação social e na coordenação motora em crianças com transtorno do espectro autista. *Revista Brasileira de Atividade Física & Saúde*, 23, 1–5. <https://doi.org/10.12820/Rbafs.23e0046>
- Walker, N. (2021). *Neuroqueer heresies: Notes on the neurodiversity paradigm, autistic empowerment, and postnormal possibilities*. Autonomous Press.

Future training needs in adapted physical activity in Europe: Insights from a multi-country survey

U. Barrett¹, M. Reponen², O. Ješina³

¹Munster Technological University, Tralee, Ireland; ²Haaga-Helia Ammattikorkeakoulu OY, Helsinki, Finland; ³Univerzita Palackeho V Olomouci, Olomouc, Czechia

Introduction: European competency frameworks, particularly the European Standards in Adapted Physical Activity (EUSAPA), articulate practitioner knowledge, skills, and responsibilities across educational, health, and community contexts (Kudláček et al., 2010). Recent evidence from the European Diploma in APA indicates strong perceived gains in graduates' APA knowledge, practical skills, international networking, and employment outcomes, underscoring the value of international delivery of APA training (Muñoz-Calvo, et al., 2025). Service needs in APA are evolving and include the growing need to include areas such as trauma-informed practice (Eales & Goodwin, 2022) and use of technology (Ng et al, 2021). Blended and online learning approaches can provide flexibility and autonomy to learners and can effectively support competency development when utilising effective design principles. (Müller et al., 2023). COOL-APA is an Erasmus+ funded project which aims to develop a blended programme fit for the future training needs of professionals in APA.

Method: An online survey was disseminated across partner countries and translated into the native languages. Respondents (n = 587) included students (50%) and professionals (50%) in education, healthcare, rehabilitation, sport, fitness and social care. The survey examined familiarity with APA, priority content areas, preferred learning formats, and technology access.

Results: Respondents demonstrated high motivation for further APA training. Familiarity with APA and EUSAPA varied, with many reporting limited awareness. Top-ranking areas for training included practical adaptations, functional assessment, interprofessional collaboration, and psychosocial and behavioural topics. Interest in trauma-informed practice and digital technologies was moderate. Blended learning was the most preferred delivery model, followed by fully online asynchronous formats. Technology access was generally adequate but uneven.

Conclusions: Findings indicate strong demand for flexible, competency-aligned APA training across Europe. The prominence of psychosocial and behavioural priorities support the development of a future-focused COOL-APA curriculum responsive to diverse learner needs and reflecting growing emphasis on holistic and person-centred practice.

References:

- Eales, L., & Goodwin, D. L. (2022). Addressing trauma in adaptive physical activity: A call to reflection and action. *Adapted Physical Activity Quarterly*, 39(2), 141–159. <https://doi.org/10.1123/apaq.2021-0088>
- Kudláček, M., Morgulec-Adamowicz, N., & Verellen, J. (Eds.). (2010). *European standards in adapted physical activity*. Palacký University Olomouc.
- Müller, C., Mildenerberger, T., & Steingruber, D. (2023). Learning effectiveness of a flexible learning study programme in a blended learning design: Why are some courses more effective than others? *International Journal of Educational Technology in Higher Education*, 20(1), Article 10. <https://doi.org/10.1186/s41239-022-00379-x>
- Muñoz-Calvo, R., García-Gómez, S., Vilhu, J., & Pérez-Tejero, J. (2025). EUDAPA: Academic, social and employment assessment of an international programme. *European Journal of Adapted Physical Activity*, 18, Article 2. <https://doi.org/10.5507/euj.2024.015>
- Ng, K., Klavina, A., Ferreira, J. P., Barrett, U., Pozeriene, J., & Reina, R. (2021). Teachers' preparedness to deliver remote adapted physical education from different European perspectives: Updates to the European Standards in Adapted Physical Activity. *European Journal of Special Needs Education*, 36(1), 98–113. <https://doi.org/10.1080/08856257.2021.1872848>

From disability to athletic identity: A qualitative exploration of the experiences of Turkish amputee football national team players

G. Beyazoğlu¹, Y. Altıparmak¹, E. Kara¹, Z. Kurt¹

¹Kırşehir Ahi Evran Üniversitesi, Kırşehir, Türkiye

Introduction: Although Social Identity Theory has been widely applied in disability-related research, recent studies indicate that this framework alone is limited in fully explaining athletes' lived experiences and that complementary theoretical perspectives are needed. In this respect, Deci and Ryan's Self-Determination Theory provides a robust framework to address this gap by explaining athletes' motivation to continue sport participation through intrinsic and extrinsic regulatory processes. Accordingly, this study examines the formation of athlete identities among Turkish amputee football national team players and explores the role of these identities in shaping athletes' motivation to continue sport participation and their processes of social integration.

Method: An interpretative phenomenological analysis (IPA) approach was employed, with 13 congenital amputee athletes aged between 18 and 27 years, all of whom were members of the Turkish amputee football national team, participating in the study. Data collection consisted of audio-recorded semi-structured interviews and reflective notes, aiming to capture how participants made sense of their sport experiences, social interactions, athlete identities, and the perceived durability of these identities.

Results: Thematic analysis resulted in four themes: (1) Reframing disability through sport: from "disabled" to "athlete"; (2) Inclusion or conditional acceptance? The social boundaries of belonging in amputee football; (3) Sport, empowerment, and resilience discourse: the social construction of motivation; and (4) Visibility, representation, and future orientations: the societal promise of amputee football.

Conclusions: The findings indicate that amputee football does not offer a one-dimensional or homogeneous experience for athletes; rather, while national team affiliation and athlete identity foster feelings of empowerment and acceptance, they simultaneously generate new forms of pressure and vulnerability through implicit ableist discourses and performance-based expectations.

References:

- Deci, E. L., & Ryan, R. M. (1985a). *Intrinsic motivation and self-determination in human behavior*. Plenum Press.
- Deci, E. L., & Ryan, R. M. (1985b). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality*, 19(2), 109–134. [https://doi.org/10.1016/0092-6566\(85\)90023-6](https://doi.org/10.1016/0092-6566(85)90023-6)

Perceptions on the use of 3D printing in adapted physical education

M. Bittner¹, S. Wogulis², C. Simpson³, B. Bittner⁴

¹CSU, Long Beach, USA; ²CSU, Long Beach, USA; ³Cal Poly Pomona, USA; ⁴CSU, Long Beach, USA

Introduction: Three-dimensional (3D) printing is an emerging form of assistive technology (AT) with growing potential to support students with significant disabilities in adapted physical education (APE). While 3D printing offers unique advantages such as customization, low cost, and rapid production, little is known about APE teachers' awareness, experiences, and perceptions of its use in educational settings.

Method: This mixed-methods study explored APE teachers' understanding and use of 3D-printed AT. Quantitative data were collected through an online survey distributed via social media and alumni networks, and qualitative data were obtained through semi-structured interviews with teachers who had experience using 3D printing in APE. Descriptive statistics and thematic analysis were used to analyze survey and interview data.

Results: Findings revealed varied levels of awareness and limited hands-on experience with 3D printing among APE teachers. Although 73% reported no direct experience, 91% agreed that 3D-printed AT could be useful for supporting students with significant support needs. Participants identified commonly created devices such as modular sports adapters, tactile tools, communication supports, and switches. Thematic barriers included limited access to printers, funding constraints, insufficient training, time demands, and concerns about durability and safety. Despite challenges, most educators expressed strong interest in future use and emphasized the potential of 3D printing to promote inclusion and individualized support.

Conclusions: Results highlight promising opportunities for 3D printing in APE but underscore the need for increased institutional support, professional development, and accessible resources. Expanding teacher training and improving access to 3D printing technology may enhance adoption and help deliver customizable, affordable AT solutions for students with disabilities.

When evidence leads to action: Using SROI and pricing research to improve access to adaptive sports equipment

B. Blommestein

Knowledge centre of sport & physical activity, Utrecht, Netherlands

Introduction: This presentation shows how applied research on value and pricing helped change national policy on adaptive sports equipment in the Netherlands. This change was needed, as people with a physical impairment participate less in sport than the general population. Limited access to appropriate adaptive sports equipment is a major barrier, while decisions on provision are often cost-driven and insufficiently supported by evidence.

Method: A study was conducted to assess the social return on investment (SROI) of sport and physical activity for people with a physical impairment, and the added value of investments in adaptive sports equipment. The study used desk research, analysis of existing datasets, a model-based SROI approach, and consultation with experts. Conservative assumptions were applied due to limited target-group-specific data.

The outcomes supported the development of a new national model for the provision of adaptive sports equipment. During implementation, municipalities identified cost neutrality as a critical condition for adoption. As a result, a desk-research pricing study was commissioned to assess realistic cost ranges, including benchmarks from the UK and USA.

Results: The SROI study showed that investments in adaptive sports equipment generate an estimated return of 4.5:1, mainly through health gains, increased social participation and reduced long-term care costs. These findings reframed the national discussions about adaptive sports equipment from a cost item to a societal investment.

The pricing study revealed a lack of price transparency and limited insight into realistic cost levels, complicating consistent and defensible funding decisions.

Conclusions: These studies show how applied research can act as a catalyst for system-level change. In the Netherlands, the findings informed national policy and supported the implementation of a structural model for access to adaptive sports equipment. This presentation also calls for international collaboration to improve the SROI and price transparency access across Europe.

Supporting primary school teachers to include a child with a visual impairment in PE lessons

N. Boylan¹, F. Murphy², S. McCauley Lambe³

¹Dublin City University (DCU), Dublin, Ireland; ²Dublin City University (DCU), Dublin, Ireland; ³Dublin City University (DCU), Dublin, Ireland

Introduction: Supporting mainstream class teachers to include a child with a visual impairment (VI) in physical education (PE) lessons, and indeed inclusive activities, is a complex and under researched area. Recent research conducted in the Irish context (Flynn et al., 2024), indicates that these children are less active than their sighted peers, and spend less time in PE class. This research aims to support teachers to create opportunities for students with VI to partake in quality PE through the development of inclusive pedagogical supports.

Method: A qualitative methodology was applied. Semi-structured interviews were employed to gather data from teachers (n = 11) of children with VI in phase one of the study (completed in 2025).

The second phase utilised a Design Based Research methodology (Brown, 1992). Data collection included further semi-structured interviews with teachers (n = 8) and other school professionals, observations of PE lessons and focus groups conducted with children (n = 6) including children with VI. Subsequently, researcher-designed supports were implemented during PE lessons and further observations were conducted to evaluate the effectiveness of these supports.

Results: Findings from phase one indicated that teachers would benefit from resources including video supports and equipment as well as CPD focusing on PE and VI. Preliminary findings from phase two indicate that teachers have benefited from the researcher-designed resources including bespoke video supports linked to their inclusive PE lessons.

Phase three will involve data collection to inform further supports to prompt an inclusive whole-school approach to teaching PE and to support professional learning of teachers.

Conclusions: This research project has the potential to provide children with VI with meaningful experiences in PE, ensuring that students do not experience feelings of exclusion, isolation and marginalisation during PE which is often reported in the literature (Ball et al., 2024; Haegele & Zhu, 2017; Tanure Alves et al., 2018).

References:

- Ball, L. E., Lieberman, L. J., Beach, P. S., Brian, A., & Ratcliff, J. J. (2024). The Basic Psychological Needs in Physical Education Scale for Use With Students With Visual Impairments: A Delphi Study. *Physical Educator*, 81(2), 142–162.
- Brown, A. L. (1992). Design Experiments: Theoretical and Methodological Challenges in Creating Complex Interventions in Classroom Settings. *Journal of the Learning Sciences*, 2(2), 141–178. https://doi.org/10.1207/s15327809jls0202_2
- Flynn, L., Millar, K., Belton, S., O'Connor, N., Meegan, S., Britton, U., & Behan, S. (2024). Quantifying physical activity, physical education and active travel in children and adolescents with visual Impairments. *Heliyon*, 10(15), e34856. <https://doi.org/10.1016/j.heliyon.2024.e34856>
- Haegele, J. A., & Zhu, X. (2017). Experiences of Individuals With Visual Impairments in Integrated Physical Education: A Retrospective Study. *Research Quarterly for Exercise and Sport*, 88(4), 425–435. <https://doi.org/10.1080/02701367.2017.1346781>
- Tanure Alves, M. L., Haegele, J. A., & Duarte, E. (2018). “We can’t do anything”: The experiences of students with visual impairments in physical education classes in Brazil. *British Journal of Visual Impairment*, 36(2), 152–162. <https://doi.org/10.1177/0264619617752761>

Motor skill predictors of executive function in individuals with visual impairments

A. Brian¹, L. J. Lieberman², P. Beach³, A. Pennell⁴

¹University of South Carolina, Columbia, SC, USA; ²SUNY-Brockport, Brockport, NY, USA; ³Rochester Institute of Technology, Rochester, NY, USA, ⁴Pepperdine University, Malibu, CA, US

Introduction: Executive function (EF) and motor skill are closely linked in child development as working memory, inhibition, and cognitive flexibility support the learning and coordination of purposeful movement, while motor experiences in turn help shape executive control. However, little is known about how EF and motor skills interact in children with visual impairments, as most assessment tools rely heavily on visual input and are vetted on populations without visual impairment. Furthermore, few employ multiple measures of EF and motor increasing the risk for measurement error given the multidimensional nature of both constructs. Thus, the purpose of this study was to assess the multiple dimensions of EF and motor skill in children with visual impairments and to examine which motor skill facets predict distinct aspects of EF.

Method: This study featured a cross-sectional, descriptive-analytic design including children with visual impairments ($N = 54$, $Mean\ age = 13.59$, $SD = 2.80$ years; Boys = 51%; Blind = 30%; Comorbid = 35%). All children completed the Forward (FDS) and Backward (BDS) Digit Spans, the Head-Toes-Knees-Shoulders (HTKS) task, Supine-to-Stand (STS), the overhand throw and the one-hand strike from the Test of Gross Motor Development-3. Parents provided informed written consent and all demographics.

Results: Results show differential predictors for each of the three EF task ($p < .10$). For FDS, only comorbidity and gender were significant predictors. For BDS, the contralateral step of the throw and strike, as well as STS were significant. For HTKS, gender and STS were significant.

Conclusions: Executive function in children with visual impairments is multidimensional and differentially associated with specific elements of motor skills rather than global motor competence. Employing a multi-method assessment approach reduces measurement error, enables more targeted interpretation of strengths and needs, and may better inform interventions aimed at supporting long-term functional outcomes and independence.

Motivation of Venezuelan refugees with physical disabilities to play wheelchair basketball

V. Cardoso¹, R. Bastilha², K. Richil¹

¹State University of Roraima, Boa Vista, Brazil; ²Boa Vista City Hall, Boa Vista, Brazil

Introduction: Motivation is an essential element for human development, involving emotional, biological, and social phenomena, also is an important variable for participation in sports. Recently, the severe humanitarian and economic crisis in Venezuela has led many citizens of that country to migrate to Brazil, including citizens with disabilities. The objective of this study is to analyze the main reasons Venezuelan refugees with disabilities participate in sports.

Method: This study is descriptive and exploratory, with a qualitative approach. The sample is intentional and non-probabilistic. Twelve Venezuelan refugees with physical disabilities, male wheelchair basketball players, participated in the study. Data collection was performed using the Motivation Inventory for Regular Physical Activity.

Results: The main reasons for playing wheelchair basketball are: 1) Sociability (100%); 2) Health (83%); and 3) Competitiveness (66%). The search for social connections is one of the most important motivating factors for the group studied to practice wheelchair basketball; sports are a way for this group to establish new friendships and bonds. Expanding social relationships for people with disabilities through sports is an important tool for integrating social and sports life. In addition to improving self-esteem, it broadens the circle of social relationships and contributes to athletic performance. Also highlighted by the group studied was the pursuit of better health. Sports provide multiple mental health benefits, protecting against depression and anxiety in this population. It is also worth mentioning that the possibility of participating in sports competitions is a reason that motivates them and favors the improvement of their sports performance during training.

Conclusions: The motivation for Venezuelan refugees with disabilities to participate in sports is influenced by several factors. We found that the search for social connections is the main reason this group seeks wheelchair basketball. Therefore, understanding their reasons for joining can provide important information for engaging in their chosen sport and help to be include in new reality in your new country.

Paralympic School Day: A mixed-methods systematic review

V. Caron¹, L. Lieberman², V. Pittet¹

¹University of Fribourg, Switzerland; ²Suny Brockport, USA

Introduction: Paralympic School Day (PSD), introduced by the International Paralympic Committee in 2006, is an educational program designed to improve students' knowledge and attitudes toward inclusion by engaging them in hands-on Paralympic sport activities such as goalball, sitting volleyball, and wheelchair basketball. In 2019, a second version of the program, Paralympic Skills Lab (PSL), was developed for college students to reinforce earlier learning and promote positive attitudes toward Paralympic sport, disability, and inclusion. These programs are grounded in contact theory, which suggests that structured contact with individuals with disabilities can promote positive attitudinal change through perspective-taking. They have been implemented in both the United States and Europe; however, no systematic review has yet synthesized this body of evidence.

Method: Using PRISMA guidelines, a systematic search was conducted across several databases, including Web of Science, EBSCOhost, ERIC, PsycINFO, and MEDLINE. This process identified quantitative studies evaluating effectiveness (n = 9) and qualitative studies exploring the experiences of participants without disabilities (n = 8). Data were extracted and analyzed using a mixed-methods systematic review approach (Lizarondo et al., 2020).

Results: Quantitative findings converged toward an overall positive effect of PSD, although the magnitude varied depending on the dimension assessed. Inclusion-specific attitudes improved in most studies, with effect sizes ranging from small to large, whereas attitudes related to the modification of sports rules showed greater resistance to change. Cognitive attitudes improved moderately but significantly. Qualitative findings highlighted experiential learning processes that contributed to shifts in perceptions of ability, athletes with disabilities, and Paralympic sport.

Conclusions: By integrating effectiveness and experiential evidence, this review provides a comprehensive understanding of the impact of PSD and PSL offering insights to inform practice, policy, and organizational decision-making related to inclusive physical education initiatives.

Analysis of digital information quality regarding access for people with physical disabilities in the national parks of Spain and Croatia

A. Castro-Sancho¹, H. Esteve-Ibáñez¹, L. Jiménez-Monteagudo¹, A. Sánchez-Rodríguez¹

¹Catholic University of Valencia San Vicente Mártir, Valencia, Spain

Introduction: Outdoor activities improve the health and quality of life of people with physical disabilities (Jiménez-Monteagudo et al., 2020). However, planning depends on technical information, its absence on the web acts as a digital barrier (Buhalis & Michopoulou, 2011). This research compares official National Park websites in Spain (n = 16) and Croatia (n = 8) to assess their communicative efficiency.

Method: A quantitative research design was employed. First, content quality was determined using the Website Accessibility Information Quality Index (WAIQI) (Aguilar-Carrasco et al., 2023), which evaluates the accessibility anchor (AA), public use information (PU), and general information (GI). Second, search engine optimization (SEO) positioning was assessed through incognito mode searches ("National Park X" and "Parque Nacional X") to determine the visibility of official URLs. Communicative efficiency was obtained by crossing WAIQI and SEO values in a four-quadrant matrix: A (Optimal), B (Improve positioning), C (Improve content), and D (Critical deficiencies in both).

Results: Analysis reveals structural deficiencies in both countries. Spanish parks present an average WAIQI of 0.087, which is higher than the 0.042 recorded in the Croatian sample. In Spain, the Atlantic Islands of Galicia stands out as the highest-rated asset (0.11), while in Croatia, 62.5% of the parks present an absolute zero WAIQI value, with Velebit obtaining the most favorable result (0.02). The technical gap is severe: 100% of Croatian parks lack an accessibility anchor (AA) on their official portals, and the Public Use (PU) indicator is null in 87.5% of cases, with Velebit being the sole exception. Efficiency analysis places all Spanish parks and 75% of Croatian parks in Quadrant C, evidencing optimal SEO positioning (frequently SEO 1 in cases such as Plitvice or Brijuni) that does not correspond with the minimum quality of informative content. The scenario is even more restrictive in Croatia, where 25% of the sample (Krka and Mljet) is in Quadrant D, lacking both network visibility and useful information for the collective.

Conclusions: While outdoor activities are vital for health, official national park websites in Spain and Croatia lack the relevant technical information required for planning by people with physical disabilities. This deficiency acts as a digital barrier that negates user autonomy before the visit.

References:

- Aguilar-Carrasco, M.-J., Gielen, E., Vallés-Planells, M., & Galiana, F. (2024). Can website information be a constraint for people with physical disabilities? Assessing an index of national parks' website content quality and efficiency. *European Journal of Tourism Research*, 38, 3803. <https://doi.org/10.54055/ejtr.v38i.3298>
- Buhalis, D., & Michopoulou, E. (2011). Information-enabled tourism destination marketing: addressing the accessibility market. *Current Issues in Tourism*, 14(2), 145-168. <https://doi.org/10.1080/13683501003653361>
- Jiménez-Monteagudo, L., & Esteban, L. (2020). Mountains as an inclusive way open to everyone: An analysis. En P. Vidal-González (Ed.), *Hiking in European Mountains: Trends and Horizons* (pp. 65-76). De Gruyter. <https://doi.org/10.1515/9783110660715-006>

Resistance training in elderly people with sarcopenia: Systematic review

S. Charitou¹, N. Zariopi¹, K. Asonitou¹, M. Skordilis¹

¹School of Physical Education and Sport Science- National and Kapodistrian University of Athens, Athens, Greece

Introduction: Sarcopenia is a progressive, age-related skeletal muscle disorder characterized by declines in muscle mass, strength, and physical performance, increasing the risk of falls, functional impairment, disability, and reduced quality of life in older adults. Resistance training is widely recognized as one of the most effective non-pharmacological strategies for preventing and managing sarcopenia. This systematic review aimed to evaluate the effectiveness of resistance training interventions on muscle strength, functional ability, and quality of life in elderly individuals diagnosed with sarcopenia.

Method: A systematic literature review was conducted following PRISMA guidelines. A comprehensive search in PubMed and Google Scholar (November 2024) employed the PICO framework and Boolean operators: (Sarcopenia AND Elderly Patients AND Resistance Training AND (Muscle Strength OR Functional Ability OR Quality of Life)). Studies published between 2020–2024, in English, involving participants over 65 years with diagnosed sarcopenia, and comprising systematic reviews, meta-analyses, randomized controlled trials, observational, or cohort studies were included.

Results: Resistance training consistently improved muscle strength, lean body mass, and functional performance in older adults with sarcopenia (Sun et al., 2025; Argyropoulou et al., 2022). Structured, progressive programs enhanced balance, reduced fall risk, and increased functional independence. Individualized and supervised interventions yielded superior outcomes compared to non-specific exercise programs. Benefits were also observed in older women and individuals with sarcopenic obesity (Flor-Rufino et al., 2023a).

Conclusions: Resistance training is a safe, effective, and essential intervention for sarcopenia management in elderly populations. Combined with adequate nutritional support, particularly sufficient protein intake, it maximizes muscle adaptations and functional outcomes (Sun et al., 2025; Govindasamy et al., 2025). These findings support integrating structured resistance training programs into clinical practice and public health strategies to promote healthy aging.

References:

- Argyropoulou, D., Geladas, N. D., Nomikos, T., & Paschalis, V. (2022). Exercise and Nutrition Strategies for Combating Sarcopenia and Type 2 Diabetes Mellitus in Older Adults. *Journal of functional morphology and kinesiology*, 7(2), 48. <https://doi.org/10.3390/jfmk7020048>
- Flor-Rufino, C., Barrachina-Igual, J., Pérez-Ros, P., Pablos-Monzó, A., & Martínez-Arnau, F. M. (2023a). Resistance training of peripheral muscles benefits respiratory parameters in older women with sarcopenia: Randomized controlled trial. *Archives of Gerontology and Geriatrics*, 104(1), 104799. DOI: 10.1016/j.archger.2022.104799
- Govindasamy, K., Rao, C. R., Chandrasekaran, B., Parpa, K., & Granacher, U. (2025). Effects of Resistance Training on Sarcopenia Risk Among Healthy Older Adults: A Scoping Review of Physiological Mechanisms. *Life (Basel, Switzerland)*, 15(5), 688. <https://doi.org/10.3390/life15050688>
- Sun, R., Wan, J., Tang, J., Deng, Y., Zhang, M., Liu, C., Li, J., & Zhang, Q. (2025). Effectiveness of resistance training on body composition, muscle strength, and biomarker in sarcopenic older adults: A meta-analysis of randomized controlled trials. *Archives of gerontology and geriatrics*, 128, 105595. <https://doi.org/10.1016/j.archger.2024.105595>

Design of an inclusive hiking model using a mountain wheelchair to promote participation of people with disabilities in outdoor physical activities.

C. Climent-Oltra¹, L. Jiménez-Monteagudo¹, L. Ramos¹

¹Catholic University of Valencia, Spain

Introduction: Inclusive participation in outdoor physical activities remains limited for people with disabilities due to structural, educational, and social barriers (Burns et al., 2009; Steinhardt et al., 2021; Manoj et al., 2022; Lieberman et al., 2023a). This study aimed to design an Inclusive Hiking Model (IHM) to promote safe, accessible, and sustainable participation of people with disabilities in natural environments through the use of a mountain wheelchair. The research was developed within a doctoral thesis framework and grounded in the United Nations Convention on the Rights of Persons with Disabilities (2006) and the 2030 Agenda for Sustainable Development, particularly Sustainable Development Goals 3, 10, and 13.

Method: A qualitative research design based on grounded theory was applied. Data were collected through semi-structured interviews, focus groups, and documentary analysis records. A total of 37 participants took part in the study, including trained pilots and representatives of organizations linked to inclusive outdoor physical activities. Data were analyzed using ATLAS.ti software, allowing for systematic coding and categorization.

Results: The analysis identified persistent barriers in outdoor physical activities, such as limited accessible infrastructure, insufficient specialized training, and exclusionary social attitudes. Results were organized into four analytical dimensions, one of which led to the development of the Inclusive Hiking Model. The IHM was structured into three main components: (1) the mountain wheelchair as a key tool for inclusive hiking; (2) guidelines for its safe and effective use; and (3) the essential knowledge required to implement the model.

Conclusions: Although the IHM was developed specifically for the use of a mountain wheelchair, this did not represent a limitation. On the contrary, it constitutes the first structured inclusive hiking model and a transferable starting point for future adaptations. The study highlights the importance of continuous training, early awareness-raising, public–private partnerships, and sustainability strategies to ensure long-term viability and social impact.

References:

- Burns, N., Paterson, K. & Watson, N. (2009). An inclusive outdoors? Disabled people's experiences of countryside leisure services. *Leisure Studies*, 28(4), 403–417. <https://doi.org/10.1080/02614360903071704>
- Manoj, M. P., George, A. & Mishra, N. (2022). Participation of young people with disability in social and leisure activities. *International Journal of Health Sciences*. <https://doi.org/10.53730/ijhs.v6ns1.8079>
- Lieberman, L. J., Ericson, K., Perreault, M., Beach, P. & Williams, K. (2023). "You Feel a Sense of Accomplishment": Outdoor Adventure Experiences of Youths with Visual Impairments during a One-Week Sports Camp. *International Journal of Environmental Research and Public Health*, 20(8). <https://doi.org/10.3390/ijerph20085584>
- Steinhardt, F., Ullenhag, A., Jahnsen, R. & Dolva, A. S. (2021). Perceived facilitators and barriers for participation in leisure activities in children with disabilities: Perspectives of children, parents and professionals. *Scandinavian Journal of Occupational Therapy*, 28(2), 121–135. <https://doi.org/10.1080/11038128.2019.1703037>
- United Nations. (2006). *Convention on the Rights of Persons with Disabilities*. United Nations.

Feasibility and acceptability of a supervised physical activity program for mothers of children with developmental disabilities

L. Columna¹, J.-L. Concepción¹, C. Cuebas¹, T. S. Yadav¹, M. Barquero¹, G. Swarup¹, D. Schaefer¹, C. Padilla¹, B. Ku², J. Meyer¹

¹University of Wisconsin–Madison, USA; ²Yong-In University, South Korea

Introduction: Parents of children with developmental disabilities (DD) often place their child's needs ahead of their own health and well-being, which can limit opportunities for physical activity and self-care (Black et al., 2025). Programs intended to support physical activity in this population must be feasible and acceptable within the context of caregiving responsibilities (Johnson et al., 2025). Therefore, the purpose of this study was to examine the feasibility and acceptability of a ten-week supervised physical activity program for mothers of children with DD.

Method: Mothers of children with DD (N = 18) were recruited to participate in a ten-week supervised moderate-intensity whole body combined aerobic and resistance physical activity program and were randomly assigned to either an intervention group or a waitlist control group. Feasibility outcomes included recruitment, attendance, retention, and completion of study assessments. Acceptability was assessed using brief surveys administered during the program and semi-structured interviews conducted following program completion. Qualitative data were analyzed using reflexive thematic analysis (Braun & Clarke, 2019).

Results: Recruitment targets were met, and all mothers assigned to the intervention group completed the ten-week program. Attendance across sessions was high, and retention and assessment completion rates suggested that the study procedures fit within mothers' schedules. High satisfaction with the program structure and delivery was reported in survey responses. Qualitative findings indicated that having dedicated time for themselves was highly valued and that the supervised, group-based format supported accountability and consistency. Participation was described as contributing to a sense of identity beyond caregiving and increasing motivation to engage in healthy behaviors for themselves and their children, despite initial feelings of guilt.

Conclusions: Findings suggest that a supervised physical activity program is feasible and acceptable for mothers of children with DD, supporting the potential expansion of this scalable, caregiver-focused physical activity intervention. Future research with a larger sample is needed to further evaluate program outcomes and inform implementation.

Quality of life and life satisfaction in sitting volleyball players: A two-wave study from the czech republic

K. Daďová¹, D. Arnošt¹

¹Charles University – Faculty of Physical Education and Sport, Prague, Czech Republic

Introduction: Sitting volleyball is a fast, inclusive team sport within adapted physical activity. Evidence on athletes' well-being remains scarce. This study assessed (i) levels and year-to-year change in quality of life (QoL) and life satisfaction (LS) among Czech sitting volleyball players, (ii) differences versus population norms, and (iii) associations between QoL domains and LS.

Method: A two-wave survey was conducted in 2021 and 2022 with 10 active players (8 men, 2 women). Standardized instruments included WHOQOL-BREF (four domains: Physical Health, Psychological well-being, Social Relationships, Environment) and SWLS for life satisfaction; a demographic module captured COVID-19 training disruption. Data were summarized with descriptive statistics and Pearson correlations.

Results: Overall life satisfaction was high and stable across waves (SWLS $\approx 24.7 \rightarrow 25.0$, both “slightly satisfied”). Global QoL ratings clustered at “good–very good”. Domain scores differed modestly by year: in 2021 the highest domain was Social Relationships, followed by Psychological, Environment, and Physical Health; in 2022 Environment led, with Psychological and Social equal second, and Physical Health consistently lowest. Relative to Czech population norms, athletes scored above average in Psychological, Social, and Environment, while Physical Health was slightly below average—unsurprising given somatic impairments. Correlations between SWLS and all QoL domains were strong to very strong in both waves (e.g., $r = .92$ with Psychological in 2021; $r = .96$ with Social in 2022; all $p < .05$), indicating that psychosocial and environmental quality strongly tracks global life satisfaction in this group.

Conclusions: Participation in adapted team sport is associated with robust psychosocial QoL and high life satisfaction in sitting volleyball players, even amid pandemic-era training disruption. Targeted support for physical health (e.g., individualized conditioning, pain management, and access to rehab) may address the only sub-average domain and further enhance holistic well-being. These findings can inform program design, rehabilitation pathways, and policy in adapted physical activity.

The 4 Dojos: A motor story workshop to foster positive attitudes toward inclusion in judo

G. Descamps^{1,2}

¹Faculty of Sports and Physical Education, University of Coimbra, Coimbra, Portugal; ²Judo Klub Sokol, Ljubljana, Slovenia

Inclusive education is a fundamental human right, and in sport, teachers' attitudes play a decisive role in the successful inclusion of participants with intellectual developmental disorders (IDD). This presentation introduces The 4 Dojos workshop, a motor-story based educational activity designed to raise awareness, foster empathy, and enhance judo teachers' capacity to employ multiple modes of communication. Anchored in the Universal Design for Learning (UDL) framework, the workshop engages participants through four communication modes—voice, movement, symbols, and cooperation—reflecting the diverse ways athletes may perceive, process, and participate in practice. By temporarily restricting specific communication channels, judo teachers are placed in situations of disorientation or frustration, simulating barriers commonly experienced by learners with IDD.

A pilot implementation conducted in March 2025 with international judo teachers demonstrated the workshop's potential to stimulate cooperation, empathy, and critical reflection on inclusive practice. This presentation will outline the ongoing development and validation of The 4 Dojos through further implementations planned for March and April 2026. Future evaluation will employ the J-TAID (Judo Teachers' Attitudes towards Inclusion of Individuals with IDD) questionnaire, guided by the Theory of Planned Behavior, to assess its measurable impact. Overall, The 4 Dojos offers a practical, evidence-informed tool to promote positive attitudes and inclusive teaching practices in judo education.

Coaching para sport in ireland: Qualitative insights to guide a national coach development framework

A. Dineen^{1,2,3,5}, B. Hughes⁵, P. Kearney^{1,3}, E. Murtagh^{1,2}, F. Nugent^{1,3}, I. Sherwin^{1,3,4}, S. Healy^{1,2}

¹Department of Physical Education and Sport Sciences, Faculty of Education and Health Sciences, University of Limerick, Ireland. ²Physical Activity for Health Research Centre, Department of Physical Education and Sport Sciences, Faculty of Education and Health Sciences, University of Limerick, Ireland. ³Sport and Human Performance Research Centre, University of Limerick, Ireland. ⁴Centre for Sport Leadership, Stellenbosch University, South Africa. ⁵Paralympics Ireland, Sport Ireland Campus, Blanchardstown, Dublin, Ireland

Introduction: Despite increasing recognition of the importance of coach education in Para Sport (PS) (Townsend et al., 2021), there remains an absence of research examining the perspectives of para-sport coaches within the Irish context. The development of an evidence-informed coach education framework requires an understanding of coaches' lived experiences, challenges, and learning needs. This study therefore represents a critical first step in addressing this gap and providing context-specific insights to guide the design of future coach development initiatives in Ireland.

Method: Seventeen PS coaches (52.9% male, 47.1% female, Mean age = 40.71, SD = 7.46) participated in semi-structured interviews. Data were analysed via reflexive thematic analysis, with a reflexive journal and critical friends promoting rigour (Braun & Clarke, 2019).

Results: The data are represented via four themes: (1) '*Coaching in Isolation*', highlighting that coaches operate without consistent peer support, mentorship, or organisational guidance. (2) '*Trial and Error Development*' which represents the various, largely informal, means by which coaches develop, including trial and error, observation of coaches, learning from the athlete, etc; (3) '*Fragmented and Inconsistent Support Structures*', Professional development opportunities are inconsistent, uncoordinated, and largely absent; (4) '*Complexity of the PS Coach*' reflecting the multiple roles and expertise-needs of a PS coach; and (5) '*Chronic Resource Constraints Shaping Practice*' which highlights how limited funding and equipment access shape how some coaches operate. Across a spectrum of coaching levels, the needs identified by coaches were notably consistent. Key areas of concern included the demand for structured PD programmes, access to mentors to facilitate coach development and idea exchange, and systematic support in areas such as funding, role clarity, and desire for acknowledge/appreciation from NGBs.

Conclusions: The findings reveal that current PD opportunities are perceived to be predominantly informal and inadequate, highlighting a severe dearth of structured formal coach education programs tailored to PS coaches.

References:

- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597. <https://doi.org/10.1080/2159676x.2019.1628806>
- Townsend, R. C., Huntley, T. D., Cushion, C. J., & Culver, D. (2021). Infusing disability into Coach Education and Development: A Critical Review and agenda for change. *Physical Education and Sport Pedagogy*, 27(3), 247–260. <https://doi.org/10.1080/17408989.2021.1873932>

The effect of a traditional greek dance program on the social skills of adults with autism spectrum disorder

A. Doulkeridou¹, K. Mohoridou¹, Z. Mpalanou¹, E. Skordilis¹

¹Faculty of Physical Education and Sport Science, National and Kapodistrian University of Athens, Greece

Introduction: Autism Spectrum Disorder (ASD) is a neurodevelopmental condition characterized by persistent difficulties in social interaction and communication (Lord et al., 2018). Social skill development is a key factor for social inclusion and psychological well-being in individuals with ASD. Previous research suggests that movement-based and dance interventions may positively affect social functioning through non-verbal communication and group interaction (Chen et al., 2022; Takahashi et al., 2019). The purpose of the present study was to examine whether a traditional Greek dance program could enhance social skills and social interactions in adults with ASD.

Method: The study was conducted in Athens and involved 24 adults with ASD (18 males and 6 females), aged 19–50 years, attending a Day Care Center. All participants exhibited comorbid intellectual disability. A structured traditional Greek dance intervention was implemented, including adapted group dances emphasizing rhythm, cooperation, and synchrony. Social skills were assessed using the Autism Social Skills Profile (Bellini & Hopf, 2007), completed by physical education teachers before and after the intervention. The instrument evaluates overall social functioning and incorporates three subdomains: Social Reciprocity, Social Participation/Avoidance, and Detrimental Social Behaviors.

Results: Statistical analysis with SPSS demonstrated a significant improvement in overall social functioning following participation in the dance program. Positive changes were observed in social reciprocity and participation, supporting previous findings on the benefits of dance-based interventions for individuals with ASD (Douka et al., 2019; Chen et al., 2022).

Conclusions: The results indicated that a traditional Greek dance may be an effective, culturally meaningful, and non-verbal intervention for improving social skills in adults with ASD. Group dance activities foster cooperation, shared attention, and social connectedness. Further research efforts with wider samples and extended duration are recommended.

References:

- Bellini, S., & Hopf, A. (2007). *The Autism Social Skills Profile*. Pro-Ed.
- Chen, Y. C., Chiang, I. T., & Shih, Y. C. (2022). Effects of dance interventions on social interaction in individuals with autism spectrum disorder: A systematic review and meta-analysis. *Disability and Rehabilitation*, 44(18), 5203–5213.
- Douka, S., Zilidou, V., Lilou, O., & Manou, V. (2019). Traditional dance as a means of enhancing social skills. *Journal of Physical Education and Sport*, 19(1), 194–200.
- Lord, C., Elsabbagh, M., Baird, G., & Veenstra-VanderWeele, J. (2018). Autism spectrum disorder. *The Lancet*, 392(10146), 508–520.
- Takahashi, H., Matsushima, K., & Kato, T. (2019). The effectiveness of dance movement therapy for individuals with autism spectrum disorder: A systematic review. *American Journal of Dance Therapy*, 41, 55–77.

Feasibility and effect of a Nordic walking program for adults with intellectual and developmental disabilities

A. Dunsky¹, S. Barak^{2,3}

¹ The Levinsky-Wingate Academic College, Wingate Campus, Netanya, Israel; ² Ariel University, Ariel, Israel; ³ Department of Pediatric Rehabilitation, The Edmond and Lily Safra Children's Hospital, The Chaim Sheba Medical Center, Ramat-Gan, Israel.

Introduction: Adults with intellectual and developmental disabilities (IDD) face higher risks of physical decline, chronic health issues, and early aging, partly because of sedentary lifestyles and limited physical activity. Although physical activity interventions are known to boost health outcomes in this group, evidence on long-term, practical, and motivating programs remains scarce. This study assessed the feasibility and health effects of a six-month Nordic walking program for adults with IDD.

Method: A pre–post intervention design was implemented with assessments before (To) and after (T1) a six-month Nordic walking program. Fifty adults with IDD were randomly chosen from a larger group, and 34 participants (mean age = 34.1, SD = 9.3 years) completed both assessments. The intervention involved weekly, instructor-led outdoor Nordic walking sessions lasting 40–50 minutes. Outcomes included physical fitness (cardiovascular endurance, muscular strength, endurance, and flexibility), waist-to-hip ratio as an indicator of metabolic health risk, emotional well-being, enjoyment, and program feasibility, assessed by attendance. Quantitative data were analyzed using paired statistical tests and effect sizes, complemented by qualitative thematic analysis of interviews with program staff.

Results: Program feasibility was supported by a mean attendance rate of 60.75%. Significant improvements were observed in lower-body power (standing long jump) and flexibility (sit-and-reach), both with moderate-to-large effect sizes. Waist-to-hip ratios significantly decreased in both men and women, indicating reduced metabolic health risk. No significant changes were observed in cardiovascular fitness or enjoyment, whereas abdominal muscle endurance declined slightly. Qualitative findings highlighted participant satisfaction, instructor engagement, and professional guidance as key contributors to program success.

Conclusions: A six-month, once-weekly Nordic walking program is feasible and beneficial for adults with IDD, leading to improvements in muscular strength, flexibility, and metabolic health indicators. Nordic walking represents a safe, enjoyable, and scalable physical activity option that may support health promotion and functional independence in this population.

The impact of physical activity on sleep in the context of alcohol use and abuse: systematic review and protocol of pilot study APhysOH

L. Duquet¹, A. Boitel^{4,5}, S. Galli^{1,3}, K. Charriere⁶, F. Mauny^{4,5}, E. Haffen^{1,2}, J. Giustiniani^{1,2}

¹Université Marie et Louis Pasteur, INSERM, UMR 1322 LINC, F-25000, Besançon, France; ²CHU Besançon, Service de Psychiatrie de l'Adulte, F-25000, Besançon, France; ³CHU Besançon, Service exploration du Sommeil, F-25000, Besançon, France; ⁴CHU Besançon, uMETH, CIC 1431 Inserm, F-25000 Besançon, France; ⁵Université Marie et Louis Pasteur, CNRS, Chrono-environnement UMR6249, F-25000, Besançon, France; ⁶CHU Besançon, CIC 1431 Inserm, Domaine Santé Mentale et Neurosciences, F-25000, Besançon, France

Introduction: Although alcohol has a temporary sedative effect, it induces sleep disorders such as insomnia and circadian rhythm disturbances and impairs sleep quality (1). Disturbed sleep, in alcohol-dependent patients exacerbates consumption and increases the risk of relapse (2). Therefore, addressing sleep disorders is essential in patients with Alcohol Use Disorder (AUD). In that regard, Adapted Physical Activity (APA) appears to be a promising intervention suitable for AUD patients (3). Indeed, this non-pharmacological therapy is a powerful synchronizer of the central clock, with proven benefits on sleep quality in the general population (4). However, although these scientific findings are also showcased in few studies assessing patients with AUD as presented in our Systematic review of the topic, more well-designed studies are needed (5). Consequently, it is essential to evaluate the feasibility of a randomized controlled trial measuring the impact of PA on sleep in this population.

Method: Thus, 40 participants aged 18 to 65 years old with alcohol dependence, active consumptions and sleep complaints, endorsed at the Addictology outpatient ward of the University hospital of Besançon in France, are being recruited in the APhysOH study. Every participant has 6 meetings in 17 weeks. These appointments contain clinical examinations, biological analyses, auto-questionnaires and physical capacity assessments. Sleep will also be assessed twice for two weeks before and after APA program with actigraphy, sleep diary and urinary melatonin analyses. Participants are randomized into two groups. A 12-week APA program is offered to 30 participants with 3 one-hour morning sessions per week of mixed exercise. The other group, of 10 participants, pursue their treatment as usual.

Results: Results of this randomized feasibility study protocol will inform the design of future large-scale trials by assessing the feasibility and preliminary effects of an APA program on sleep, addiction-related, physical and mental health outcomes of individuals with AUD.

The impact of physical activity on sleep in alcohol users: a Systematic Review

L. Duquet¹, S. Galli^{1,3}, E. Haffen^{1,2}, J. Giustiniani^{1,2}

¹Université Marie et Louis Pasteur, INSERM, UMR 1322 LINC, F-25000 Besançon, France; ²CHU Besançon, Service de Psychiatrie de l'Adulte, F-25000, Besançon, France; ³CHU Besançon, Service exploration du Sommeil, F-25000, Besançon, France

Introduction: Alcohol misuse impairs sleep quality and circadian rhythms (1). Yet, sleep is essential, as a lack of sleep is a predictive factor for addiction and relapse risk in patients with alcohol use disorder (AUD) (2). On the contrary, effective insomnia treatment after withdrawal increases abstinence (2). Meanwhile, adapted physical activity (APA), a suitable therapeutic for AUD patients (3), has been shown to improve sleep quality and circadian rhythms in non-clinical population (4). Hence, it would be interesting to assess the impact of APA on sleep in alcohol users with and without dependence.

Method: Systematic search was conducted using Prisma guidelines for the screening and ROB-1 for bias analysis of randomized controlled trial (RCT).

Results: Out of 4995 studies screened, none assess as main purpose the impact of PA on sleep in alcohol users. Still, 81.8% of the selected studies, in their secondary outcomes, highlight PA's positive association with sleep in alcohol users with or without dependence. Main positive sleep outcomes were insomnia and sleep fragmentation reduction as well as sleep quality and duration improvement.

Conclusions: There is a lack of publication regarding the impact of PA on sleep in non-clinical alcohol users and AUD patients. Still, PA appears to enhance sleep in both populations. Further well designed RCT are needed to produce robust data. In the first instance feasibility study should be performed as adherence can be an issue in the population. Finally, different PA programs (frequency, intensity, time, type, duration) should be compared, to determine the optimal dose in different AUD status (intoxication, withdrawal, abstinence).

High-intensity training for individuals with cerebral palsy using aquatic resistance training: A pilot study

I. Þ. Einarsson¹, J. Saavedra¹, H. R. Oddsson¹, B. Waller²

¹PAPESH Reykjavik University Iceland, ²Finnish Institute of High Performance Sport KIHU, Finland

Introduction: Individuals with Cerebral Palsy (CP) often experience difficulties with physical activity, particularly when the level of CP significantly affects their motor control. Recommendations state that people with CP should reach an intensity level of 60-95% of HR max for a few minutes, 3 times per week (Verschuren et al., 2016).

Method: Six people with CP (2 Hemiplegia, 2 Diplegia and 2 Quadriplegia, two of them wheelchair users) volunteered to do Functional Aquatic Resistance Training (FART) in chest-deep water. They were equipped with resistance devices on their ankles and their arms. Heart rate (HR) was measured constantly during the session, and Lactate acid (LA) was measured before and after the session.

Results: All of them were able to balance in the water and follow the trainer's instructions. They all stated that they enjoyed the session and felt good about being able to move more freely than they are used to on land. The HR peaked at around 95% of HRmax 183,5 (4,7) (b/min), and the LA was measured between 6,7 to 10,5 mmol/L.

Discussion: We demonstrated that FART can be used and enjoyed among people with CP. The experimental data show that individuals with CP can reach the recommended level of PA. In this cohort, no one required assistance with balance; however, small buoyancy assistance devices were tried, and they did not significantly impact the movement. It is our belief that FART can be used to high benefit for many people with CP.

Member commitment to wheelchair sports groups of the Swiss paraplegic association

F. Epiney¹, L. Hany^{2,3}, S. Denzler^{1,4}, S. Nagel¹, C. Klenk¹

¹University of Bern, Institute of Sport Science, Bern, Switzerland; ²University of Basel, Institute of Psychology, Basel, Switzerland; ³PluSport, Umbrella Organization of Swiss Disabled Sports, Volketswil, Switzerland; ⁴Swiss Inclusive Sport, Olten, Switzerland

Introduction: Physical activity (PA) is vital for individuals with physical disabilities (IWPDs), yet they are less physically active than the general population (WHO, 2022). While organized sport can booster PA-levels and foster social contacts and connectedness (Elmose-Østerlund et al., 2019; Klenk et al., 2019), specific factors for member commitment – defined as the willingness to stay in a sport group/club – remain under-researched in IWPDs (Schlesinger & Nagel, 2015). Applying a social-ecological approach (McLeroy et al., 1988), we aimed to identify factors of commitment across individual, interpersonal and environment levels for members of wheelchair sport groups.

Method: This study employed an explorative, cross-sectional mixed-methods design. Data were collected from February to June 2025 via online surveys from Swiss Paraplegic Association (SPA) members ($n = 131$), targeting a highly specific sample of IWPDs currently or formerly active in wheelchair sports group. Additionally, coaches ($n = 46$) were surveyed online and board members of the SPA-clubs ($n = 26$) participated in interviews. To address non-linearity, member data were modeled using random forest to analyze partial and marginal effects of possible predictors on member commitment (e.g. motivation, previous memberships) and interpreted using partial dependence (PD) and individual conditional expectation (ICE). Coach and board member data were analyzed via descriptive statistics and interviews applying thematic analysis (Braun & Clarke, 2021).

Results: Preliminary results highlight motivation, sense of belonging, and satisfaction with club characteristics (e.g. facilities) as primary individual-level predictors of commitment. While coaches reported high satisfaction with group atmosphere on the group level, board members identified commitment challenges regarding member motivation and a lack of diverse sport offers, particularly for those with lower functional capacities on the club level. This study underscores the multi-level nature of member commitment, providing multi-perspective insights for developing targeted retention strategies within wheelchair clubs and national federations.

References:

- Braun, V., & Clarke, V. (2021). *Thematic analysis: A practical guide*. Sage Publications Limited.
- Elmose-Østerlund, K., Seippel, Ø., Llopis-Goig, R., Van Der Roest, J.-W., Adler Zwahlen, J., & Nagel, S. (2019). Social integration in sports clubs: Individual and organisational factors in a European context. *European Journal for Sport and Society*, 16(3), 268–290. <https://doi.org/10.1080/16138171.2019.1652382>
- Klenk, C., Albrecht, J., & Nagel, S. (2019). Social participation of people with disabilities in organized community sport: A systematic review. *German Journal of Exercise and Sport Research*, 49(4), 365–380. <https://doi.org/10.1007/s12662-019-00584-3>
- McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An Ecological Perspective on Health Promotion Programs. *Health Education Quarterly*, 15(4), 351–377. <https://doi.org/10.1177/109019818801500401>
- Schlesinger, T., & Nagel, S. (2015). Does context matter? Analysing structural and individual factors of member commitment in sport clubs. *European Journal for Sport and Society*, 12(1), 53–77. <https://doi.org/10.1080/16138171.2015.11687956>
- World Health Organization (2022). *Global status report on physical activity 2022*. <https://www.who.int/publications/i/item/9789240062888>

Empowering inclusion in physical education and sport: barriers, practices, and systemic change for learners with intellectual disabilities in Malta

A. Farrugia

Malta College of Arts, Science and Technology, Paola, Malta

Introduction: Although the inclusion of students with intellectual disabilities (ID) is widely recognised as a fundamental human right, meaningful participation in physical education (PE), physical activity (PA), and sport remains a challenge in Malta (Farrugia & Soundy, 2024). This study responds to the continued exclusion experienced by children with ID by aiming to: (a) identify the barriers encountered by children with ID when engaging in PE, PA, and sport within and beyond school; (b) identify the strategies used by PE teachers and Learning Support Educators (LSEs) to support inclusive practice; and (c) identify key stakeholders responsible for promoting inclusion in Malta.

Method: A Community-Based Qualitative Research (CBQR) approach grounded in a pragmatic worldview was employed. Participants included 16 PE teachers, 16 LSEs from mainstream secondary schools, and 9 educational and governmental stakeholders. All participants took part in a single semi-structured online interview and were recruited through criterion-based purposive sampling across government, church, and independent schools. Data were analysed using reflexive thematic analysis to examine inclusive practices, perceived needs, and system-level strategies.

Results: Findings were structured into three themes: (1) age-related barriers, where participation became increasingly challenging due to physical and cognitive differences; (2) marginalisation arising from competitive PE and sport structures; and (3) systemic constraints, including limited training, resources, large class sizes, and stakeholder-level decisions that restricted individualised support and reinforced segregated practices.

Conclusions: The study highlights the need for tailored training and practical professional development for PE teachers, LSEs, and sports coaches. Inclusive pedagogical approaches and collaborative decision-making processes involving all stakeholders, including children with ID, are essential to achieve meaningful inclusion in PE, PA, and sport.

Reference:

Farrugia, A., & Soundy, A. (2024). Teaching inclusive physical activity and sports to students with intellectual disability: Perception and experiences of PE teachers and learning support educators. In G. Bennett & E. Goodall (Eds.), *The Palgrave encyclopedia of disability*. Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-40858-8_165-1

Methodological assessment of speed stabilization in an adapted 3-minute all-out swimming test in young para swimmers

A. Febles-Castro^{1,2,3}, J. J. Ruiz-Navarro^{1,4}, O. López-Belmonte⁵, A. Romarate^{3,6}, R. Arellano¹

¹Aquatics Lab, Department of Physical Education and Sports, Faculty of Sport Sciences, University of Granada, Granada, Spain; ²Spanish Paralympic Committee, Madrid, Spain; ³Spanish Sports Federation for People with Physical Impairments (FEDDF), Madrid, Spain; ⁴Human Performance and Sports Science Laboratory, Faculty of Sport Sciences, University of Murcia, Murcia, Spain; ⁵Department of Didactics of Musical, Artistic and Bodily Expression, Faculty of Education, University of Valladolid, Soria, Spain; ⁶Emen4sport, Leioa, Spain

Introduction: Performance testing in para swimming is complicated to standardize due to the wide impairments' heterogeneity and the large speeds variability across swimming sport classes. Protocols based on a fixed number of repetitions may therefore impose different physiological demands across swimmers. In the modified 3-minute all-out swimming test (12x25m test), meaningful interpretation requires that swimmers reach a stabilized speed profile during the final phase of the test (Mitchell, 2019). When this protocol is defined by total work and adapted with individualized number of repetitions, explicit verification of end-test speed stabilization becomes methodologically necessary.

Method: A cross-sectional observational pilot study was conducted in 13 young international-level para swimmers. An adapted 12x25m test was applied, standardized by total work duration with individualized 25m repetitions (i.e., nx25) and 5s rest intervals. Speed stabilization during the final and initial phase (i.e., last and first 4 repetitions, respectively) of the test was examined using speed-time linear regression slope and variability was quantified using the coefficient of variation (CV) (Jones & Poole, 2005; Poole et al., 2008). Predefined numerical criteria were applied to define stabilization (absolute slope < 0.02m·s⁻¹·rep⁻¹ and CV < 3%). Initial-phase metrics were used as a contrast condition to confirm phase differences. Phase comparisons were performed using paired-samples t-tests.

Results: In the final phase, speed-time linear regression slope was $-0.002 \pm 0.010\text{m}\cdot\text{s}^{-1}\cdot\text{rep}^{-1}$ and $\text{CV} = 1.68 \pm 0.70\%$, indicating end-test speed stabilization. Based on the predefined criteria, 84.6% of swimmers met the operational definition of stabilization. In contrast, the initial phase showed a steeper negative slope ($-0.050 \pm 0.018\text{m}\cdot\text{s}^{-1}\cdot\text{rep}^{-1}$) and higher variability ($\text{CV} = 5.29 \pm 2.23\%$). Speed-time slope and CVs differed significantly between phases ($p < .001$).

Conclusions: In this sample, most young para swimmers demonstrated a stabilized speed profile during the final phase of an adapted 12x25m test. These preliminary findings suggest that objective verification of end-test stabilization may support methodological adaptations of performance testing in heterogeneous para swimming populations, although confirmation in larger samples is required.

References:

- Jones, A. M., & Poole, D. C. (2005). Oxygen Uptake Dynamics: From Muscle to Mouth—An Introduction to the Symposium. *Medicine & Science in Sports & Exercise*, 37(9), 1542–1550.
- Mitchell, L. J. G. (2019). *Anaerobic assessment and training monitoring in elite swimmers*. University of Canberra.
- Poole, D. C., Barstow, T. J., McDonough, P., & Jones, A. M. (2008). Control of Oxygen Uptake during Exercise. *Medicine & Science in Sports & Exercise*, 40(3), 462–474.

How to increase the evidence supporting the effects of physical exercise on health and well-being of participants with neurodevelopmental disorders?

J.P. Ferreira¹

¹University of Coimbra, Interdisciplinary Center for the Study of Human Performance (CIPER), Faculty of Sport Sciences and Physical Education, Coimbra. Portugal

Introduction: Physical inactivity represents a major public health concern and is recognized as a leading contributor to chronic non-communicable diseases, increasing global morbidity and mortality (WHO, 2018). Similar to the general population, individuals with Neurodevelopmental Disorders (NDD), including Intellectual Disability (ID) and autism spectrum disorder (ASD), benefit from regular Health-Enhancing Physical Activity (HEPA). However, this population requires specific guidelines and adapted exercise programs aiming to promote health and well-being.

Method: Following PRISMA guidelines (2021), this scoping review aimed to identify research gaps and synthesize evidence regarding the effects of physical activity (PA) and physical exercise (PE) in individuals with NDD. The search strategy was structured according to PICOS criteria: (i) Population: individuals of all ages diagnosed with ID or ASD; (ii) Intervention: PA or PE programs; (iii) Concept: use of PA or PE to address symptoms associated with ID or ASD; (iv) Outcomes: effects on core symptoms and related health and well-being indicators; and (v) Study design: systematic reviews and systematic reviews with meta-analyses of longitudinal, randomized, non-randomized, and controlled intervention studies published within the last five years.

Results: The analysis identified substantial experimental and methodological gaps. Experimental limitations included insufficient reporting of exercise intensity, volume, frequency, and duration, limited clarity regarding program effects, and inadequate descriptions of assessment and monitoring procedures. Methodological shortcomings such as small sample sizes, incomplete participant characterization, lack of robust randomization and allocation procedures, insufficient justification of intervention design, and inconsistencies in defining precise PE dosage as an adjunct therapeutic approach.

Conclusions: The findings highlight the need for greater methodological rigor, standardized reporting, and improved program design. Enhancing the quality and specificity of exercise interventions, alongside robust assessment and monitoring strategies, is essential to ensure that physical activity programs effectively meet the health needs and expectations of individuals with NDD.

Reference:

World Health Organization. (2018). Global action plan on physical activity 2018–2030. Geneva: World Health Organization.
Rethlefsen, M. L., Kirtley, S., Waffenschmidt, S., Ayala, A. P., Moher, D., Page, M. J., & Koffel, J. B. (2021). PRISMA-S: an extension to the PRISMA statement for reporting literature searches in systematic reviews. *Systematic reviews*, 10(1), 39.

Elite team composition as a factor for increased performance orientation! A comparison of Unified Sports competitions

T. M. Göb¹, S. Greve², J. Süßenbach¹, F. Kiuppis³

¹Leuphana University of Lüneburg, Lüneburg, Germany; ²Humboldt-University of Berlin, Berlin, Germany; ³RPTU University Kaiserslautern-Landau, Kaiserslautern-Landau, Germany

Introduction: The joint competition of individuals with intellectual disabilities (athletes) and those without (partners) within Special Olympics Unified Sports® contains the potential for differing interests across groups of players. Alongside individual ambitions, conceptual requirements prevail – such as the “principle of meaningful involvement”, which aims to ensure equal participation (Special Olympics, 2012). There is little published data on the competitive context in Unified Sports® (Greve et al., 2025). Against this background, this study investigates the goals of German handball and basketball players across different competition settings. It analyses the impact of different qualification processes for the World Games 2023 on competition. Whereas in handball an elite team was formed through team selection, in basketball the same team competed as at the National Games.

Method: At the German National Games 2022, 41 guideline-based interviews were conducted with players from various Unified Sports® handball and basketball teams (14 athletes and 27 partners). During the World Games 2023, further 16 interviews were conducted (8 athletes and 8 partners). Data were analysed using open and axial coding procedures of the Grounded Theory methodology (Corbin & Strauss, 1990), separated by sport and groups of players. These results were then comparatively analysed.

Results and Conclusions: Participants articulated differing, partly inconsistent goals across competitions. An area of tension emerged between success-oriented goals and joyful participation, which manifested differently in both competitions. In basketball, goals remained consistently heterogeneous, whereas in handball a shift towards performance-oriented goals occurred from the National Games to the World Games. Given differing performance compositions within the teams at the World Games, their emphases varied. Some goals result in competitive dynamics that do not fully align with the principles of the Competitive model.

References:

- Corbin, J. M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, 13, 3–21. <https://doi.org/10.1007/BF00988593>
- Greve, S., Göb, T. M., & Süßenbach, J. (2025). “Go for Gold!” or “just for fun”? - Competitions at Special Olympics Unified Sports at the National Games 2022. *Frontiers in Sports and Active Living*, 7, 1608690. <https://doi.org/10.3389/fspor.2025.1608690>
- Special Olympics. (2012). Principle of Meaningful Involvement. <https://media.specialolympics.org/resources/sports-essentials/unified-sports/Unified-Sports-Principles-of-Meaningful-Involvement.pdf>

From dystopia to utopia: attempting to re-imagine physical education for disabled students

J.A. Haegele¹, W.J. Wilson², M. Ichihara¹, L. Nowland³

¹Old Dominion University, Norfolk, VA (USA); ²University of Illinois Urbana-Champaign, Champaign, IL (USA); ³California State University – San Bernardino, San Bernardino, CA (USA)

Introduction: In this study, we considered shedding the presupposition that inextricably links the physical education (PE) of disabled and nondisabled students. That is, we rooted this study in exploring what would happen if ‘adapted’ PE instead focused on the development of skills, knowledge, and confidence to engage in and enjoy physical activity across the lifetime, irrespective of how closely it aligns with the established general PE curriculum. The purpose of this study was to explore how adapted PE professionals would re-imagine PE for disabled students if they were not required to follow the district/school-established curriculum and practices for nondisabled students.

Method: Eight adapted PE professionals completed one-to-one interviews to participate in this post-structuralist research. Data were subjected to thematic analysis to identify patterns of meaning.

Findings: Based on the participants’ narratives, two cascading themes were constructed. The first theme offers the participants critique of current educational systems as well as the possibilities to move past those systems. The second theme describes participants’ ideas on how PE spaces and pedagogies can be re-constructed to better support disabled students.

Conclusions: Our findings suggest autonomy-supportive practices and the adoption of community-based instruction to enhance PE for disabled students and refute ideals that PE for disabled students is valuable only to the degree that nondisabled students are present.

Transforming identities and active involvement: caregiving perspectives of adult children with CHARGE syndrome

A. A. Hazzan¹, P. Beach², L. Lieberman³, S. Leung², N. Ness²

¹Department of Healthcare Studies, State University of New York, USA; ²College of Health Sciences and Technology, Rochester Institute of Technology, USA; ³Department of Kinesiology, Sport Studies & Physical Education (KSSPE), State University of New York, USA

Introduction: CHARGE syndrome (CS) is complex genetic condition that affects ~1 in 8,500 newborns worldwide. Individuals living with CS frequently face significant physical challenges from birth, requiring managed medical and developmental assistance. Many of these individuals are cared for by family caregivers who often report elevated levels of stress. However, as children with CS get older, their medical complications often subside. With the resolution of many of their medical complications, it is possible the experiences of these caregivers may be different than the experiences of caregivers for younger children with this condition. The purpose of this study was to determine the quality of life and physical activity of caregivers of older (18 years and older) individuals with CS.

Method: A total of seven family caregivers of adult children living with CS participated in this study. Transcripts from these semi-structured interviews were analyzed using qualitative description methodology.

Results: Four themes emerged from the qualitative interviews: (1) Reshaping Identity and Autonomy, focusing on how caregiving transforms parents' sense of self and freedom; 2: Emotional Resilience and Coping, highlighting the strategies parents use to manage stress and maintain wellbeing; 3: Systemic Barriers and Support, addressing the challenges with formal systems and reliance on informal networks, and 4: Child's Health Profile and Responsibilities, detailing the specific medical complexities and daily caregiving demands.

Physical activity was an important coping strategy for most of the caregivers. Overcoming mobility and navigation challenges was also a common subtheme, "She tires easily, struggles with balance"; "Didn't walk until 5"; "Balance issues outdoors, needs someone's arm."

Conclusions: The strategies and unique approaches from caregivers in this study can be helpful to specialists of individuals with severe disabilities and/or sensory impairments and parent groups as they navigate CS.

Match physical performance demands in footballers with coordination impairments

M. Henríquez¹, I. Errekagorri², M. I. Cornejo^{1,3}, D. Castillo⁴, J. Yanci^{2,5}, R. Reina⁶

¹Escuela de Kinesiología, Universidad Santo Tomas, Chile; ²Sports and Physical Exercise Research Group (GIKAFIT), Department of Physical Education and Sport, Faculty of Education and Sport, University of the Basque Country (UPV/EHU), Vitoria-Gasteiz, Spain; ³Magister en Ciencias de la Actividad Física y del Deporte Aplicadas al Entrenamiento, Rehabilitación y Reintegro Deportivo, Universidad Santo Tomas, Santiago 8320000, Chile; ⁴Valoración del Rendimiento Deportivo, Actividad Física y Salud y Lesiones Deportivas (REDAFLED), Department of Didactics of Musical, Plastic and Corporal Expression, Faculty of Education, University of Valladolid, 42004 Soria, Spain; ⁵AKTIBOKi: Research group in physical activity, physical exercise and sport, Department of Physical Education and Sport, Faculty of Education and Sport, University of the Basque Country (UPV/EHU), Vitoria-Gasteiz, Spain; ⁶Department of Sport Sciences, Sports Research Centre, Miguel Hernández University, Elche, Spain.

Introduction: Understanding how physical performance evolves during match play is essential to optimizing training and competition strategies in para-football. In para-athletes with coordination impairments, physical demands may interact with neuromuscular constraints and influence pacing behavior and sports performance.

Purpose: To examine differences in external load between the first and second halves of international-level cerebral palsy (CP) Football matches and to determine whether these changes are consistent with the physical demands and pacing strategies.

Method: A retrospective observational study was conducted using 223 match observations from 98 players competing in official tournaments. External load was measured via GPS devices worn by each player. Variables included total distance, distance in speed zones (0–6, 6.01–12, 12.01–18, 18.01–21, 21.01–24, >24 km·h⁻¹), Player Load, high-speed running, sprint distance, acceleration and deceleration distances by intensity, and maximal acceleration and deceleration. Results are presented as median and interquartile range. First–second half differences were tested with Wilcoxon signed-rank tests, and the Hodges–Lehmann estimator was used to calculate change magnitude with 95% confidence intervals.

Results: Total distance was significantly lower in the second half ($\Delta = -64.1$ m; $p < .01$), mainly due to reduced low-to-moderate speed running (6–12 km·h⁻¹; $\Delta = -82.0$ m; $p < .001$). Player Load also declined ($\Delta = -1.3$ AU; $p < 0.001$). Neuromuscular load showed selective decreases in high-intensity accelerations (>3 m·s⁻²; $\Delta = -6.6$ m; $p = .025$) and decelerations (< -3 m·s⁻²; $\Delta = -9.8$ m; $p = .002$). However, high-speed running, sprint distance, and maximal outputs were maintained ($p > .05$).

Conclusions: Reduced overall and neuromuscular load in the second half, with preserved high-intensity outputs, suggests players regulate effort through pacing rather than experiencing global performance decline. These findings inform training design, load management, and match strategies in CP football.

When “systematic” is only in the title: A methodological review of adapted physical education research

J. Kantor¹, L. Baloun², J. Wittmannová², O. Ješina², M. Kudláček², V. Osičková², J. Li¹, Z. Svobodová¹, L. Perimal-Lewis¹, M. Klugar¹

¹ JBI Center of Evidence-Based Education & Arts Therapies, Institute of Special Education Studies, Faculty of Education, Palacký University Olomouc, Czech Republic; ² Department of Adapted Physical Activities, Faculty of Physical Culture, Palacký University Olomouc, Czech Republic

Introduction: Systematic reviews (SRs) are research studies that provide robust and reliable evidence. However, poor methodological quality of SRs may reduce their applicability and compromise evidence-based decision-making. The aim of this contribution is to identify the most common methodological challenges that reduce the quality of SRs in adapted physical education (APE) and to provide recommendations that may help authors improve evidence synthesis in this field.

Method: This review was conducted according to a prospectively published protocol (<https://osf.io/mhdrb/>) and reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) checklist (Page et al., 2021). The literature search was conducted using the following information sources: PubMed, SPORTDiscus, PsycINFO, Epistemonikos, Web of Science, Scopus, ProQuest Central, Open Dissertations, and Academic Search Ultimate. Study selection, data extraction, and methodological quality assessment were performed by two independent reviewers.

Results: Of the 4,884 records identified, 22 studies were titled as systematic reviews; however, only two adhered to systematic review methodology and were eligible for inclusion in this review. Numerous methodological challenges identified in SRs focusing on APE limit their utility for evidence-based decision-making.

Conclusions: We formulated concrete recommendations to improve the methodological quality of future SRs in APE. These recommendations include registration of review protocols, rigorous adherence to established methodological and reporting guidelines (e.g., JBI, Cochrane, Campbell, GRADE), appropriate formulation of review questions using frameworks such as PICO (Population, Intervention, Comparator, Outcome) or PICO (Population, Phenomenon of Interest, and Context) and implementation of robust procedures for literature searching, critical appraisal, data synthesis, and evaluation of the certainty of evidence.

References:

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*, 372. n71. <https://doi.org/10.1136/bmj.n71>

Physical fitness assessment in adolescents with intellectual disability: Implications for physical education

A. Klavina^{1,2,3}, N. Strazdina⁴, Z. Galeja⁵, E. Ozols⁵, R. Ansons⁵

¹Riga Stradins University, Laboratory of Sports and nutrition research, Riga, Latvia; ²Lithuanian Sport University, Department of Health Promotion and Rehabilitation, Kaunas, Lithuania; ³Klaipėdos Valstybinė Kolegija/ Higher Education Institution, Klaipėda, Lithuania; ⁴Liepāja Academy, Riga Technical University, Riga, Latvia; ⁵Riga Stradins University, Rehabilitation Department, Riga, Latvia

Introduction: Physical fitness is a key indicator of health during adolescence; however, limited evidence exists regarding how fitness components interact in youth with intellectual disabilities (ID). This study examined differences and associations between physical fitness components in adolescents with and without moderate ID.

Method: A total of 165 adolescents aged 12–18 years, including 94 with moderate ID, from seven educational settings in Latvia completed the EUROFIT physical fitness test battery. Composite z-scores were calculated for combined muscular strength, speed, and local muscular endurance. Group differences and associations among fitness components were analyzed by sex and age.

Results: Adolescents with ID demonstrated significantly lower performance in dynamic strength and speed-based tests compared with typically developing (TD) peers. No between-group differences were observed for flexibility, handgrip strength, static balance, or bent-arm hang performance in girls. Age was strongly associated with cardiorespiratory endurance and combined strength in boys across groups. Combined muscular strength showed the strongest association with overall physical fitness in both ID and TD adolescents, while balance demonstrated notable sex-specific associations, particularly in girls with ID.

Conclusions: These findings indicate that muscular strength, speed, and balance are key contributors to overall fitness in adolescents, regardless of intellectual status. The results support prioritizing these components in physical education programs and confirm that adolescents with moderate ID are capable of meaningful fitness development when assessed using standardized fitness batteries.

Funding: The study financed by “Innovations, methodologies and recommendations for the development and management of the sports sector in Latvia” (Nr.VPP-IZM-Sports-2023/1-0001).

Intelligent assistive technologies to support inclusive physical education for students with visual impairments

P. Kornfeind¹, A. Baca¹

¹Department of Sport and Human Movement Science, University of Vienna, Vienna, Austria

Introduction: Physical education (PE) often presents significant participation barriers for students with disabilities. Students with blindness or visual impairments frequently experience limited inclusion, reduced activity levels and delayed motor development. The strong reliance on visual information in PE further restricts independent participation. The Smart Sport Assistance project addressed these challenges by developing intelligent, low-cost assistive technologies to support inclusive participation in PE lessons.

Method: Barriers, needs and opportunities of students with blindness or visual impairments in PE were identified through qualitative analyses and participatory needs assessments (Meier et al., 2023). The findings were translated into a catalogue of functional and technical requirements. Based on this catalogue, several assistive systems were designed and prototyped using an agile, user-centred development approach. Development was conducted in cooperation with students from schools for higher technical education and included iterative testing and refinement in school-based PE settings.

Results: Several assistive technology prototypes were developed: (1) a digital bell ball providing acoustic feedback during movement and when stationary; (2) a basketball assistance system combining an acoustic orientation signal with automated basket detection; (3) a haptic headband delivering vibrotactile feedback to support orientation and movement guidance; and (4) two swimming assistance systems to prevent collisions with the pool edge, using either computer vision-based tracking or haptic compressed-air feedback. The prototypes address orientation, safety and independent task execution in PE activities. To support sustainability and transferability, all systems are accompanied by open hardware and software documentation enabling independent replication.

Conclusions: The project demonstrates that participation barriers in physical education for students with visual impairments can be addressed through cost-effective and accessible assistive technologies. Audio- and haptic-based feedback systems may enhance safety, autonomy and meaningful participation in PE. Future work will focus on usability and effectiveness evaluations and long-term implementation in inclusive school settings.

References:

Meier, S., Höger, B., & Giese, M. (2023). "If only balls could talk...": barriers and opportunities to participation for students with blindness and visual impairment in specialized PE. *Frontiers in Sports and Active Living*, 5, 1286909. <https://doi.org/10.3389/fspor.2023.1286909>

Co-designing accessible assistive technologies to support safe physical activity in older adults with visual impairments

P. Kornfeind¹, S. A. Petter¹, A. Baca¹

¹Department of Sport and Human Movement Science, University of Vienna, Vienna, Austria

Introduction: Older adults with visual impairments are at increased risk of physical inactivity due to environmental, psychosocial and technological barriers. Although physical activity is associated with improved physical and mental health, participation rates remain low. Fear of falling, low self-confidence and inaccessible environments are frequently reported obstacles. In addition, many mainstream fitness technologies are not designed for non-visual use, limiting their suitability for adapted physical activity. This project aims to develop accessible assistive technologies that support safe physical activity for older adults with visual impairments.

Method: A participatory, user-centred development approach was applied. Older adults with visual impairments and members of their social environment were involved throughout all development phases. A literature review, qualitative interviews and a project kick-off workshop were conducted to identify technology-related and contextual barriers to physical activity. These findings guided an iterative co-design process within an open innovation framework. Citizen scientists and students from four technical schools contributed to the design and prototyping of assistive systems. Design priorities included accessibility, low cost and ease of use in adapted physical activity settings.

Results: Several assistive technology prototypes were developed, including (1) a computer vision-based camera system providing posture-related audio feedback, (2) audio-enhanced user interfaces for fitness equipment, and (3) an interactive exercise mat integrating pressure sensors, haptic feedback and Bluetooth connectivity. The prototypes support adapted dance, light exercise and balance training. All systems emphasise non-visual interaction through audio and haptic feedback to enhance safety and usability during physical activity.

Conclusions: The project demonstrates how participatory co-design can guide the development of accessible assistive technologies for adapted physical activity. By addressing technology-related barriers and prioritising non-visual interaction, the developed systems may support safer and more inclusive physical activity participation among older adults with visual impairments. Future work will focus on feasibility and usability testing in real-life exercise settings.

Self-efficacy of adapted physical activity students and graduates in teaching physical education to children after bone marrow transplantation in the Czech Republic

M. Kotz¹, K. Dadřová¹, I. Pavlová¹, J. Vařeková¹

¹Charles University – Faculty of Physical Education and Sport, Prague, Czech Republic

Introduction: Physical activity is an essential element of follow-up care for children after hematological-oncological treatment, supporting physical recovery, psychological well-being, and social reintegration (Wurz et al., 2026). In school physical education (PE), the successful inclusion of a student after bone marrow transplantation (BMT) depends not only on health-related precautions but also on the professional self-efficacy (SE) of educators. This study examined SE levels of students and graduates of Adapted Physical Activity (APA) programs when teaching pupils post-BMT.

Method: A modified version of the SE-PETE-D questionnaire (Block et al., 2013) was administered to 40 respondents aged over 18 years. The instrument assessed SE across eight adapted-teaching situations and included open-ended items evaluating pedagogical strategies. Quantitative and qualitative analyses were conducted.

Results: Across all scenarios, respondents most frequently reported moderate SE (43.1%), followed by high SE (39.4%), while full confidence was indicated in 12.5% of responses. The lowest confidence appeared in tasks requiring organization of game-based activities (e.g., adapting competitive game participation), where a small subset expressed low or no confidence. Conversely, the highest SE levels were observed in communication and empathy-related tasks (e.g., identifying when a student needs assistance or sensitive instruction of classmates). Practical experience with oncological patients was limited: 40% had never worked with a person post-cancer treatment, and 42.5% reported only 1–2 such experiences, suggesting a restricted experiential foundation for decision-making in complex PE scenarios.

Conclusions: Although APA students and graduates generally demonstrate moderate to high SE, the absence of complete confidence, especially in managing game situations and safety considerations, highlights a need for more structured, experience-based training. Strengthening practical modules, clinical placements, and interdisciplinary collaboration with medical professionals could improve preparedness for inclusive PE involving students after BMT. Providing clear educational guidelines and safety recommendations is essential for ensuring meaningful participation in PE during recovery.

References:

- Block, M. E., Hutzler, Y., Barak, S., & Klavina, A. (2013). Creation and validation of the self-efficacy instrument for physical education teacher education majors toward inclusion. *Adapted Physical Activity Quarterly*, 30(2), 184–205.
- Wurz, A., Price, J., Oser, M., et al. (2026). Exploring physical activity experiences among children and adolescents during and beyond cancer treatment: A meta-synthesis of qualitative research. *BMC Cancer*, 26, Article 326.

Neurovisual and multisensory training for maintaining brain function and postural stability in older adults: a scoping review

M. Křivánková¹, K. Daďová¹, I. Starková¹

¹Faculty of Physical Education and Sport, Charles University, Prague, Czech Republic

Introduction: Age-related decline in sensory processing, multisensory integration, and neuroplasticity contributes to reduced postural stability, impaired mobility, and increased fall risk in older adults. Vision provides the dominant proportion of sensory input for motor control, while vestibular, proprioceptive, and interoceptive systems jointly regulate balance, orientation, and bodily awareness. Emerging neurotraining approaches targeting these systems may represent a promising strategy for maintaining brain health and functional independence in ageing populations.

Aim: The aim of this scoping review was to map and summarize current evidence on neurovisual and multisensory training interventions focusing on visual, vestibular, proprioceptive, and interoceptive stimulation, and their effects on cognitive function, balance, mobility, and fall-related outcomes in older adults.

Method: A scoping review methodology was used to identify and synthesize studies investigating sensory-based or neurocentric training programs in adults aged 65 years and older. Eligible interventions included visual or oculomotor exercises, vestibular rehabilitation, proprioceptive or balance training, breathing-based interoceptive approaches, and multimodal neurotraining. Outcomes of interest included postural stability, gait performance, reaction time, cognitive measures, and fall risk indicators. Study characteristics and intervention components were descriptively mapped across sensory domains.

Results: The reviewed literature indicates that sensory-focused interventions may improve oculomotor control, postural stability, gait parameters, and selected cognitive functions. Visual and oculomotor training appears particularly relevant due to the dominant role of vision in spatial orientation and motor control. Vestibular and proprioceptive exercises support postural reflexes and sensorimotor integration, while interoceptive strategies such as breathing techniques may enhance autonomic regulation and perceived well-being. Multimodal programs targeting multiple sensory systems simultaneously show the greatest potential for functional transfer to daily activities and fall prevention. However, heterogeneity in protocols and outcome measures limits direct comparison across studies.

Conclusions: Neurovisual and multisensory training represents a promising, non-pharmacological approach to support brain plasticity, mobility, and balance in older adults. Future research should standardize intervention protocols and establish dose–response relationships to inform evidence-based implementation in clinical, community, and preventive settings.

What is taught within introductory adapted physical activity courses? The perceptions of US faculty

L. J. Lieberman¹, P. H. Warner², B. M. McMullen³

¹SUNY Brockport; ²University of Illinois; ³UW-La Crosse, USA

Introduction: In the US, many physical educators receive introductory coursework in adapted physical activity (APA) to prepare them to educate students with disabilities in physical education. Unfortunately, students with disabilities report physical educators are often untrained or unable to support their needs in physical education (Holland & Haegele, 2021). Scholars in APA identified important content for introductory adapted physical education courses (Lieberman et al., 2024). However, we do not know what is currently being prioritized by faculty from such courses. Accordingly, the purpose of this project was to answer the research question, how do instructors perceive essential content are addressed within introductory APA courses?

Method: Faculty members teaching the Introduction to Adapted Physical Education courses were surveyed to examine how 20 major content areas were addressed in introductory APA courses.

Results: Descriptive analysis of preliminary results indicate that faculty prioritize the laws, assessment and individual education plans within introductory coursework. Faculty reported they were unsatisfied with their ability to cover topics such as behavior management, collaboration, and transition. Lastly, faculty frequently reported that they did not address behavior management, placement decision making, Universal Design for Learning, and transition planning within their introductory APA courses.

Conclusions: Introductory APA courses must continue to be examined to ensure the content provided to physical educators is aligned with recommendations from APA faculty to ensure students with disabilities are receiving high-quality physical education.

References:

- Holland, K., & Haegele, J. A. (2021). Perspectives of students with disabilities toward physical education: A review update 2014–2019. *Kinesiology Review*, 10(1), 78–87.
- Lieberman, L. J., Grenier, M., McNamara, S., Houston-Wilson, C., & Brian, A. (2024). Identifying essential content in the introduction to adapted physical education class. *International Journal of Kinesiology in Higher Education*, 8(3), 255–267.

Five-year follow up of a fundamental motor skill intervention for children with autism spectrum disorder: preliminary results

M. Lloyd¹, H. Lywood¹

¹Ontario Tech University, Canada

Introduction: The fundamental motor skills of children with autism spectrum disorder (ASD) have consistently been found to be delayed (Gandotra et al., 2020). Consequently, motor skill intervention research has increased. Three high-quality reviews have been published on the topic (Case & Yun, 2019; Healy et al., 2021; Ruggeri et al., 2020). All three of these reviews concluded that children with ASD demonstrate improvements in motor skills after intervention. However, there is no research on the long-term impacts of motor skill interventions.

Method: Thirty children with ASD (3-5 years of age) participated in a fundamental motor skill intervention. The Test of Gross Motor Development-2 was used to measure changes in fundamental motor skills. The intervention consisted of 1 hour of group instruction, twice per week for 12 weeks. Five years later the children were brought back to the research lab between the ages of 8-10 years, and the Test of Gross Motor Development-3. Twelve new children in the same age band were recruited who had not participated in the intervention to act as a control group.

Results: Mean locomotor standard scores were slightly higher in the control group (Experimental: 5.33, SD = 3.11, Control: 6.00, SD = 3.33) and not statistically different ($p = .271$). Mean object control standard scores were also slightly higher in the control group (Experimental: 5.43, SD = 3.88, Control: 6.00, SD = 2.80) and not statistically different ($p = .324$), and the mean gross motor quotient scores were higher in the control group (Experimental: 72.73, SD = 19.10, Control: 76.42, SD = 15.00), but overall the scores were not statistically different between the two groups ($p = .277$).

Conclusions: This data provides preliminary evidence that the benefits of a fundamental motor skill intervention may not persist 5 years after the intervention ends. However, the COVID pandemic occurred in the 5-year interval limiting opportunities for continued practice and instruction and selection bias may have impacted who enrolled in this study.

References:

- Case, L., & Yun, J. (2019). The Effect of Different Intervention Approaches on Gross Motor Outcomes of Children With Autism Spectrum Disorder: A Meta-Analysis. *Adapt Phys Activ Q*, 36(4), 501-526.
- Gandotra, A., Kotyuk, E., Szekely, A., Kasos, K., Csirmaz, L., & Cserjesi, R. (2020). Fundamental movement skills in children with autism spectrum disorder: A systematic review. *Research in Autism Spectrum Disorders*, 78, 101632.
- Healy, S., Obrusnikova, I., & Getchell, N. (2021). Fundamental Motor Skill Interventions in Children with Autism Spectrum Disorder: A Systematic Review of the Literature Including a Methodological Quality Assessment. *Research in Autism Spectrum Disorders*, 81, 101717.
- Ruggeri, A., Dancel, A., Johnson, R., & Sargent, B. (2020). The effect of motor and physical activity intervention on motor outcomes of children with autism spectrum disorder: A systematic review. *Autism*, 24(3), 544-568.

Leisure-time sport inclusion of athletes with intellectual disabilities: Perspectives of athletes and coaches

M. Lund Ohlsson^{1,2}, J. Oskarsson^{1,3}, E. Flygare Wallén^{4,5}, K. Wickman⁶

¹Department of Health Sciences, Swedish Winter Sport Research Centre, Mid Sweden University, Östersund, Sweden; ² Department of Physiology, Nutrition and Biomechanics, The Swedish School of Sport and Health Sciences (GIH), Stockholm, Sweden; ³The Swedish Paraspport Federation, Stockholm, Sweden; ⁴Karolinska Institutet (KI), Department of Neurobiology, Care Sciences and Society (NVS) Division of Occupational Therapy, Stockholm, Sweden; ⁵Health and Social Care Administration, Municipality of Östersund, Östersund, Sweden; ⁶Department of Education, Umeå University, Umeå, Sweden.

Introduction: People with intellectual disability (ID) participate in organised sports to a lesser extent than people in general (Borland et al., 2020). Leisure-time sport is often organized around normative expectations of physical and cognitive abilities, leading to experiences of exclusion for athletes who do not conform to these standards (Svanelöv et al., 2020; Wickman, 2008). The overall aim of this study was to study athletes' and coaches' perceptions, analysed separately regarding important adaptations needed to sense of belonging and inclusion in leisure-time sport.

Method: Semi-structured online interviews were conducted with athletes with ID (N = 15) and with coaches to athletes with ID (N = 15) in Sweden. The qualitative analysis was guided by the theoretical framework of sense of belonging for athlete data, and the social-relational model of disability for coach data (Allen et al., 2021; Townsend et al., 2015).

Results: From the athletes' perspective, the main theme *Empower me to grow as an athlete- adapt the support to help me develop my sport skills and social aspects* illuminated motivation, competence, perception, and opportunities as key aspects for engagement in sport. The coaches' perspective revealed how coaches worked to build relation with the athletes, create mutual understanding, and the need of adapted support at multiple levels.

Conclusions: Athletes with ID are motivated, wish to feel competent, and strive to be recognised as athletes who belong in sports and can develop within it. Coaches tailor their coaching by first building trusting relationships that enable them to understand each athlete's individual needs. This relational approach contributes to an environment in which the athletes feel included, supported in their development, and comfortable asking questions when something is unclear.

The findings of this study may contribute to increased knowledge and competence among coaches and sports federations, thereby supporting sport equity and inclusion for athletes with ID.

References:

- Allen, K. A., M. L. Kern, C. S. Rozek, D. M. McInerney, and G. M. Slavich. 2021. "Belonging: A Review of Conceptual Issues, an Integrative Framework, and Directions for Future Research." *Australian Journal of Psychology* 73, no. 1: 87–102. Doi:10.1080/00049530.2021.1883409.
- Borland, R. L., N. Hu, B. Tonge, S. Einfeld, and K. M. Gray. 2020. "Participation in Sport and Physical Activity in Adults With Intellectual Disabilities." *Journal of Intellectual Disability Research* 64, no. 12: 908922. Doi:10.1111/jir.12782.
- Svanelöv, E., E. F. Wallén, P. Enarsson, and J. Stier. 2020. "'Everybody With Disability Should Be Included': A Qualitative Interview Study of Athletes' Experiences of Disability Sports Participation Analysed With Ideas of Able-Mindedness." *Scandinavian Journal of Disability Research* 22, no. 1: 296–306. Doi:10.16993/sjdr.676.
- Townsend, R. C., Smith, B., & Cushion, C. J. (2015). *Disability sports coaching: Towards a critical understanding. Sports Coaching Review*, 4 (2), 80–98. Doi: [10.1080/21640629.2016.1157324](https://doi.org/10.1080/21640629.2016.1157324)
- Wickman, K. (2008). *Bending mainstream definitions of sport, gender and ability: representations of wheelchair racers* [Doctoral dissertation, Umeå University]. <https://www.diva-portal.org/smash/get/diva2:141458/FULLTEXT01.pdf>

Sedentary behavior and physical activity levels in Swedish adolescents with and without intellectual disabilities

M. Lund Ohlsson^{1,2}, C. A. Staunton^{1,3}, E. Flygare Wallén^{4,5}, E. P. Andersson¹
S. Fjellström^{1,6}

¹Department of Health Sciences, Swedish Winter Sport Research Centre, Mid Sweden University, Sweden; ²The Swedish School of Health and Sport Sciences (GIH), Department of Physiology, Nutrition and Biomechanics; ³Department of Environmental and Bioscience, School of Business, Innovation and Sustainability, Halmstad University, Halmstad, Sweden; ⁴Karolinska Institutet (KI), Department of Neurobiology, Care Sciences and Society (NVS) Division of Occupational Therapy, Stockholm, Sweden; ⁵ Health and Social Care Administration, Municipality of Östersund, Östersund Sweden; ⁶Public Health Agency, Department of Living Conditions and Lifestyle, Sweden

Introduction: Physical activity is essential for health (World Health Organization, 2020) and active behaviour early in life predicts higher physical activity levels in adulthood (García-Hermoso et al., 2025). Adolescents with intellectual disability (ID) show lower activity levels than peers without ID (Einarsson et al., 2015). However, less is known about how physical activity patterns vary throughout the week - such as during school hours and leisure time - which may influence these differences. The present study aimed to examine physical activity patterns among Swedish adolescents with and without ID using accelerometer data.

Method: Physical activity was measured objectively using hip-worn accelerometers (ActiGraph GT3X) over seven consecutive days. This cross-sectional study included 45 adolescents with mild-to-moderate ID (median [IQR], 17.0 [14.0-19.0] years; 45.2% females) and 70 adolescents without ID (16.0 [15.0-16.3] years; 62.2% females). Physical activity was categorized as sedentary behavior (SB), light physical activity (LPA), and moderate-to-vigorous physical activity (MVPA), and analysed across school days, weekend days, and separately for daytime and evening periods on school days.

Results: Overall, the relative amount of SB was similar between groups ($p > .05$), but significant differences were observed for LPA and MVPA. Adolescents with ID accumulated more LPA during school-day daytime hours (23% vs. 19%; $p = .012$), while peers without ID accumulated more MVPA during leisure time, such as school-day evenings ($p = .025$) and weekends ($p = .039$). For both groups, MVPA was higher on school days than on weekends ($p < .001$). Among adolescents with ID, SB increased markedly on weekends (72% vs. 77%; $p < .001$).

Conclusions: Adolescents with ID were generally less active than peers without ID, except during school-day daytime, where MVPA was similar, but LPA was higher. Leisure time, particularly weekends and school-day evenings, seems to be particularly challenging for achieving sufficient MVPA among adolescents with ID. Targeted interventions focusing on unstructured periods may help promote active lifestyles and reduce health disparities in this population.

References:

- Einarsson, I. O., Ólafsson, Á., Hinriksdóttir, G., Jóhannsson, E., Daly, D., & Arngrímsson, S. Á. (2015). Differences in physical activity among youth with and without intellectual disability. *Medicine & Science in Sports & Exercise*, 47(2), 411–418.
- García-Hermoso, A., López-Gil, J. F., & Ezzatvar, Y. (2025). Tracking of physical activity and sport from childhood and adolescence to adulthood: A systematic review and meta-analysis. *Translational Pediatrics*, 14(6).
- World Health Organization. (2020). WHO guidelines on physical activity and sedentary behaviour: web annex: evidence profiles. Geneva: WHO.

Reconnecting research and practice in paralympic sport management: The ParaManager framework as an evidence-informed model of professionalisation

P. Marek

Institute of Sport-National Research Institute, Warsaw, Poland

Introduction: Paralympic sport management in Europe has developed dynamically; however, the professionalisation of managerial roles remains uneven and largely based on experiential knowledge rather than validated competency frameworks. Previous research conceptualises sport professions as “blended professional areas” combining specialised knowledge, ethical responsibility, and social impact. A persistent gap between research and organisational practice limits effective governance and sustainable inclusion. This study aims to present the ParaManager qualification framework (EQF Level 5) as an evidence-informed model of professionalisation.

Method: A qualitative design was applied using focus group interviews with managers of Paralympic sport from multiple European countries. Participants were selected purposively from National Paralympic Committees and sport federations. Data were analysed using thematic analysis to identify key competency domains and their alignment with existing models of sport professionalisation.

Results: The findings derive from a thematic analysis of 33 interview transcripts collected from 12 representatives of European National Paralympic Committees. Findings indicate that managerial competencies are highly context-dependent and cannot be standardised into a single development pathway. Paralympic sport requires diverse expertise due to specific organisational constraints. Professional learning should therefore be grounded in real working environments rather than formalised training alone. Knowledge transfer in organisations is often informal and embedded in practice; without structured mechanisms, valuable expertise may be lost. Based on these insights, a competency framework was developed, including inclusive governance, stakeholder coordination, programme planning, external relations, funding management, quality monitoring, and ethical leadership. The model incorporates portfolio-based assessment and Recognition of Prior Learning.

Conclusions: The ParaManager framework provides an evidence-based approach to integrating research and practice in Paralympic sport management. It supports competency transparency, strengthens professional identity, and enhances system coherence. In the long term, harmonised qualification standards may contribute to greater comparability across European sport systems and to sustainable inclusion in sport.

From the pitch to the workplace: The coach's role in facilitating skills for employability for athletes with intellectual disabilities

C. Messiaen¹, R. Reina¹, A. Roldán¹

¹Miguel Hernández University, Sports Research Centre, Elche, Spain

Introduction: Unemployment remains a critical challenge for individuals with Intellectual Disabilities (ID). While sports are recognized as a tool for developing "soft skills" (e.g., teamwork, autonomy) that enhance employability, the process of acquisition is understudied. Specifically, the role of the coach as a mediator in this development is often overlooked. This study explores how coaches of athletes with ID understand, prioritize, and develop soft skills, analysing differences between team and individual sport contexts.

Method: A qualitative approach was employed involving semi-structured interviews with 20 coaches of athletes with ID (9 Team Sports, 11 Individual Sports; mean age 38.1 ± 15 years). Participants were recruited via the Spanish Federation of Sports for Intellectual Disability (FEDDI) and Special Olympics Spain. Interviews focused on the coaches' conceptual understanding of *soft skills*, their intentionality in training them, and their prioritization of specific skills. Data were transcribed verbatim and analysed following an abductive approach.

Results: Results revealed a general lack of conceptual clarity; most coaches could not explicitly define "soft skills" and admitted to using an "implicit" development approach, believing skills emerge automatically, rather than an intentional strategy. A distinct dichotomy emerged in prioritization: Team sport coaches prioritized interpersonal skills (i.e., teamwork, empathy, social relationships), while individual sport coaches focused on intrapersonal skills (i.e., autonomy, emotional management, constancy).

Conclusions: The use of an abductive lens highlights that while coaches act as "architects", their design for employability are currently unintentional. These findings are relevant for the design of specialized coach-training programs; by understanding the unique psychosocial demands of team vs. individual sports, we can develop targeted curricula that help coaches transition from implicit to explicit teaching methodologies. This ensures that the specific soft skills nurture on the pitch are effectively translated to professional competencies for the labour market in people with ID.

Experiences of inclusion and exclusion by children and adolescents with social, emotional and mental health needs in physical education: A participatory research project

R. Meyer¹, M. Giese²

¹University of Wuppertal, Wuppertal, North-Rhine Westphalia, Germany; ²Philipps University Marburg, Marburg (Lahn) Hesse, Germany

Introduction: Social, Emotional and Mental Health (SEMH) needs have increased in recent years, while a considerable “hidden need” remains insufficiently captured by formal diagnostics (Stein & Müller, 2024). Physical education (PE) constitutes an ambivalent setting for these students, offering opportunities for belonging while concentrating embodied demands that may intensify exclusion (Brunßen et al., 2025; Giese, 2023). SEMH needs pose specific challenges for adapted physical activity, particularly regarding emotional regulation, social interaction, and participation in dynamic and publicly visible situations. The project seeks to reconstruct experiences of inclusion and exclusion from students’ perspectives.

Method: The study follows an ethnographic participatory research approach (von Unger, 2014) in two school settings with differing organisational forms (inclusive and segregated). After several unsuccessful attempts to gain access, two schools agreed in principle to participate. The fieldwork includes children and adolescents with SEMH needs aged 6–16. Data are generated through participant observation, semi-structured interviews, and participatory mapping methods, with some interviews conducted jointly with teachers. While the study aims to involve students across all phases of the research process, sustained participation remains challenging due to fluctuating engagement, emotional demands, and the situational nature of school contexts. These tensions are treated as integral to the research process.

Results: Preliminary analyses indicate that inclusion and exclusion are situationally negotiated and closely linked to spatial organisation. For students with SEMH needs, less structured “in-between” spaces—such as transitions between playground, changing rooms and gym—emerge as particularly vulnerable. More structured spaces can stabilise engagement. Teacher transparency, trust-building practices, and opportunities for partial participation are central for sustaining involvement.

Conclusions: The project highlights the fragile and situational nature of participation with students with SEMH needs, challenging normative assumptions in research and adapted physical activity. This has epistemological implications, as knowledge emerges through partial and fluctuating involvement, calling for more reflexive and flexible approaches in both research and pedagogical practice.

References:

- Brunßen, L., Haase, R. K., & Kastrup, V. (2025). Encouraging inclusion of students with social, emotional and mental health needs in physical education: A systematic review. *German Journal of Exercise and Sport Research*. <https://doi.org/10.1007/s12662-025-01069-2>
- Giese, M. (2023). Sport- and movement-oriented educational approaches with children and adolescents with behavioural difficulties. In R. Stein, T. Müller, & P. Hascher (Eds.), *Education as a challenge: Foundations for pedagogy in behavioural disorders* (pp. 246–258). Julius Klinkhardt.
- Stein, R., & Müller, T. (Eds.). (2024). *Inclusion in the field of social and emotional development* (3rd rev. ed.). Kohlhammer.
- von Unger, H. (2014). *Participatory research: Introduction to research practice*. Springer VS. <https://doi.org/10.1007/978-3-658-01291-5>

Influence of the school integration program (PIE) on body composition and physical performance in schoolchildren

F. Muñoz-Hinrichsen¹, M. Socias Marfan¹, C. Pardo Tamayo², J. Pérez-Tejero³

¹Laboratorio de Actividad Física, Salud, y Rendimiento Humano, Departamento de Kinesiología, Universidad Metropolitana de Ciencias de la Educación; ²Departamento de Educación Física, Deporte y Recreación, Universidad Metropolitana de Ciencias de la Educación, Chile; ³Cátedra de Estudios del Deporte Inclusivo (CEDI), INEF Universidad Politécnica de Madrid, España

Introduction: School education and physical activity are vital for the inclusion and social participation of children and adolescents with disabilities (CaAwD) (Martin Ginis et al., 2021). Despite global goals for Quality Education, 84% of CaAwD in Chile are physically inactive (Ministerio del Deporte, 2020). This inactivity can negatively impact body composition and physical performance, leading to cardiovascular risks and barriers to social inclusion (Aguilar-Farias et al., 2024).

Method: This study compared body composition and physical performance between participants in the School Integration Program (SIP, n = 50) and non-participants (n = 76) in Santiago, Chile. Variables assessed included standing broad jump, handgrip strength, percentage of fat, percentage of muscle, and Waist-to-height ratio. The overall mean age was 10.3 years, with no significant differences by sex (p = .973) or SIP participation (p = .797). The independent samples T-Test, Mann-Whitney U test, and Cohen's d were used for analysis.

Results: Statistically significant differences were found in several variables: The SIP group showed a significantly higher mean percentage of fat (31.53% vs. 25.34%; p = .002; d = 0.56). The non-SIP group exhibited significantly higher means in percentage of muscle (39.22% vs. 35.78%; p = .003; d = 0.555), standing broad jump (95.46 cm vs. 85.71 cm; p = .02; d = 0.42), and in the age-adjusted ratios for standing broad jump (p = .043) and handgrip strength (p = .040). The effect size for these differences ranged from small to medium.

Conclusions: Schoolchildren not in the SIP program, on average, demonstrate better body composition (lower fat and higher muscle percentage) and superior physical performance (greater Standing Broad Jump) compared to their SIP peers. These findings highlight the need for targeted interventions within the SIP program to enhance physical fitness and metabolic health components, which can thus promote cognitive processes and physical-emotional health.

References:

- Aguilar-Farias, N., Miranda-Marquez, S., Toledo-Vargas, M., Sadarangani, K. P., Ibarra-Mora, J., Martino-Fuentealba, P., Rodriguez-Rodriguez, F., Cristi-Montero, C., Henríquez, M., & Cortinez-O'Ryan, A. (2024). Results From the First Para Report Card on Physical Activity for Children and Adolescents With Disabilities in Chile. *Journal of Physical Activity and Health*, 1–9. <https://doi.org/10.1123/jpah.2024-0073>
- Martin Ginis, K. A., Van Der Ploeg, H. P., Foster, C., Lai, B., McBride, C. B., Ng, K., Pratt, M., Shirazipour, C. H., Smith, B., Vásquez, P. M., & Heath, G. W. (2021). Participation of people living with disabilities in physical activity: A global perspective. *The Lancet*, 398(10298), 443–455. [https://doi.org/10.1016/S0140-6736\(21\)01164-8](https://doi.org/10.1016/S0140-6736(21)01164-8)
- Ministerio del Deporte. (2020). Primer estudio nacional de hábitos de actividad física y deporte en personas con discapacidad.

Developing an inclusive physical education resource guide for south african educators: A multi-stage mixed-methods study

R. Naidoo¹, X. McCreanor¹, V. Chetty¹

¹University of KwaZulu-Natal, College of Health Sciences, Durban, South Africa

Introduction: Children with disabilities in South Africa continue to experience exclusion and inconsistent participation in physical education (PE), often linked to limited educator training, inconsistent curriculum implementation, and a lack of practical guidance (Donohue & Bornman, 2014; Dube et al., 2018; Wegner & Struthers, 2011). Despite inclusive education policies, educators frequently report uncertainty in adapting instruction, selecting appropriate activities, and responding to diverse learner needs (Block et al., 2021; Haegele & Sutherland, 2015; Sharma et al., 2008). This study aimed to develop and validate a comprehensive PE resource guide to support educators in special-needs schools and promote inclusive practice.

Method: A four-year, multi-stage mixed-methods design was employed. A scoping review synthesised literature on PE curricula and teaching approaches for children with disabilities. Qualitative interviews with educators (n = 12) explored classroom practices and challenges, while interviews with children (n = 22) captured their experiences of PE participation. These findings informed the development of a draft resource guide. A modified Delphi study with 16 South African experts was conducted over 2 rounds to evaluate the guide's relevance, clarity, accuracy, and practical utility. Consensus was defined as $\geq 75\%$ agreement.

Results: The scoping review revealed fragmented curricula and limited disability-specific guidance. Educators reported inadequate training, resource constraints, and difficulties adapting activities, while learners described exclusion, inconsistent support, and unmet participation needs. These insights informed the guide's development. Across two Delphi rounds, experts reached a strong consensus on all sections, confirming the guide's usability, policy alignment, and practical value. The final guide includes adaptable lesson strategies, disability-specific considerations, assessment approaches, and curated online resources.

Conclusions: This study produced a validated PE resource guide tailored to special-needs schools in South Africa. The guide offers contextually relevant strategies to support inclusive PE, enhance participation, and promote learners' physical, social, and emotional development.

References:

- Block, M. E., Haegele, J. A., Kelly, L. E., & Obrusnikova, I. (2021). *Physical education for students with disabilities* (2nd ed.). Human Kinetics.
- Donohue, D. K., & Bornman, J. (2014). The challenges of inclusive education in South Africa. *South African Journal of Education*, 34(2), 1–14. <https://doi.org/10.15700/201412071114>
- Dube, T., Pillay, M., & van Niekerk, D. (2018). Barriers and facilitators to physical activity participation among children with disabilities in South Africa: A systematic review. *African Journal of Disability*, 7, a310. <https://doi.org/10.4102/ajod.v7i0.310>
- Haegele, J. A., & Sutherland, S. (2015). Perspectives of students with disabilities toward physical education: A qualitative inquiry review. *Quest*, 67(3), 255–273. <https://doi.org/10.1080/00336297.2015.1050118>
- Sharma, U., Forlin, C., & Loreman, T. (2008). Impact of training on pre-service teachers' attitudes and concerns about inclusive education and sentiments about persons with disabilities. *Disability & Society*, 23(7), 773–785. <https://doi.org/10.1080/09687590802469271>
- Wegner, L., & Struthers, P. (2011). Sports for learners with physical disabilities in ordinary public primary schools in the Western Cape, South Africa. *African Journal for Physical, Health Education, Recreation and Dance*, 17(Suppl.), 103–112.

Differences in perceptions of the inclusion of students with autism and ADHD in physical education classes

D. Nemček¹, Z. Zacharová²

¹Comenius University Bratislava, Faculty of Education, Department of Special Education, Bratislava, Slovakia; ²Comenius University Bratislava, Faculty of Education, Department of Psychology and Pathopsychology, Bratislava, Slovakia

Introduction: The inclusion of students with autism and attention deficit hyperactivity disorder (ADHD) in physical education (PE) classes continues to be an important topic of international research and professional discussion. Understanding PE teachers' perceptions of the inclusion of students with disorders is essential for the effective implementation of inclusive practices within general PE.

Objective: The aim of the research was to examine differences in PE teachers' perceptions of attitudes towards the inclusion of students with autism and students with ADHD in their classes.

Method: The study sample consisted of 198 PE teachers including 106 women and 92 men with a mean age of 41.26 ± 10.07 years. Participants completed the Attitudes toward Teaching Individuals with Physical Disabilities in Physical Education scale (using a seven-point response format) with a specific focus on students with autism and students with ADHD (Nemček & Haegele, 2025). Differences in teachers' perceptions of inclusion-related attributes were analysed using the Wilcoxon Signed Ranks Test.

Results: Significant differences between the inclusion of students with autism and students with ADHD in PE classes were identified in the attitudinal attributes: communication ($Z = -3.392$, $p = .001$) helpfulness ($Z = -3.556$, $p = .000$) tolerance ($Z = -3.471$, $p = .001$) and personality development ($Z = -1.959$, $p = .050$). No significant differences were observed in the attributes: knowledge about people with disorders (mean score of 4.9 out of 7 points) or cooperation (mean score of 5.0 out of 7 points).

Conclusions: PE teachers perceive that the inclusion of students with autism in general PE classes can substantially enhance helping behaviours among typically developing peers while simultaneously promoting greater tolerance towards individual differences. In contrast, teachers perceive that the inclusion of students with ADHD has a positive impact on the personal development of the student with ADHD and significantly supports typically developing peers in developing effective communication with students with ADHD.

References:

Nemček, D. & Haegele, J. A. (2025). Gender differences in positive and negative outcomes towards inclusion of students with autism spectrum disorders in physical education classes. *International Journal of Developmental Disabilities*, 1-9. <https://doi.org/10.1080/20473869.2024.2448684>

Funding: Research was supported by the grant VEGA 1/0694/24.

Challenges in the inclusion of students with autism from the perspective of Slovak physical education teachers across different educational level

D. Nemček¹, Z. Zacharová²

¹Comenius University Bratislava, Faculty of Education, Department of Special Education, Bratislava, Slovakia; ²Comenius University Bratislava, Faculty of Education, Department of Psychology and Pathopsychology, Bratislava, Slovakia

Introduction: The inclusion of students with autism spectrum disorder (ASD) in general physical education (PE) classes represents a significant pedagogical and organizational challenge requiring specific professional competencies and supportive conditions. Understanding how Slovak PE teachers perceive these challenges across different educational levels is essential for improving inclusive practices and developing targeted support strategies.

Objective: The aim of the study was to compare perceived challenges and experiences toward the inclusion of students with ASD in PE classes among teachers working at the primary education, lower secondary and upper secondary education levels.

Method: The study sample consisted of 172 Slovak teachers teaching PE at primary education level (n = 82), lower secondary (n = 66), and upper secondary education level (n = 24) with mean age = 41.39, SD = 10.40 years. Participants completed the Physical Educators' Self-efficacy toward Including Students with Disabilities-Autism scale using a five-point response format (Bundová & Nemček, 2025). Differences in challenges were analysed using the Mann-Whitney U-Test.

Results: Among three groups of teachers, the most negative experiences with the inclusion of students with ASD were reported by teachers at the primary education level. The greatest perceived challenges included a lack of appropriate equipment, insufficient time to implement instructional modifications, absence of aid or professional support, large class sizes and multiple classes sharing the gym, student behavior problems, and increased levels of stress. In contrast, upper secondary school PE teachers identified large disparities in students' skill levels compared with their peers as the most significant challenge.

Conclusions: These findings indicate that the nature and intensity of perceived inclusion challenges vary across educational levels, with primary school PE teachers experiencing the greatest overall burden. Addressing resource limitations, class organization, and teacher support may be particularly critical in primary education, while differentiation strategies appear especially important at the upper secondary level.

References:

Bundová, L., & Nemček, D. (2024). Skúsenosti učiteľov so začlenením žiakov s poruchami autistického spektra do inkluzívnej telesnej a športovej výchovy. [Teachers' experiences with the inclusion of pupils with autism spectrum disorders in inclusive physical and sports education]. *Studia Scientifica Facultatis Paedagogicae*, 23(1), 86-99. <https://doi.org/10.54937/ssf.2024.23.1.86-99>

Funding: Research was supported by the grant VEGA 1/0694/24.

Age of starting sports among Finnish adolescents with disabilities

K. Ng^{1,2,3}, V. Pikkupeura-Riikilä⁴, A. Pohjavirta⁴, R. Hämylä⁴

¹Department of Teacher Education, Turku Institute of Advanced Studies, University of Turku, Finland; ²Physical Activity for Health Research Centre, Health Research Institute, Department of Physical Education and Sport Sciences, University of Limerick, Ireland; ³Institute of Sports Science and Innovation, Lithuanian Sports University, Lithuania; ⁴Faculty of Sport and Health Sciences, University of Jyväskylä, Finland

Introduction: There is much debate about the benefits and harms of early specialisation in sport participation. Although there are programmes that help bring children with disabilities into sports clubs, there is a lack of information on what age children with disabilities start sports and if these ages have changed over time. The purpose of this study is to examine reported age of starting sport club participation, and how the average age changes over time from Finnish national representative samples.

Method: Repeated cross-sectional data from the voluntary national representative Finnish School-age physical activity (FSPA) study in 2018, 2022 and 2024 was used. The survey included items where individuals completed the self-reported version of the Washington Group/Child Functioning Module, as a proxy for disabilities, organised sport participation, the age of starting sport club participation. Data were stratified by gender and controlled for age in a general linear model to determine differences in starting age between males and females with and without disabilities over the three time points.

Results: Approximately 60% (n = 11,964/17,691) of Finnish adolescents reported to participate in organised sports in 2018, 2022, and 2024. Of which, 17% (n = 1,942/11,417) reported disabilities with more females (20%) and males (14%). The age of starting sport was, on average, greater among males with disabilities (mean = 7.3y) than without disabilities (mean = 6.5y) (p < .001, Eta² = .009) Similar starting ages were among females with disabilities (mean = 6.6y) and without disabilities (mean = 6.2y) (p < .001, Eta² = .003). There was no statistically significant interaction between year and disability.

Conclusions: Adolescents with disabilities have consistently started sports at a later age than their non-disabled peers. More research is needed on specific disability groups, starting age for organised sports, as well as identification of the types of sports being practiced.

Self-efficacy toward teaching disabled children across instructional settings: psychometric properties of a scale's spanish version among Colombian pre-service physical educators

L. Nowland-Christmas¹, F. Arroyo-Rojas², B. Ramirez-Forero³, X. Zhu⁴, L. Prieto⁵

¹California State University-San Bernadino, San Bernadino, CA, United States; ²Hofstra University, Hempstead, NY, United States; ³Universidad de Caldas, Manizales, Colombia; ⁴Old Dominion University, Norfolk, VA, United States; ⁵University of Wisconsin-Madison, Madison, WI, United States

Introduction: The purpose of this study was twofold: (a) to translate the Self-Efficacy to Teach Students with Disabilities Across Instructional Placements for Physical Education (SETSD-IPPE) scale into Spanish and examine its psychometric properties on a sample of Colombian pre-service physical educators and (b) to explore the association between efficacy-relevant information on their self-efficacy across instructional placements.

Method: The participants were 202 pre-service physical educators (143 males; 58 females, 1 prefer not to say) from three universities in Colombia. 37.6 % of the participants (Mean age = 23.33, SD = 4.45) were in their third year of study in their physical education teacher education program at the time of data collection.

Results: Confirmatory factor analyses supported the factor structure of the Spanish version of the self-efficacy scale and efficacy-relevant subscales across both integrated and self-contained instructional placements, with acceptable to good model fit. Cronbach's alpha ranged from acceptable to excellent. Structural equation modelling indicated that favourable efficacy-relevant information significantly predicted self-efficacy while mediating the indirect prediction of unfavourable efficacy-relevant information on Colombian pre-service physical educators' self-efficacy to teach disabled students in an integrated placement. The structural model for the self-contained instructional placement did not demonstrate acceptable fit.

Conclusions: Perhaps, this is reflective of the types of training experiences provided in this context as well as the predominance of integrated spaces in the training of future educators that strongly aligns with the global inclusive movement. The Spanish version of the SETSD-IPPE appears to be a valid and reliable instrument, providing room for future research on Spanish speaking physical educators self-efficacy to teach disabled students across integrated and self-contained placements.

The role of sporting abilities in inclusive processes: A qualitative study with people with visual impairments from an ableism-critical perspective

F. Oldörp¹

¹ Philipps-Universität Marburg, Marburg, Germany

Introduction: Due to its performance orientation, abilities are a central element in sport, but also an area of controversy (Wendler & Maier, 2020). They may have an implicitly exclusionary effect through ableist notions of ability (Rich et al., 2022). Although abilities are rarely explicitly defined, they play an important role in inclusion. Given that abilities are placed in a binary relationship with disability and evaluated accordingly (Campbell, 2019), understanding the interaction between inclusion and abilities is essential.

Method: Episodic interviews (Flick, 2011) were conducted to examine the interplay between inclusion and athletic abilities, with the objective of identifying aspects of inclusion that are both supportive and inhibitory. Six adult blind tennis players and six adult alpine para-skiers from Germany were interviewed. The data were analyzed using a content-structuring qualitative content analysis (Kuckartz, 2018).

Results: From the perspective of people with visual impairments, the role of athletic abilities can be described on three levels: integration into everyday life, demonstration of abilities, and ableist assumptions about abilities. The analysis indicated that the interviewees comprehended athletic abilities in diverse ways beyond physical fitness and coordinative skills. Abilities functioned as resources that were consciously or unconsciously integrated into their everyday life. Moreover, they used sport to demonstrate their abilities to themselves and others, which supported perceptions of competence and challenged deficit-oriented assumptions within inclusive processes (Oldörp et al., 2025; Oldörp et al., 2024).

Conclusions: Abilities thus exist in a tense relationship between being a resource and a compensatory tool for ableist thinking patterns. Demonstrating abilities as a tool for inclusion should be viewed critically, as it contributes only to a limited extent to the visibility and normalization of the abilities of people with visual impairments. Alternatives such as shared sporting experiences should be considered to challenge and reflect disability-related prejudices and assumptions about abilities.

References:

- Campbell, F. K. (2019). Precision ableism: a studies in ableism approach to developing histories of disability and abledment. *Rethinking History*, 23(2), 138–156. <https://doi.org/10.1080/13642529.2019.1607475>
- Flick, U. (2011). The episodic interview. In G. Oelerich & H.U. Otto (Eds.) *Empirical Research and Social Work: A Study Guide* (1st Edition) (pp. 273–280). VS Verlag für Sozialwissenschaften.
- Kuckartz, U. (2018). *Qualitative Content Analysis: Methods, Practice, Computer Support* (4th Edition). Beltz Juventa.
- Oldörp, F., Schaller, T., Grenier, M. & Giese, M. (2025). The importance of abilities in inclusive experiences from the perspective of people with visual impairments: the example of alpine skiing. *Frontiers in Sports and Active Living*, 7, 1587603. <https://doi.org/10.3389/fspor.2025.1587603>
- Oldörp, F., Giese, M. & Grenier, M. (2024). The Influence of Blind Tennis on Subjective Inclusion Experiences - An Ableism-Critical Analysis. *Adapted Physical Activity Quarterly*, 41(3), 420–439. <https://doi.org/10.1123/apaq.2023-0140>
- Rich, J., Lieberman, L. J., Beach, P. & Perreault, M. (2022). “Moving Freely in Space with Power and Not Be Afraid”: An Interpretative Phenomenological Analysis of the Experiences of Elite Rowers with Visual Impairment. *International Journal of Environmental Research and Public Health*, 19(21), 14059. <https://doi.org/10.3390/ijerph192114059>
- Wendler, M. & Maier, J. (2020). Exclusion and inclusion in (recreational) sports. In H. Greving, C. Reichenbach & M. Wendler (Eds.), *Inclusion in special education: Discourses, guiding principles, action plans* (pp. 163–174). Kohlhammer Verlag.

Alpine skiing in athletes after transplantation and with chronic kidney disease – Movement as courage and therapy

I. Pavlová¹, A. Mahrová¹

¹Charles University, Faculty of Physical Education and Sport, Prague, Czech Republic

Introduction: Physical activity in individuals with serious chronic conditions, such as those after organ transplantation or patients regularly undergoing hemodialysis, represents not only a medical challenge but also a unique opportunity to improve quality of life.

Aim: The aim of this is to present the issue of alpine skiing in this specific group of patients – a sport that is physically demanding yet attractive and highly motivating.

Results: The contribution presents the issue of alpine skiing in patients with serious chronic conditions from a research perspective, with a focus on the methodology of case report processing. Attention is given to the assessment of health risks, the specifics of training preparation, safety measures, and the potential benefits of physical activity in the context of sports medicine. The presentation will include patient case reports and examples of good practice, illustrating the importance of motivation, personal responsibility, and support from physicians and therapeutic teams in returning to an active lifestyle.

Talent identification in paralympic sport in Germany: Structures, stakeholders, and challenges

S. Radtke¹, A. Vogel¹

¹Paderborn University, Paderborn, Germany

Introduction: Talent identification (TID) in Paralympic sport is shaped by heterogeneous impairment types, diverse entry pathways, and complex structural conditions (Patatas et al., 2020; Dehghansai et al., 2021). In Germany, several initiatives aim to improve access to Paralympic sport and identify potential talent. However, empirical evidence on the effectiveness and sustainability of these measures remains limited. The ParaTalent project analysed talent identification measures in Paralympic sport in Germany, focusing on structures, roles, and implementation processes (Radtke & Vogel, 2025).

Method: A mixed-methods design was applied, comprising document and website analyses; expert interviews with national and regional federation stakeholders (n = 18); online surveys of organisers (n = 58) and participants or parents (n = 76); and longitudinal interviews with participants conducted immediately after and approximately six months following selected measures (n = 18 / n = 14). Qualitative data were analysed using structured qualitative content analysis, and quantitative data descriptively.

Results: The findings show variability in structures and objectives across organisations involved in Paralympic talent identification. A discrepancy emerged between conceptual goals and practical implementation. While most stakeholders emphasised broad access to organised sport, only a minority explicitly targeted performance-oriented talent identification. Participation was dominated by already sport-active individuals with relatively low support needs, whereas individuals with more complex impairments were rarely reached. Key challenges included limited coordination, unclear communication, regional disparities, and insufficient post-event follow-up. Parents played a particularly influential role in facilitating access and continuity, especially in youth contexts.

Conclusions: The ParaTalent findings underline the need for shared objectives, improved stakeholder coordination, and more systematic follow-up structures to enhance the effectiveness and sustainability of talent identification in Paralympic sport in Germany. Strengthening roles, communication strategies, and access pathways is crucial for developing a broader inclusive talent pool.

References:

- Dehghansai, N., Pinder, R. A., & Baker, J. (2021). "Looking for a Golden Needle in the Haystack": Perspectives on Talent Identification and Development in Paralympic Sport. *Frontiers in sports and active living*, 3, 635977. <https://doi.org/10.3389/fspor.2021.635977>
- Patatas, J. M., De Bosscher, V., Derom, I., & De Rycke, J. (2020). Managing parasport: An investigation of sport policy factors and stakeholders influencing para-athletes' career pathways. *Sport Management Review*, 23(5), 937–951. <https://doi.org/10.1016/j.smr.2019.12.004>
- Radtke, S., & Vogel, A. (2025). Talentsuche im paralympischen Sport (ParaTalent). In Bundesinstitut für Sportwissenschaft (Hrsg.), *BISp-Forschungsförderung 2024/25* (S. 72–76). BISp. <https://doi.org/10.4126/FRL01-006526442>

Promoting inclusive competition from the grassroots level: the case of the Spanish school age championships

A. Redondo-Fernández¹, J. Pérez-Tejero¹

¹"Fundación Sanitas" Chair for Inclusive Sport Studies (CEDI), AFIPE Research group, Faculty of Physical Activity and Sport Sciences (INEF), Universidad Politécnica de Madrid, Spain.

Introduction: School age is a very important stage in motor, psychological and emotional development. One of the key values is the inclusion of people with disabilities, who often face barriers to accessing sport, especially when it comes to competition. In recent years, various initiatives have been promoted to enable adults and young people with and without disabilities to compete on equal terms. In Spain, the Spanish School Championships are held, an initiative promoted by the Higher Sports Council, which since 2018 has also been carried out in an inclusive format by nine sports federations (badminton, athletics, triathlon, table tennis, swimming, wheelchair basketball, rhythmic gymnastics and cross-country), promoting values such as empathy and respect.

Method: The aim of this study was to find out the opinions of the participants (n = 226): athletes with (n = 10) and without disabilities (n = 123), coaches (n = 51), federation managers (n = 15), referees (n = 9) and family members (n = 14) in these championships during the 2024/2025 season, in order to identify strengths and weaknesses and propose improvements that could make these championships a benchmark for inclusive competitions each year. The instrument was an online questionnaire with three sections: the first two were Likert-type questions, the first related to the difficulty of including different types of disabilities in their sports modalities and the second related to visibility, equality and adaptations. The last section was an open-ended question in which participants could give their opinion.

Results: Participants indicated the difficulty, lack of visibility and good organization in different sports. Overall, 85% of participants indicated that they had enjoyed the inclusive competition and the importance of promoting access to sport for athletes with disabilities.

Conclusions: All of these opinions will be used to try to improve the aspects mentioned, so that these competitions become an inclusive benchmark in the competitive calendar.

Inclusion and accessibility in local mass-participation running events: Practical implications for inclusive event design

R. Reina¹, L. González¹, A. Roldán¹

¹Universidad Miguel Hernández de Elche, Sports Research Centre, Elche, Spain

Introduction: Local mass-participation running events are widely promoted as inclusive and accessible opportunities that foster physical activity and social cohesion (Ocete-Calvo et al., 2016). However, people with disabilities continue to face structural, organizational, and attitudinal barriers that limit full and equitable participation (Chen et al., 2024). Assessing real accessibility conditions in these events is therefore essential to inform practical decision-making and promote inclusive practices based on universal design and reasonable accommodations within a continuum of inclusion approach.

Method: A descriptive comparative study was conducted with runners with disabilities who participated in two local events held in the Valencian Community (Spain): the 52nd Elche Half Marathon (n = 9; up to close 5.000 runners) and the 8th Sant Joan Solidarity Run (n = 12, around 800 participants). Data were collected using a structured and accessible questionnaire assessing sociodemographic characteristics, type of disability, perceived accessibility (e.g., bib collection, parking, toilets, course design, technical assistance, rest areas, and communication), and overall experience using a 6-point Likert scale. Open-ended questions were also included to gather qualitative feedback. Although the sample size was small, data were collected in real competition contexts, providing ecologically valid insights.

Results: The Sant Joan Solidarity Run showed greater diversity in disability profiles and higher accessibility ratings across most dimensions, particularly in bib collection, parking, and visibility of technical assistance. In contrast, the Elche Half Marathon attracted an older and more performance-oriented profile but presented limitations in adapted toilets, rest areas, and communication of available supports. Although overall course accessibility was positively rated in both events, specific barriers such as curbs, uneven surfaces, and organizational issues at start and finish areas were reported. Overall experience was moderately positive, with notable variability across participants.

Conclusions: Local running events show increasing awareness of inclusion; however, important accessibility gaps persist. Visibility of adaptations appears to be as relevant as their actual availability. Inclusion should therefore be addressed as a continuous improvement process, supported by participants' feedback and practical evaluation tools by stakeholders. The findings provide applied guidance for decision-making regarding eligibility criteria based on minimum impairment, rule adaptations, categorization for prizes, and potential race result adjustments through time compensations based on individual and collective performance historic records.

References:

- Chen, M., Li, Q., & Wang, L. (2024). *Understanding factors influencing people with disabilities' participation in sports and cultural activities*. BMC Public Health, 24, 389.
- Ocete-Calvo, C., Pérez-Tejero, J., Pinilla, J., & Polo Más, I. (2016). *Guía de carreras populares inclusivas*. Universidad Politécnica de Madrid.

Retrospective and prospective analysis of the Spanish paralympic ADOP programme: Key challenges and strategic priorities for LA 2028

R. Reina, A. Roldán

Miguel Hernández University, Sports Research Centre, Elche, Spain

Introduction: National high-performance support programmes play a key role in the development and success of Paralympic sport. In Spain, the ADOP Programme provides financial, technical, and institutional support to Paralympic athletes and their environment. Following the Paris 2024 Paralympic Games, a systematic evaluation of the previous cycle was essential to identify strengths, limitations, and priority areas to optimize preparation for the Los Angeles 2028 Paralympic Games.

Method: A nationwide descriptive study was conducted on behalf of the Spanish Paralympic Committee, using two structured online questionnaires addressed to athletes, coaches, support staff, and sport administrators linked to the Paris 2024 cycle and Milano-Cortina 2026 Paralympic Games. A total of 105 valid responses were obtained (21.9% response rate). The questionnaires included closed-ended items rated on a 6-point Likert scale and open-ended questions addressing demographic characteristics, sport performance, financial support, classification, training and competition conditions, professional services, and institutional support. Quantitative data were analysed descriptively, while qualitative responses were thematically synthesised to inform applied conclusions.

Results: Overall satisfaction with the ADOP Programme was moderate to acceptable. Financial support through scholarships was identified as a key facilitator, particularly for enabling full-time training and access to equipment and medical services. However, major challenges emerged, including perceived equity in scholarship distribution, transparency in decision-making processes, financial coverage for non-podium athletes, and flexibility in the use of funds. Additional barriers included access to international competitions, multidisciplinary support services, accessible and inclusive training facilities, well-prepared staff and stability in technical planning across the Paralympic cycle. Classification processes and communication were also highlighted as areas requiring improvement. Paris 2024 performance outcomes were positively valued, although some structural limitations were reported to constrain optimal preparation.

Conclusions: The ADOP Programme constitutes a fundamental pillar for Spanish Paralympic sport, yet strategic adjustments are recommended for LA 2028. Priorities include grants scheme, strengthening multidisciplinary services (including mental health), enhancing coordination with sports federations, support during international-level classification opportunities, and adopting the best individualized and athlete-centred approach. These findings provide evidence-based guidance for the strategic evolution of Paralympic support systems in Spain.

Attitudes, beliefs, and self-efficacy expectations of prospective teachers for inclusive physical education. Results of a theory-practice-based professionalization concept

C. Reuter¹, J. Precht¹, C. Kreinbacher-Bekele²

¹Julius-Maximilians-University of Wuerzburg, Germany; ²University of Teacher Education Styria, Graz, Austria

Introduction: With the ratification of the UN Convention on the Rights of Persons with Disabilities, countries such as Austria and Germany have committed to enabling people with disabilities to participate equally in education. Physical education occupies a special position within the school curriculum, as its focus on the body and physical activity makes learning processes immediately visible for all participants (Giese & Ruin, 2018), while offering considerable potential for inclusive schooling with appropriate didactic design (Block, 2007). The professionalization of prospective teachers is therefore of particular importance, as teachers often feel inadequately prepared to teach heterogeneous groups (Hutzler et al., 2017) and existing training formats only partially address this challenge (Block et al., 2017).

Method: A multi-site pre-post intervention study was conducted at two universities in Austria and Germany in 2024 and 2025, with 144 pre-service teachers in the intervention group and 35 in the control group. The intervention combined theoretical foundations, models of adapted physical activity, and practice-oriented learning opportunities including self-awareness exercises and reflection phases. Data were collected using a questionnaire developed for this study, drawing on established and validated instruments such as Sentiments, Attitudes and Concerns about Inclusive Education Revised (SACIE-R) by Forlin et al. (2011), Teacher Efficacy for Inclusive Practices (TEIP) by Sharma et al. (2011), the EFI-L-Skala (Seifried & Heyl, 2016) and open-ended questions on previous experiences and challenges.

Results: Quantitative results indicate a significant improvement in attitudes toward inclusion in the intervention group, while self-efficacy expectations remained unchanged. The stable self-efficacy scores likely reflect that sustained gains require repeated successful experiences in real teaching contexts beyond a single seminar phase. Qualitative data complemented these findings, showing that prospective teachers increasingly recognized the teacher's attitude, professional knowledge, and lesson planning as key factors for successful inclusive teaching.

Conclusions: The findings highlight the importance of theory-informed and practice-based learning opportunities for professionalization in teacher education, while pointing to the need for extended practical engagement.

References:

- Block, M. (2007). A Teacher's Guide to Including Students with Disabilities in General Physical Education, Third Edition
- Block, M. E., Giese, M., & Ruin, S. (2017). Inklusiver Sportunterricht – eine internationale Standortbestimmung. *Sonderpädagogische Förderung heute*, 62 (3), 233-243. <https://doi.org/10.3262/SZ1703233>
- Forlin, C., Earle, C., Loreman, T. & Sharma, U. (2011). The Sentiments, Attitudes and Concerns about Inclusive Education Revised (SACIE-R) scale for measuring pre-service teachers' perceptions of inclusion. *Exceptionality Education International*, 21 (2&3), 50-65.
- Giese, M., & Ruin, S. (2018). Forgotten bodies – an examination of physical education from the perspective of ableism. *Sport in Society*, 21(1), 152–165. <https://doi.org/10.1080/17430437.2016.1225857>
- Hutzler, Y., Meier, S., & Reuter, C. (2017). Einstellung von Sportlehrkräften zu inklusivem Sportunterricht – mögliche Bezugspunkte (inter-)nationaler Forschung. *Sonderpädagogische Förderung heute*, 62 (3), 244-254.
- Seifried, S., & Heyl, V. (2016). Konstruktion und Validierung eines Einstellungsfragebogens zu Inklusion für Lehrkräfte (EFI-L). [Development and Validation of an Attitude Questionnaire on Inclusion for Teachers] *Empirische Sonderpädagogik*, 8(1), 22–35.
- Sharma, U., Loremann, T. & Forlin, C. (2011). Measuring teacher efficacy to implement inclusive practices. *Journal of Research in Special Educational Needs*, 12 (1), 12–21.

Feasibility of ChatGPT for translating educational documents into easy-to-read language for students with specific educational support needs

A. Roldán, R. Reina

Miguel Hernández University, Sports Research Centre, Elche, Spain

Introduction: Students with intellectual disability and/or autism often face linguistic and cognitive barriers that limit participation in educational contexts (Thurm et al., 2021). Easy-to-read (E2R) methodology improves comprehension and accessibility by adapting linguistic and visual information according to established guidelines (Fajardo et al., 2014). However, producing officially validated E2R materials requires specialised training and considerable time, limiting its implementation in everyday educational practice. Recent advances in artificial intelligence, particularly large language models such as ChatGPT, may support teachers in adapting educational materials by reducing linguistic complexity and facilitating more inclusive learning environments (Walton et al., 2022).

Method: This study explores the feasibility of using ChatGPT as a complementary tool to support AI-facilitated reading when traditional E2R adaptation is not feasible. A descriptive feasibility design was adopted. Educational texts commonly used in schools were adapted into three versions: the original text, an officially validated E2R version, and an AI-facilitated reading version generated with ChatGPT using predefined prompts. Two groups of students with learning disabilities were exposed either to the E2R or the AI-facilitated reading version and completed comprehension questions after reading. In addition, qualitative feedback regarding clarity, accessibility, and ease of understanding was collected.

Results: Quantitative analyses will compare comprehension outcomes between conditions, while qualitative feedback will explore perceived clarity, ease of understanding, and accessibility. Data collection and analysis are currently ongoing, and preliminary findings will be presented at the conference.

Conclusions: This study provides empirical evidence on the feasibility of using ChatGPT as a complementary tool for producing accessible educational materials. Findings are expected to inform inclusive educational practice while highlighting the importance of professional supervision to ensure quality, accessibility, and appropriateness for students with learning disabilities.

References:

- Thurm, A., Halladay, A., Mandell, D., Maye, M., Ethridge, S., & Farmer, C. (2021). Making Research Possible: Barriers and Solutions For Those With ASD and ID. *Journal of Autism and Developmental Disorders*, 52, 4646 - 4650. <https://doi.org/10.1007/s10803-021-05320-1>.
- Walton, K., Krahn, G., Buck, A., Andridge, R., Lecavalier, L., Hollway, J., Davies, D., Arnold, L., & Haverkamp, S. (2022). Putting "ME" into measurement: Adapting self-report health measures for use with individuals with intellectual disability. *Research in Developmental Disabilities*, 128, 104298. <https://doi.org/10.1016/j.ridd.2022.104298>.
- Fajardo, I., Ávila, V., Ferrer, A., Tavares, G., Gómez, M., & Hernández, A. (2014). Easy-to-read texts for students with intellectual disability: linguistic factors affecting comprehension. *Journal of applied research in intellectual disabilities*, 27(3), 212-225. <https://doi.org/10.1111/jar.12065>

Feasibility of smartphones and smartwatches to support self-monitoring of physical activity in university students with intellectual disabilities

A. Roldán¹, S. Healy², D. Van Biesen^{3,4}, D. Pastor¹, R. Reina¹

¹Miguel Hernández University, Sports Research Centre, Elche, Spain; ²Department of Physical Education and Sport Sciences, University of Limerick, Limerick, Ireland; ³Faculty of Movement and Rehabilitation Sciences, Department of Rehabilitation Sciences, KU Leuven, Leuven, Belgium; ⁴Virtus Academy, Virtus World Intellectual Impairment Sport, Sheffield, United Kingdom

Introduction: Young adults with intellectual disabilities and/or autism engage in low levels of physical activity. Step-based self-monitoring using wearable technologies may support awareness and participation in activity, although evidence on long-term implementation remains limited. This study examined the feasibility of a step self-monitoring intervention embedded within a university vocational training programme for young adults with intellectual disabilities and/or autism.

Method: A quasi-experimental, practice-based feasibility study was conducted across four academic years. Sixty students aged 18-30 years participated in a 20-week intervention integrated into their regular university routine. Two cohorts were included: the first cohort used smartphones to record step counts, while the second cohort used wrist-worn smartwatches. Feasibility outcomes included adherence to monitoring and completeness of step-count data. Linear mixed-effects models examined longitudinal step-count patterns adjusted for baseline activity levels. Additional analyses compared weekday and weekend activity.

Results: Overall feasibility was high, with participants sustaining step monitoring across the 20-week period. Across the study, 19.6% of potential observations were missing. Data completeness differed by device, with fewer missing records in the smartwatch cohort. After adjusting for baseline activity, step counts remained stable over time, with no significant longitudinal changes. Participants consistently accumulated fewer steps on weekends than weekdays. Mean weekday step counts were higher with smartphones ($7,741.97 \pm 3,476.59$) than weekends ($4,740.36 \pm 4,093.36$ and $5,706.16 \pm 3,016.84$). A similar pattern was observed with smartwatches, with higher weekday ($9,249.83 \pm 4,977.26$) than weekend counts ($7,201.44 \pm 4,167.13$). Although differences between devices were not statistically significant, smartwatch users showed consistently higher step counts and greater continuity of recorded data.

Conclusions: Step-based self-monitoring using digital devices is feasible for young adults with intellectual disabilities and/or autism in real-world university settings. Device type influenced data completeness, and lower weekend activity suggests the need for additional support beyond structured weekday routines.

Exploring exercise motivation in people with intellectual disabilities: A qualitative study

K. E. Sakalidis¹, A. Klavina^{2,3}, W. De Luna⁴, K. Ng^{5,6,7}, M. Khudair⁸, Á. Redondo⁹, J. Pérez-Tejero⁹, F. J. Hettinga¹⁰

¹School of Psychology, Northumbria University, Newcastle upon Tyne, United Kingdom; ²Laboratory of Sports and Nutrition Research, Riga Stradins University, Latvia; ³Department of Health Promotion and Rehabilitation, Lithuanian Sports University, Kaunas, Lithuania; ⁴Department of Health Sciences and Human Performance, University of Tampa, Tampa, Florida, USA; ⁵Institute of Sports Science and Innovation, Lithuanian Sports University, Kaunas, Lithuania; ⁶Department of Physical Education and Sport Sciences, University of Limerick, Limerick, Ireland; ⁷Faculty of Education, University of Turku, Rauma, Finland; ⁸School of Psychology, Cardiff University, United Kingdom; ⁹Department of Health and Human Performance, Universidad Politecnica de Madrid, Spain; ¹⁰Department of Human Movement Sciences, Vrije Universiteit Amsterdam, The Netherlands

Introduction: Despite the well-established benefits of exercise, participation rates among people with Intellectual Disabilities (ID) remain low. Exercise motivation is a critical factor for supporting exercise participation however, it remains under-investigated in people with ID. Notably, limited attention has been given to their lived experiences and to the motives that underpin participation within organised competitive sport programmes. Therefore, this study aimed to explore the perspectives of people with ID regarding their exercise motives.

Method: People with ID (n = 13) from six countries who were involved in their national Special Olympics programmes participated in semi-structured interviews exploring exercise-related motivations. Data collection was finalised when additional interviews were unlikely to yield new insights, and transcripts were analysed using inductive thematic analysis in NVivo 14.

Results: From the semi-structured interviews, four themes emerged. ‘Relationship with the coach’ captured athletes’ descriptions of coaches as important sources of encouragement and emotional connection. ‘Social interaction and support’ reflected opportunities to interact with teammates and feel socially included through sport participation. ‘Achievement, goals, and skill development’ described athletes’ focus on improving their skills, achieving personal goals, and progressing in their sport. ‘Physical and psychological benefits’ referred to athletes’ awareness of positive outcomes of participation, including feeling healthier and more confident.

Conclusions: Taken together, the findings suggest that exercise motivation among athletes with ID is linked to the quality of their social interactions within sport settings. Interpreted through Self-Determination Theory, such experiences may support autonomy, competence, and relatedness, enabling athletes to view exercise as personally meaningful. Athletes’ recognition of exercise benefits, alongside the development of an athletic identity through goal-directed skill development, also suggests more self-driven motivation for exercise. Overall, the findings highlight the importance of strengthening supportive, identity-affirming exercise environments to promote exercise and sport participation among people with ID.

The effects of aquatic exercise on motor skills and social behaviors in children and adolescents with autism spectrum disorder: A systematic review

S. Salar¹, B. Jorgic², S. Ruin³, S. Stojanovic⁴, M. Pourgholi⁵

¹Department of Human Movement Science, Sport and Health, University of Graz, Graz, Austria; ²Faculty of Sport and Physical Education, University of Niš, Niš, Serbia; ³Department of Human Movement Science, Sport and Health, University of Graz, Graz, Austria; ⁴Faculty of Sport and Physical Education, University of Niš, Niš, Serbia; ⁵Department of sport injury and corrective exercise, University of Tehran, Tehran, Iran

Introduction: Autism Spectrum Disorders is defined by deficits in social interaction skills, communication (verbal and non-verbal communication), and restricted repetitive patterns of behavior. It is also characterized by delays and differences in motor skills, balance, and postural control and social behavior in children and adolescents with ASD (Healy et al. 2021). Aquatic exercise is one of the preferred physical activities for children with ASD (Eversole et al., 2016). The purpose of the present review is the effects of aquatic exercise on motor skills and social behaviors of children and adolescents with ASD.

Method: This review was conducted according to the PRISMA guidelines. All studies were peer-reviewed English publications from 2004 to Jun 2025. The databases included PubMed, Cochrane, Scopus, Embase, Web of Science, PsycINFO, and EBSCO HOST (Liberati, 2009). The methodological quality was assessed using standard risk-of-bias tools. A total of 2705 articles were found across the databases and finally 9 articles included in this study.

Results: After applying the exclusion criteria, nine studies were identified. The analysis indicated that various aquatic programs, including hydrotherapy and swimming activities, can improve motor skill levels and social behaviors in children and adolescents with ASD.

Conclusions: Aquatic exercise programs represent a valid intervention for children with ASD, effectively addressing motor and social-behavior (Marzouki, 2022). This study confirms that aquatic exercise is an effective, safe, and highly adaptable therapeutic approach for addressing the motor, social, and behavior of children and adolescents with ASD and effectively addressing both motor and social-behavioral skills (Battaglia, 2019). However, more evidence is needed to determine the appropriate dosage of aquatic-based therapy for long-term improvements of social, behavioral, and motor abilities. Tailoring program intensity, progression, and focus based on individual characteristics and developmental stages can optimize outcomes and long-term benefits.

References:

- Healy, S., Obrusnikova, I., & Getchell, N. (2021). Fundamental Motor Skill Interventions in Children with Autism Spectrum Disorder: A Systematic Review of the Literature Including a Methodological Quality Assessment. *Research in Autism Spectrum Disorders*, 81, 101717. <https://doi.org/10.1016/j.rasd.2020.101717>
- Eversole, M., Collins, D. M., Karmarkar, A., Colton, L., Quinn, J. P., Karsbaek, R., Johnson, J. R., Callier, N. P., & Hilton, C. L. (2015). Leisure Activity Enjoyment of Children with Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders*, 46(1), 10–20. <https://doi.org/10.1007/s10803-015-2529-z>
- Marzouki, H., Soussi, B., Selmi, O., Hajji, Y., Marsigliante, S., Bouhleb, E., Muscella, A., Weiss, K., & Knechtel, B. (2022). Effects of Aquatic Training in Children with Autism Spectrum Disorder. *Biology*, 11(5), 657. <https://doi.org/10.3390/biology11050657>
- Battaglia, G., Agrò, G., Cataldo, P., Palma, A., & Alesi, M. (2019). Influence of a Specific Aquatic Program on Social and Gross Motor Skills in Adolescents with Autism Spectrum Disorders: Three Case Reports. *Journal of Functional Morphology and Kinesiology*, 4(2), 27. <https://doi.org/10.3390/jfkm4020027>
- Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P. A., Clarke, M., Devereaux, P. J., Kleijnen, J., & Moher, D. (2009). The PRISMA Statement for Reporting Systematic Reviews and Meta-Analyses of Studies That Evaluate Health Care Interventions: Explanation and Elaboration. *Annals of Internal Medicine*, 151(4), W-65-W-94. <https://doi.org/10.7326/0003-4819-151-4-200908180-00136>

Defining wheelchair skills education in physiotherapy curricula

A. Saltan¹, F. Mutluay¹, K. Karinharju², R-K. Kuusiluoma², F. Dokuztuğ Üçsular³, B. Molik⁴, J. Marszałek⁴, G. Kaya Aytutuldu⁵, D. Nalçı^{6,7}, H. Keser⁶, Y. S. Akgül⁶, M. Bahçekapılı⁸, V. Pokvytytė⁹, K. Skucas¹⁰

¹Yalova University, Faculty of Health Sciences, Department of Physiotherapy and Rehabilitation, Yalova, Türkiye; ²Satakunta University of Applied Sciences, Finland; ³Independent Researcher, Türkiye; ⁴Jozef Pilsudski University of Physical Education in Warsaw, Faculty of Rehabilitation, Warsaw, Poland; ⁵Biruni University, Faculty of Health Sciences, Department of Physiotherapy and Rehabilitation, İstanbul, Türkiye; ⁶Gebze Technical University, Faculty of Engineering, Department of Computer Engineering, Gebze, Türkiye; ⁷Gebze Technical University, Cybersecurity Vocational School, Gebze, Türkiye; ⁸Yalova University, Faculty of Islamic Sciences, Department of Religious Education Yalova/Türkiye; ⁹Lithuanian Sports University, Department of Sport Promotion and Rehabilitation, Kaunas, Lithuania; ¹⁰Lithuanian Sports University, Department of Sport Promotion and Rehabilitation; Institute of Sports Science and Innovations, Kaunas, Lithuania

Introduction: Wheelchair skills are a fundamental professional competence for physiotherapists working in rehabilitation, inclusive physical activity, and community-based contexts. Evidence from European studies indicates substantial variability and insufficient integration of wheelchair skills education within undergraduate physiotherapy curricula. Although international frameworks for wheelchair skills and service provision exist, standardized, education-focused implementation across European higher education programs remains limited.

Method: This qualitative focus group study was conducted within the WELLDONE Erasmus+ project across four European countries (Türkiye, Poland, Finland, and Lithuania). Participants included physiotherapy students, practicing physiotherapists, and educators. Semi-structured focus group interviews explored educational needs related to wheelchair skills training, including optimal timing within the curriculum, content, duration, and the balance between theoretical and practical components. Data were transcribed verbatim and analysed using reflexive thematic analysis.

Results: Across all participating countries, a clear consensus emerged that wheelchair skills training should be a mandatory component of undergraduate physiotherapy education. Participants consistently recommended introducing the training in the second academic year, following foundational clinical coursework. A minimum of three hours of dedicated training was proposed, consisting of one hour of theoretical instruction and two hours of supervised practical training. Structured, hands-on learning was identified as essential for developing professional competence, safety awareness, and confidence in wheelchair skills instruction.

Conclusions: By integrating structured wheelchair skills training into physiotherapy curricula and supporting it with digital educational resources, including a digital handbook and mobile application, the WELLDONE project offers a scalable framework to promote the standardization of wheelchair skills education across European higher education contexts.

Stress and recovery assessment in Deaflympic athletes

R. Schliermann¹, A. Markov-Glazer²

¹Regensburg University of Applied Sciences, Regensburg, Germany; ²Friedrich Schiller University Jena, Jena, Germany.

Introduction: Athletes with hearing impairments represent a heterogeneous population, particularly with respect to communication modalities. However, research on standardized and psychometrically tested diagnostic tools suitable for this population remains limited. As written questionnaires often lack accessibility for these athletes, the development of appropriate assessment tools is essential. This study addresses this gap by culturally adapting the Recovery–Stress Questionnaire for Athletes (RESTQ; Kellmann & Kallus, 2025) into German Sign Language (DGS) and examining its psychometric properties.

Method: The RESTQ was culturally adapted into DGS following established guidelines (Andrade et al., 2017). The adaptation process consisted of six sequential steps and was conducted by six sign language experts. A total of 130 elite athletes with hearing impairments (35% female), eligible for participation in the Deaflympics, were recruited. The questionnaire was administered online in a bimodal format, allowing participants to read the items and view corresponding sign language videos. Data collection also included sociobiographical information and participant feedback regarding the perceived usefulness of the DGS videos.

Results: The adapted RESTQ demonstrated overall acceptable internal consistencies comparable to the original RESTQ validated in hearing athletes. Only two subscales yielded Cronbach's alpha values below 0.70. Construct validity was examined using exploratory factor analyses with principal axis factoring and varimax rotation, conducted separately for the general and sport-specific sections of the questionnaire. The data were suitable for factor analysis (Kaiser–Meyer–Olkin values $\geq .80$; Bartlett's tests of sphericity $p < .001$). The extracted factor solutions consistently reflected the two theoretically expected higher-order dimensions of stress and recovery.

Conclusions: This study responds to a gap in accessible psychological assessment for athletes with hearing impairments. By adapting and psychometrically examining the RESTQ, this study contributes to Deaf sport research and supports improved applied practice with athletes with hearing impairments.

References:

- Andrade, L. F., Borges, K. A., Ferreira, M. B. G., Felix, M. M. D. S., Castro, S. S. D., & Barbosa, M. H. (2017). Translation methods of instruments to sign language: an evidence-based proposal. *Texto & Contexto-Enfermagem*, 26(4), 113. <https://doi.org/10.1590/0104-07072017002210017>
- Kellmann, M., & Kallus, K. W. (Eds.). (2025). *The Recovery-Stress Questionnaires: A user manual*. Routledge.

Developing the 2026 Germany's first para report card for children and adolescents

S. Seemüller¹, F. Bükers², F. Beck¹, Y. Demetriou³, S. Eghbalpour⁴, I. El-Rajab⁵, C. Feldhaus⁶, N. Schott⁵, A. K. Reimers¹

¹Department of Sport Science and Sport, Friedrich-Alexander-Universität Erlangen-Nürnberg, Erlangen, Germany; ²Unit for Physical Education and Sports Didactics, Institute for Physical Activity, Sports and Health, Leuphana University Lüneburg, Lüneburg, Germany; ³Institute of Sports Science, Eberhard Karls University Tübingen, Tübingen, Germany; ⁴Katho NRW Aachen, Aachen, Germany; ⁵Department of Sport and Movement Science, University of Stuttgart, Stuttgart, Germany; ⁶Institute of Sports and Sports Science, Karlsruhe Institute of Technology, Karlsruhe, Germany

Introduction: The development of the Active Healthy Kids Report Card (RC) follows an established international methodology to assess physical activity (PA) among children and adolescents (Aubert et al., 2022). Recent efforts have extended this framework to children with disabilities through Para Report Cards (PRCs) (e.g., Ng et al., 2022). In preparation for the 2026 German RC, a German PRC was developed to evaluate evidence on PA among children and adolescents with disabilities.

Method: The RC methodology includes grading ten indicators across behaviours, individual characteristics, settings, and policy. Evidence is identified through systematic database searches, complemented by snowballing, expert inquiries, and manual screening. The PRC builds on this framework but includes methodological adaptations to account for the heterogeneity of disability and limited data availability. Included were empirical studies from the past 15 years on 6–17-year-olds with disabilities or special educational needs. Studies were excluded if they did not differentiate disability or report PA-related outcomes. Indicators with insufficient evidence were classified as incomplete (INC) or not graded.

Results: The main outcome is the development of adapted inclusion criteria and grading procedures enabling application of the RC framework to children with disabilities. Preliminary mapping indicates substantial data gaps, with several indicators likely classified as INC or not graded, particularly overall PA, family and peers, school, and community and environment.

Discussion: The PRC shows that the RC framework can be extended to children with disabilities, but major data gaps remain. Future PRCs may enable international comparisons and improve understanding of structural barriers. Evidence suggests lower PA levels among children with disabilities, highlighting the need for targeted research and policy action.

References:

- Aubert, S., Barnes, J. D., Demchenko, I., Hawthorne, M., Abdeta, C., Abi Nader, P., Adsuar Sala, J. C., Aguilar-Farias, N., Aznar, S., Bakalár, P., Bhawra, J., Brazo-Sayavera, J., Bringas, M., Cagas, J. Y., Carlin, A., Chang, C.-K., Chen, B., Christiansen, L. B., Christie, C. J.-A.,...Tremblay, M. S. (2022). Global Matrix 4.0 Physical Activity Report Card Grades for Children and Adolescents: Results and Analyses From 57 Countries. *Journal of Physical Activity and Health*, 19(11), 700–728. <https://doi.org/10.1123/jpah.2022-0456>
- Ng, K., Sit, C., Arbour-Nicitopoulos, K., Aubert, S., Stanish, H., Hutzler, Y., Santos Silva, D. A., Kang, M., López-Gil, J. F., Lee, E., Asunta, P., Pozeriene, J., Urbański, P. K., Aguilar-Farias, N., & Reilly, J. J. (2023). Global Matrix of Para Report Cards on Physical Activity of Children and Adolescents With Disabilities. *Adapted Physical Activity Quarterly*, 40(3), 409–430. Retrieved Apr 16, 2026, from <https://doi.org/10.1123/apaq.2022-0111>

Bringing science live to the stage: Young people's reflections on inclusive and adapted physical education through creative performance

L. Sharpe¹, S. Sanchez², J. Baker²

¹School of Psychology, Sport Science & Wellbeing, University of Lincoln, Lincoln, UK; ²School of Creative Arts, University of Lincoln, Lincoln, UK

Introduction: Historically, the voices of disabled and marginalised young people have been underrepresented in research concerning physical education (PE) and school sport (Maher & Haegele, 2024). While participatory and creative research methods have increasingly been used to include young people in research (Fitzgerald et al., 2020; Sharpe et al., 2021), less attention has been paid in how we disseminate that research to young people. Traditional academic outputs remain largely inaccessible and often fail to resonate with the young people whose experiences they represent (Stride et al., 2022). Science Live on Stage was developed as an interdisciplinary response to this gap, translating sociological and critical disability research on PE, sport and inclusion into a live theatre performance for children and young people.

Method: The study adopts a qualitative, arts-based methodological approach. Science Live on Stage was collaboratively developed bring together critical disability studies and young people's theatre using narrative, character, humour, and embodied storytelling to translate research findings via theatrical performance. To explore how this method resonated for young audiences, school-based focus groups were conducted with fifteen (n = 15) secondary school students (11-13 years) who watched Science Live on Stage to explore how young audiences interpreted and engaged with the performance.

Results: Early insights point to the potential of creative performance to open up critical dialogue around adapted PE and inclusive practice in ways that are accessible, meaningful, and socially resonant for young audiences.

Conclusions: This study positions live performance as a method of research dissemination, beyond impact activity. Science Live on Stage demonstrates the potential of creative methods to extend inclusive research practices beyond data collection and into dissemination, offering important implications for adapted PE research, practice, and public engagement.

References:

- Fitzgerald, H., Stride, A., & Enright, E. (2020). Messy methods: Making sense of participatory research with young people in PE and sport. *European Physical Education Review*, 1–15. <https://doi.org/10.1177/1356336X20953462>
- Maher, A. J., & Haegele, J. A. (2024). *Disabled Children and Young People in Sport, Physical Activity and Physical Education* (1st ed.). Routledge. <https://doi.org/https://doi.org/10.4324/9781003566434>
- Sharpe, L., Coates, J., & Mason, C. (2021). Participatory research with young people with special educational needs and disabilities: a reflective account. In *Qualitative Research in Sport, Exercise and Health*. <https://doi.org/10.1080/2159676X.2021.1952297>
- Stride, A., Brazier, R., & Fitzgerald, H. (2022). Misguided and Modest: Reflections of Our Youth Voice Research. *Frontiers in Sports and Active Living*, 4(July). <https://doi.org/10.3389/fspor.2022.824953>

Motor competence in children aged 6–12 years: Cross-sectional associations with age, sex, and skill component

A. Skiadopoulos, Ch. Evaggelinou

School of Physical Education and Sports Science, Aristotle University of Thessaloniki, Serres, Greece

Introduction: Motor competence is a multidimensional latent construct reflecting proficiency across distinct motor skill domains, shaped by both individual and contextual factors, and associated with physical activity, cognitive, and academic outcomes (Barnett et al., 2016). This study examined the influence of sex, age, and class context on domain-specific motor competence profiles in Greek primary school children.

Method: A cross-sectional sample of 312 children aged 6–12 years (156 girls) was assessed using the Movement Assessment Battery for Children–Second Edition (Henderson et al., 2007). Domain standard scores (manual dexterity, aiming–catching, balance) were analyzed via linear mixed-effects modelling with sex, within- and between-class age as fixed predictors and correlated domain-specific random slopes at both student and class levels. Post hoc pairwise contrasts were conducted with Westfall correction. Alpha was set at $\alpha = .05$. All analyses were performed in R statistical software.

Results: Balance yielded the highest domain scores, and manual dexterity was consistently lowest. Boys outperformed girls in aiming–catching. Within-class age negatively predicted manual dexterity scores. Class-level random effects accounted for substantial variance (23.1%), indicating marked between-class heterogeneity. At-risk prevalence was 10% (boys) and 15% (girls), with severe difficulties in 11.5% and 7.1% respectively; across age groups, 5–31% were at-risk and 4–17% severely impaired. Single-domain competence ranged from 8% (age 9) to 30% (age 8).

Conclusions: Motor competence in Greek primary school children is strongly domain-specific and classroom-dependent, with substantial and age-varying prevalence of below-threshold performance. Manual dexterity emerges as a curricular priority, age effects operate selectively across domains, and findings collectively underscore the need for domain-level screening and targeted school-based intervention.

References:

- Barnett, L. M., et al. (2016). Correlates of gross motor competence in children and adolescents: A systematic review and meta-analysis. *Sports Medicine*, 46, 1663–1688.
- Henderson, S. E., Sugden, D., & Barnett, A. L. (2007). *Movement Assessment Battery for Children-2*. The Psychological Corporation.

Adaptive sport as a pathway to inclusion: Stakeholder perspectives from wheelchair and frame sports in Malta

L. Tonna Grima¹, A. Borg Amaira¹, N. Aquilina¹

¹Institute for PE and Sport, University of Malta, Msida, Malta

Introduction: Exercise, mobility, and sport are increasingly recognised as important vehicles for social participation among people with physical disabilities. However, the impact of engagement in physical activity and sport is not uniform, as individuals encounter sporting environments shaped by differing attitudes, principles, and goals. This paper explores the perspectives of key stakeholders involved in adaptive sport in Malta and examines how participation in wheelchair and frame sports contributes to the inclusion of persons with physical impairments.

Method: Focusing on wheelchair basketball, wheelchair dance sport, and frame football, the study adopted a qualitative approach. Face-to-face, semi-structured interviews were conducted with 15 participants drawn from three adaptive sport associations in Malta, including officials (coaches and administrators), athletes (over 18y) with and without physical impairments, and parents. Data were analysed using thematic analysis (Braun & Clarke, 2006).

Results: Findings indicate that adaptive sport is widely perceived as a powerful tool for inclusion, offering substantial physical, psychological, and social benefits. Nevertheless, participants identified persistent barriers that limit participation and development, including limited financial and material resources, high equipment costs, transportation challenges, inaccessible sporting facilities, and low participation rates often linked to fear or resistance to engagement in sport. The involvement of allied professionals, particularly physiotherapists, alongside the support of significant others, emerged as important in addressing athletes' needs. Additionally, curricular physical education and the role of physical education teachers were highlighted as pivotal in raising awareness of adaptive sport and fostering early engagement.

Conclusions: Despite strong stakeholder commitment, the findings reveal a clear need for greater institutional and governmental support. Increased financial investment, improved infrastructure, and the development of a skilled and supported volunteer base are essential to ensure the sustainable growth of adaptive sport as a pathway to inclusion.

References:

Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3 (2). pp. 77-101. ISSN 1478-0887. Available from: <http://eprints.uwe.ac.uk/11735>

Effects of aquatic intervention on gross motor function and water orientation skills in children with cerebral palsy

E. Vodáková¹, A. Hořín¹, J. Wittmannová¹, O. Ješina¹, M. Kudláček¹

¹Department of adapted physical activity, Faculty of Physical Culture Palacky University, Czech Republic

Introduction: Aquatic therapy is increasingly used in pediatric rehabilitation for children with cerebral palsy (CP) because the aquatic environment facilitates movement, postural control, and active motor practice (Adar et al., 2017). Previous systematic reviews and meta-analyses have reported positive effects of aquatic interventions on balance, muscle tone regulation, and gross motor performance. The aim of this case series was to explore the effects of a 12-week aquatic intervention on gross motor function and water orientation skills in children with CP (Pauluka et al., 2024; Mujawar et al., 2022).

Method: The study included six children aged 6–7 years diagnosed with spastic hemiplegic cerebral palsy classified at Gross Motor Function Classification System (GMFCS) levels II–III. The intervention was conducted twice weekly for 12 weeks in a pool with water temperature of 28–30 °C. Gross motor function was assessed using the Gross Motor Function Measure (GMFM-88), while aquatic abilities were evaluated using the Water Orientation Test Alyn 2 (WOTA-2), focusing on mental adaptation, breathing control, balance, and functional movement skills in water. Pre- and post-intervention differences were analyzed using the Wilcoxon signed-rank test ($p < .05$).

Results and Discussion: Improvements were observed in both aquatic skills and gross motor function following the intervention. Median WOTA-2 scores increased from 27.0 to 51.5, while GMFM total scores improved from 199.0 to 224.0. Statistically significant improvements were found for both WOTA-2 ($W = 0.00$, $p = .031$) and GMFM scores ($W = 0.00$, $p = .031$), with large effect sizes ($r = 1.00$). Individual-level analysis revealed clinically meaningful changes, particularly in higher-level mobility skills such as walking, running, and jumping.

Conclusions: This case series suggests that a 12-week aquatic intervention may improve both water orientation skills and gross motor function in children with CP. Although limited by the small sample size, the findings support the potential role of aquatic therapy as a complementary intervention in pediatric rehabilitation.

References:

- Adar, S., Gurer, G., Inanici, F., & Erbahçeci, F. (2017). *The effect of aquatic exercise on spasticity, quality of life, and motor function in children with cerebral palsy*. *Journal of Physical Therapy Science*, **29**(8), 1348–1352. <https://doi.org/10.1589/jpts.29.1348>
- Mujawar, J. C., Shaikh, M. S., & Mulani, R. (2022). *The effects of aquatic therapy on motor functions in children with cerebral palsy: A systematic review*. *International Journal of Health Sciences*, **6**(S8), 5863–5873. <https://doi.org/10.53730/ijhs.v6nS8.13506>
- Pauluka, E., Ceolin, L., Fontanela, L., & Santos, A. (2024). *Aquatic Compared With Land-Based Exercises on Gross Motor Function of Children/Adolescents With Cerebral Palsy: A Systematic Review With Meta-Analysis*. *Child Care Health and Development*, **51**(1). <https://doi.org/10.1111/cch.70023>

Parents in competitive sport – A comprehensive literature review on similarities and differences between disability and non-disabled sport

A. Vogel¹, S. Radtke²

¹Paderborn University, Paderborn, Germany; ²Paderborn University, Paderborn, Germany

Introduction: Parents play a key role in children's engagement and development in competitive sport by introducing them to athletic activities (e. g. Burke & Straub, 1976), influencing sport choice through their attitudes and prior experiences (e. g. Gould, 2002) and providing various forms of support (e. g. Knight et. al., 2016). Studies underline the unique demands placed on parents of children with disabilities such as increased caregiving responsibilities, emotional stress and encounters with exclusion (e. g. Trescher, 2025) that their non-disabled counterparts rarely encounter.

Talent identification and development (TID) in competitive sport rely fundamentally on parental involvement. In competitive disability sport, the aforementioned aspects intensify the indispensability of parental involvement, making it uniquely critical (e.g. Coates & Howe, 2023). Nevertheless, existing findings have not yet been systematically reviewed.

Method: Eight databases were searched in August 2025. After duplicate removal 1579 records were screened based on the following inclusion criteria: Empirical/review studies in German/English examining parents in competitive disability and non-disabled sport. Included studies were analyzed using descriptive statistics and qualitative content analysis (Kuckartz & Rädicker, 2024) to identify the number of studies, key topics and results.

Results: A total of 390 studies were deemed eligible and therefore included in the review, out of which 11 examine parents in disability sport. In non-disabled sport, the most frequently examined topics were types of parental support, unsupportive behaviours, and the influence of parents' own sport backgrounds. In disability sport, research has likewise focused primarily on types of parental support, followed by the parents' role in facilitating access to sport and their attitudes towards both sport and disability.

Conclusions: The pronounced underrepresentation of parents in competitive disability sport research contrasts sharply with the fact that TID is fundamentally dependent on parental involvement in this context.

References:

- Burke, E. J.; Straub, W. F. (1976): Locus of Control and Other Psycho-Social Parameters in Successful American Age-Group Swimmers.
- Cloerkes, G. (2007). Soziologie der Behinderten: eine Einführung.
- Coates, J. & Howe, P.D. (2023). Parents in the parasport pathway: Parental experiences of facilitating their child's engagement in competitive disability sport. *Journal of Applied Sport Psychology*, 35(6), 1050-1071. <https://doi.org/10.1080/10413200.2023.2181464>
- Gould, D., Dieffenbach, K., & Moffett, A. (2002). Psychological Characteristics and Their Development in Olympic Champions. *Journal of Applied Sport Psychology*, 14(3), 172–204. <https://doi.org/10.1080/10413200290103482>
- Knight, C. J., Dorsch, T. E., Osai, K. V., Haderlie, K. L., & Sellars, P. A. (2016). Influences on parental involvement in youth sport. *Sport, Exercise, and Performance Psychology*, 5(2), 161. <https://doi.org/10.1037/spy0000053>
- Kuckartz, U., & Rädiker, S. (2024). *Qualitative Inhaltsanalyse. Methoden, Praxis, Umsetzung mit Software und künstlicher Intelligenz*. Juventa Verlag.
- Trescher, H. (2025). *Eltern von (erwachsenen) Kindern mit geistiger Behinderung. Erfahrungen, Probleme, Bedarfe*. Marburg: Bundesvereinigung Lebenshilfe e. V. <https://doi.org/10.25656/01:32292>

Feasibility and impact of a low-threshold 12-week supervised exercise program on physical fitness and quality of life in oncology patients.

A. Vokurka¹, V. Knappová¹, L. Čepička¹, G. Kavalířová¹, P. Kalistová¹, M. Dědičová¹, A. Mazurek¹, Š. Strejčková², M. Málková², S. Šípová², S. Vokurka²

¹The Center of Physical Education and Sport, Faculty of Education, University of West Bohemia, Pilsen, Czech Republic; ²Department of Oncology and Radiotherapeutics, Center for Palliative and Supportive Medicine, Faculty of Medicine of Charles University in Pilsen, Czech Republic.

Introduction: Targeted exercise interventions are a significant element of supportive care in oncology. However, experience with unselected groups of cancer patients remains limited. Safety considerations and the patient's individual health status require specific adaptations.

Method: A prospective study approved by the Institutional Ethics Committee, evaluating a low-threshold supervised 12-week comprehensive exercise. The program consisted of 60-minute sessions held once a week, 12 sessions total, during 09–12/2024 and 03–06/2025. It included group-based health and fitness exercises (approx. 12 participants) with individualized physiotherapy elements, conducted under the supervision of experts in kinanthropology, physiotherapy, and healthcare, with assistance from university students (The Center of Physical Education and Sport). Pre- and post-intervention fitness levels were objectively assessed using the Six-Minute Walk Test (6MWT), Borg Rating of Perceived Exertion (RPE), and maximum heart rate (HRmax). Quality of life and functional status were evaluated via the SF-36 questionnaire (PF and RE domains).

Results: A total of 22 patients (19 females), median age 52 (40–86), were fully evaluated. 72.7% were in remission, 63.6% had breast cancer, and 13.6% had completed treatment. We demonstrated a statistically significant increase in 6MWT distance (424.24 m vs. 466.17 m post-intervention; $p = .019$) and a reduction in RPE (12.05 vs. 11.11 post-intervention; $p = .031$). Positive trends were observed in HRmax ($p = .419$) and both SF-36 domains (PF: $p = .201$; RE: $p = .234$), though these did not reach statistical significance.

Conclusions: This 12-week supervised low-threshold comprehensive program is feasible and yields positive results. It respects the needs and safety of patients across various stages of cancer and treatment, and its long-term effects. Interdisciplinary collaboration, expert guidance, and an individualized approach are key to enhancing patient safety, confidence, and the joy of movement. However, the limited willingness of patients to engage in exercise programs remains a challenge.

Healthy? Lifestyle of Czech school aged children with hearing impairment

J. Wittmannová¹, L. Hornová¹

¹Department of APA, Faculty of Physical Culture, Palacký University, Olomouc, Czechia

Introduction: The Health Behaviour in School-aged Children (HBSC) study monitors health-related behaviours and provides a reference framework for evaluating lifestyle patterns in the general population (Inchley et al., 2020). HBSC in the Czech Republic (CZ) has identified insufficient physical activity (PA), unhealthy dietary habits, and excessive sedentary behaviour among school-aged children (Materová et al., 2019; Salonna et al., 2023). Due limited availability of data on children with disabilities, the disHBSC methodology was developed. A version for pupils with hearing impairment has been applied in Czech research (Grygarová, 2020).

Aim: To assess selected lifestyle aspects of schoolchildren with hearing impairment aged 11–15 years and to compare the findings with HBSC data from the general population and previous disHBSC research (Grygarová, 2020).

Method: A quantitative cross-sectional design was applied using the disHBSC questionnaire. The sample consisted of 50 pupils aged 11–15 years from three schools for students with hearing impairment in the CZ. Data was collected in 2023. Description and comparison statistics are presented.

Results: Results indicated low levels of PA, with 43.7% of no participation in leisure-time PA. Daily consumption of fruit (24%) and vegetables (16%) was low, while frequent intake of sweets (28%) and sugar-sweetened beverages (22%) was reported. Regarding screen-based activities, 38% of schoolchildren reported five or more hours of daily television viewing and computer gaming. These findings correspond with trends observed in the general adolescent population within the HBSC study.

Conclusions: Schoolchildren with hearing impairment exhibit several lifestyle-related risk factors, such as insufficient PA, unhealthy dietary habits, and excessive sedentary behaviour. Similar patterns have been described both in the HBSC study and in previous disHBSC research. The disHBSC questionnaire proved to be an appropriate tool for monitoring lifestyle behaviours in this population and for enabling comparison with HBSC data.

References:

- Inchley, J., Currie, D., Budisavljevic, S., Torsheim, T., Jästad, A., Cosma, A., Kelly, C., Arnarsson, Á. M., & Samdal, O. (2020). *Spotlight on adolescent health and well-being: Findings from the 2017/2018 Health Behaviour in School-aged Children (HBSC) study*. World Health Organization Regional Office for Europe.
- Materová, E., Pelclová, J., Gába, A., & Frömel, K. (2022). Surveillance of physical activity and sedentary behaviour in Czech children and adolescents: A scoping review of the literature from the past two decades. *BMC Public Health*, 22(1), Article 363. <https://doi.org/10.1186/s12889-022-12766-0>
- Grygarová, V. (2020). *Vybrané determinanty ovlivňující životní způsob školáků se sluchovým postižením (Selected determinants influencing the lifestyle of schoolchildren with hearing impairment)* (Master's thesis). Palacký University Olomouc.
- Salonna, F., Vorlíček, M., Rubín, L., Vašíčková, J., & Mitáš, J. (2023). How Czech adolescents perceive their physical activity. *Children*, 10(7), Article 1134. <https://doi.org/10.3390/children10071134>

Youth unified at universities: Special Olympics pilot project at Eurasia region

J. Wittmannová¹, J. Hakkinen², A. Hořín¹, K. Kucharčuková¹

¹Department of APA, Faculty of Physical Culture, Palacký University, Olomouc, Czechia; ²Youth and Education, Special Olympics Europe Eurasia

Introduction: Special Olympics Europe Eurasia (SOEE) promotes youth leadership, unified sports, and inclusive education across the region. Building on youth-led innovation projects, SOEE recognizes universities as key environments for developing inclusive attitudes, professional skills, and long-term engagement. To address this potential, SOEE launched the Youth Unified at Universities Pilot Project (2023–2025) to test sustainable grassroots models integrating youth leadership and unified sports in higher education.

Youth Innovation Grants – Content Description: The pilot was supported through Youth Innovation Grants, providing funding for youth-led initiatives implemented with universities. Supported by mentors and academic partners, young leaders with and without intellectual disabilities (ID) designed projects combining unified sports, awareness-raising, education, volunteering, and community engagement. The grants also supported leadership development and partnerships between Special Olympics National Programs and universities, between youth with and without ID.

Partners and Pilot Contributions: Five national programs participated: Slovenia, Germany, Czech Republic, Finland, and Hungary. Each pilot reflected its academic and national context while contributing to shared learning. Slovenia focused on inclusive judo workshop; Germany emphasized networking and future *Learning Arena* project development; Finland prioritized awareness-raising through unified youth leader pairs; and Hungary demonstrated institutional integration through health promotion and research.

Czech Republic – Example of Good Practice: The Czech Republic pilot using bocce as an inclusive sport, the youth-led project connected university students, special schools, and athletes with intellectual disabilities through theoretical preparation, practical workshops, school-based activities, and tournaments. The initiative culminated in a national unified bocce tournament involving approximately 100 athletes and a diverse volunteer base, including Erasmus students. The project demonstrated strong youth leadership, community impact, and scalability and is as a best-practice model.

Conclusions: The pilot confirms universities as effective platforms for inclusion and youth leadership, with Youth Innovation Grants acting as catalysts for sustainable partnerships.

Psychomotor interventions in physical education for students with ADHD: A review of inclusive approaches

Z. Zacharová¹, A. Kirillov², D. Nemček²

¹Comenius University Bratislava, Faculty of Education, Department of Psychology and Pathopsychology, Bratislava, Slovakia;

²Comenius University Bratislava, Faculty of Education, Department of Special Education, Bratislava, Slovakia

Introduction: ADHD is a prevalent neurodevelopmental condition associated with impairments in executive functions (EF), motor coordination, and school functioning (Bölte et al., 2024; Jensen et al., 2025). Recent research highlights the potential of movement-based and psychomotor interventions to support self-regulation and learning through integrated cognitive-motor demands (Nejati & Derakhshan, 2021; Fang et al., 2024). Physical education (PE) provides a natural context for such interventions; however, evidence remains fragmented, particularly regarding methodological quality and alignment with equity, diversity, and inclusion (EDI).

Objective: To synthesize empirical evidence on the effectiveness of psychomotor interventions in PE for students with ADHD, with a focus on EF and inclusive frameworks (Page et al., 2021).

Method: A systematic review was conducted following PRISMA 2020 guidelines. Searches in WoS, Scopus, and ERIC (2020–2025) identified 63 records; 21 empirical studies met inclusion criteria. Included studies focused on school-aged students with ADHD and interventions implemented in PE integrating motor and cognitive components (e.g., coordination, rhythm, body awareness). Studies addressing only general physical activity or sport performance without cognitive-motor integration were excluded. Studies were analysed by intervention type, cognitive-motor demands, duration, EF outcomes, and inclusive potential.

Results: Most studies (15/21) reported improvements in inhibitory control, working memory, attention, and self-regulation, alongside gains in motor skills and classroom behaviour. Interventions combining motor and cognitive demands showed the most consistent effects. School-based psychomotor programs demonstrated high ecological validity and inclusive potential. Limitations include small samples, heterogeneous outcomes, and a lack of randomized controlled trials. General physical activity interventions were methodologically stronger but less aligned with psychomotor and inclusive principles.

Conclusions: Psychomotor interventions in PE represent a promising inclusive approach to supporting EF and school functioning in students with ADHD. Future research should prioritize larger samples, standardized EF measures, and stronger integration of EDI frameworks.

References:

- Bölte, S., Alehagen, L., Black, M. H., Hasslinger, J., Wessman, E., Lundin Remnélius, K., Marschik, P. B., D'Arcy, E., Seidel, A., Girdler, S., & Zander, E. (2024). Assessment of functioning in ADHD according to World Health Organization standards: First revision of the International Classification of Functioning, Disability and Health Core Sets. *Developmental Medicine & Child Neurology*. Advance online publication. <https://doi.org/10.1111/dmcn.15865>
- Fang, Y., Sun, F., Wang, Z., Yang, Y., Lau, M., Huang, K., Yeung, M. K.-C., Kranz, G. S., & Chan, C. C. H. (2024). Cognitively combined/engaged physical activity for the executive function, symptomology, and motor competence of children and adolescents with attention-deficit/hyperactivity disorder: A systematic review and meta-analysis. *Research in Developmental Disabilities*, 155, Article 104880. <https://doi.org/10.1016/j.ridd.2024.104880>
- Nejati, V., & Derakhshan, Z. (2021). The effect of physical activity with and without cognitive demand on the improvement of executive functions and behavioral symptoms in children with ADHD. *Expert Review of Neurotherapeutics*, 21(5), 607–614. <https://doi.org/10.1080/14737175.2021.1912600>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>

Funding: Research was supported by VEGA 1/0694/24.

Do lower-limb passive mechanical properties influence postural stability? Innovative use of biofeedback-based intervention in children with cerebral palsy

L. Zaliene¹, K. Zemguliene¹

¹Department of Holistic Medicine and Rehabilitation, Faculty of Health Sciences, Klaipėda University, Lithuania

Introduction: Postural instability is a common and functionally limiting impairment in children with cerebral palsy (CP), negatively affecting balance, gait efficiency, and participation in daily activities (Szopa & Domagalska-Szopa, 2024). Effective postural control depends on the interaction between sensory integration, neuromuscular coordination, and biomechanical characteristics of the musculoskeletal system (Saavedra & Goodworth, 2020). Altered muscle tone and increased stiffness may compromise balance control in CP; however, the role of lower-limb passive mechanical properties remains insufficiently explored (Bertoncelli et al., 2023). Biofeedback-based interventions have shown beneficial effects on balance, yet the underlying biomechanical mechanisms are not fully understood (Liu et al., 2022). The aim of this study was to investigate the association between lower-limb passive mechanical properties and postural stability in children with cerebral palsy, and to evaluate the effects of VR- and biofeedback-based balance training on these parameters.

Method: A controlled comparative study included 12 children aged 9–12 years: 7 children with CP (GMFCS I–II) and 5 typically developing peers. The CP group completed eight biofeedback-based balance training sessions (20 minutes each) using an Alfa stabilometric platform, while the control group underwent a single assessment session. Postural stability was assessed using stabilometric testing, including the Romberg test. Lower-limb passive mechanical properties were evaluated using the MyotonPro device.

Results: Children with CP demonstrated greater postural sway and increased reliance on visual input compared to typically developing peers. Following the intervention, clinically meaningful improvements in postural stability were observed in the CP group. Large effect sizes were identified for sway area with eyes closed and for the eyes-closed to eyes-open ratio of sway path length ($r = 0.78$), while moderate effects were found under eyes-open conditions. The most pronounced mechanical adaptations occurred in distal lower-limb structures, particularly the tibialis anterior muscle and plantar fascia, where marked reductions in tone and stiffness were observed. These changes coincided with improvements in Romberg test parameters, suggesting a functional relationship between optimized distal tissue mechanics and enhanced postural control.

Conclusions: Lower-limb passive mechanical properties, especially in distal structures, appear to play a meaningful role in postural stability in children with cerebral palsy. Biofeedback-based balance training may promote coordinated neuromuscular and connective tissue adaptations that contribute to clinically relevant improvements in postural control.

References:

- Szopa, A., & Domagalska-Szopa, M. (2024). Postural stability in children with cerebral palsy. *Journal of Clinical Medicine*, 13(17), 5263. <https://doi.org/10.3390/jcm13175263>
- Saavedra, S. L., & Goodworth, A. D. (2020). Postural control in children and youth with cerebral palsy. In *Cerebral palsy* (pp. 2565–2586). Springer.
- Bertoncelli, C. M., Bertoncelli, D., Bagui, S. S., & Costantini, S. (2023). Identifying postural instability in children with cerebral palsy using a predictive model. *Diagnostics*, 13(12), 2126. <https://doi.org/10.3390/diagnostics13122126>
- Liu, C., Wang, X., Chen, R., & Zhang, J. (2022). The effects of virtual reality training on balance in children with cerebral palsy: A systematic review and meta-analysis. *JMIR Serious Games*, 10(4), e38972. <https://doi.org/10.2196/38972>

Pre-teaching in physical education as experienced by youth with visual impairments

K. Zamberlin¹, L. J. Lieberman¹, A. Samalot¹, M. Perreault¹

¹SUNY Brockport, USA

Introduction: Pre-teaching children with visual impairments has been a teaching method promoted as an integral instructional strategy by physical educators in the field (Conroy, 2016; Iannacchino et al., 2022). One study on pre-teaching with physical education teachers revealed that most teachers did not know how to do the pre-teaching for their students with visual impairments (Iannacchino et al., 2024). They did feel that it was an important teaching technique. The merits of pre-teaching have been encouraged in the field, yet there has been minimal research on pre-teaching strategies or the effects that pre-teaching has on the skill acquisition of children and youth with visual impairments. The purpose of this study was to identify what students with visual impairments know about pre-teaching, their current experiences with pre-teaching, their opinions on effective strategies, and their views on ineffective strategies.

Method: Twelve participants in three focus groups engaged in this qualitative study. There were six boys, six girls, eight white, two Asian, two African American. Ages ranged from 9-16y with a mean of 12.5y. Participants took part in one of three focus groups during a sports camp. The transcripts were analyzed by thematic analysis by two researchers with extensive backgrounds in qualitative analysis.

Results: The findings revealed themes of 1. confidence, 2. facilitators, 3. barriers, and 4. routines. Implications support the use of pre-teaching before units in physical education.

Conclusions: Students with visual impairments, paraeducators, and the teachers must work together to ensure pre-teaching is an effective and positive experience for everyone.

References:

- Conroy, P. (2016). Building background knowledge: Pre-teaching PE concepts to students with VI. *Journal of Blindness Innovation and Research*, 6(2). <https://doi.org/10.5241/6-80>
- Iannacchino, C., Lieberman, L.J., Beach, P., & Perreault, M. (2024). A preliminary investigation of physical education teachers' perceptions of pre-teaching students with visual impairments. *The New Review*, 2 (1): 27–41. [Doi.org/10.56733/TNR.22.014](https://doi.org/10.56733/TNR.22.014)
- Iannacchino, C., Lieberman, L.J., & Beach, P. (2022). Pre-teaching in physical education for students with visual impairments. *Journal of Physical Education, Recreation & Dance*, 93(3), 48-50, doi.org/10.1080/07303084.2022.2035539

School for parents of persons with disabilities: Enhancing family quality of life through increased knowledge, engagement, and practical skills, including adapted physical activity

E. Zheleva¹, D. Kanchev¹, Z. Stankov², E. Neshev³

¹Department of Kinesiotherapy, Faculty of Public Health “Prof. Dr. Tsekomir Vodenicharov”, Medical University – Sofia, Bulgaria; ²Student in Kinesiotherapy, Faculty of Public Health, Medical University – Sofia, Bulgaria; ³Specialist in Adapted Physical Activity, Coach – “SEN Sport and Sambo for Development”, Bulgaria

Introduction: Families of individuals with disabilities face high stress, emotional exhaustion, and reduced quality of life due to caregiving challenges and limited access to specialized services, particularly in Bulgaria. Inspired by evidence-based international parent training programs, the proposed “School for Parents” integrates online and in-person sessions to improve parental knowledge, practical home-based therapeutic skills, stress management, and family interactions. A key innovative element is the inclusion of adapted physical activity and sports to support motor development, coordination, and parent-child bonding.

Method: A systematic review and meta-analysis of 21 RCTs (n > 1000 participants, children aged 2–9 with autism, ADHD, intellectual disabilities, etc.) from PubMed, ScienceDirect, and PMC informed the 8-session program (120–180 min each). Topics covered: disability understanding, behavior management, mindfulness (ACT-based), communication strategies, social integration, legal rights, and adapted physical activities/sports. Pre- and post-assessments used WHOQOL-BREF, PSS-10, PSI, and CBCL. Analysis included paired t-tests and Hedge’s g effect sizes.

Results: Significant improvements were observed: overall quality of life increased (g = 0.53, p = .04), parental stress decreased (g = –1.26 to –1.15, p < .001), depressive symptoms reduced (g = –0.71), and child problem behaviors diminished (CBCL T-score from 63.24 to 57.62, g = –0.57, p = .02), with up to 40% reduction in negative parent-child interactions. High participation (75–88%) and satisfaction (>8/10) were reported. Adapted sports enhanced motor skills, physical fitness, and family relationships.

Conclusions: The “School for Parents” program, combining evidence-based training with adapted physical activity, effectively reduces stress, improves quality of life, and supports home-based therapy and social inclusion. It holds strong potential for implementation in Bulgaria as an accessible, scalable model for long-term family support in adapted physical activity contexts.

Physical literacy, autism, and inclusion in physical education: Preliminary findings from a uk primary schools pilot study

E. Zjawiony^{1,2}, A. Kosmol¹, N. Morgulec-Adamowicz¹

¹Józef Piłsudski University of Physical Education in Warsaw, Poland; ²Lambeth Autism Advisory Service, London, UK

Introduction: Adapted Physical Activity (APA) aims to support meaningful participation for all children. In school settings, a gap often exists between assessment frameworks and inclusive everyday practice, particularly for autistic pupils approaching adolescence. Physical literacy provides a way to understand not only physical competence, but also daily behaviour, confidence, motivation, knowledge and understanding (Longmuir et al., 2018). This pilot study explores physical literacy among autistic and neurotypical children aged 10-11 in real school contexts.

Method: The study was conducted in three primary schools in London and involved autistic (n = 16) and neurotypical (n = 20) pupils in Years 5 and 6. Physical literacy was assessed using the Canadian Assessment of Physical Literacy (CAPL-2) (Healthy Active Living and Obesity Research Group, 2017). Activities were delivered within regular PE classes and designed to be enjoyable, inclusive and non-competitive.

Results: Early results suggest consistent differences in physical literacy profiles between autistic and neurotypical pupils age 10-11 ($p < .001$). Across schools, neurotypical children achieved significantly higher scores in physical competences, daily behaviour, and motivation and confidence ($p < .001$, $p < .05$, and $p < .001$, respectively), while knowledge and understanding were similar between two groups. Autistic pupils showed greater variability, with some engaging and performing well, while others found certain tasks more challenging. When activities were clearly structured, inclusive and presented as non-competitive, pupils across both groups participated positively and showed enjoyment.

Conclusions: These preliminary findings highlight the value of using physical literacy assessments such as CAPL-2 in everyday school practice. Results suggest that physical literacy assessment can help identify differences in physical competence as well as the need for supportive environments that promote confidence and engagement. Although exploratory, this pilot study provides a strong foundation for further research and offers practical insights for inclusive physical education, particularly during the transition to secondary school, where strengths-based approaches may support participation and long-term engagement in physical activity.

References:

- Healthy Active Living and Obesity Research Group. (2017). *Canadian assessment of physical literacy: Manual for test administration* (2nd ed.). Children's Hospital of Eastern Ontario Research Institute.
- Longmuir, P. E., Gunnell, K. E., Barnes, J. D., Bélanger, K., Leduc, G., Woodruff, S. J., & Tremblay, M. S. (2018). *Canadian Assessment of Physical Literacy (CAPL) second edition: A streamlined assessment of the capacity for physical activity among children aged 8–12 years*. BMC Public Health, 18(Suppl 2), 1047. <https://doi.org/10.1186/s12889-018-5902-y>

Poster Presentations

Effects of a multicomponent intervention on physical fitness, cognitive function, anxiety, quality of life, and health in children and adolescents with autism spectrum disorder – A study protocol

S. Ataíde¹, M. J. Campos^{1,2}, M. Castelo-Branco^{3,4}, J. P. Ferreira^{1,2}

¹Faculty of Sport Sciences and Physical Education, University of Coimbra, Coimbra, Portugal; ²Interdisciplinary Center for the Study of Human Performance, University of Coimbra, Coimbra, Portugal; ³Faculty of Medicine, University of Coimbra, Coimbra, Portugal; ⁴Coimbra Institute for Biomedical Imaging and Translational Research, University of Coimbra, Coimbra, Portugal

Introduction: Physical exercise has been shown to be an effective non-pharmacological strategy with positive effects on symptoms associated with autism spectrum disorder (ASD) (Shahane et al., 2024). However, gaps in knowledge and inconsistencies remain in the literature regarding the most effective intervention models (Ferreira et al., 2018; Ataíde et al., 2024).

Method: A minimum of 30 children and adolescents with a clinical diagnosis of ASD aged 10–21 years will be recruited to engage in a 20-week intervention study. After baseline assessments, participants will be randomized to one of the three groups: (i) experimental group 1 (physical exercise and cognitive intervention); (ii) experimental group 2 (physical exercise intervention); and (iii) control group (no intervention). Baseline assessments will be repeated after 10 weeks of intervention (mid-testing) and upon completion of the intervention (post-testing).

Results: The parameters to be assessed include body composition (bioimpedance); cardiorespiratory capacity (Åstrand-Ryhming protocol on the cycle ergometer; six-minute walk test); neuromuscular capacity (dominant grip strength; knee flexion and extension); flexibility (shoulder stretch; back-saver sit-and-reach); executive function (eco-supermarket; electroencephalography); anxiety (SCARED; S-COR; S-AA); quality of life (KIDSCREEN); cardiovascular health (RHR; SBP; DBP; SpO₂; HRV); metabolic health (total cholesterol; HDL-C; LDL-C; glucose; triglycerides); inflammatory health (BDNF; IGF-1; IL-6; IL-10; TNF- α ; insulin; HOMA-IR).

Conclusions: The results of this study will assist in the development of more effective strategies, recommendations and interventions to ensure better and greater adherence to physical exercise and cognitive intervention by children and adolescents with ASD. In addition, we intend to develop a digital tool offering resources for assessing, prescribing and implementing multicomponent intervention in the ASD.

References:

- Ataíde, S. S., Ferreira, J. P., & Campos, M. J. (2024). Prescription of exercise programs for individuals with autism spectrum disorder: A systematic review. *Journal of Autism and Developmental Disorders*. <https://doi.org/10.1007/s10803-024-06566-1>
- Ferreira, J. P., Andrade Toscano, C. V., Rodrigues, A. M., Furtado, G. E., Barros, M. G., Wanderley, R. S., & Carvalho, H. M. (2018). Effects of a physical exercise program (PEP-Aut) on autistic children's stereotyped behavior, metabolic and physical activity profiles, physical fitness, and health-related quality of life: A study protocol. *Frontiers in Public Health*, 6, Article 47. <https://doi.org/10.3389/fpubh.2018.00047>
- Shahane, V., Kilyk, A., & Srinivasan, S. M. (2024). Effects of physical activity and exercise-based interventions in young adults with autism spectrum disorder: A systematic review. *Autism*, 28(2), 276–300. <https://doi.org/10.1177/13623613231169058>

Physical health changes following a supervised physical activity program for mothers of children with developmental disabilities

M. Barquero¹, J.-L. Concepción¹, C. Cuebas¹, T. S. Yadav¹, G. Swarup¹, D. Schaefer¹, C. Padilla¹, B. Ku², L. Columna¹

¹University of Wisconsin–Madison, USA; ²Yong-In University, South Korea

Introduction: Mothers of children with developmental disabilities (DD) often face caregiving demands that limit opportunities for physical activity. Over time, low physical activity levels may contribute to reduced strength, functional mobility, and well-being. Although physical activity is known to improve these outcomes, few studies have examined physical health outcomes among mothers of children with DD. Therefore, the purpose of this feasibility study was to examine preliminary changes and estimate the magnitude of effects in physical health outcomes following participation in a supervised physical activity program.

Method: Mothers of children with DD (N = 18) were recruited to participate in a ten-week supervised physical activity program and were randomly assigned to either an intervention group or a waitlist control group. Physical outcomes were assessed at baseline, mid-intervention, and post-intervention and included measures of body composition, muscular strength, muscular endurance, and functional mobility. A multivariate analysis of variance was used to examine changes over time between groups. However, given the sample size, standardized effect sizes were examined to describe patterns.

Results: No statistically significant interaction effects were observed. However, mothers in the intervention group showed improvement in functional performance compared with the control group. At post-intervention, a large between-group effect size favored the intervention for lower-body functional mobility, as assessed by sit-to-stand performance ($d = -0.88$). Upper-body muscular endurance, measured by push-up performance, improved over time in the intervention group. Changes in handgrip strength were modest, and physical outcomes in the control group remained relatively stable.

Conclusions: Preliminary findings suggest that a supervised physical activity program is feasible for mothers of children with DD. After ten weeks of participation, improvements in selected measures of functional performance were observed among mothers in the intervention group. Observed effect sizes suggest promise. A larger, adequately powered trial is needed to rigorously evaluate physical health outcomes.

Motor development in CHARGE syndrome: The role of environmental affordances and parent teaching competence

P. Beach¹, P. Aksen², M. Perreault³, L. Lieberman³

¹Rochester Institute of Technology, College of Health Sciences and Technology, USA; ²Kirikkale University, Faculty of Sport Sciences, Turkey; ³State University of New York Brockport, USA, Department of Kinesiology, Sport Studies, and Physical Education

Introduction: Childhood motor development is an important determinant of lifelong physical activity and health, with the home environment playing a central role in shaping children's opportunities for movement. In children with disabilities, including complex conditions such as CHARGE syndrome, motor development may be further constrained, increasing the relevance of environmental affordances and parents' teaching competence. The purpose of this study was to compare motor competence, environmental affordances, and parent perceived teaching competence between children with CHARGE syndrome and children without disabilities.

Method: Participants included 32 parents of children with CHARGE and 18 without disabilities. Instruments included motor development assessments (*The Little Developmental Coordination Disorder Questionnaire* and the *Coordination questionnaire*), parent perception measures (*The Child Movement Skills Research: Parent Questionnaire* and *The Parent Perceived Motor and Teaching Competence Questionnaire*) and environmental affordances (*The Home Physical Activity Equipment Scale*, *The Neighborhood Environment Scale*, *The Convenient Facilities Scale*, and *The School Environment Questionnaire*).

Results: Groups were demographically matched except for child age (CHARGE: $M = 7.38$, $SD = 2.98$ vs. controls: $M = 4.82$, $SD = 2.04$; $t(47) = 3.14$, $p = .003$, $d = 1.00$), which was controlled in analyses. Parents of children with CHARGE syndrome reported significantly lower child motor competence ($U = 67.5$, $p < .001$), reduced disability-related teaching competence ($U = 77.0$, $p = .047$; $M = 2.31$ vs. $M = 4.24$ for non-disability tasks, $t = 15.417$, $p < .001$), fewer home physical activity equipment items ($U = 155.0$, $p = .026$), but better physical accessibility ($U = 105.5$, $p = .001$). Groups showed no differences in neighborhood characteristics, walking safety perception, environmental convenience, or school environment (all $p > .05$).

Conclusions: This study addressed a critical gap in understanding motor development in children with severe disabilities during a period when motor demands intensify, identifying modifiable environmental and parent-teaching factors that extend intervention possibilities beyond early childhood. By examining how these factors relate to motor outcomes, the findings highlight opportunities for family-centered interventions that strengthen home and school environments and bolster parent competence for school-age children.

The future of adapted physical activity in rehabilitation: Perspectives, applications and impact on the quality of life of people with disabilities

D. E. Bekada¹, Y. Zenati²

¹Faculty of Natural and Life Sciences, Abdelhamid Ibn Badis University, Mostaganem, Algeria; ²Institute of Physical Education and Sports, University Khemis Miliana, laboratory of Optimizing Research Programmes on Physical and Sports Activities, University of Abdelhamid Ibn Badis - Mostaganem, Algeria.

Introduction: Adapted physical activity now occupies a central place in rehabilitation and health sciences. It constitutes an innovative therapeutic strategy, centered on the individual and adapted to the needs of people with physical, sensory, cognitive, or mental disabilities, by combining the principles of movement, functional rehabilitation, and the promotion of autonomy.

Objective: this research aims to analyze and compile recent scientific evidence on the role of adapted physical activity in rehabilitation, focusing on its therapeutic, functional, and psychosocial benefits for individuals with different types of disabilities.

Method: This work is based on a narrative review enriched with scientific sources, which has demonstrated the impact of APA in the neurological, locomotor and psychosocial fields.

Results: The results show that APA improves physical function, mental health, autonomy and social participation; researchers are now collaborating with field professionals to translate the scientific results into adapted programs in hospitals, specialized schools and medical-social establishments.

Conclusions: Adapted physical activity (APA) is a transformative approach with strong potential for holistically improving the lives of people with disabilities. APA is now established as an essential discipline within the rehabilitation sciences. By combining prevention, therapeutic intervention, and social transformation, APA not only helps restore physical function but also strengthens the dignity, autonomy, and social participation of people with disabilities. The future of APA is promising, driven by scientific research, technological innovation, and growing institutional recognition.

Exploring the psychometric properties of the physical activity self-advocacy inventory for use with youth with visual impairments

A. Brian¹, L. J. Lieberman², R. Childs², P. Beach³

¹University of South Carolina, Columbia, SC, USA; ²SUNY-Brockport, Brockport, NY, USA; ³Rochester Institute of Technology, Rochester, NY, USA

Introduction: Self-advocacy research often focuses on enhancing educational outcomes for students with disabilities. There is a pressing need for these studies to be backed by rigorously vetted heuristics. Thus, the purpose of this study was to examine the psychometric properties of the Physical Activity Self Advocacy Inventory (PASAI) survey tool for youth with visual impairments.

Method: This study featured a secondary analysis from a previously collected data set (Author et al., in review). Participants ($N = 66$; Boys = 42, Girls = 24; Mean age = 15.00, $SD = 2.71$ years) were enrolled in a one-week physical activity program for children with visual impairments. Participants completed the PASAI at the beginning and end of a one-week physical activity program. The Institutional Review Board from the lead author's institution approved all procedures. Parents provided written informed consent and children verbal assent. To assess reliability, we calculated McDonald's Omega, Cronbach's Alpha and test-retest. For construct validity, we conducted a confirmatory factor analysis (CFA) using maximum likelihood estimations and all appropriate fit indices.

Results: McDonald's omega scores ($\omega = .90$) demonstrate high internal consistency for the PASAI. Test-retest reliability indicated strong stability ($r = .77$, $p < .001$). All items significantly ($p < .05$) loaded into the one factor solution (item loadings ranged from .59 - .95). The model showed good fit ($\chi^2 = 19.77$, $p = .138$, χ^2/Df ratio = 1.41, RMSEA = .07, CFI = .98).

Conclusions: The PASAI produces results can be considered valid and reliable for use among youth with visual impairments. Research efforts should also explore the PASAI's adaptability and relevance across broader populations, including youth without visual impairments, those with other disabilities, and culturally diverse groups. Future research can explore recommend cutoff scores or interpretation guidelines to aid practitioners with interpretation and actionable items.

Psychometric evaluation of the VISIONS QL brief instrument

A. Brian¹, P. Beach², A. Taliaferro¹, L. Lieberman³

¹University of South Carolina, College of Education, Department of Educational and Developmental Science, USA; ²Rochester Institute of Technology, College of Health Sciences and Technology, USA; ³State University of New York Brockport, Department of Kinesiology, USA

Introduction: Children with visual impairments (VI) experience lower Quality of Life (QoL), higher sedentary time, and reduced motor competence as compared to their sighted peers, posing challenges to their health, well-being, and psychosocial development. While several QoL instruments have been developed internationally for youth with VI, none have been validated for use with U.S. pediatric populations. The purpose of this study was to evaluate the psychometric properties of the VISIONS QL assessment tool tailored for youth with VI, with a primary aim of variable/item reduction to develop a streamlined version of the instrument.

Method: This study featured a cross-sectional, descriptive analytic design with convenience sampling. Participants were youth with visual impairments, aged 9 – 19 years, ($N = 148$; Boys = 71, Girls = 77; *Mean age* = 14.49, *SD* = 3.36 years). A PCA with orthogonal varimax rotation was conducted to reduce dimensionality and identify components.

Results: Results of the PCA yielded three components explaining 46% of the variance: Educational Opportunities = 7 items; Social and Familial Implications = 8 items; Communication = 5 items. Overall, the VISIONS QL Brief had a high level of internal consistency reliability ($\alpha = .857$; $\alpha = .858$) and test-retest reliability. The original 63-item version showed concurrent validity with the 20-item brief scale.

Conclusions: Findings affirm the multidimensional nature of QoL and support the usage of the VISIONS QL Brief and its utility in settings where time, accessibility, and cognitive load are critical considerations.

MASBLOX European project - Promoting mixed ability games through roblox communities

M. J. Campos¹, L. Batista¹, H. Sarmiento¹

¹University of Coimbra, CIPER, Faculty of Sport Sciences and Physical Education, Coimbra, Portugal

Introduction: MASBLOX is an innovative Erasmus+ Sport Project (ID: 101132716) that aims to transform the way people engage with inclusive sports, digital environments, and social participation. This Erasmus+ Cooperation Partnership bridges the gap between people with and without disabilities through innovative, game-based learning. MASBLOX responds to the growing need for accessible and inclusive experiences for sport enthusiasts with and without disabilities, aiming to:

1. foster cooperation among sports clubs;
2. promote inclusion and professional training;
3. establish equality and openness in sport.

Method: By combining mixed ability groups with eSports and Roblox environments, MASBLOX seeks to create a safe, inclusive, and accessible digital space where all individuals can connect, play, and learn together before transferring these experiences into real-life sports. The project advances EU priorities on inclusion, diversity, and digital transformation, aligning with the EU Work Plan for Sport and the Digital Education Action Plan. The Consortium comprised 6 partners: Coordinator Club Deportivo Chañe (ES), Inclusive Sports Club (TR), ATERMON (NL), PESG Sports Club (HR), EPSI – European Platform for Sport Innovation (BE) and the University of Coimbra (PT).

Results: MASBLOX' outputs involve the development of a Roblox-based game featuring inclusive sports; the creation of a country-specific Roblox lobbies serving as online community spaces to connect players, coaches, and clubs; design of a training package including educational modules, lesson plans, and assessments for sport professionals; hosting eSports competitions and physical tournaments, fostering engagement between online and offline communities, and building the MASBLOX Hub, an online platform offering Open Educational Resources, learning materials, and access to events.

Conclusions: By leveraging the popularity of gaming and virtual communities, MASBLOX offers a forward-looking model for engaging people in sport, especially those who may face physical, social, or psychological barriers to participation. The project ultimately aims to contribute to a more inclusive, accessible, and motivating sport culture in Europe.

Exploring the impact of a program based on judo falls on health and injury prevention of adults with intellectual and developmental disabilities

M. J. Campos¹, H. Ângelo¹, A. Massart¹, J.P. Ferreira¹,

¹University of Coimbra, CIPER, Faculty of Sport Sciences and Physical Education, Coimbra, Portugal

Introduction: Inactivity and fall-related injuries are concerns across all populations, particularly among individuals with disabilities. Compared to adults without disabilities, individuals with disabilities exhibit a significantly higher risk of unintentional injuries, a trend also observed in children with disabilities. Falls represent the most frequent type of injury among adults with disabilities (Shi, Wheeler, et al., 2015). While several programs have integrated Judo-based exercises to teach safe falling techniques, none have specifically targeted individuals with Intellectual and Developmental Disabilities (IDD). Implementing a physical exercise program that develops correct fall-reaction strategies may play a crucial role in improving health and preventing fall-related injuries. Therefore the primary aim of this study is to assess the impact of a Judo-fall-based physical exercise program on health outcomes and injury prevention in adults with IDD.

Method: Thirty three institutionalized adults with IDD, aged 20 to 67 years (Mean age = 44,48, SD = 11,62), from two Portuguese special institutions participated. Participants were divided in experimental as control groups (EG = 11; CG = 22). Health-related measures included body mass index, body composition, physical fitness (hand-grip strength, seated 3 kg medicine ball throw, and 30-second sit-to-stand), biochemical markers (blood and saliva), and quality of life (Personal Outcomes Scale). Injury-prevention-related measures included balance (Timed Up and Go Test and Fall Risk Assessment), fall-ability (Judo4Balance), and perceived fall risk (Falls Efficacy Scale International).

Results and Conclusions: Expected results indicate that participation in the program will yield significant improvements in both health-related outcomes and fall-prevention measures. These findings may suggest that Judo-based fall training is a promising intervention for enhancing physical health, functional capacity, and safety in adults with IDD. Implementing structured programs such as this may reduce the risk of fall-related injuries and improve overall quality of life, providing a foundation for broader adoption of adapted martial arts programs in individuals with IDD.

References:

Shi, X., Wheeler, K. K., Shi, J., Stallones, L., Ameratunga, S., Shakespeare, T., & Xiang, H. (2015). Increased risk of unintentional injuries in adults with disabilities: a systematic review and meta-analysis. *Disability and health journal*, 8(2), 153–164. <https://doi.org/10.1016/j.dhjo.2014.09.012>

The participation of african countries in the Paralympic games from 1960 to 2020: The case of Mozambique

M. d. Carvalho¹, A. J. Fogão¹, B. C. Machado¹, E. B. Corrêa¹, P. A. d. S. Lins¹, M. L. T. Alves¹

¹Universidade Estadual de Campinas, UNICAMP, Brazil

Introduction: The participation of African countries in the Paralympic Games has increased in recent decades, albeit unevenly across different regions of the continent. While some countries have achieved international prominence, others continue to face significant structural constraints. In this context, the case of Mozambique is examined, taking into account economic, political, and cultural factors that influence the development of Paralympic sport.

Aim: This study aimed to analyze the trajectory of African countries' participation in the Paralympic Games between 1960 and 2020, with a particular focus on Mozambique, identifying challenges and structural factors related to the development of Paralympic sport.

Method: This qualitative case study employed documentary analysis and a semi-structured interview with the Vice-President of the Mozambican Paralympic Committee. Data were analyzed using content analysis techniques. Sport for disabled people in Mozambique began to be structured after 1975, following the country's independence, through the establishment of associations, federations, and the Paralympic Committee.

Results and Conclusions: Despite these advances, persistent limitations remain, including scarce funding, weak or absent public policies, management challenges, insufficient sports infrastructure, and a shortage of qualified professionals. These challenges are further compounded by social stigmas and cultural beliefs associated with disability, which affect athletes' access to and retention in sport. The findings indicate that institutional strengthening, investment in inclusive public policies, and the expansion of access to adapted sport are essential for the sustainable development of Paralympic sport in Mozambique and across the African continent.

Funding: This study was supported by the São Paulo Research Foundation (FAPESP), under grant number 2025/07078-2.

Implementation of exercises developing the habit of correct body posture in physical education classes – An innovative preventive and compensatory program for students in an inclusive classroom

D. Celebańska¹, B. Rosołek¹, A. Zwierzchowska¹, A. Żebrowska¹

¹The Jerzy Kukuczka Academy of Physical Education in Katowice, Katowice, Poland

Introduction Postural disorders affect a large proportion of children and adolescents, including those with developmental disorders (both total and partial). Physical education (PE) classes can serve as an important preventive and compensatory element supporting the therapy of postural disorders. In Poland, the national core curriculum for PE includes content related to developing the habit of correct body posture; however, school practice reveals shortcomings in this area. Therefore, a 12-week intervention was proposed, aimed at implementing exercises that develop the habit of correct body posture during PE classes.

Method: The intervention was implemented in 4th-grade classes of a primary school with inclusive classrooms (girls = 10, boys = 18). In each lesson, exercises developing the habit of correct body posture were incorporated into the introductory part, warm-up, main part, and concluding part, in accordance with a prepared instructional protocol.

Before and after the intervention, assessments of body structure were conducted (body mass, body height, waist and hip circumference), as well as posture assessment (thoracic kyphosis angle, lumbar lordosis angle – using the Rippstein plurimeter and MediMouse IDIAG360), spinal alignment in the frontal plane (Bertrand Test), and knee alignment, in accordance with the protocols of the Laboratory for Body Structure and Posture Diagnostics (PN-EN ISO 9001:2015) at the Academy of Physical Education in Katowice.

Results: Preliminary results did not show a significant change in students' body posture. At the same time, positive changes were observed in environmental and physiological patterns.

Conclusions: It is recommended to implement exercises developing the habit of correct body posture in PE classes and to involve the entire school environment (teachers of all specializations and administrative staff) in preventive and compensatory activities.

An investigation of inclusive physical education practices in suburban middle schools

M. Cho¹, J. Kim¹

¹Soonchunhyang University, Asan, South Korea

Introduction: Inclusive physical education aims to provide equitable learning opportunities for students with and without disabilities in regular school settings. Although inclusive education has been emphasized in South Korea, its implementation in physical education remains challenging, particularly in suburban schools where resources and professional support are limited (Choi, 2011). This study examined the status of inclusive physical education in suburban middle schools and identified key constraints and coping strategies.

Method: A survey was conducted with 42 physical education teachers working in inclusive classes at suburban middle schools in South Korea. The teachers reported experiences teaching students with intellectual disabilities, physical disabilities, autism spectrum disorder, and emotional-behavioral disabilities. The questionnaire addressed student participation, lesson planning, instructional practices, assessment, educational environment, and perceived constraints. Descriptive statistics and content analysis were used. Open-ended responses were categorized into planning, instruction, and assessment domains.

Results: Students with disabilities were reported to show relatively low engagement in physical education. Specifically, 57% of teachers indicated low interest, and 62% reported low active participation. The main reasons were severity of disability (39%), lack of confidence or fear of physical activity (32%), and limited peer acceptance (10%). In lesson planning, 57% of teachers reported insufficient consideration of students with disabilities, and 76% reported limited consultation with special education teachers. In addition, 62% reported insufficient facilities and equipment, while 84% identified support personnel as a major need. Content analysis showed that the main constraints were related to disability characteristics, lack of instructional programs, insufficient facilities/resources, low participation, and difficulty establishing fair assessment criteria.

Conclusions: Inclusive physical education in suburban middle schools continues to face structural and instructional challenges. Stronger collaboration, contextualized program development, support personnel, and flexible assessment practices are needed to improve inclusion and reduce regional disparities.

References:

Choi, Y. (2011). Physical education teachers' perceptions and practices of inclusive physical education classes for students with disabilities in middle schools. Unpublished master's thesis, Inje University Graduate School, Gyeongsangnam-do, South Korea.

Relevance and knowledge of classification among Paralympic athletes and support personnel in a global south context

M. I. Cornejo^{1,2}, M. Henríquez¹, K. P. Sadarangani^{3,4}, S. Hernández-Jaña⁵, F. Muñoz^{6,7}, R. Kons⁸, R. Reina⁹

¹Escuela de Kinesiología, Universidad Santo Tomas, Chile; ²Magíster en Ciencias de la Actividad Física y del Deporte Aplicadas al Entrenamiento, Rehabilitación y Reintegro Deportivo, Universidad Santo Tomas, Santiago 8320000, Chile; ³Universidad Autónoma de Chile, Chile; ⁴Faculty of Health and Dentistry, School of Kinesiology, Universidad Diego Portales, Santiago, Chile; ⁵Dirección Médica Nacional, Instituto Teletón, Santiago, Chile; ⁶Laboratorio de Actividad Física, Salud, y Rendimiento Humano, Departamento de Kinesiología. Facultad de Artes y Educación Física, Universidad Metropolitana de Ciencias de la Educación, Chile; ⁷ParaLab, Departamento de Kinesiología, Facultad de Artes y Educación Física, Universidad Metropolitana de Ciencias de la Educación, Chile; ⁸Department of Physical Education, Federal University of Bahia, Bahia, Brazil; ⁹Department of Sport Sciences, Sports Research Centre, Miguel Hernández University, Elche, Spain.

Introduction: Classification is a cornerstone of Paralympic sport, ensuring fair competition by minimizing the impact of impairment on performance. However, awareness and understanding of classification vary across countries, particularly in the Global South, where structural and educational barriers may limit access to reliable information. This study explored the knowledge, perceptions, and relevance of classification among athletes, coaches, and multidisciplinary staff in Chile.

Method: A cross-sectional online survey was distributed to Paralympic athletes and support personnel. The questionnaire included demographic information, sport participation, and classification-related items. A total of 325 participants completed the survey: athletes (80%), coaches (12%), and multidisciplinary staff (8%). Responses were analyzed descriptively.

Results: Most respondents were male (74%) with a median age of 29 years. Participants represented multiple sports, including para-swimming (19%), CP football (19%), and wheelchair basketball (15%). Regarding disability type, 71% reported physical impairments, while 39% acquired their disability later in life. Only 15% correctly identified the term “classification” as used by the IPC, while 69% referred to “functional classification.” Knowledge levels varied (median = 5/7), with 49% unaware of national classification courses. The perceived importance of classification for sport initiation and development was rated highly (median = 7/7). However, 67% did not know international sanctions related to intentional misrepresentation, and 39% believed intentional misrepresentation is common. Despite this, most denied having falsified during classification (78%).

Conclusions: The findings reveal high recognition of the importance of classification but limited conceptual knowledge and awareness of regulations, particularly regarding intentional misrepresentation. Educational gaps highlight the need for training opportunities not only for athletes but also for coaches and multidisciplinary staff. Strengthening education and resources in Global South countries such as Chile is essential to safeguard fairness and credibility in Paralympic sport.

“I am black, i am an athlete, i am a woman”: Intersectionality of black disabled women in Brazilian Paralympic sport

E. B. Corrêa¹, I. d. S. Alves², J. V. S. Rodrigues¹, M. d. Carvalho¹, P. A. d. S. Lins¹, M. L. T. Alves¹

¹Universidade Estadual de Campinas - UNICAMP, Brazil; ²Comitê Paralímpico Brasileiro -CPB, Brazil

Introduction: Brazilian Paralympic sport has a history strongly linked to rehabilitation, shaped by ableist and sexist narratives. When examined through the experiences of Black disabled women, the intersection of race, gender, and disability emerges as a set of social markers that produce specific inequalities in high-performance sport. The study aimed to investigate the sporting trajectory of a Black disabled woman in Brazilian Paralympic sport, analyzing how race, gender, and disability intersect in the construction of her experiences and identity.

Method: This qualitative, exploratory, and descriptive study is grounded in the oral life history method. The participant was a Black woman with an acquired physical impairment who competed in Brazilian Paralympic sport. Data were collected through a remotely conducted semi-structured interview, which was transcribed and analyzed through an intersectional lens informed by Feminist Disability Studies and Race Studies.

Results: The findings indicate that the athlete’s sporting trajectory is shaped by multiple forms of oppression related to social class, race, gender, and disability. Prior to acquiring her impairment, she already experienced inequalities associated with poverty and racism. Following this event, new barriers emerged, including stigmatization, invisibility, and ableist discourses. Paralympic sport functioned as a space for re-signifying the body, fostering empowerment and identity affirmation, while challenging stereotypes related to fragility and the logic of “overcoming.” The findings demonstrate that race, gender, and disability operate in interconnected ways in the production of inequalities within Paralympic sport.

Conclusions: The analyzed trajectory highlights the need for educational practices that address multiple dimensions of difference, moving beyond formal inclusion and promoting the effective recognition of diversity as a constitutive element of human experience.

Funding: This study was supported by the São Paulo Research Foundation (FAPESP), under grant number 2025/07078-2.

Biopsychosocial evaluation of a 6-month activity-based therapy program in chronic spinal cord injury: Insights from three case studies

S. Cudré¹, J. Wegrzyk², B. Leger³, J. Barral¹

¹Institute of Sport Sciences, University of Lausanne, Lausanne, Switzerland; ²HESAV School of Health Sciences, HES-SO University of Applied Sciences and Arts Western Switzerland, Lausanne, Switzerland; ³Department of Medical Research Suva clinics, Clinique Romande de Réadaptation, Sion, Switzerland

Introduction: Personalized activity-based therapy (ABT) programs are recommended for individuals with spinal cord injury (SCI) and may induce various multidimensional health benefits (Harness et al., 2008; Quel de Oliveira et al., 2017). To address this inter-individual variability, the observational SPRALT study examines biopsychosocial changes in participant-specific profiles of three adults with chronic SCI following completion of a 24-week ABT program.

Method: Assessments were conducted at baseline (T1), post-program (T2), and at 1-month follow-up (T3) using validated questionnaires covering biomedical, psychosocial, functional, and physical activity outcomes, alongside upper-limb strength tests.

Results: Results revealed the following individual profiles: Participant 1 (female, 50 yrs., T7 injury): Pain decreased at T2 while digestive symptoms worsened and persisted at T3. Psychosocial outcomes were stable at T2 but anxiety and depression increased at T3. Physical activity levels increased at T3 relative to T1, coinciding with the increase of strength from T2 onward. Participant 2 (male, 52 yrs., C6-C7 injury): Psychosocial outcomes improved at T2 with reduced anxiety and depression that remained stable at T3. Functional autonomy and physical activity levels increased at T2, with partial declines at T3 yet remaining above baseline. Upper-limb strength peaked at T2 and decreased at T3 while remaining higher than baseline. Participant 3 (male, 33 yrs., T11-T12 injury): Secondary health conditions (pain, digestive symptoms, contractures) improved at T2, while psychosocial outcomes worsened, with depressive symptoms and high fatigue. At T3, psychosocial measures partially recovered but remained below baseline. Physical activity increased at T2 and declined at T3 below T1 levels, while vigorous activity maintained. All participants initially included completed the program, reported benefits and remained active after the follow-up.

Conclusions: Findings from the SPRALT study confirmed that individuals with SCI undergoing a personalized ABT program do not exhibit homogeneous health-related outcomes. This highlights the need to monitor biopsychosocial outcomes to guide individualized, data-driven rehabilitation strategies while accounting for additional personal challenges (Swaffield et al., 2022).

References:

- Harness, E. T., Yozbatiran, N., & Cramer, S. C. (2008). Effects of intense exercise in chronic spinal cord injury. *Spinal Cord*, 46(11), 733-737. <https://doi.org/10.1038/sc.2008.56>
- Quel de Oliveira, C., Refshauge, K., Middleton, J., de Jong, L., & Davis, G. M. (2017). Effects of Activity-Based Therapy Interventions on Mobility, Independence, and Quality of Life for People with Spinal Cord Injuries : A Systematic Review and Meta-Analysis. *Journal of Neurotrauma*, 34(9), 1726-1743. <https://doi.org/10.1089/neu.2016.4558>
- Swaffield, E., Cheung, L., Khalili, A., Lund, E., Boileau, M., Chechlac, D., Musselman, K. E., & Gauthier, C. (2022). Perspectives of people living with a spinal cord injury on activity-based therapy. *Disability and Rehabilitation*, 44(14), 3632-3640. <https://doi.org/10.1080/09638288.2021.1878293>

Physical education experiences of autistic Puerto Rican teens

C. F. Cuebas Garcia¹, J. Haegele², K. Pickett¹, M. Fernández-Vivó³, L. Columna¹

¹University of Wisconsin–Madison, USA; ²Old Dominion University, USA; ³University of Puerto Rico–Mayagüez, USA

Introduction: Education is a basic human right worldwide (UNESCO), including access to Physical Education (PE). In Puerto Rico, PE is formally recognized and protected for students with disabilities. However, access to PE alone does not ensure equitable participation or positive experiences (Sliwa et al., 2017). This has led to growing recognition of the importance of examining students' experiences in PE. Despite this, the experiences of autistic youth in Puerto Rico remain underrepresented in the literature. Therefore, the purpose of this study was to explore the physical education experiences of autistic Puerto Rican adolescents.

Method: We adopted a descriptive qualitative research design (Sandelowski, 2010). Participants were autistic adolescents aged 13 to 18 years from Puerto Rico (N = 10; 1 female, 9 males) who participated in one-on-one semi-structured Zoom interviews. Interviews were audio-recorded, transcribed verbatim, and analyzed using reflexive thematic analysis (Braun & Clarke, 2012).

Results: Participants described both negative and positive experiences in PE. Negative experiences included being excluded from activities, being teased or bullied by peers, spending class time disengaged or inactive, and receiving limited instructional or social support from teachers. In contrast, positive experiences were characterized by active participation, enjoyment of class activities, and supportive interactions with teachers and peers during class.

Conclusions: This study adds to the limited literature on the PE experiences of autistic youth in Puerto Rico. The findings suggest factors that may be important when designing and delivering PE for autistic adolescents. To our knowledge, this is among the first studies to examine the PE experiences of autistic youth in Puerto Rico. Future research should further explore these experiences in PE settings.

References:

- Braun, V., & Clarke, V. (2012). Thematic analysis. In *APA handbook of research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological* (pp. 57–71). American Psychological Association. <https://doi.org/10.1037/13620-004>
- Right to education | UNESCO. (2025, December 9). <https://www.unesco.org/en/right-education>
- Sandelowski, M. (2010). What's in a name? Qualitative description revisited. *Research in Nursing & Health*, 33(1), 77–84. <https://doi.org/10.1002/nur.20362>
- Sliwa, S., Nihiser, A., Lee, S., McCaughtry, N., Culp, B., & Michael, S. (2017). Engaging Students in Physical Education. *Journal of Physical Education, Recreation & Dance*, 88(8), 43–48. <https://doi.org/10.1080/07303084.2017.1271266>

Czech translation and content validation of the AISDPE questionnaire

L. Dolívková, J. Vařeková, I. Pavlová, K. Daďová, K. Kotlík, A. Mahrová

Faculty of Physical Education and Sport, Charles University, Prague, Czech Republic

Introduction: Attitudes toward including students with disabilities in physical education are a key factor in implementing effective inclusive practice. The Attitudes Towards Inclusion of Students with Disabilities in Physical Education (AISDPE) questionnaire (Reina et al., 2016), widely used internationally, has lacked a validated Czech version. This study aimed to translate the instrument into Czech and evaluate the content validity of the translated version.

Method: Three independent experts produced initial translations, which were reviewed by two researchers who selected the most appropriate wording for each item. The preliminary Czech version was then assessed by four specialists for relevance and clarity. A back-translation into English by a native speaker unfamiliar with the original questionnaire helped identify potential discrepancies. Based on expert feedback and the back-translation results, a final Czech version was created and pilot-tested in the Czech context.

Results: Expert evaluation confirmed the clarity and adequacy of the items, and pilot testing demonstrated good comprehensibility and practical usability.

Conclusions: The Czech adaptation of the AISDPE questionnaire thus represents a valid and culturally appropriate tool for assessing attitudes toward inclusion in physical education.

References:

Reina Vaillo, R., Hutzler, Y., Iñiguez Santiago, M. C., & Moreno Murcia, J. A. (2016). Attitudes towards Inclusion of Students with Disabilities in Physical Education Questionnaire (AISDPE): A two-component scale in Spanish. *European Journal of Human Movement*, 36, 75–87.

An eTwinning-based pedagogical approach in adapted physical education: Traditional dances and games

A. Doulkeridou¹, P. Albanidou²

¹Faculty of Physical Education and Sport Science, National and Kapodistrian University of Athens, Greece; ²Consultant for special education and inclusive education of Pella and Florina Prefectures, Greece

Introduction: Adapted Physical Education (APE) is a core component of special education, aiming to support students' motor, social, and emotional development through appropriately adapted physical activities (Block, 2016). At the same time, eTwinning projects promote collaboration, communication, and active learning through the use of Information and Communication Technologies (ICT), fostering inclusive educational practices across Europe (European Commission, 2022).

Purpose: The purpose of this study was to explore the pedagogical value of utilizing traditional dances and games into Adapted Physical Education through an exclusively eTwinning project, focusing on motor development, socialization, and active participation of students with disabilities and/or special educational needs (SEN).

Method: Approximately 30 students from different countries participated in the eTwinning project, while 12 students from Greece took part in the study. They were students of special secondary schools and their age ranged from 15 to 19 years old. The pedagogical approach was based on experiential learning and collaborative teaching principles (Kolb, 1984). Students participated in adapted traditional dances and games representing the local cultural heritage of the participating schools. Digital collaboration was supported through various Web 2.0 tools for communication, material exchange, and presentation of outcomes. Data were collected mostly through systematic observation, interviews, digital artifacts, and teacher questionnaires.

Results: The findings indicated some improvement in the students' motor skills, such as balance, confirming the contribution of traditional dances to psychomotor development (Lykesas & Zachopoulou, 2006). Most importantly, however, increased social interaction, cooperation, self-confidence, and emotional expression were observed. Students demonstrated a stronger sense of belonging and active engagement within a supportive learning community.

Conclusions: The results suggest that eTwinning can serve as an effective and inclusive pedagogical approach in Adapted Physical Education, where traditional dances and games can be utilized as means to enhance the motor and social development of students with disabilities and/or SEN. Combining movement, cultural heritage, and digital collaboration enhances both motor and social development of students with special educational needs and supports the fundamental aims of APE.

References:

- Block, M. E. (2016). *A teacher's guide to adapted physical education: Including students with disabilities in sports and recreation*. Baltimore, MD: Paul H. Brookes.
- European Commission. (2022). *eTwinning: Supporting collaboration and innovation in education*. Brussels.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.
- Lykesas, G., & Zachopoulou, E. (2006). The effects of a traditional dance program on motor skills and social behavior of children. *Studies in Physical Culture and Tourism*, 13, 163–168.
- UNESCO. (2015). *Quality physical education: Guidelines for policy-makers*. Paris: UNESCO.

Exploring the concordance between critical speed from an adapted 3-minute all-out test and 100-m performance in young para swimmers

A. Febles-Castro^{1,2,3}, J. J. Ruiz-Navarro^{1,4}, O. López-Belmonte^{1,5}, A. Romarate^{3,6}, R. Arellano¹

¹Aquatics Lab, Department of Physical Education and Sports, Faculty of Sport Sciences, University of Granada, Granada, Spain;

²Spanish Paralympic Committee, Madrid, Spain; ³Spanish Sports Federation for People with Physical Impairments (FEDDF), Madrid, Spain;

⁴Human Performance and Sports Science Laboratory, Faculty of Sport Sciences, University of Murcia, Murcia, Spain; ⁵Department of Didactics of Musical, Artistic and Bodily Expression, Faculty of Education, University of Valladolid, Soria, Spain; ⁶Emen4sport, Leioa, Spain

Introduction: Performance assessment in para swimming is challenged by the large functional heterogeneity among athletes. The modified 3-minute all-out swimming test (12x25m test) provides valid estimates of critical speed (CS) in swimmers without disabilities (Mitchell, 2019); however, its applicability to para swimmers remains unexplored. In this population, standardization by total work duration rather than by a fixed number of repetitions may represent a required methodological adaptation. Examining the agreement between CS and specific segments of competitive performance may provide evidence for its practical use.

Method: A concordance study was conducted in 13 young high-performance para swimmers. Athletes performed an adapted 12x25m test standardized by total work duration, with individualized partitioning into 25m repetitions and 5s rest interval in-between. A minimum of four repetitions was required for analysis. CS was calculated as the mean speed of the two slowest repetitions among the last four completed. Competitive performance was assessed using the swimming speed of the second split of a 100-m race. Agreement between CS and second split speed was evaluated using Bland–Altman analysis, including bias, limits of agreement, coefficient of repeatability (CR), standard error of measurement (SEM), coefficient of variation (CV), percentage of observations within limits, and assessment of proportional bias (Hopkins, 2000; Martin Bland & Altman, 1986).

Results: CS showed high agreement with second split speed. Mean bias was $0.046\text{m}\cdot\text{s}^{-1}$, with limits of agreement from -0.059 to $0.151\text{m}\cdot\text{s}^{-1}$ and a CR of $0.105\text{m}\cdot\text{s}^{-1}$. The SEM was $0.038\text{m}\cdot\text{s}^{-1}$ and the CV was 4.5%. All observations were within the limits of agreement. No proportional bias was observed ($R^2 < 0.01$), indicating stable agreement across the range of swimming speeds.

Conclusions: These findings support the practicality of CS derived from an adapted 12x25m test standardized by total work duration for assessing the ability to sustain swimming speed under fatigue, regardless of the number of repetitions performed, providing useful information for individual performance monitoring in para swimming.

References:

Hopkins, W. G. (2000). Measures of Reliability in Sports Medicine and Science. *Sports Medicine*, 30(1), 1–15.

Martin Bland, J., & Altman, D. (1986). Statistical methods for assessing agreement between two methods of clinical measurement. *The Lancet*, 327(8476), 307–310.

Mitchell, L. J. G. (2019). *Anaerobic assessment and training monitoring in elite swimmers*. University of Canberra.

Physical activity program based on the constraints-led model: Effects on motor competence, functional capacity, and executive functions in children with autism spectrum disorder

G. A. Figueiredo^{1,2}, A. C. A. Tobias², L.B. Chacon², M.L.T. Alves²

¹School of Applied Sciences - FCA, University of Campinas - UNICAMP, Limeira, SP, Brazil; ²School of Physical Education-FEF, University of Campinas - UNICAMP, Campinas, SP, Brazil

Introduction: Children with Autism Spectrum Disorder (ASD) frequently present alterations in motor development and in components of executive functions (EF), factors that modulate the form of participation in physical activity contexts and modulate learning processes. The objective of this study was to analyse the effects of a structured physical activity program on motor competence and to preliminarily explore changes in eye-movement (EM) behaviour and possible repercussions in EF components in children with ASD, with emphasis on the teaching strategies adopted.

Method: Twelve children with ASD (8.0 ± 1.7 years) participated in a 12-week group physical activity program. The pedagogical strategies were grounded in the ecological approach and dynamic systems theory, using the constraints-led model to manipulate task, environmental, and organism variables. The strategies included progressive task simplification, controlled variability, contextualization based on the children's interests, rule flexibility, and gradual withdrawal of supports. Motor competence was assessed using the KTK battery and functional tests. EM behaviour was analysed using Eye Tracking Glasses (ETG 2.0 – SMI) in a subsample (4 participants), in a preliminary manner, during visual fixation and guided movement tasks (Barela et al., 2020).

Results: The results indicated improvements in functional mobility, lower-limb functional strength, and overall motor competence ($p < .01$). The preliminary EM analysis revealed, after the intervention, more organized fixation patterns (longer fixation time) and better saccadic control (higher number of saccades in the guided condition), suggesting possible adaptations in attention, inhibitory control, and action monitoring processes.

Conclusions: It is concluded that the program promoted relevant motor and functional gains and preliminary changes in visuomotor behaviour, suggesting possible repercussions in attentional and executive processes.

References:

Barela, J. A., Tesima, N., Amaral, V. D. S., Figueiredo, G. A., & Barela, A. M. F. (2020). Visually guided eye movements reduce postural sway in dyslexic children. *Neurosci Lett*, 725, 134890. doi: 10.1016/j.neulet.2020.134890

UN CRPD and sport: A comparative analysis of european states parties reports and the progressive realisation gap

A. Geppert^{1,2}, E. M. Smith³, M. MacLachlan^{1,2,4,5}

¹Department of Psychology, Maynooth University, W23 F2H6 Maynooth, Ireland; ²Assisting Living and Learning (ALL) Institute, Maynooth University, W23 A3HY Maynooth, Ireland; ³School of Allied Health, University of Limerick, V94 T9PX Limerick, Ireland; ⁴Olomouc University Social Health Institute, Palacky University Olomouc, CZ-7779 00 Olomouc, Czech Republic; ⁵Department of Psychiatry and Mental Health, University of Cape Town, Cape Town 7700, South Africa

Introduction: The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) is the first international treaty to provide a basis for standards for the rights of persons with disabilities (United Nations, 2007). It also represents the first human rights convention formally ratified by the European Union. In 2008, the UNCRPD was ratified by the majority of EU and EEA member states (European Commission, n.d.). Article 30 of the Convention specifically addresses the right to participate in cultural life, recreation, leisure, and sport (United Nations, 2007).

Assistive technology (AT) is widely recognized as essential to achieving the UNCRPD, particularly Article 30, by reducing barriers and enabling equitable participation in sport and physical activity. This paper examines how sport and AT are referenced and addressed in UNCRPD States Parties reports submitted by all EU and EEA countries, as well as the United Kingdom. Research Question: How is sport represented in the State Party reports submitted under the UNCRPD?

Method: Data were collected from the UN Treaty Body Database. When multiple reports were available for a country, both were analysed.

Results: Thematic analysis of 31 reports revealed six key themes: General Factors, Sport in Article 30, Types of Support, Entities, Assistive Technologies, and Assistive Technologies in Sport. Sport was mentioned in all reports, with 90.3% referencing recreational sport and 83.9% elite-level sport. Funding and programmes were the most frequently cited supports. Nearly half reported dedicated entities overseeing disability sport. Assistive technology was widely referenced across UNCRPD articles, but only 16.1% discussed its use in sport. Countries differ significantly in implementation: some advance toward full inclusion, others rely on targeted programs.

Conclusions: Disparities exist in reporting and implementation. Ambiguities in categorizing sport, underreporting of programs, and limited references to frameworks like the Kazan Action Plan highlight inconsistencies. Assistive technology, while acknowledged, is rarely linked to sport. Clearer guidelines and comprehensive reporting are needed to ensure inclusive sport opportunities.

References:

- European Commission. (n.d.). *United Nations Convention on the Rights of Persons with Disabilities*. https://commission.europa.eu/strategy-and-policy/policies/justice-and-fundamental-rights/disability/united-nations-convention-rights-persons-disabilities_en
- United Nations. General Assembly. (2007). *Convention on the rights of persons with disabilities and optional protocol*. UN. <https://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>

Feasibility of a supervised physical activity program for psychological well-being in mothers of children with developmental disabilities

J. L. Jaime-Concepción¹, C. Cuebas¹, T. S. Yadav¹, M. Barquero¹, G. Swarup¹, B. Ku², J. Meyer¹, L. Columna¹

¹University of Wisconsin–Madison, USA; ²Yong-In University, South Korea

Introduction: Mothers of children with developmental disabilities (DD) often experience high levels of stress, anxiety, and depressive symptoms related to caregiving demands. Physical activity may support psychological well-being; however, few studies have examined physical activity programs for mothers of children with DD. Therefore, the purpose of this feasibility study was to examine preliminary changes and estimate the magnitude of effects in psychological well-being among mothers of children with DD in a supervised physical activity program.

Method: Mothers of children with DD (N = 18) were recruited to participate in a ten-week group-based physical activity program and were randomly assigned to either an intervention group or a waitlist control group. Psychological outcomes were assessed at baseline, mid-intervention, and post-intervention and included anxiety, depressive symptoms, perceived stress, worry, quality of life, and moderate-to-vigorous physical activity. A multivariate analysis of variance was used to examine changes over time between groups. However, given the small sample size, standardized effect sizes were examined to describe observed changes.

Results: No statistically significant interaction effects were observed; however, mothers in the intervention group showed consistent improvement across psychological outcomes compared with the control group. At post-intervention, moderate-to-large between-group effect sizes favoured the intervention for anxiety ($d = -0.85$), depressive symptoms ($d = -0.77$), perceived stress ($d = -0.86$), and worry ($d = -0.53$). Psychological outcomes improved over time in the intervention group, while outcomes in the control group remained relatively stable. MVPA demonstrated a large between-group effect at post-intervention ($d = 1.00$).

Conclusions: Preliminary findings suggest that a supervised physical activity program is feasible for mothers of children with DD. After ten weeks of participation, improvements in psychological outcomes were observed among mothers in the intervention group. Observed effect sizes suggest potential benefits. A larger, adequately powered trial is needed to evaluate psychological outcomes more rigorously.

Reliability of the Brockport physical fitness test (BPFT) measuring instrument in girls, boys and adolescents with intellectual disabilities in Chile

C. Jeréz Cofre¹, F. Muñoz-Hinrichsen^{1,2}, D. Camargo³

¹Magister en Ciencias del Movimiento y la Cognición Humana, Universidad Metropolitana de Ciencias de la Educación, Santiago, Chile; ²Laboratorio de Actividad Física, Salud, y Rendimiento Humano, Departamento de Kinesiología, Universidad Metropolitana de Ciencias de la Educación, Santiago, Chile; ³Departamento de Movimiento Corporal Humano, Universidad Nacional de Colombia

Introduction: Physical fitness is a crucial health indicator in children and adolescents. In the population with intellectual disability (ID), assessment requires adapted instruments with proven reliability. Although the Brockport Physical Fitness Test (BPFT) is widely used internationally, its reliability has not been studied in the Chilean population with ID. The objective of the study was to evaluate the test-retest reliability and agreement of the BPFT in children and adolescents with ID in a Chilean school context. This research seeks to address the critical data gap on physical fitness in this population, reported as "Incomplete" by the Global Matrix 2023.

Method: A quantitative correlational study was conducted on students with ID aged 10 to 17 years from a special education school in Santiago of Chile (n = 54). BPFT tests were applied that measure body composition, flexibility, strength, muscular endurance, and aerobic capacity. The reliability of continuous variables was analysed using the Intraclass Correlation Coefficient (ICC), with its 95% Confidence Interval. The agreement of categorical variables was assessed using the Kappa index. The ICC and Kappa were interpreted according to international criteria.

Results: The results showed variable levels of reliability: Excellent Reliability (ICC \geq 0.90): Anthropometric variables (Height, Weight, % Fat) and most of the strength tests (Handgrip, Extended Arms Hang, Bench Press, Trunk Extension, Flexed Arms Hang). Good Reliability (ICC \geq 0.75-0.90): Flexibility (Sit-and-Reach) and Modified Abdominals. Moderate Reliability (ICC \geq 0.50-0.75): Isometric Plank (ICC = 0.728) and the PACER aerobic test (ICC = 0.741). Agreement (Kappa): Moderate agreement was observed in the Shoulder Stretch (Right Shoulder, Kappa = 0.539; p = .037), while the left shoulder showed a lack of consistency.

Conclusions: The BPFT presents acceptable reliability for assessing physical fitness in children and adolescents with intellectual disabilities in the Chilean school context. The high reliability of most of the tests supports the use of the protocol in this population. The variability in tests such as PACER and Isometric Plank suggests the importance of standardizing instruction and motivation. The study establishes the basis for the use of this tool in the planning of interventions and metabolic health policies in Chile.

Older women's experiences with baduanjin in an adapted physical activity program: A qualitative study

N. Ježová¹, S. Liu¹, J. Vařeková¹, K. Daďová¹

¹Charles University, Faculty of Physical Education and Sport, Prague, Czech Republic

Introduction: Mind-body exercises are increasingly implemented within Adapted Physical Activity (APA) programs for older adults due to their low physical demands and potential psychosocial benefits. However, little is known about how older women subjectively experience such activities in real-world APA settings.

Aim: This study aimed to explore how older women perceive and make sense of participating in a structured Baduanjin (Eight Pieces of Brocade) program, with particular attention to perceived physical and psychological effects as well as contextual factors influencing their engagement.

Method: Fifteen women (Mean age = 68 years) took part in a 12-week Baduanjin intervention held twice weekly and combined with strength training. Following the program, semi-structured interviews were conducted. Data were analysed using reflexive thematic analysis with an inductive approach.

Results: Five themes captured participants' experiences: (1) Baduanjin was viewed as a gentle and accessible activity, often perceived more as stretching or warm-up than vigorous exercise; (2) psychological benefits, such as calmness, relaxation, and mental slowing, were typically short-term and limited to the practice period; (3) instructor guidance and the group environment played a key role in motivation, adherence, and perceived benefit; (4) the slow, mindful nature of Baduanjin did not align with some participants' preferences or movement histories, occasionally leading to frustration or reduced engagement; and, (5) women attributed highly varied meanings to the practice, ranging from relaxation and self-care to participation driven primarily by external structure or obligation.

Conclusions: Older women's experiences with Baduanjin in an APA context were highly diverse and strongly influenced by individual characteristics and contextual factors. The findings highlight the need for person-centered adaptations, skilled instruction, and supportive group dynamics when integrating mind-body exercises into APA programs for older women.

Self-development group for parents of children with disabilities as part of occupational therapy support: A case study

M. Koželská¹, J. Vařeková¹

¹Faculty of Physical Education and Sport, Charles University, Prague, Czech Republic

Introduction: Caring for a child with a disability places substantial physical, emotional, and social demands on parents. Long-term caregiving responsibilities may contribute to chronic stress, physical strain, reduced self-care, and limited participation in health-promoting activities. While multidisciplinary rehabilitation primarily targets the child's development, growing evidence highlights the importance of supporting parental well-being as a key factor influencing overall family functioning. Occupational therapy, grounded in a holistic and family-centered approach, is well positioned to address both child and parent needs within comprehensive care.

Objective: To evaluate whether participation in a structured self-development group contributes to improved physical well-being and perceived coping among parents of children with disabilities.

Method: This case study included 7 parents of children with disabilities recruited from the Fyzioaktiv rehabilitation facility. The intervention consisted of five 90-minute group sessions. Sessions focused on compensatory strategies for managing caregiving demands, training in proper breathing and posture, relaxation techniques, and sensory awareness exercises. The group format also encouraged peer sharing and mutual support. Data were collected using an initial anamnesis questionnaire, the Kansas Parenting Satisfaction Scale (KIPP – Kansas), a focus group method, and a final feedback questionnaire.

Results: Preliminary findings suggest increased awareness of physical self-care, improved relaxation skills, enhanced body awareness, and strengthened peer support among participants. Parents reported valuing the opportunity to share experiences and normalize caregiving challenges.

Conclusions: Structured self-development groups may represent a meaningful addition to occupational therapy services. Supporting parental resilience and well-being can contribute to healthier family dynamics and indirectly promote better developmental outcomes for children.

Inclusive physical and sport education in Czechia and Slovakia: A school-based paralympic programme with follow-up monitoring of attitudes and inclusion readiness

L. Zmeškal¹, M. Kudláček¹, O. Ješina¹, T. Vyhlídal¹, M. Korhelíková¹, M. Dunová², P. Harminc², P. Billík², D. Augustovičová³, S. Kraček⁴, D. Nemček⁴, M. Čambal²

¹Palacky University, Olomouc, Czech Republic; ²Slovakian Paralympic Committee, Bratislava, Slovakia; ³MUNI, Brno, Czech Republic; ⁴Komensky University, Bratislava, Slovakia

Introduction: Inclusive physical and sport education is increasingly recognised as a key component of equitable and quality schooling; however, its successful implementation remains contingent on more than structural conditions alone. In both Czechia and Slovakia, persistent gaps can be observed in teachers' preparedness to work inclusively, particularly in relation to attitudes, perceived competence, and practical experience with pupils with disabilities. At the same time, pupils' perceptions of disability and inclusion are still shaped by limited direct experience and stereotypical narratives. These challenges point to the need for a comprehensive, systemically embedded approach that addresses both educational staff and pupils simultaneously. This contribution presents a cross-border initiative that responds to this need through a structured combination of experiential Paralympic education and targeted teacher professional development, complemented by a follow-up monitoring framework focused on attitudes and inclusion readiness.

Method: The project is implemented through two main components: (1) Paralympic School Days designed to increase pupils' awareness of the lives of persons with disabilities and to introduce parasports in an experiential format; (2) subsequent teacher training delivered in a blended-learning model. The training addresses inclusive principles, the use of inclusive PE equipment, and practical strategies for working with pupils with various disabilities or health-related limitations. The programme involves more than 40 schools and over 120 educational staff, with expected reach of more than 2,000 pupils through the Paralympic School Days. A follow-up monitoring process evaluates programme impact on selected participant groups. Teacher attitudes towards inclusive PE are assessed using ATIPDPE, and pupil attitudes towards inclusion of peers with disabilities are assessed using CAIPE-R.

Results: Inclusive physical and sport education is increasingly vital for equitable schooling, yet its implementation in Czechia and Slovakia is often constrained by disparities in teacher preparedness and pupils limited, often stereotypical, engagement with disability. To address this, we present a comprehensive cross-border initiative adopting a dual-stream approach: experiential 'Paralympic School Days,' designed to foster positive pupil attitudes, and a blended-learning framework aimed at enhancing teacher competence and practical inclusive pedagogy. Encompassing over 40 schools, 120 educators, and 2,000 pupils, the programme seeks to create a systemic shift in the educational environment.

Conclusions: The project's impact is currently being evaluated through longitudinal assessment of teacher attitudes (ATIPDPE) and pupil perceptions using CAIPE-R, with research and data analysis currently in progress.

Caregiver assessment of adaptive movement programs (CAAMP): Development and pilot testing

A. Mahrová¹, J. Vařeková¹, L. Jirchářová¹, K. Daďová¹, I. Pavlová¹

¹Charles University, Faculty of Physical Education and Sport, Prague, Czech Republic

Introduction: Rehabilitation and experiential residential programs can play an important role in post-treatment care and comprehensive family support for children with disabilities. Although various benefits of these programs are frequently reported, their systematic evaluation from the caregivers' perspective remains limited. The aim of this study was to develop and pilot-test the CAAMP (Caregiver Assessment of Adaptive Movement Programs) questionnaire designed to assess the perceived benefits and challenges of adaptive movement and residential programs from the perspective of caregivers.

Method: The CAAMP questionnaire was developed at the Department of Health Physical Education and Sports Medicine, Faculty of Physical Education and Sport, Charles University. The questionnaire focuses on three key areas: the child, the parents, and family functioning. The questionnaire contains a total of 39 questions (basic demographic information – 4 questions; evaluation of individual statements, closed-ended questions – 25 questions; space for participants to describe their own experiences and opinions, open-ended questions – 10 questions). The closed-ended questions were evaluated with Lickert scale items and open-ended questions were addressed to child-related outcomes, caregiver well-being, family functioning, organizational aspects, environmental conditions, and perceived barriers. Content validity was evaluated by ten independent experts in the fields of adapted physical activity and rehabilitation. Pilot testing was conducted during a hippotherapy-based residential program for children with physical and multiple disabilities.

Results: Preliminary findings indicate that CAAMP is understandable, feasible, and sensitive to capturing a broad range of perceived benefits and challenges of adaptive movement programs. We are currently compiling the results, which will be included in the presentation.

Conclusions: CAAMP shows potential as a practical evaluation tool for research and practice in adapted physical activity, rehabilitation, and family-centered care.

Design and implementation of an inclusive hiking program to promote social inclusion for people with intellectual disabilities.

D. Martínez Cormenzana¹, L. Jiménez-Monteagudo¹

¹Catholic University of Valencia, Spain

Introduction: Outdoor physical activities generate positive responses in the health of people with intellectual disabilities. These benefits can be grouped into three essential areas: mental benefits including improved cognitive function, self-confidence and emotional regulation, better emotional states, lower levels of anxiety and depression and reduced stress; social benefits such as improved interpersonal relationships, communication and teamwork; physical benefits like preventing diseases such as diabetes, osteoporosis, multiple sclerosis, and myopia. In addition, they are also associated with improved subjective health and physical quality of life (Climent-Oltra et al., 2025).

Method: The main objective is to analyse the impact of inclusive hiking on people with and without disabilities. A qualitative research methodology was used. Information was collected through semi-structured interviews adapted to participants with intellectual disabilities, as well as ad hoc questionnaires for students studying a degree in Physical Activity and Sports Sciences. The program activities consisted of hiking trails in which people with and without intellectual disabilities participated together. A total of 8 sessions were held. A total of 40 people were involved, equally distributed.

Results: Overall results were positive for people with intellectual disabilities, particularly in the social sphere, although we could also see physical and mental well-being benefits. We got mostly favourable responses when asking questions regarding the experience shared with other people or their feelings after the program, among others. Regarding the university students, we received positive feedback as well. Most agreed that these experiences play a major role in their development and improving their attitude towards people with intellectual disabilities.

Conclusions: Activities like these should be held more often, given that it had a positive impact on everyone who participated. We can certainly say that inclusive hiking has the power to bring people together and improve their quality of life.

References:

Climent-Oltra, C., Lieberman, L. J., & Jiménez-Monteagudo, L. (2025). Values and benefits of inclusive outdoor physical activities with a hiking mountain wheelchair. *Journal of Outdoor Recreation and Tourism*, 52, 100981. <https://doi.org/10.1016/j.jort.2025.100981>

We belong here: Female athletes challenging stigma through wheelchair basketball

C. McKay¹, K. Holland², T.N. Kirk³

¹James Madison University, USA; ²Norwegian University of Science and Technology, Norway; ³University of Georgia, USA

Introduction: This qualitative study explored the lived experiences and personal meanings ascribed to sport participation by female wheelchair basketball athletes from low- and middle-income countries affected by recent or ongoing armed conflict.

Method: Thirty-one athletes representing three national teams engaged in semi-structured focus group interviews, sharing narratives of challenge, resilience, and transformation. Data were analyzed thematically using an interpretive descriptive approach.

Results: Three distinct themes emerged: (1) “The people in my village looked at me like I was a strange person,” highlighting the pervasive societal exclusion and stigma faced by disabled women; (2) “Wheelchair basketball makes us physically strong,” capturing the profound physical and emotional benefits derived from sport participation, including enhanced self-esteem and well-being; and (3) “I am a collector of disabled people in the province- mostly women,” illustrating how sport can serve as a catalyst for broader societal change, empowering athletes to become advocates and role models within their communities

Conclusions: Findings suggest that engagement in wheelchair basketball not only fosters physical and emotional strength, but also enables disabled women to redefine their identities, challenge social barriers, and collaborate with others. Through sport, participants reported increased confidence and agency both on and off the court, positioning themselves as leaders and change agents in their families, villages, and countries. These insights underscore the transformative potential of adaptive sport for disabled women in conflict-affected regions and highlight the importance of inclusive opportunities for participation and leadership.

“As a wheelchair user, that's too difficult”: Participation in sport from the perspective of German boccia players with physical disabilities

C. Mihajlovic¹, M. Schoo¹

¹3 PUNKTE für meinen Verein e.V., Stuttgart, Germany

Introduction: In recent years, research has increasingly focused on the lived experiences and perspectives of individuals with disabilities regarding social inclusion and participation in physical education (PE) and sport (e.g. Kirk & Holland, 2025). However, recent literature rarely captures the perspectives of individuals with severe motor disabilities, especially in the context of extracurricular and recreational sports. This article aims to address this research gap by amplifying the voices of individuals with physical disabilities regarding their experiences in sport participation.

Method: Five adults with severe motor disabilities from an indoor boccia team in Germany were interviewed on how they experience participation in sport. The interviews were qualitatively content analyzed using a deductive-inductive approach.

Results: The findings indicate that participation in sport is closely associated with feelings of being valued and recognized as a legitimate member of the boccia training group. The study also identified several barriers to participation in physical activity programs, such as the lack of personal assistance, transportation, and limited accessibility to sport facilities (Mihajlovic & Schoo, 2025). Overall, this study contributes to the growing body of research that considers the perspectives of individuals with disabilities regarding sport participation. It provides empirical insights into how participants experience social inclusion and encounter barriers in physical activity programs.

Conclusions: In sum, this study demonstrates that boccia can serve as an inclusive, empowering, and socially meaningful sport for adults with severe motor impairments. However, broader systemic efforts are necessary to ensure that such opportunities are available, accessible, and sustainable within the wider landscape of community sport.

References:

- Kirk T. N., Holland S. K. (2025). Lived experiences of individuals with cerebral palsy in “inclusive” physical education. Adapted Physical Activity Quarterly: APAQ, 1–25. Advance online publication. <https://doi.org/10.1123/apaq.2024-0197>
- Mihajlovic, C., & Schoo, M. (2025). “As a Wheelchair User, that’s too Difficult”: Participation in Sport from the Perspective of German Boccia Players with Physical Disabilities. *Belonging*, 1(1-2), 185-203. <https://doi.org/10.1177/30290805251375435>

Differences in the perception of factors influencing feelings in inclusive physical education classes in neurodivergent pupils

D. Nemček¹, D. Švecová¹,

¹Comenius University Bratislava, Faculty of Education, Department of Special Education, Bratislava, Slovakia

Introduction: The feelings of primary school neurodivergent pupils with autism spectrum disorder (ASD), attention deficit disorder (ADD), and attention deficit hyperactivity disorder (ADHD) during physical education (PE) lessons play a crucial role in the process of inclusive education, as they are influenced by several factors. Comparing differences in the perception of these factors among neurodivergent pupils is essential for effective planning and implementation of inclusive PE lessons.

Objective: The aim of the study was to analyse and compare differences in the perception of factors influencing the feelings of pupils with ASD and ADD/ADHD during PE lessons.

Method: The research sample consisted of 58 pupils in primary education, including 38 pupils diagnosed with ASD and 20 with ADD/ADHD, (Mean age = 8.38, SD = 1.31 years). Data were collected using a self-designed questionnaire (Švecová & Nemček, 2025). Pupils responded to statements by choosing one of three options, ranging from 1 (agreement) to 3 (disagreement). Differences were analysed using the Mann-Whitney U-test.

Results: Factors influencing pupils' feelings during inclusive PE lessons were perceived more positively by pupils with ADD/ADHD compared to pupils with ASD. Pupils with ASD significantly more often reported that typically developing peers hurt them during PE lessons ($U = 299, p = .050$), they do not play games they like ($U = 270, p = .041$), they are disturbed by the sound of the teacher's whistle ($U = 272, p = .048$), they are afraid of loud noise in the gym ($U = 261, p = .023$), and that they dislike competitive activities ($U = 258, p = .017$).

Conclusions: Compared to pupils with ADD/ADHD, pupils with ASD perceive factors influencing their feelings during inclusive PE lessons more negatively. The most pronounced differences were observed in the teacher factor and the pupil personality factor. These findings highlight the necessity of a sensitive teacher approach responding to the individual needs of pupils with ASD in inclusive PE.

References:

Švecová, D., & Nemček, D. (2025). Diferencie vo vnímaní faktorov ovplyvňujúcich pocity žiakov so zdravotným znevýhodnením na hodinách telesnej a športovej výchovy z pohľadu typu základnej školy [Differences in the perception of factors influencing the feelings of pupils with disabilities in physical and sports education classes from the perspective of the type of primary school]. *Studies in Special Education*, 14(2), 132-147.

Funding: Research was supported by the grant VEGA 1/0694/24.

Evaluating the impact of inclusive sport practices for individuals with intellectual disabilities in Europe

C. Ocete¹, P. Aksen², J. Gutiérrez³

¹GICAF Research Group, Education, Research Methods and Evaluation Department, Pontifical Comillas University, Madrid, Spain; ²Kırıkkale University Faculty of Sport Sciences, Kırıkkale, Türkiye; ³Down Spain, Madrid, Spain

Introduction: The success of inclusive sport projects is commonly reported through quantitative indicators such as the number of activities conducted, participant figures, and produced outputs. However, these indicators often fail to capture the broader impact of physical activity participation for individuals with intellectual disabilities. Recent research highlights that inclusive sport contributes to social inclusion, motivation, and well-being outcomes beyond participation rates (Hassett et al., 2024). Therefore, more comprehensive evaluation approaches are needed. The aim of this study is to critically examine the impact findings reported in inclusive sport project results.

Method: The study employed a qualitative document analysis of project outputs, including reports, impact indicators, evaluation tools, and participant feedback. A thematic content analysis was conducted using a systematic coding procedure. Documents were categorized by type and source, followed by open coding to identify recurring impact dimensions. Codes were then grouped into themes through iterative comparison to enhance analytical consistency and methodological transparency. This approach enabled the identification of both emphasized and underrepresented aspects of impact in project reporting.

Results: Findings indicate that inclusive sport projects demonstrate multi-dimensional impacts beyond access to physical activity, including increased continuity of participation, enhanced social interaction, motivation, and changes in perceptions of sport environments. However, subjective participant experiences and long-term impacts are only partially reflected in existing evaluation frameworks. These findings align with recent literature emphasizing the need for more comprehensive and context-sensitive evaluation models (Oldörp, 2025; Nemananzhe, 2025).

Conclusions: Inclusive sport evaluation should move beyond output-based indicators and incorporate measures that reflect the quality, continuity, and meaning of participation. This study highlights the need for more comprehensive and evidence-informed evaluation frameworks to better capture the full impact of inclusive sport practices.

References:

- Hassett, L., et al. (2024). Effects of sport or physical recreation for adults with physical or intellectual disabilities: A systematic review with meta-analysis. *British Journal of Sports Medicine*, 58(5), 269-277.
- Oldörp, F., Mihajlovic, C., & Giese, M. (2025). Inclusion in and through disability sport: A scoping review. *JSAMS Plus*, 5, 100096.
- Nemananzhe, K., et al. (2025). Developing inclusive sports and recreational programs for learners with disabilities. *International Journal of Environmental Research and Public Health*, 22(12), 1855.

The impact of real-time video analysis and cloud-based data services on boccia competition management : A case study of the 2025 Seoul World boccia cup

J. Oh¹, S. Hong², S. Kim³

¹Korea National Sport University, Seoul, Rep. of Korea; ²Songwon University, KwangJu, Rep. of Korea; ³Korea National Sport University, Seoul, Rep. of Korea

Introduction: The purpose of this study was to explore the implementation of a real-time video analysis and cloud-based game data service applied for the first time at the 2025 Seoul World Boccia Cup, and to examine its impact on competition management, coaching, performance analysis, and broadcasting through a qualitative case study approach.

Method: Participants were eight stakeholders, including coaches, performance analysts, researchers, and an operations manager, who were directly involved in the operation and utilization of the service throughout the preparation and execution of the event. Data were collected through semi-structured in-depth interviews and a review of relevant documents, and were analyzed using transcription, coding, categorization, within-case analysis, and cross-case analysis procedures.

Results: The findings revealed that the implementation of real-time video analysis and cloud-based data services, first, transformed the conventional post-competition analysis structure into an on-site, immediate analysis framework, thereby integrating competition and performance analysis. Second, the cloud-based sharing system enhanced operational efficiency and strengthened trust and transparency in international competition management by ensuring simultaneous and equitable access to game data. Third, the role of performance analysts was redefined as providers of evidence-based feedback, contributing to increased professionalism and effectiveness in coaching practices. Fourth, the integration of data visualization into broadcasting facilitated a shift toward information-oriented broadcasting, improving spectators' understanding of game strategies and enhancing engagement.

Conclusions: However, operational challenges such as network instability, dependence on specific platforms, and limited user understanding of analytical indicators were identified, highlighting the need for infrastructure stabilization and systematic pre-event training.

Subjective concepts of inclusion and their role in evaluating sport settings – An interview study in blind tennis and para alpine skiing

F. Oldörp

Philipps-Universität Marburg, Marburg, Germany

Introduction: Inclusion for people with visual impairments is discussed in the literature in contexts ranging from school sports (e.g. Giese & Grenier, 2025) to recreational sports (e.g. Hiemstra & Rana, 2024). Nevertheless, the term inclusion often remains vague or is reduced to structural and spatial aspects (Haegele & Wilson, 2022). In their scoping review, Oldörp et al. (2025) showed that there are diverse conceptualisations of inclusion in sport settings, but that the perspective of people with disabilities is important in order to gain a more comprehensive understanding of inclusion and to examine the potential for inclusion in sport settings.

Method: Episodic interviews (Flick, 2011) were conducted with six adult blind tennis players and six adult alpine para-skiers from Germany. The data were analyzed using a content-structuring qualitative content analysis (Kuckartz, 2018).

Results: The analysis revealed that interviewees held individual concepts of inclusion, which could be grouped into four categories. These concepts were often multidimensional, encompassing structural and spatial aspects as well as feelings of belonging and appreciation. Importantly, these subjective concepts functioned as evaluative frameworks through which participants assessed the inclusive potential of their own sport (Oldörp, Schaller et al., 2025; Oldörp et al., 2024).

Conclusions: The findings indicate that inclusion is individually constructed and does not adhere to a "one size fits all" model (Hiemstra & Rana, 2024, 33). Subjective understandings of inclusion are not merely theoretical concepts. They also influence the evaluation of sports settings. The expansion of the concept of inclusion to encompass a subjective perspective offers valuable insights for the analysis of inclusive settings.

References:

- Flick, U. (2011). The episodic interview. In G. Oelerich & H.U. Otto (Eds.) *Empirical Research and Social Work: A Study Guide* (1st Edition) (pp. 273–280). VS Verlag für Sozialwissenschaften.
- Giese, M., & Grenier, M. (2025). "... it's so funny to just throw off the blind girl" subjective experiences of barriers in physical education with visually impaired students—an emancipatory bad practice approach. *Frontiers in Sports and Active Living*, 7, 1515458. <https://doi.org/10.3389/fspor.2025.1515458>
- Haegele J. A. & Wilson W. (2022). 10 Things I hate about 'Inclusion' in physical education. In: D. Goodwin & M. Connolly (Eds.) *Reflexivity and Change in Adaptive Physical Activity* (pp. 21–33). Routledge.
- Hiemstra, M., & Rana, J. (2024). Sensing inclusion among visually impaired and guide runners. *International Review for the Sociology of Sport*, 59(1), 22–37. <https://doi.org/10.1177/10126902231172919>
- Kuckartz, U. (2018). *Qualitative Content Analysis: Methods, Practice, Computer Support* (4th Edition). Beltz Juventa.
- Oldörp, F., Mihajlovic, C. & Giese, M. (2025). Inclusion in and through disability sport? A scoping review using the examples of goalball and wheelchair basketball. *JSAMS Plus*, 5, 100096. <https://doi.org/10.1016/j.jsampl.2025.100096>
- Oldörp, F., Schaller, T., Grenier, M. & Giese, M. (2025). The importance of abilities in inclusive experiences from the perspective of people with visual impairments: the example of alpine skiing. *Frontiers in Sports and Active Living*, 7, 1587603. <https://doi.org/10.3389/fspor.2025.1587603>
- Oldörp, F., Giese, M. & Grenier, M. (2024). The Influence of Blind Tennis on Subjective Inclusion Experiences - An Ableism-Critical Analysis. *Adapted Physical Activity Quarterly*, 41(3), 420–439. <https://doi.org/10.1123/apaq.2023-0140>

“Whaaaat.....I have all 2 legs but I cannot do that...what an inspiring young man”- Exploring the public’s views toward Musa Motha, a disabled dancer

B. Ollila, Y. Mamo, J. A. Haegele

Old Dominion University, USA

Introduction: Interactive social media platforms (e.g., YouTube, Instagram) have expanded forums in which opinions about disability are communicated or shared with and among the public (French & Le Clair, 2018). Some scholars have suggested that social media platforms are a tool where disabled people are depicted as either greater or lesser than human, or as an object of inspiration (Grue, 2016). Our study focused on the body-centered performance art and physical activity of dance, to extend this line of inquiry and explore how disabled dancers are discussed within social media. To do so, the purpose of this study was to explore the public’s views toward the dancing of Musa Motha on Britian’s Got Talent via social media engagement.

Method: The data collection process was performed using the Google YouTube data API. The video titled “Inspirational dance Musa Motha gets first ever group golden buzzer! | auditions |BGT 2023” had received 6914 interactions (comments and responses) on YouTube at the time of our analysis. For this analysis, we coded the 1500 comments with the most interactions. All comments were coded using a three step, inductive, content analysis approach (Hsieh & Shannon, 2005). The final coding structure included 10 categories derived from the inductive coding process.

Results: Of the 1500 comments, the most coded categories were superficial positivity (26.9%), followed by inspirational (17.8%), emotional (15.4%), and overcoming impairment (9.5%). Fewer comments were categorized as people’s choice (8%), recognition (5.3%), God’s plan/will (3.9%), phony (3.2%), and representation (0.8%).

Conclusions: Notably, very few commenters acknowledge the level of talent, choreography and stylistic choices, or the presence of disability without notions of inspiration or overcoming impairment. Comments categorized as “inspirational” and “overcoming impairment” highlight the views of presumably nondisabled individuals toward disabled people that objectify them for the purpose of self-satisfaction (Ayers & Reed, 2022).

References:

- Ayers, K., & Reed, K. (2022). Inspiration porn and desperation porn. In Bones, P., Smartt Gullion, J., & Barber, P. (Eds), *Redefining disability*, pp. 90-101. Brill Publishers.
- French, L., & Le Clair, J. M. (2018). Game changer? Social media, representations of disability and the paralympic games. In I. Brittain, & A. Beacom (Eds), *The Palgrave handbook of Paralympic studies* (pp. 99–121). Palgrave Macmillan London.
- Ginsburg, F. (2020). Disability in the digital age. In H.A. Horst and D. Miller (Eds.), *Digital Anthropology* (pp. 101-126). Routledge.
- Grue, J. (2016). The problem with inspiration porn: A tentative definition and a provisional critique. *Disability & Society*, 31(6), 838-849.
- Hsieh, H., & Shannon, S.E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288. <https://doi.org/10.1177/1049732305276687>

Education of children with emotional and behavioural difficulties through physical activity in small non-formal education groups: A psychologist–coach support model

V. Ostaseviciene¹, A. Vengale¹, R. Naujoke², A. Pauliukonyte²

¹Lithuanian Sports University, Kaunas, Lithuania; ²Algis Žikevičius Safe Child School, Kaunas, Lithuania

Introduction: Research shows that children with special educational needs (SEN) benefit from long-term non-formal activities combined with psychological or social support, especially through ongoing collaboration (Kristjánsson et al., 2020). This study examines cooperation between a psychologist and a coach supporting children with emotional and behavioural difficulties (EBD) during informal physical activities.

Method: Twenty-five children and adolescents aged 7 to 15 with emotional and behavioral disorders (EBD) participated in a 9-month educational study involving non-formal physical education. Using the BASC-2 system instruments, PANAS scale/PANAS-X subscale data were collected through self-reports, parent ratings, and teacher ratings. The younger group (ages 7–10) participated in ice skating, while the older group (ages 11–14) engaged in judo. Analysis was performed through reflexive thematic analysis and statistical methods including means calculation, the Wilcoxon test, and linear regression with HC3 correction using SPSS 24.0 and R.

Results: Following the program, younger students showed significant decreases in both positive and negative emotions, as well as sadness. In older students, a marginal reduction in negative feelings was observed. Teachers reported substantial improvements in adaptation, social skills, and resilience in younger students, while older students exhibited increases in aggression and bullying. Parents noted reductions in hyperactivity and aggressiveness among younger children, who also reported increased self-confidence. The psychologist's qualitative research indicated a gradual and uneven inclusion process, marked by a shift from defensive behaviours to greater openness and introspection.

Conclusions: Students with EBD have shown statistically significant gains in their emotional well-being and behaviour when they participate in collaborative education, which involves a coach and a psychologist in small, informal groups. Compared to older children, who require more complex and extended therapies, younger children's emotional self-regulation and behavioural modification are greatly influenced by a controlled and emotionally secure school environment.

References:

Kristjánsson, A. L., Mann, M. J., Sigfusson, J., Thorisdottir, I. E., & Allegrante, J. P. (2020). Implementing the Icelandic model for preventing adolescent substance use. *Health Promotion Practice, 21*(1), 70–79. <https://doi.org/10.1177/1524839919849033>

The European Masters in adapted physical activity master study program at Lithuanian Sports University

V. Ostaseviciene¹, K. Ng^{1,2,3}, A. Klavina^{1,4}, J. Pozeriene¹, D. Reklaitiene¹

¹Lithuanian Sports University, Kaunas, Lithuania; ²University of Turku, Turku, Finland; ³University of Limerick, Limerick, Ireland; ⁴Riga Stradins University, Riga, Latvia

Introduction: More professionals in adapted physical activity (APA) in Europe are needed. The Lithuanian Sports University (LSU) offers a full-time Master of Health Sciences in Adapted Physical Activity. The aim of this study is to outline the course programme and report findings from the international expert accreditation panel.

Method: A review of the course curriculum was supplemented with reports provided by an international external expert panel who reviewed and conducted a site visit. The review included analyses of the APA programme (2018-2022). Following these results from the report, the APA team met online to discuss ways to attract more high-quality students to study on the programme. The outcomes of the review and discussions are presented in this short study.

Results: The two-year 120 ECTS full-time program APA Master programme was and continues to be conducted in English. The programme is equivalent to National Qualifications Framework Level VII. Furthermore, the accreditation panel gave a positive evaluation. Students and staff have provisions students with special needs or from socially vulnerable groups. The staff on the APA programme are regularly involved in national and international APA activities. Furthermore, innovated opportunities such as blended intensive programmes are sought for to enhance the experience of students.

Conclusions: The LSU APA master programme is an example of the human rights obligations provided by Lithuania. Core features include opportunities for students with disabilities, as well as increasing future workforce competences, skills and knowledge in APA.

The well-being and lived care experiences of family care partners of people living with dementia: the case study of photovoice practice in Lithuania

I. Petkutė^{1,2}, D. Reklaitienė¹, S. Karpavičiūtė²

¹The Lithuanian Sports University, Kaunas, Lithuania; ²NGO Socialiniai meno projektai, Vilnius, Lithuania

Introduction: The number of people living with dementia is increasing rapidly worldwide, making it essential to systematically assess and support the family care partner's health.

Aim: To investigate the well-being and lived care experiences of family care partners of people living with dementia (FCP) through the implementation of the Photovoice practice in Lithuania.

Method: During March-September 2024, FCP took part in the study. Data were collected using a questionnaire survey (before the study); Photovoice practice, photographs, stories, observational notes (during the study), individual meetings/group discussions with participants (during/after the study). Qualitative data were analysed using a thematic analysis approach. Creative results (photographs/stories) were presented in a public exhibition.

Results: The following themes emerged from the discussions, photographs, stories: "Interdependency," "Interconnectedness of Care," "Mundane," "The Bond in Care," "The Role of Supportive Environment," "The Aspiration to Maintain One's Inner Freedom," and "Who is the Bearer of Responsibility?". These themes uncovered problematic areas from individual to systemic levels such as poor FCP well-being (experienced high levels of stress, anxiety, fatigue; emotional/physical distress in care relationships); lack of daily dementia care/self-care skills, support for FCP (emotional support; assisting with daily tasks; creating opportunities for rest; fostering healthy family-work life integration); lack of knowledge and stigma related to dementia within the society, among formal/informal caregivers; limitations in the support system for people living with dementia (absence of a person-oriented approach; challenges in pre/during/post diagnostic services, worrisome aspects of quality and accessibility); and the need for community support groups, learning opportunities, arts-based approaches to support FCP health and well-being.

Conclusions: There is an urgent need to actively support the well-being of FCP in Lithuania by offering services that focus on dementia care and self-care skills development, physical and mental resilience, and ensuring the accessibility and quality of care systems. The application of the Photovoice practice is a valuable arts-based approach that provides a deeper insight into their intimate lived care experiences. The study revealed the need for community support groups, educational and arts-based activities and tools to strengthen their physical health and mental well-being.

Analysis Of barriers to physical activity participation among persons with physical disabilities

J. Pozeriene¹, M. Valentukonyte¹, D. Reklaitiene¹, V. Ostaseviciene¹

¹Lithuanian Sports University, Lithuania

Introduction: Low participation rates in physical activity among persons with disabilities are driven not only by primary health conditions but also by multi-faceted barriers involving the physical environment, social environment, and psychological factors such as personal beliefs and motivation (Úbeda-Colomer et al., 2019). Despite ongoing improvements in sports infrastructure, accessibility remains a significant challenge. This study aims to identify and evaluate the primary perceived barriers to physical activity participation among individuals with physical disabilities.

Method: The study sample consisted of 54 working-age individuals (18–65 years) with physical disabilities (minimum 25% work capacity). Data was collected using two validated instruments:

1. The Physical Activity Scale for Individuals with Physical Disabilities (**PASIPD**; Washburn et al., 2002).
2. The Barriers to Physical Activity Questionnaire for People with Mobility Impairments (**BPAQ-MI**; Úbeda-Colomer et al., 2019).

Results: Findings revealed that 92.6% of participants exhibited very low levels of physical activity. Gender-based analysis showed that women dedicate significantly more time to light housework than men ($U = 214.5$; $p = .009$). At the interpersonal level, the inactivity of social circles (family and friends) was identified as a primary barrier. Women reported a greater lack of support from sports facility staff ($(\chi^2 = 3) 13.671$; $p = .003$) and insufficient adapted transportation ($(\chi^2 = 3) 10.587$; $p = .014$) compared to men. While no significant gender differences were found regarding overall PA levels or the general perception of barriers, a significant inverse correlation between PA and social dependency was observed across the entire sample ($p < .05$).

Conclusions: Physical activity levels among persons with disabilities PWD are critically low, with only 7.4% of the sample meeting active thresholds. Key barriers identified include fatigue, lack of motivation, inadequate facilities, a deficit of specialized sports programs, and inaccessible urban infrastructure (sidewalks/streets). The data suggest that increased physical activity is associated with reduced dependence on others. While gender does not significantly influence overall activity levels, women face specific challenges related to domestic labor demands and logistical support (staff assistance and transportation).

References:

- Úbeda-Colomer, J., Devís-Devís, J., & Sit, C. H. (2019). Barriers to physical activity in university students with disabilities: Differences by sociodemographic variables. *Disability and Health Journal*, 12(2), 278-286.
- Washburn, R. A., Zhu, W., McAuley, E., Frogley, M., & Figoni, S. F. (2002). The physical activity scale for individuals with physical disabilities: development and evaluation. *Archives of physical medicine and rehabilitation*, 83(2), 193-200. <https://doi.org/10.1053/apmr.2002.27467>

Outdoor adventure programme for students at a special needs school: teachers' and families' opinions

A. Redondo-Fernández¹, V. Gómez-Barrios², L. Mediavilla-Saldaña², J. Pérez-Tejero¹

¹"Fundación Sanitas" Chair for Inclusive Sport Studies (CEDI), AFIPE Research group, Faculty of Physical Activity and Sport Sciences (INEF), Universidad Politécnica de Madrid, Spain; ²Faculty of Physical Activity and Sport Sciences (INEF), Universidad Politécnica de Madrid, Spain.

Introduction: Activities in the natural environment offer numerous physical and psychological benefits. However, pupils at special educational needs schools often lack opportunities to participate due to logistical challenges. This study implemented a three-year outdoor activity programme (rock climbing and orienteering) to investigate its effects on 25 students with intellectual disabilities and ASD, while gathering the perspectives of teachers and families.

Method: The aim of this study was to gather the views of teachers (n = 8) and family members (n = 12). The intervention was carried out over three academic years, two of which focused on climbing and one on orienteering. Before starting the programme, the students' individual characteristics were assessed, and the intervention was designed. During those three years, the centre was visited once a week for a one-hour session in which various activities related to these two sports were carried out. Each academic year concluded with an off-site activity attended by pupils, teachers and families, depending on availability. The instrument used to gather participants' opinions was a semi-structured interview. These interviews consisted of a first section on the activities carried out and a second section on the students' personal views and daily lives, such as "What do you like most about the climbing lessons?". The data obtained were analysed through a process of coding and categorisation, and triangulation was carried out by three experts.

Results: Four main categories emerged: personal factors (autonomy), environmental factors (socialization and access), values, and motivation. Findings indicate that both teachers and families strongly support these interventions. Reported benefits include enhanced personal development, improved interpersonal relationships, and positive impacts on activities of daily living.

Conclusions: Outdoor adventure activities are a powerful tool for the holistic development of students with special needs, overcoming traditional barriers to participation in natural environments.

Digital innovation in adapted physical activity: Evaluating the influence of the "sport, disability and inclusion" MOOC for physical activity and sport professionals

A. Redondo-Fernández¹, J. Pérez-Tejero¹

¹"Fundación Sanitas" Chair of Inclusive Sport Studies (CEDI), Department of Health and Human Performance, Faculty of Physical Activity and Sport Sciences (INEF), AFIPE research group, Universidad Politécnica de Madrid (UPM), Madrid, Spain.

Introduction: Information and communication technologies (ICT) have become increasingly important tools in education, especially for promoting inclusive processes at all levels of teaching. Aware of this potential, the Universidad Politécnica de Madrid (UPM) designed a massive online open course (MOOC) that has been implemented in its third edition during 2025. Entitled 'Sport, Disability and Inclusion', this digital training course was developed specifically for sport professionals, teachers and students interested in improving and update their knowledge of adapted and inclusive physical activity. The aim of this research was to compare the evolution of participants' perceptions and satisfaction during its three editions, held along 2024 and 2025.

Method: The course was organised into three distinct modules comprising 24 lessons, offered free of charge on a digital platform. Of a total of 671 participants enrolled in the three editions, 237 people completed the training. These 237 individuals then responded to a course satisfaction survey consisting of four Likert-type questions (ranging from 1 "very dissatisfied" to 5 "very satisfied"), a dichotomous question about recommending the course to others, and an open section for suggestions.

Results: The results indicated very positive perceptions in all three editions, with more than 94% of participants rating their level of satisfaction as 4 or 5. It should be noted that more than 95% of participants would recommend the training to others, and the qualitative comments provided essential information for further improvement, highlighting as a strength the content recommendations and the usefulness of the course and as a suggestion for improvement more study content in form of written documents.

Conclusions: This study represents a significant advance in the application of ICT for inclusive physical education and adapted physical activity. It sets a solid precedent for institutions wishing to offer flexible, innovative and accessible training to professionals in the sector.

Mindfulness and emotional intelligence as predictors of psychological well-being in athletes with disabilities

D. Reklaitiene¹, J. Vveinhardt²

¹Department of Coaching Science, Lithuanian Sports University, 44221 Kaunas, Lithuania; ²Institute of Sport Science and Innovations, Lithuanian Sports University, 44221 Kaunas, Lithuania.

Introduction: Although athletes who have disabilities face unique challenges, little is known about the interaction between mindfulness and emotional intelligence in the context of their psychological self-feeling. This study is among the first to systematically examine how mindfulness and emotional intelligence are related to stress, anxiety and depression in this population and to reveal the pathways through which the mediating effect of emotional intelligence manifests itself.

Method: A total of 95 athletes who have various types of disabilities were surveyed. The research instrument consisted of several scales: Depression, Anxiety, and Stress Scale (DASS-21), the Mindfulness Inventory for Sport (MIS), and the Emotional Intelligence Scale for Use in Sport (EIS). The data were analysed by employing descriptive statistical methods, performing correlation analysis, creating regression models, and through mediation analysis.

Results: Several significant trends were identified: professional athletes demonstrated higher mindfulness than amateurs, and higher education was associated with lower mindfulness and emotional intelligence. Mindfulness predicted better emotional competencies ($B = 0.511$, $p < .001$), which were related to lower levels of stress, anxiety, and depression ($B = -0.310$, $p = .001$), confirming a partial mediating effect ($B = -0.158$, 95% PI [-0.273 ; -0.065]). These findings add to the existing knowledge, demonstrating that in the context of sport for people with disabilities, mindfulness can improve mental health not only directly but also indirectly—through emotional intelligence.

Conclusions: This study lays the foundation for individually tailored psychological interventions that would correspond to the specific needs of athletes who have disabilities. Keywords: sport for people with disabilities; mindfulness; emotional intelligence; psychological self-feeling; psychological well-being.

Perception of inclusion in physical education questionnaire - Validation of the tool among students with special educational needs

B. Rosołek¹, M. Kalbarczyk², E. Zjawiony³, A. Komosa⁴, A. Zwierzchowska¹, L. Lieberman⁵, N. Morgulec-Adamowicz⁴

¹Academy of Physical Education in Katowice, Katowice, Poland; ²University of Warsaw, Warsaw, Poland; ³Lambeth Autism Advisory Service, London, United Kingdom; ⁴Józef Piłsudski University of Physical Education in Warsaw, Warsaw, Poland; ⁵State University of New York at Brockport, New York, United States

Introduction: Physical education (PE) is important in the development of students with special educational needs (SEN), yet their inclusion remains a challenge. The process of inclusion must be assessed from the PE teacher's and the student's perspective. For this purpose, the Perceptions of Inclusion in Physical Education Questionnaire (PIQ-PE) was developed, based on the Perceptions of Inclusion Questionnaire (Venetz et al. 2015). The PIQ-PE assesses perceptions of inclusion in PE in three aspects: social, emotional, and academic, from the perspective of the PE teacher and the student (two sheets – one for the teacher „PIQ-PE teacher” and one for the student „PIQ-PE student”). The aim of our study was to validate the tool in a group of primary school students with special educational needs.

Method: Exploratory factor analysis (EFA) was performed. Three-factor structure was evaluated using confirmatory factor analysis (CFA) and Cronbach's alpha. The root mean square error of approximation (RMSEA), comparative fit index (CFI), standardized root mean square residual (SRMR), and Tucker-Lewis Index (TLI) were calculated to assess CFA model fit. To assess the reliability of the PIQ-PE the intraclass correlation coefficient (ICC) was used between two waves conducted two weeks apart. All analyses were conducted using STATA software version 19.5.

Results: The results of the EFA indicated that the three PIQ-PE factors accounted for 68% of the variance for student's version and 78.6% for teacher's version. The fit measures in the basic model for student's version were CFI = 0.96, RMSEA = 0.075, SRMR = 0.05, TLI = 0.94, and for teacher's version were CFI = 0.94, RMSEA = 0.12, SRMR = 0.077, TLI = 0.92. Test-retest reliability was moderate (ICC between 0.60 and 0.70) and higher for teachers than for students

Conclusions: The results indicate good model fit and acceptable temporal stability of the scale. Therefore, we recommend the PIQ-PE as an effective tool for assessing student's perception of inclusion in PE.

References:

Venetz, M., Zurbriggen, C. L. A., Eckhart, M., Schwab, S., & Hessels, M. G. P. (2015). The Perceptions of Inclusion Questionnaire (PIQ). English Version.

Colonizing parasport repertoires? Extension projects and the dominance of classical modalities in Brazilian adapted physical activity

T. G. Santos¹, A. C. A. Tobias², G. A. Figueiredo^{2,3}

¹Federal Institute of Southern Minas Gerais, Muzambinho, Brazil; ²School of Physical Education- FEF, University of Campinas - UNICAMP, Campinas, SP, Brazil; ³School of Applied Sciences - FCA, University of Campinas - UNICAMP, Limeira, SP, Brazil

Introduction: University Extension (UE) in Adapted Physical Education in Brazil links academic training, research, and community action. However, recent studies indicate this potential has been strained by colonized sport logics aligned with hegemonic International Paralympic Sport (PS) standards.

Aim: This study analyses how Brazilian extension projects organize bodily and sporting repertoires for persons with disabilities (PwD), identifying institutional mechanisms inducing such choices.

Method: A decolonial critical documentary analysis was conducted (Quijano, 2005). The primary source was the Atlas of University Extension in Physical Education for Persons with Disabilities, a survey compiling 194 extension actions (Winckler et al., 2025). To contextualize findings within the national sport development system, public documents from the Brazilian Paralympic Committee were analysed, with emphasis on official bulletins of the 2025 School Paralympic Games (SPG) (Brazilian Paralympic Committee, 2025).

Results: The Atlas shows a strong concentration in classical parasport modalities, especially athletics (11.9%; n = 23) and swimming (10.8%; n = 21), followed by boccia (8.2%; n = 16) and goalball (5.7%; n = 11). Although 46 distinct modalities are reported, practices originating from disability itself or with cultural and territorial potential remain marginal ($\leq 2.6\%$). A similar pattern appears in the SPG, where 61.5% of participation were concentrated in athletics and swimming.

Discussion: Findings indicate structural alignment between universities and the competitive sport systems, mediated by institutional recognition of PS, differentiated access to resources linked to reference centres, and the centrality of competitive events, which narrow extension repertoires. This contrasts with the literature identifying 201 catalogued parasport modalities, evidencing impoverishment of the repertoire. In a highly culturally diverse country, the hegemony of Euro–North American modalities silences plural bodily practices and reinforces cultural hierarchies.

Conclusions: By reproducing this model, the university weakens its political-pedagogical role. Decolonizing parasport requires repositioning UE as a critical locus capable of diversifying repertoires and valuing local knowledge.

Evidence-informed network governance for adapted physical activity in Finland: scaling inclusion through club and regional implementation pathways

T. Siivonen, N. Peltonen

Finnish Paralympic Committee (FPC), Finland

Introduction: This poster applies a network-governance lens to two national adapted physical activity (APA) development projects to clarify how multi-level coordination between sport clubs, federations and regions support inclusive sport participation.

Method: This practice-based poster applies a network-governance lens to analyse Finland's "double strategy" for adapted physical activity and disability sport. We present a descriptive comparative case study of two national projects coordinated by the FPC. Open doors focusing inclusive capacity-building in sport clubs through national and regional sport federations. Liikkeellä kuntoon focusing regional coordination across municipalities, services and regional sport federations. Cases are analysed by governance level, actor roles, and implementation mechanisms. Empirical evidence is complemented with national monitoring data from *Liikuttaako 2023?*. Data include surveys: persons with disability (n = 2,047), sport club (n = 243) and association (n = 92), indicating participation, organisational readiness and perceived accessibility.

Results: The projects illustrate complementary implementation pathways across governance levels, actor roles and mechanisms. Open Doors advances inclusion at club level through sport federations acting as intermediaries. Key mechanisms include structured education, mentoring and peer learning. Activities have reached 73 local sport clubs through regional network events and 19 education sessions. National federation specialists support clubs in adapting sport-specific inclusive practices and building inclusive capacity. Liikkeellä kuntoon highlights regional sport federations as coordinators across municipalities, services and sport actors, include regional APA development plans, network-based information exchange and service solutions, assistive equipment rental point supporting regional availability of sports equipment. Across both pathways, monitoring data indicate persistent gaps in participation and organisational readiness, underscoring the need for coordinated, evidence-informed governance combining club-level inclusion with regional coordination.

Conclusions: The projects demonstrate a two-path strategy: (1) strengthening inclusive capacity within sport clubs through educations, mentoring and peer networks, and (2) regional coordination connecting municipalities, services and sport expertise to improve access and sustainability in decentralised systems.

Preparing physical fitness testing (EUROFIT) for students with special education needs in mainstream schools

N. Strazdiņa¹, A. Kļaviņa²

¹Riga Technical University, Liepaja Academy, Liepaja, Latvia; ²Rīga Stradiņš University, Laboratory of Sports and nutrition research, Riga, Latvia

Introduction: Physical fitness is closely associated with health and motor development in school-aged children and is a key component of physical education (Király et al., 2019; Kapsal et al., 2019). However, students with special educational needs are often less physically active, face higher health risks, and remain underrepresented in health-related fitness research (Rimmer et al., 2010; Winnick, 2005).

Therefore, the aim of this study was to develop applicable EUROFIT testing methodology for physical education teachers in mainstream schools working with students with special educational needs (SEN).

Method: A total of 239 students aged 12–18 years (mean age = 14.01, SD = 2.08 years) from seven educational institutions in Latvia participated in the study. Of these, 171 students had special educational needs, including visual, hearing, physical disability, as well as moderate and severe intellectual disabilities. Physical fitness was assessed using nine components of the EUROFIT test battery.

Results: The adapted EUROFIT fitness testing methodology was developed, based on three key stages:

1. preparation of instructions for physical education teachers;
2. adaptations of the testing procedure for students with SEN;
3. developing the physical fitness profile of students with different disability.

The methodology includes disability-specific adaptations for visual impairment, hearing impairment, physical/mobility disabilities, and moderate to severe intellectual disabilities.

The EUCAPA conference poster will include visual methodological materials, physical fitness profile and a link to a video demonstration.

Conclusions: The developed methodology provides a safe, standardized, and inclusive approach to EUROFIT fitness testing for students with SEN in mainstream schools. It can serve as a practical tool for physical education teachers, promoting equal opportunities for physical fitness assessment under comparable conditions with typically developing peers.

References:

- Kapsal, N., Dicke, T., Morin, A. J. S., Vasconcellos, D., Maiano, C., Lee, J., & Lonsdale, C. (2019). Effects of physical activity on the physical and psychosocial health of youth with intellectual disabilities: A systematic review and meta-analysis. *Journal of Physical Activity and Health*, 16(12), 1187–1195. <https://doi.org/10.1123/jpah.2018-0675>
- Király, A., Kaj, M., Kälbli, K., & Csányi, T. (2019). Overview of the adaptation process of the Hungarian National Student Fitness Test to students with special educational needs. *PALAESTRA*, 33(1), 20–27.
- Rimmer, J. H., Yamaki, K., Lowry, B. M., Wang, E., & Vogel, L. C. (2010). Obesity and obesity-related secondary conditions in adolescents with intellectual/developmental disabilities. *Journal of Intellectual Disability Research*, 54(9), 787–794.
- Winnick, J. P. (2005). Introduction to the Brockport physical fitness test technical manual. *Adapted Physical Activity Quarterly*, 22(4), 315–322. <https://doi.org/10.1123/apaq.22.4.315>

APA consultant for the South Moravian region Czechia

J. Tomišková¹, K. Palečková¹

¹Mateřská škola a základní škola Brno, Kociánka, příspěvková organizace, Brno, Czech Republic

Introduction: Inclusive physical education and physical activity remain challenging areas for schools educating children with special educational needs (SEN). Teachers often lack methodological support, appropriate resources, and interdisciplinary cooperation. To address these challenges, the position of Adapted Physical Activity (APA) Consultant was established in the South Moravian Region, Czechia. This newly created role is conceptually based on a unified methodological framework developed at the Faculty of Physical Culture, Palacký University Olomouc (UPOL), which provides a structured approach to supporting inclusive physical activity practice. This poster presents a practice-based model of APA consultancy and its initial outcomes.

Method: The presented data are based on professional practice conducted between May and December 2025. The activities followed the unified APA methodological framework developed at UPOL and included school visits, individual consultations with teachers and teaching assistants, collaboration with Special Education Centres, diagnostic assessment of pupils' motor skills, modification of physical education content, and the use of compensatory and adaptive equipment. Documentation and internal records were used to summarize the scope of support provided.

Results: During the monitored period, professional support was provided to 3 kindergartens and 16 primary schools, involving a total of 23 pupils with SEN. Key outcomes included improved participation of pupils in physical education lessons, increased teacher confidence in adapting activities, and the establishment of a lending system for compensatory equipment. The consultant role also contributed to stronger cooperation between schools and external organisations.

Conclusions: The APA consultant model, grounded in a standardized methodological framework, represents an effective support mechanism for inclusive physical activity at the regional level. Early results indicate positive impacts on school practice, interdisciplinary collaboration, and accessibility of physical activities for pupils with SEN. The model shows potential for further development and transfer to other regions.

HOPE - Horses for opportunity, participation, and empowerment

J. Tomišková¹, O. Miçooğulları², S. Akpınar², K. Özcan², U. Odek², M. Slottheden Olivemark³

¹JK Fany Hostěnice, Czech Republic; ²Faculty of Sport Sciences, Nevşehir Hacı Bektaş Veli University, Türkiye; ³Caprifolen Voltigeklubb, Våxtorp, Sweden

Introduction: Paravaulting is an emerging para-equestrian discipline combining gymnastics and vaulting on horseback for athletes with disabilities. Originating in the Czech Republic, it has developed into a meaningful form of inclusive sport supporting physical development, social inclusion, and intercultural dialogue. Despite its growing relevance, discipline lacks internationally recognized rules, standardized educational approaches, and a unified competition system. The purpose of this paper is to present the HOPE (Horses for Opportunity, Participation, and Empowerment) project, which aims to establish foundations for an international methodology and future sport regulations in paravaulting.

Method: The project is implemented within the Erasmus+ programme and coordinated by the equestrian club Fany Hostěnice, in cooperation with partner organizations from Türkiye and Sweden. The methodology includes online webinars, practical international workshops, and the pilot development of an educational system for paravaulting judges. These activities integrate knowledge transfer, professional training, and intercultural exchange to support the co-creation of a shared and transferable methodological framework.

Results: The project has contributed to the formation of an international network of coaches, judges, and therapists with enhanced competencies in paravaulting. Key outcomes include the drafting of unified methodological guidelines and the pilot testing of training and competition formats across different equestrian traditions. The collaborative process has increased awareness of paravaulting as both a therapeutic and competitive discipline and highlighted its potential for broader international recognition.

Conclusions: Paravaulting offers unique opportunities for inclusive participation in sport; however, its sustainable international development depends on the harmonization of rules, education, and standards. The HOPE project demonstrates how transnational cooperation can strengthen professional capacity, foster innovation, and lay the groundwork for the future recognition of paravaulting as an official para-equestrian discipline.

Content validity assessment of the FaB-PA questionnaire: facilitators and barriers to physical activity

J. Vařeková¹, A. Mahrová¹, M. Barcalová², E. Liptáková², K. Daďová¹, S. Majorová¹, P. Nováková¹

¹Faculty of Physical Education and Sport, Charles University, Prague, Czech Rep.; ²Technical University Košice, Slovakia

Introduction: Understanding facilitators and barriers to regular physical activity is essential in rehabilitation, social work, and inclusive health promotion, particularly for people with disabilities. Despite their importance, internationally comparable instruments capturing these factors within a biopsychosocial framework remain limited.

Aim: The aim of this study was to assess the content validity of the newly developed FaB-PA (Facilitators and Barriers – Physical Activity) questionnaire.

Method: The FaB-PA questionnaire is being developed through international collaboration and is grounded in the WHO biopsychosocial model of health. It consists of four domains: (A) physical health, (B) mental health, (C) social relationships, and (D) environmental factors. Each domain includes five items rated on a 5-point Likert scale. For content validation, experts were asked to evaluate the relevance of each item to its respective domain using a 4-point relevance scale. Item-level and scale-level Content Validity Index (CVI) values were calculated.

Results: Preliminary expert evaluations indicate satisfactory relevance of items across domains, supporting the conceptual structure of the FaB-PA questionnaire.

Conclusions: The content validity assessment supports the FaB-PA questionnaire as a promising tool for identifying facilitators and barriers to physical activity within a biopsychosocial framework. Further psychometric testing is warranted.

Accelerometry-based 24-hour movement behaviour in manual wheelchair users: Insights into differences by disability onset

A. Vernerová, J. Dygrýn, F. Chmelík

Faculty of Physical Culture, Palacký University Olomouc, Czech Republic

Introduction: Physical activity, sedentary behaviour, and sleep are increasingly viewed as interrelated components of a 24-hour movement profile. Manual wheelchair users are particularly vulnerable to low levels of physical activity, prolonged sedentary time, and poor sleep. Objective data, particularly regarding disability origin and sociodemographic factors, remain limited.

Method: Seventy-two manual wheelchair users (18–65 years) wore an ActiGraph wGT3X-BT on their non-dominant wrist for seven days and completed a sociodemographic questionnaire. Guideline adherence was defined as ≥ 150 minutes/week of moderate-to-vigorous physical activity (MVPA), 7–9 hours of sleep per night, and < 8 hours/day of sedentary behaviour.

Results: No participants met all three 24-hour movement guidelines, as none met the sedentary behaviour target. Overall, 90% met the physical activity guideline, and 69% met the sleep guideline. Participants with acquired disabilities accumulated significantly more physical activity and spent less time sedentary than those with congenital disabilities. Participants with acquired disabilities were more likely to meet the physical activity guideline, while those with congenital disabilities more often met the sleep guideline.

Discussion: To our knowledge, this is the first study to measure full 24-hour movement behaviour in manual wheelchair users using accelerometry. Compared with previous research, adherence to 24-hour movement guidelines in our sample was higher for physical activity and sleep, although sedentary behaviour remained the most challenging component. Participants also showed more moderate-to-vigorous activity but less light-intensity activity than reported in prior studies, reflecting unique movement patterns.

Conclusions: Sedentary behaviour is the most difficult 24-hour guideline for manual wheelchair users. These findings highlight the need for disability-specific recommendations that consider daily realities and differences in activity, sedentary time, and sleep across subgroups.

Comparison of scoring patterns between WH1 and WH2 players in para-badminton matches

S. Woo, H. Kim, J. Kim, Y.-G. Yoon, S-Y. Lee

Soonchunhyang University, Asan, South Korea

Introduction: Para-badminton in South Korea has undergone continuous development since its adoption as an official event at the National Para-sports Festival in 1996 and has recently reached a level of international competitiveness (Kwon & Kim, 2020). Because functional classification affects movement capacity and tactical characteristics during match play, systematic examination of scoring pattern differences between WH1 and WH2 players is warranted (Jung & Kim, 2024). Accordingly, the purpose of this study was to compare and analyse the scoring patterns of WH1 and WH2 players in competitive para-badminton matches.

Method: Sixteen semifinal and final matches from national-level para-badminton tournaments in South Korea were analysed using notational analysis. All rallies were categorized according to scoring type, error type, rally length, stroke type, target area, and scoring patterns. Descriptive statistics were used to compare scoring characteristics between WH1 and WH2 players.

Results: For both groups, most points resulted from opponent errors (WH1: 50.75%; WH2: 50.34%), followed by no-touch points (WH1 44.78%, WH2 40.27%). WH1 players most frequently committed line-out (68.12%) and service errors (14.49%), whereas WH2 players showed higher proportions of line-out (51.32%) and net errors (31.58%). Points decided within the first six strokes occurred more frequently in WH1 (52.87%) than in WH2 (39.00%). Drop shots, clears, and lifts were the main point-determining strokes for WH1, while WH2 players relied more on drop shots, lifts, and drives. WH1 players mainly scored in the front right and back right court areas, whereas WH2 players targeted the front right and front left areas. Common scoring patterns involved early exchanges of clears and lifts followed by a decisive drop shot.

Conclusions: Distinct classification-specific scoring patterns were identified between WH1 and WH2 players. These findings provide practical evidence for developing classification-specific training and tactical strategies in wheelchair badminton.

References:

- Kwon, T., & Kim, Y. (2020). Analysis of performance skills and match patterns in wheelchair badminton according to the severity of spinal cord injury. *The Korean Journal of Sport Science*, 29(3), 1031–1040.
- Jung, J., & Kim, J. (2024). A scoping review of comparative analysis factors in badminton performance between athletes with and without disabilities. *Journal of Exercise Rehabilitation and Welfare*, 5(1), 55–64.

Physical activity, menopause, and quality of life among mothers of individuals with and without disabilities

T. S. Yadav¹, J. L. Jaime-Concepción¹, M. Barquero¹, B. Ku², C. Yamnia I.³, L. Columna¹

¹University of Wisconsin at Madison-Department of Kinesiology, USA; ²Yong-In University-Department of Special Physical Education, South Korea; ³University of Iowa - School of Nursing, USA

Introduction: Mothers of individuals with developmental disabilities (DD) often experience caregiving demands that limit opportunities for physical activity and adversely affect quality of life. Despite these challenges, limited research has examined how physical activity, menopause-related symptoms, and quality of life intersect among mothers of individuals with DD. Therefore, the purpose of this study was to examine physical activity, menopausal symptoms, and quality of life among mothers of individuals with and without DD.

Method: This cross-sectional study included 194 mothers aged 35–65 years, including mothers of children with DD (N = 63) and mothers of children without DD (N = 131). Participants completed questionnaires assessing physical activity, menopause-related symptoms, and quality of life. Univariate analyses of covariance were conducted to examine group differences in menopause-related symptoms, quality of life, and physical activity, while controlling for age, income, and race. Associations among menopause symptoms, physical activity and quality-of-life outcomes were examined using regression analyses.

Results: Mothers of children with DD reported lower quality of life and poorer menopause symptoms compared with mothers of children without DD, whereas physical activity levels were similar between groups. After adjusting for covariates, disability status remained a significant predictor of quality of life ($p < .001$), along with income ($p < .001$). In contrast, no significant group differences in physical activity were observed after adjustment. Across the full sample and within each group, physical activity was not significantly associated with overall quality of life or menopause symptoms after controlling for demographic factors.

Conclusions: Despite comparable levels of physical activity, mothers of children with DD reported poorer quality of life, and more severe menopause symptoms. As such, future physical activity interventions should consider additional variables to address quality of life among mothers of children with DD. One plausible approach is integrating menopause-related education to support symptom management.

Effects of aquatic rehabilitation exercise on physical and cognitive function in older adults with physical disability

H. Yang¹, Y. Lee²

¹Department of Physical Education, Seoul National University, Seoul, South Korea; ²Department of Physical Education, Seoul National University, Seoul, South Korea

Introduction: Older adults with physical disabilities face elevated risks of falls and cognitive decline, reducing independence and quality of life. Aquatic rehabilitation exercise offers a low-impact alternative that leverages buoyancy and water resistance to enhance physical and cognitive function while minimising joint strain.

Method: This experimental study, grounded in the Leisure Ability Model, assessed older adults with physical disabilities across pre-, post-, and follow-up time points. Physical outcomes included SPPB, TUG, SFT, grip strength, isokinetic lower-limb strength and endurance, cardiovascular endurance, and balance (BBS). Cognitive function was evaluated using MoCA and LICA subdomains. Activities of daily living were measured by K-MBI. Analyses were adjusted for age and sex.

Results: Aquatic rehabilitation exercise significantly improved lower-limb strength, balance, gait, and global cognitive function (MoCA and LICA subdomains), with gains maintained at follow-up. Upper-body strength (grip strength and arm curl) also improved, whereas the land-based group showed more limited and selective adaptations.

Conclusions: Aquatic rehabilitation exercise is an effective, sustained intervention for improving physical, cognitive, and functional independence in older adults with physical disabilities. Interpreted through the Leisure Ability Model, the programme facilitates progression from functional recovery to cognitive and psychological leisure competence, supporting long-term leisure participation.

Not one story: Diverse-eyed seeing and intersectional lived experiences of disabled people in physical activity

K. J. Yi

McMaster University, Hamilton, Canada

Introduction: Disability and physical activity research often treats disability as a single category, overlooking how social identities and life circumstances shape participation. This poster synthesizes six qualitative studies examining physical activity experiences of disabled people across intersecting identities, including Indigeneity, race/ethnicity, immigration status, socioeconomic position, geography, family context, and age. Guided by an intersectional framework (Crenshaw, 1991) and a “diverse-eyed seeing” methodology inspired by Indigenous ways of knowing, this work centres lived experiences to show how power, culture, and place shape opportunities for being active.

Method: This synthesis draws on six qualitative studies conducted by the author over the past two years, using semi-structured interviews, focus groups, talking circles, and participatory validation with disabled children, youth, adults, and older adults, as well as their families and practitioners, across physical education, after-school, leisure, recreation, and exercise contexts. Data were thematically analysed using NVivo and re-examined through intersectional and diverse-eyed seeing lenses. Reflexive journaling and collaborative member-checking supported trustworthiness.

Results: Across studies, disability never acted alone in shaping physical activity experiences. Barriers emerged at intersections with colonial histories, racism, poverty, migration, language, geography, and institutional design. Cross-cutting patterns included: (1) systemic barriers; (2) relational factors; (3) cultural meanings of movement tied to identity, spirituality, and community; and (4) program qualities. The “5 Senses” framework (story, self, belonging, community, solidarity) showed that meaningful participation extends beyond physical access.

Conclusions: This synthesis show that intersectionality is essential, not optional, in understanding disability and physical activity. Diverse-eyed seeing reveals how colonial and structural forces shape movement opportunities. Inclusive and responsive programs must move beyond “one-size-fits-all” models toward culturally grounded, relational, and justice-oriented practice.

References:

Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43(6), 1241-1299. <https://doi.org/10.2307/1229039>

From story to movement: Narrative-based psychomotor activities in inclusive education

Z. Zacharová¹, L. Bundová², D. Nemček³

¹Comenius University Bratislava, Faculty of Education, Department of Psychology and Pathopsychology, Bratislava, Slovakia; ²Comenius University Bratislava, Faculty of Education, Department of Pre-primary and Primary Education, Bratislava, Slovakia; ³Comenius University Bratislava, Faculty of Education, Department of Special Education, Bratislava, Slovakia

Introduction: The narrative approach originally developed for language learning supports emotional engagement, shared attention, and participation in early education (Taeschner et al., 2004). When adapted for movement and psychomotor activities, narrative structures provide an inclusive framework for integrating bodily movement into classroom practice in preschool and primary education (Jursová Zacharová, 2019). The narrative format (NF) is particularly relevant in contexts where physical education lessons are limited by staffing or space constraints. National policy guidelines allow the integration of active movement into regular lessons when specialised facilities or staff are unavailable (Ministry of Education, 2024).

Objective: This contribution presents a NF for integrating movement and psychomotor activities into classroom teaching and illustrates its inclusive potential through short case studies of neurodiverse children with ADHD and ASD.

Method: NF is based on didactic adaptation and reflective classroom practice. Narrative and dramatic play structure movement and psychomotor activities embedded within regular lessons. A model activity based on the story Circus uses a circle as an emotionally safe learning space. Activities include walking along a line, jumping with a 180-degree turn, controlled landing, and simple forward rolls.

Results: Increased activity levels and willingness to participate were observed when narrative-based tasks were introduced. The child with ADHD showed a higher frequency of repetitions and sustained interest. The child with selective mutism mainly observed the activities; however, parents reported increased movement in the home environment. The child with autism spectrum disorder approached activities cautiously and engaged selectively based on preference.

Discussion: The case studies suggest that narrative-based movement activities can support inclusive classroom participation by prioritising emotional safety, regulation, and engagement over motor performance. NF offers a flexible way to integrate psychomotor elements into inclusive early education.

References:

- Taeschner, T. Pirchio, S., Corsetti, R. & Francese, G. (2004). The Magic Teacher's Kit. DITI.
- Jursová Zacharová, Z. (2019). Naratívny formát v škole: Od metódy k výskumu. Podpora naratívnej kompetencie v slovenskom jazyku u detí z marginalizovaného jazykového prostredia [The narrative format in school: From method to research. Supporting narrative competence in the Slovak language among children from marginalised linguistic backgrounds]. Havava.
- Ministry of Education of the Slovak Republic. (2024, August 21). Odporúčania pre školy k realizácii tretej hodiny vyučovacieho predmetu telesná a športová výchova [Guidelines for schools on the implementation of the third weekly lesson of physical and sports education]. Ministry of Education of the Slovak Republic. <https://www.minedu.sk/data/att/581/30974.d52942.pdf>

Funding: Research was supported by the grant VEGA 1/0694/24.

Is supported standing metabolically demanding in children requiring palliative care? A feasibility study protocol

L. Zaliene

Holistic Medicine and Rehabilitation Department, Health Science faculty, Klaipeda university, Klaipeda, Lithuania

Introduction: Children requiring palliative care often present with severe motor impairments, altered muscle tone, and changes in passive mechanical muscle properties that affect postural control, comfort, and quality of life. Previous studies in children with cerebral palsy, mainly involving ambulatory or moderately affected participants, have shown that quiet standing is associated with higher energy expenditure compared with sitting (Saxena et al., 2016). However, children with the most severe motor impairments (GMFCS Level V) have been largely excluded from studies assessing the metabolic cost of upright positioning. Consequently, knowledge about passive muscle behavior and metabolic demand during supported standing in this population remains limited. This study introduces a feasible and ethically appropriate protocol to assess passive mechanical muscle properties and indirect indicators of metabolic cost during supported standing in young children requiring palliative care.

Method: A methodological observational study protocol was implemented in a palliative day care center. Children aged 1.5–7 years requiring palliative care and classified as GMFCS Level V were included. Passive mechanical properties of lower limb muscles were assessed using Myoton. Surface electromyography (EMG) was used to monitor leg muscle activity and ensure passive muscle conditions, while heart rate monitoring was applied as an indirect indicator of metabolic cost. All measurements were performed in an individually adapted supported standing position, ensuring safety and comfort. Feasibility, safety, and data reliability were evaluated.

Results: The protocol proved feasible and safe in a palliative day care setting. The combined use of Myoton, EMG, and heart rate monitoring enabled the collection of reliable biomechanical data and indirect indicators of metabolic cost during supported standing.

Conclusions: This study presents a feasible and ethically appropriate protocol for assessing passive mechanical muscle properties and indirectly monitoring metabolic cost during supported standing in young children requiring palliative care. The protocol addresses an important research gap and may support individualized assessment and intervention planning in adapted physical activity and pediatric palliative care.

References:

Saxena, S., Kumaran, S., & Rao, B. K. (2016). *Energy expenditure during standing in children with cerebral palsy: A brief report*. *Journal of Pediatric Rehabilitation Medicine*, 9(3), 241–245. <https://doi.org/10.3233/PRM-160386>

Digital assessment technologies as optimization tools in adapted physical activity for children in schools and sports clubs

L. Zaliene

Higher Education Institution/Klaipėdos valstybinė kolegija, Klaipėda, Lithuania

Introduction: In adapted physical activity (APA) for children, decision-making in schools and sports clubs is often based on observational assessment and professional experience, which may limit sensitivity to subtle functional changes and individual developmental differences (Westcott et al., 1997; An et al., 2023). The increasing availability of digital assessment technologies enables the integration of objective data into APA processes, supporting individualized planning and outcome evaluation (Hands & Larkin, 2006).

Method: A technology-supported APA framework was implemented using a data-driven optimization cycle including baseline assessment, individualized intervention planning, implementation in real settings, monitoring and feedback, data-driven adjustment, and outcome analysis. Objective functional, biomechanical, neuromuscular, and psychomotor indicators were collected using digital tools such as motion and biometric analysis systems, surface electromyography, stabilometric platforms, posture assessment systems, gait analysis technologies, and cognitive–motor reaction tests. Instrumented gait analysis, electromyography, and postural stability assessment have been shown to provide sensitive indicators of motor function in pediatric populations (Daunoravičienė et al., 2021; Plandowska et al., 2019). Data were collected in school-based and sports club APA programs involving children with diverse motor abilities.

Results: Technology-supported assessment enabled the development of objective functional profiles, facilitating individualized task selection and load prescription (Hands & Larkin, 2006). Continuous monitoring allowed detection of small but clinically and educationally meaningful changes that may not be observable through subjective assessment alone (Daunoravičienė et al., 2021). In schools, objective data supported early identification of motor difficulties and inclusive educational planning (An et al., 2023). In sports clubs, technology-based monitoring contributed to safer participation, overload prevention, and clearer progression criteria (Maïano et al., 2018; WHO, 2020).

Conclusions: Digital assessment technologies provide an effective framework for optimizing adapted physical activity processes in schools and sports clubs. Integrating objective data into assessment, intervention planning, and outcome monitoring enhances individualization, efficiency, and transparency of APA practice, supporting inclusive education and safe participation in physical activity (Westcott et al., 1997; WHO, 2020).

References:

- An, M., Columba, L., Lieberman, L. J., & Haeghele, J. A. (2023). A scoping review of adapted physical activity interventions for children and youth with disabilities. *Adapted Physical Activity Quarterly*, 40(2), 147–171. <https://doi.org/10.1123/apaq.2022-0054>
- Daunoravičienė, K., Juškienė, G., & Raistenskis, J. (2021). EMG-based analysis of gait symmetry in healthy children. *Sensors*, 21(17), 5983. <https://doi.org/10.3390/s21175983>
- Hands, B., & Larkin, D. (2006). Physical fitness and developmental coordination disorder. In S. A. Cermak & D. Larkin (Eds.), *Developmental coordination disorder* (pp. 172–184). Delmar Cengage Learning.
- Plandowska, M., Lichota, M., & Górniak, K. (2019). Postural stability of 5-year-old girls and boys with different body heights. *PLoS ONE*, 14(12), e0227119. <https://doi.org/10.1371/journal.pone.0227119>
- Westcott, S. L., Lowes, L. P., & Richardson, P. K. (1997). Evaluation of postural stability in children: Current theories and assessment tools. *Physical Therapy*, 77(6), 629–645.
- World Health Organization. (2020). WHO guidelines on physical activity and sedentary behaviour. World Health Organization.

Adapted physical activity and parental involvement as an innovative approach in kinesiotherapy for children with disabilities

E. Zheleva¹, D. Kanchev¹, N. Manova¹, K. Dobrev¹, Z. Stankov², E. Neshev³

¹Department of Kinesiotherapy, Faculty of Public Health “Prof. Dr. Tsekomir Vodenicharov”, Medical University – Sofia, Bulgaria; ²Student in Kinesiotherapy, Faculty of Public Health, Medical University – Sofia, Bulgaria; ³Specialist in Adapted Physical Activity, Coach – “SEN Sport and Sambo for Development”, Bulgaria

Introduction: Adapted Physical Activity (APA) is a personalized form of movement tailored to individuals with disabilities and serves as a key component in multidisciplinary rehabilitation. For children with neurodevelopmental and motor impairments (e.g., cerebral palsy, autism, Down syndrome), family-centred models that actively involve trained parents are particularly valuable. This study evaluates the benefits of an innovative kinesiotherapy model integrating APA sessions with parental participation to enhance motor, cognitive, social, and family outcomes.

Method: Twenty-six children (Mean age = 6.4, SD = 1.5 years) diagnosed with cerebral palsy (n = 10), autism (n = 9), or Down syndrome (n = 7) were randomly assigned to an experimental group (n = 14; APA with trained parents) or control group (n = 12; standard kinesiotherapy without parental involvement). The 11-week intervention consisted of 4 × 50-minute weekly sessions of playful, functional exercises, sensorimotor stimulation, and motor activities in therapeutic and home settings. Assessments included GMFM-88 (gross motor function), WHODAS 2.0 (overall functioning), parental questionnaires (emotional bonding, stress, motivation), and video/sensor analysis. Statistical analysis used independent t-tests, MANOVA, and Cohen’s d effect sizes.

Results: The experimental group showed statistically significant improvements compared to controls: GMFM-88 scores increased (85.1, SD = 4.5 vs. 75.8, SD = 5.4; $t = 3.62$, $p = .001$), WHODAS 2.0 decreased (25.7, SD = 5.9 vs. 35.2, SD = 6.1; $t = -3.24$, $p = .004$), social engagement rose (8.3, SD = 1.4 vs. 6.2, SD = 1.6; $t = 3.05$, $p = .006$), and parental stress decreased (3.1, SD = 1.0 vs. 5.4, SD = 1.3; $t = -3.12$, $p = .005$). Cohen’s d exceeded 0.8 in all comparisons, indicating large, clinically meaningful effects. Parents reported stronger emotional bonds, better control, and higher motivation.

Conclusions: Integrating trained parents into APA-based kinesiotherapy significantly enhances motor function, overall functioning, social engagement, and family well-being in children with disabilities. This family-centred, innovative model extends therapeutic benefits beyond clinical settings, reduces parental stress, and promotes sustainable participation. It offers a practical, evidence-based approach for rehabilitation and exercise therapy in adapted physical activity contexts, with strong potential for wider implementation.

Professional and Video Presentations

Promoting inclusive values and professional skills through adapted physical activity: The INEFC Barcelona experience

A.M. Bofill-Ródenas¹, R. Tarragó¹

¹Institut Nacional d'Educació Física de Catalunya, Barcelona, Spain

For the past ten years, the National Institute of Physical Education of Catalonia (INEFC) has hosted a university day at its Barcelona campus focused on physical activity and sport with people with disabilities. The event provides participants with an experiential understanding of adapted and inclusive sports and serves as the closing activity for the third-year course “Adapted Physical Activity and Sport.” This initiative has become a valuable learning space to foster respectful and inclusive attitudes among future professionals in physical activity and sport and to raise awareness within the university community about the importance of accessibility and active participation for people with disabilities.

Each edition involves around 200 participants, including students, professionals, and people with disabilities. The day begins with the testimony of an individual directly involved in sport for people with disabilities, offering a motivational component that highlights how sporting experiences develop values such as perseverance, responsibility, commitment, and self-confidence. Participants then engage in practical experiences with people with intellectual disabilities, cerebral palsy, and other physical disabilities, experiencing firsthand the adaptations required for sports practice. Inclusive workshops form a core methodology, promoting meaningful learning, empathy, understanding of individual needs, and reinforcing cooperation and teamwork.

Activities are organized across multiple spaces, allowing participants to fully immerse themselves in adapted physical activity and encouraging active engagement throughout the event. This structure develops specific professional skills, including activity adaptation, attention to the needs of people with disabilities, and promotion of an inclusive environment.

Overall, the event is a formative and awareness-raising initiative that consolidates an inclusive culture within the university. It promotes full participation of people with disabilities in sport and physical activity and strengthens the social and educational responsibility of the academic community. The day demonstrates how experiential learning in adapted sports fosters both professional competencies and inclusive values, preparing future professionals to create accessible and empowering environments for all participants.

Inclusive hiking project in physical education

L. Jiménez-Monteagudo, C. Climent-Oltra, L. Ramos-López, V. Sánchez-Sanz, M. Martín-Rodríguez, A. Castro-Sancho, H. Esteve-Ibáñez

Catholic University of Valencia, Valencia, Spain

This video presents a research project carried out in the Valencian Community (Spain), framed within the EUCAPA line of work on Physical Education and Inclusive Activities. The main objective was to design and validate a perception questionnaire on inclusive physical activities in natural environments aimed at adolescents. In addition, the project sought to promote the inclusion of students with physical disabilities in outdoor activities conducted within the context of Physical Education.

The research made it possible to design and implement a real inclusive experience, developed in six secondary schools in the Valencian Community, where six inclusive hiking routes were carried out—one in each school and distributed across the three provinces of the region. For these routes, the Joëlette mountain wheelchair was used, a specific tool that facilitates the inclusion of people with physical disabilities in outdoor physical activities.

In addition to the design and validation of the questionnaire using the Delphi method, a pre-test, post-test design was applied in each of the participating schools. A total of 361 secondary school students took part in the project, 18 of whom had a disability, along with students from the Bachelor's Degree in Physical Activity and Sport Sciences, who played a key role as pilots of the mountain wheelchairs during the routes.

The video presents in detail the planning and implementation process of this type of experience, with the aim of enabling other teaching and research groups to replicate the project and thus contribute to the effective inclusion of students with physical disabilities in outdoor activities within the field of Physical Education.

The link of the video: <https://www.youtube.com/watch?v=fXsDlewZF4s>

Self-advocacy in the community for youth with visual impairments

L. Lieberman, R. Childs, G. Orzel

SUNY Brockport, USA

Children and youth with visual impairments are very often behind in motor skills, fitness and socialization. They are also often marginalized at school and in the community. Self-advocacy, traditionally taught to children with disabilities, has been linked to numerous positive outcomes such as academic success, increased on-task behavior, improved classroom engagement, reduced behavioral issues, and greater self-efficacy. There is a great need for self-advocacy skills to be taught and nurtured with youth with visual impairments. The purpose of this video is to teach youth, teachers, and caregivers how to promote self-advocacy to access community recreation. This video features a girl who is visually impaired who is turned away from bowling with her friends because the bowling alley manager is nervous about her skills. The girl in the video works hard to figure out how to self-advocate so she can eventually bowl with her friends. She uses some simple strategies to help make her case to bowl. This is a free video and can be utilized by all members of IFAPA.

<https://www.campabilities.org/instructional-materials.html>

Monoski days – Awareness event

D. Mikeška, G. Hanzlíčková

Faculty of Physical Culture, Palacky University Olomouc, Czech Republic

Monoski Days is an inclusive educational sports event aimed at raising awareness of adapted alpine skiing and promoting accessibility in winter sports for individuals with disabilities as well as the general public. Organized annually since 2013 by the Centrum APA of the Faculty of Physical Culture at Palacký University Olomouc, the event takes place during the winter season (February-March) in selected ski resorts across the Moravian part of the Czech Republic. Monoski Days offers participants the opportunity to experience adapted skiing using specialized equipment such as monoskis and biski skis, free of charge and under the guidance of licensed instructors and trained volunteers.

The event is designed as a one-day program held on weekends, combining practical skiing experiences with educational and awareness-raising activities. Participants with special needs are supported by registered volunteers—typically six to eight per event day. Who ensure safe instruction and individualized assistance. Each participant is guaranteed multiple rides. In addition to skiing, the program includes musical accompaniment, instructional demonstrations, interviews with participants, and presentations of independent monoski riding.

Monoski Days emphasizes the idea of “skiing for all” by connecting adapted skiing, families, professionals, and the broader public in a shared recreational environment. The primary goal is to introduce adapted winter sports to people with disabilities while simultaneously increasing public awareness and reducing social barriers related to disability and physical activity. The event fosters positive emotional experiences, social inclusion, and enthusiasm for physical activity, highlighting the potential of adapted sports as a meaningful tool for education, inclusion, and community engagement.

Symposium

Disabled lived experience

M. Giese¹, A. J. Maher², S. Ruin³

¹Philipps-University Marburg, Germany; ²Leeds Beckett University, UK; ³University of Graz, Austria

The lived experience of disabled individuals is often marginalized and remains hidden in the APE discourse. This prevents the field from understanding the lived experience of disabled people from their own and individual perspective and can lead to the creation of an image of disabled people that is shaped by power structures (in which disabled people are marginalized) and misleading ideas about disability (Giese et al., 2026). From a theoretical perspective, the epistemic injustice approach raises awareness that ableist notions of disability are often reproduced (Fricker, 2010), which is not consistent with the global goal of promoting awareness of disabled people. Epistemic injustice (Kidd et al., 2017) serves to theoretically situate the symposium and legitimize the methodological approaches used in the different contributions included in the symposium.

The epistemic injustice approach, which also influences the international discourse on inclusion (Scully, 2020; Tremain, 2017), questions from a bioethical and philosophical-political perspective how knowledge (e.g., about social structures, educational practices, interactions, etc.) is generated. The symposium therefore aims to make the lived experience of disabled individuals visible from their own perspectives, using participatory, multi-sensory and theoretical approaches. Researching the lived experiences of disabled people from their subjective perspective is fundamental to revealing relevant aspects of the transition to an inclusive society. The epistemic considerations point to the goal of generating knowledge that proves meaningful to those addressed by the research. These considerations refer to the symposium's theoretical conceptualization of inclusion, which views inclusion as an intersubjective experience that can be described theoretically and captured empirically using qualitative research methods. With this in mind, the symposium is dedicated to the EUCAPA 2026 themes *Leisure, Recreation and Psychosocial Aspects of APA*, as well as *Physical Education and Inclusive Activities*.

References:

- Fricker, M. (2010). *Epistemic injustice. Power and the ethics of knowing*. Oxford Univ. Press.
- Giese, M., Meier, S., & Höger, B. (2026). Amplifying the Voices of Individuals with Visual Impairments and Deaf-blindness in the Context of Sports. *Frontiers Media SA*. <https://doi.org/10.3389/978-2-8325-7312-9>
- Kidd, I. J., Medina, J., & Pohlhaus, G. (Eds.). (2017). *Routledge handbooks in philosophy. The Routledge Handbook of Epistemic Injustice*. Routledge Taylor & Francis Group.
- Scully, J. L. (2020). Epistemic Exclusion, Injustice, and Disability. In A. Cureton, D. T. Wasserman, & J. L. Scully (Eds.), *The Oxford Handbook of Philosophy and Disability* (pp. 295–309). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780190622879.013.8>
- Tremain, S. (2017). Knowing disability, differently. In I. J. Kidd, J. Medina, & G. Pohlhaus (Eds.), *Routledge handbooks in philosophy. The Routledge Handbook of Epistemic Injustice* (pp. 175–183). Routledge Taylor & Francis Group.

Storying the experiences of running with a tracheostomy

F. Arroyo-Rojas¹, A. J. Maher²

¹Hofstra University Hempstead, USA; ²Leeds Beckett University, UK

In life-threatening medical situations, urgent procedures—including tracheostomy—are often performed to maintain life (Kaub-Wittemer et al., 2003). A tracheostomy creates a surgical opening in the trachea and inserts a tube to assist with breathing. While lifesaving, tracheostomies can carry physical, communicative, psychosocial, and occupational consequences (Newman et al., 2022), existing research focuses predominantly on short-term, medicalized experiences in intensive care settings (Nakarada-Kordic et al., 2017); and experiences situated within the Global North primarily (Newman et al., 2022). Evidence concerning adults living with long-term tracheostomies (Wrapson et al., 2017), particularly in non-medical and underrepresented sociocultural contexts, is limited. In this qualitative study we use a narrative approach to story the experiences of running of one 67-year old Chilean man (pseudonym: Marcelo) who has lived with a tracheostomy for over ten years following chronic inflammatory demyelinating polyradiculoneuropathy and prolonged mechanical ventilation. Data comprise multiple online, life-history interviews. Reflexive narrative analysis, led by the researcher with an external critical friend acting as peer debriefer, constructed interpretive themes. By shifting emphasis from incidence, timing and clinical-based techniques to socio-cultural and political meanings, the study responds to calls for extended investigation of long-term tracheostomy experiences. Focusing on the experiences of long-distance running in Chile offers novel insight into embodiment, adaptive strategies, social participation, and wellbeing among people living with long-term tracheostomies.

References:

- Kaub-Wittemer, D., Steinbüchel, N. V., Wasner, M., Laier-Groeneveld, G., & Borasio, G. D. (2003). Quality of life and psychosocial issues in ventilated patients with amyotrophic lateral sclerosis and their caregivers. *Journal of Pain and Symptom Management*, 26(4), 890-896. [https://doi.org/10.1016/s0885-3924\(03\)00323-3](https://doi.org/10.1016/s0885-3924(03)00323-3)
- Nakarada-Kordic, I., Patterson, N., Wrapson, J., & Reay, S. D. (2017). A systematic review of patient and caregiver experiences with a tracheostomy. *The Patient - Patient-Centered Outcomes Research*, 11(2), 175-191. <https://doi.org/10.1007/s40271-017-0277-1>
- Newman, H., Clunie, G., Wallace, S., Smith, C., Martin, D., & Pattison, N. (2022). What matters most to adults with a tracheostomy in ICU and the implications for clinical practice: A qualitative systematic review and metasynthesis. *Journal of Critical Care*, 72, 154145. <https://doi.org/10.1016/j.jcrc.2022.154145>
- Wrapson, J., Patterson, N., Nakarada-Kordic, I., & Reay, S. (2017). A life-changing event: Patients' personal experiences of living with a long-term tracheostomy. *Design for Health*, 1(2), 256-271. <https://doi.org/10.1080/24735132.2017.1386432>

Storying the lived experience of a blind climber

M. Giese¹, S. Meier², A. J. Maher³

¹Philipps-University Marburg, Germany; ²Augsburg University, Germany; ³Leeds Beckett University, UK

Introduction: This study explores the sensory and narrative experiences of a blind adult, and professional climber, contributing to research on visual impairment, disability, and sport by foregrounding embodied ways of knowing beyond vision.

Method: Guided by the assumption that lives are storied (Sparkes & Smith, 2014), the research adopts an interpretivist narrative approach grounded in ontological relativism and epistemological social constructionism. The central aim is to story how a blind climber makes sense of climbing through multisensory, relational, and embodied experiences within specific material and social contexts. The study generated qualitative narrative data during shared climbing and skiing with the researchers. Data generation involves audio-recorded conversations captured via body-mounted microphones, helmet-mounted GoPro video footage, and retrospective discussions prompted by video playback (Brighton et al. 2026).

Results: These methods enable attention to lived experience as it unfolds, while also supporting reflective sense-making over time (Giese et al., 2026). Reflexive narrative analysis was undertaken with ongoing collaboration between the participant and researchers acting as critical friends and peer debriefers. This multisensory orientation challenges ocular-centric assumptions that dominate sport and disability research and allows exploration of how meaning, identity, and agency are constituted through non-visual sensory engagement. By examining how the blind climber navigates climbing spaces, relationships, and emotions through the senses, the study illuminates the intersubjective construction of experience and selfhood.

Conclusions: Overall, the study offers methodological and theoretical insights into narrative-sensory research, while advancing more inclusive understandings of embodiment, disability, and physical activity. These insights have implications for research, practice, and policy by promoting ethically attentive, inclusive approaches to studying sport that value diverse bodies, senses, stories, and ways of being globally.

References:

- Brighton, J., Powis, B., & Gubby, L. (2026). Using sensory methods for researching disability in physical education. In A. J. Maher, J. A. Haegle & J. Coates (Hrsg.), *Routledge Handbook of Qualitative Methods for Researching Disability in Physical Education* (S. 345-360). Routledge.
- Giese, M., Meier, S., & Höger, B. (2026). *Amplifying the Voices of Individuals with Visual Impairments and Deaf-blindness in the Context of Sports*. Frontiers Media SA. <https://doi.org/10.3389/978-2-8325-7312-9>

Let's talk about sex – the desexualization and dehumanization of disabled youth in PE

J. Haegele¹, S. Ruin²

¹Old Dominion University, USA; ²University of Graz, Austria

Introduction: The sport pedagogy discourse often treats physical education (PE) as an ostensibly desexualized space, despite the reality that sexuality, love, and physicality are integral to the experiences of young people. Historically, the body in sport pedagogy has been functionalized for purposes such as health promotion, military preparation, or athletic performance, while themes of love and sexuality have been excluded (Ruin, 2025). This desexualization persists, even as contemporary dynamics like the fitness boom and social media amplify the body's role in social recognition and attractiveness (Pürgstaller, 2023). Not least these trends call for a critical reexamination of the intersection of sexuality, physicality, and pedagogy, particularly in relation to marginalized groups such as disabled individuals.

Method: This analysis combines historical perspectives on the desexualization of the body (Addlakha et al., 2017) in sport pedagogy with contemporary discussions on disability, sexuality, and PE (Böhlke et al., 2024; Shuttleworth et al., 2021). Drawing on theoretical frameworks and empirical studies, the work explores how disabled bodies are positioned within PE spaces, focusing on their sexualization, desexualization, and the hierarchies that marginalize them.

Results: Disabled individuals are often perceived as either unsexual or hypersexual, reflecting societal stigmas that pathologize their bodies. PE spaces, shaped by normative hierarchies, frequently reinforce these misconceptions, positioning disabled bodies as subhuman or nonhuman. This marginalization extends beyond schools, influencing societal attitudes and contributing to systemic barriers, including limited access to sexuality education and increased vulnerability to sexual violence.

Conclusions: PE has the potential to challenge ableist and heteronormative narratives by fostering inclusive understandings of diverse bodies and sexualities. A critical, intersectional approach that centers the voices of disabled individuals can help deconstruct harmful stereotypes and epistemic injustice (Fricker, 2007) and promote the recognition of disabled people as sexual beings with equal rights to intimacy, pleasure, and self-expression.

References:

- Addlakha, R., Price, J., & Heidari, S. (2017). Disability and sexuality: Claiming sexual and reproductive rights. *Reproductive Health Matters*, 25(50), 4-9.
- Böhlke, N., Zander, B., & Rode, D. (2024). Between nature and culture – interpreting students' sexuality in physical education. *Frontiers in Sociology*, 9, 1374488. <https://doi.org/10.3389/fsoc.2024.1374488>
- Fricker, M. (2007). *Epistemic injustice: Power and the ethics of knowing*. Oxford University Press.
- Pürgstaller, E. (2023). (Im)perfect Bodies 2.0 - Body Concepts in Current Bodily Practices. *Vierteljahrsschrift für wissenschaftliche Pädagogik*, 99(1), 48-61. <https://doi.org/10.30965/25890581-09703078>
- Ruin, S. (2025). Disziplinierungsobjekt, Ermöglichungsraum, Normalisierungsvehikel – Pädagogische Interpretationen von Körper und Körperlichkeit im Kontext von Bewegung, Spiel und Sport [Object of discipline, space of opportunity, vehicle of normalization—pedagogical interpretations of the body and physicality in the context of movement, play, and sport]. In R. Bleser & M. Clemens (Eds.), *Körperliche Gegenwart: Figurationen durch Status, Macht und Sichtbarkeit* (pp. 18-62). Lit-Verlag.
- Shuttleworth, R., Bahner, J., & Mona, L.R. (2021). *Routledge Handbook of Disability & Sexuality*. Routledge.

Participatory design of a digital sound ball in PE: Lived experiences of BVI students

B. Höger¹, B. Sandbichler¹, S. Meier¹, M. Giese², K. Weiß¹

¹Institute of Sports Science, University of Augsburg, Germany; ²Philipps-University Marburg, Germany

Introduction: This study examines the participatory development of a digital sound ball designed to enhance participation opportunities for blind and visually impaired (BVI) students in Physical Education (PE). Building on the rights-based framework of the UN-CRPD and previous research highlighting material and social barriers (Höger et al., 2025; Meier et al., 2023), we focus on the potentials and limitations of digital technologies to counter ableist norms embedded in conventional PE materials. Drawing on a critical understanding of ableism (Campbell, 2009; Wolbring, 2008) and Participatory Design (Simonsen & Robertson, 2013), the project involved BVI students in an iterative Design Thinking process of a final functional prototype.

Method: Empirical data were generated over the course of two years through student-guided school tours accompanied by guideline interviews (Clark, 2005), audio-recorded workshop interactions during station-based activities and a post-lesson group interview with four BVI secondary school students who tested the prototype in an authentic PE setting. Using thematic analysis (Braun & Clarke, 2012), we explore students' lived and embodied experiences with the digital sound ball in PE, and how these experiences shaped their evaluations of its possibilities and constraints.

Results: While the prototype enabled new forms of agency, orientation, and playful engagement, students also articulated fine-grained technological and sensory challenges that shaped the usability of the device and exposed persistent normative assumptions about vision, skill, and efficiency in PE.

Conclusions: Grounded in the student' lived and embodied experiences, these ambivalences highlight both the productive and the limiting dimensions of participatory technology development and illustrate how material innovations can unsettle, but also inadvertently reproduce dominant ability norms. The study illuminates how participatory design processes with BVI students can challenge ableist materialities in PE and provides conceptual and practical insights into the role of material design in shaping inclusive and equitable PE environments.

References:

- Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology. Volume 2: Research designs: Quantitative, qualitative, neuropsychological, and biological* (pp. 57–71). American Psychological Association. <https://doi.org/10.1037/13620-004>
- Campbell, F. K. (2009). *Contours of ableism: The production of disability and abledness*. Palgrave Macmillan.
- Clark, A. (2005). Ways of seeing: Using the Mosaic approach to listen to young children's perspectives. In A. Clark, A. T. Kjørholt, & P. Moss (Eds.), *Beyond listening: Children's perspectives on early childhood services* (1st ed., pp. 29–49). Bristol University Press. <https://doi.org/10.2307/j.ctt1t89jof>
- Höger, B., Meier, S., & Giese, M. (2025). "Actually, it's pretty much like normal PE": Reconstructing social hierarchies from the perspective of visually impaired students and their teachers in segregated PE. *Frontiers in Sports and Active Living*, 7, 1582648. <https://doi.org/10.3389/fspor.2025.1582648>
- Meier, S., Höger, B., & Giese, M. (2023). "If only balls could talk...": Barriers and opportunities to participation for students with blindness and visual impairment in specialized PE. *Frontiers in Sports and Active Living*, 5, 1286909. <https://doi.org/10.3389/fspor.2023.1286909>
- Simonsen, J., & Robertson, T. (Eds.). (2013). *Routledge international handbook of participatory design*. Routledge. <https://doi.org/10.4324/9780203108543>
- Wolbring, G. (2008). The Politics of Ableism. *Development*, 51(2), 252–258. <https://doi.org/10.1057/dev.2008.17>

Opportunities and limitations of participatory research in the field of APA

J. Wibowo¹

¹Ruhr-Universität Bochum, Germany

Participatory research (PR) has gained prominence within Adapted Physical Activity (APA) as a response to persistent inequalities in knowledge production and the limited involvement of people with disabilities in research and practice (Rich et al., 2024). Conceptualised as a research paradigm rather than a single method, PR emphasises participation, collective knowledge production, and critical reflexivity (ICPHR, 2013). This aligns with international normative frameworks such as the UN Convention on the Rights of Persons with Disabilities, which frames participation as a fundamental right (United Nations, 2006). Despite this normative consensus, participatory practice in APA remains heterogeneous and marked by tensions between empowerment, methodological rigour, and feasibility.

This symposium brings together four complementary contributions that critically examine opportunities and limitations of participatory research across diverse APA contexts. The overarching aims are: (1) to analyse how participatory approaches reshape knowledge production in APA; (2) to identify methodological, epistemic, and ethical challenges arising in participatory designs; and (3) to reflect on power relations, representation, and generalisability within participatory research.

The contributions address participatory investigations of spatial accessibility of sports facilities, participatory research on assistive technology users' engagement in community sport, critical reflections on epistemic injustice, and lessons learned from participatory action research in physical education and community-based APA. Across studies, recurring challenges include representation and wheelchair bias, difficulties accessing diverse impairment groups, competing accessibility needs, and risks of tokenistic participation. At the same time, the contributions demonstrate the potential of participatory approaches to generate socially robust and practice-relevant knowledge that extends beyond expert-driven evaluations.

The symposium contributes to EUCAPA 2026 themes including inclusive physical education, technology and adaptive equipment, and psychosocial aspects of APA, aligning with the conference motto "APA Evolution: Honoring Our Past, Shaping Our Future."

References:

- ICPHR. (2013). What is Participatory Health Research? https://www.icphr.org/uploads/2/0/3/9/20399575/ichpr_position_paper_1_definition_-_version_may_2013.pdf
- Rich, K. A., Smith, R. & Giles, A. R. (2024). Introduction. In K. A. Rich, R. Smith & A. R. Giles (Hrsg.), *Participatory Research in Sport and Physical Activity* (S. 1–14). Routledge.
- United Nations. (2006). *Convention on the Rights of Persons with Disabilities*. <https://social.desa.un.org/issues/disability/crpd/convention-on-the-rights-of-persons-with-disabilities-articles>

Epistemic Injustice and participatory methods: A critical reflection

J. Coates¹, L. Sharpe²

¹Loughborough University, UK; ²University of Lincoln, UK

Epistemic injustice is a term first coined by Miranda Fricker (2007). It refers to an injustice enacted on a person or group in their capacity as a knower, arising from structural inequalities and prejudices. This results in some people, notably those in positions of privilege or power, being afforded more credibility to produce and share knowledge; while others are effectively silenced or marginalised in knowledge creation (Fricker, 2023). Fricker identifies two main forms of injustice: testimonial and hermeneutical injustice.

Drawing on concepts of social and identity power, testimonial injustice refers to the ways that injustices are drawn through power being unjustly afforded to those who are not 'knowers' of a particular identity such that and testimony drawn from those with social power who are perceived to have more credibility. This can lead to the silencing of those who hold certain marginalised or 'oppressed' identities (e.g. young people, disabled people, women, etc).

Hermeneutical injustice refers to the ways in which knowledge resources are unequally shared so that those in powerful positions tend to have more appropriate understandings of their experiences, while those afforded less power have ill-fitting interpretations of their lived experience to draw on (Fricker, 2007).

This paper introduces core concepts relating to epistemic injustice as an epistemological gaze through which to do participatory research. We then use this theoretical framing to critically reflect on research undertaken with disabled young people. Drawing on three studies (Sharpe et al., 2022; Coates et al., forthcoming), we consider how participatory methods can bring to the fore the rich, complex realities of disabled peoples' lived experiences and examine issues relating to research ethics, reflexivity and accessible research dissemination.

References:

- Coates, J., Sharpe, L., Mason, C., Ruin, S., & Giese, M. (forthcoming) Examining the Experiences of Young People with Disabilities in Physical Education: The Case for Participatory Research, *German Journal of Exercise and Sport Research*.
- Fricker, M. (2007). *Epistemic injustice: Power and the ethics of knowing*. Oxford University Press.
- Fricker, M. (2023). Evolving concepts of epistemic injustice. In *The Routledge handbook of epistemic injustice* (pp. 53-60). Routledge.

Participatory research exploring facilitators and barriers for at-users' engagement in sport

A. Geppert¹, J. Kavangh¹, E. Smith¹, M. MacLachlan¹

¹ALL Institute, Maynooth University, Ireland

Introduction: The benefits of sports participation span physical, psychological, and social dimensions (Bargaru et al., 2011; Eigenschenk et al., 2019; Saxena et al., 2005; WHO, 2010). However, individuals with disabilities engage in sports at lower rates than those without disabilities (van den Berg-Emons et al., 2010), largely due to systemic and social barriers. Limited access to assistive technologies (AT) that enable participation is a major obstacle (WHO, 2018). While research has explored assistive products (AP) in elite parasports (Burkett, 2010), little attention has been given to everyday AP for recreational or community-level participation.

This study addresses that gap by examining factors influencing sports engagement among AT users outside elite contexts. We aim to identify facilitators and barriers and explore how AT is used in these settings. Using a participatory approach, we employ the Photovoice method to answer two questions: (1) What are the facilitators and barriers for AT-users' engagement in sport? and (2) How is AT used by AT-users to participate in sport?

Method: Photovoice involves participants photographing how technology supports daily life and sports participation. Data collection includes in-depth interviews (n = 20) discussing these photographs. Transcripts are analyzed using Braun and Clarke's (2006) thematic analysis. Photovoice promotes inclusion and empowers marginalized groups by sharing experiences visually and narratively (Labbé, 2020; Budig et al., 2018; Wang et al., 1997). An advisory board of disability sport organizations and persons with disabilities, including the European Disability Forum, guides the project.

Participants have four weeks to complete photographs and narratives, followed by one-hour interviews. Data collection began in July 2025 and continues into 2026. Interviews are transcribed, pseudonymized, and analyzed inductively, with photographs complementing themes.

Results and Conclusions: The study will highlight key facilitators and barriers AT-users face in sports and demonstrate how AT supports participation at the community level.

References:

- Bargaru, M., Dekker, R., Geertzen, J. H., & Dijkstra, P. U. (2011). Amputees and sports: a systematic review. *Sports medicine*, 41(9), 721-740.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Budig, K., Diez, J., Conde, P., Sastre, M., Hernán, M., & Franco, M. (2018). Photovoice and empowerment: evaluating the transformative potential of a participatory action research project. *BMC public health*, 18(1), 432.
- Burkett, B. (2010). Technology in Paralympic sport: performance enhancement or essential for performance?. *British journal of sports medicine*, 44(3), 215-220.
- Eigenschenk, B., Thomann, A., McClure, M., Davies, L., Gregory, M., Dettweiler, U., & Inglés, E. (2019). Benefits of outdoor sports for society. A systematic literature review and reflections on evidence. *International journal of environmental research and public health*, 16(6), 937.
- Labbé, D., Mahmood, A., Routhier, F., Prescott, M., Lacroix, É., Miller, W. C., & Mortenson, W. B. (2021). Using photovoice to increase social inclusion of people with disabilities: Reflections on the benefits and challenges. *Journal of Community Psychology*, 49(1), 44-57.
- Nykiforuk, C. I., & Vallianatos, H. (2018). Reflection/Commentary on a Past Article: "Photovoice as a Method for Revealing Community Perceptions of the Built and Social Environment" <http://journals.sagepub.com/doi/full/10.1177/1609406918788236>. *International Journal of Qualitative Methods*, 17(1), 1609406918788236.
- Saxena, S., Van Ommeren, M., Tang, K. C., & Armstrong, T. P. (2005). Mental health benefits of physical activity. *Journal of mental health*, 14(5), 445-451.
- van den Berg-Emons, R. J., Bussmann, J. B., & Stam, H. J. (2010). Accelerometry-based activity spectrum in persons with chronic physical conditions. *Archives of physical medicine and rehabilitation*, 91(12), 1856-1861.
- Wang, C., & Burris, M. A. (1997). Photovoice: Concept, methodology, and use for participatory needs assessment. *Health education & behavior*, 24(3), 369-387.
- World Health Organization, T. (2010). Global recommendations on physical activity for health. World Health Organization.
- World Health Organization. (2018) Assistive Technology. Key facts.

Lessons learned utilizing participatory research methodologies

A. Keene¹

¹Elizabeth City State University, USA

Introduction: Many disabled individuals report negative experiences with physical activity (PA) (Martin Ginis et al., 2021; Wilson et al., 2024) and physical education (PE) (Ball et al., 2022; Holland & Haegele, 2021). Participatory research may support disabled people to positively contribute to research (Fitzgerald et al., 2021) by involving them in program development decisions, thereby proactively addressing their needs to facilitate more meaningful experiences (Cook-Sather, 2002; Spencer-Cavaliere & Rintoul, 2012; Walseth et al., 2018).

Method: The first study, rooted in participatory action research (PAR), employed blind young adults as research partners to co-construct resources and recommendations for PE Teachers, aiming to enhance PE for current and future blind students (Vaughn & Jacquez, 2020). The second study will employ Community-Based Participatory Action Research (CBPAR) to design a community-based adapted PA program, that directly supports personal development, reflects individual experiences and preferences, and aims to meet the social, emotional, and physical activity needs of disabled members of the local community (Peers, 2018).

Results: The first study developed a website and collaborative worksheet to disseminate to PE teachers of blind students, in an attempt to improve PE experiences. Three themes were constructed that highlighted both the opinions and desires of the research partners throughout the project: Awareness, Accessibility, and Generalizability that Fosters Individuality. The second study is currently in progress and aims to be completed by May 2026; preliminary results will be prepared for discussion.

Conclusions: We must continue to challenge current practices and provide opportunities for disabled individuals to infiltrate and positively engage with research (Fitzgerald et al., 2021), ideally helping to mitigate prior research that has been poor and tokenistic (Smith et al., 2022). In alignment with suggestions from Fitzgerald et al. (2021), we encourage researchers to be transparent about their experiences with participatory research, ideally contributing to the conversation and approaching participatory research with greater scrutiny and awareness.

References:

- Ball, L., Lieberman, L., Haibach-Beach, P., Perreault, M., & Tirone, K. (2022). Bullying in physical education of children and youth with visual impairments: A systematic review. *British Journal of Visual Impairment*, 40(3), 513-529. <https://doi.org/10.1177/02646196211009927>
- Cook-Sather, A. (2002). Authorizing students' perspectives: Toward trust, dialogue, and change in education. *Educational Researcher*, 31(4), 3-14.
- Fitzgerald, H., Stride, A., & Enright, E. (2021). Messy methods: Making sense of participatory research with young people in PE and sport. *European Physical Education Review*, 27(3), 421-435. <https://doi.org/10.1177/1356336x20953462>
- Holland, K., & Haegele, J. A. (2021). Perspectives of students with disabilities toward physical education: A review update 2014–2019. *Kinesiology Review*, 10(1), 78-87.
- Martin Ginis, K. A., van der Ploeg, H. P., Foster, C., Lai, B., McBride, C. B., Ng, K., Pratt, M., Shirazipour, C. H., Smith, B., Vásquez, P. M., & Heath, G. W. (2021). Participation of people living with disabilities in physical activity: A global perspective. *The Lancet*, 398(10298), 443-455. [https://doi.org/10.1016/S0140-6736\(21\)01164-8](https://doi.org/10.1016/S0140-6736(21)01164-8)
- Peers, D. (2018). Engaging axiology: Enabling meaningful transdisciplinary collaboration in adapted physical activity. *Adapted Physical Activity Quarterly*, 35(3), 267-284. <https://doi.org/10.1123/apaq.2017-0095>
- Smith, B., Williams, O., & Bone, L. (2022). Co-production: A resource to guide co-producing research in the sport, exercise, and health sciences. *Qualitative Research in Sport, Exercise and Health*, 15(2), 159-187. <https://doi.org/10.1080/2159676x.2022.2052946>
- Spencer-Cavaliere, N., & Rintoul, M. A. (2012). Alienation in physical education from the perspectives of children. *Journal of Teaching in Physical Education*, 31(4), 344-361. <https://doi.org/10.1123/jtpe.31.4.344>
- Vaughn, L. M., & Jacquez, F. (2020). Participatory research methods – choice points in the research process. *Journal of Participatory Research Methods*, 1(1). <https://doi.org/10.35844/001c.13244>
- Walseth, K., Engebretsen, B., & Elvebakk, L. (2018). Meaningful experiences in PE for all students: An activist research approach. *Physical Education and Sport Pedagogy*, 23(3), 235-249. <https://doi.org/10.1080/17408989.2018.1429590>
- Wilson, A., Longo, V., Ma, J., & Bulut, S. (2024). Perceived barriers and facilitators to physical activity among individuals with disabilities: A qualitative study. *International Journal of Sport Studies for Health*, 7(3), 10-17. <https://doi.org/10.61838/kman.intjssh.7.3.2>

Participation in investigations of spatial accessibility of sports facilities

J. Wibowo¹, J. Haut², L. Müller³

¹Ruhr-Universität Bochum, Germany; ²Georg-August-Universität Göttingen, Germany; ³Goethe Universität Frankfurt, Germany

Introduction: Spatial accessibility is a central determinant of sports participation, particularly for people with disabilities (Wright et al., 2019). Empirical assessments of spatial accessibility still rely predominantly on technical standards and expert-driven evaluations. Recent work has highlighted that such approaches insufficiently reflect the lived experiences of different impairment groups and risk reproducing biases (Ming et al., 2021). Participatory approaches therefore hold significant promises for generating more valid and socially robust assessments of spatial accessibility in sports facilities.

Method: This paper draws on two participatory studies conducted in cooperation with the German National Paralympic Committee. The first study aimed to identify core criteria of spatial accessibility across different sports facilities as a basis for a nationwide information system. The second study focused on reconstructing subject perspectives from different user groups to develop impairment-specific profiles.

Results: Participatory approaches sharpened our understanding of spatial accessibility but also reveal clear limitations. Different document types reproduce a wheelchair bias, and co-researchers struggle to abstract from their own experiences for broader generalization (Wibowo et al., 2025). Local participation risks excluding non-participants, and access to diverse groups remains difficult. Individuals seldom represent whole impairment groups, and multimodal or interaction-dependent methods pose substantial analytical and practical challenges. Furthermore, the findings indicate that differing impairment groups stand in a partially competing relationship when it comes to improving spatial accessibility, highlighting how power relations shape which needs gain recognition and which remain overlooked in participatory and planning processes.

Conclusions: Future APA research should integrate experiential knowledge with technical standards and address the heterogeneity within impairment groups. Methods enabling meaningful participation - especially for people with cognitive or communicative impairments - must be advanced. Scalable participatory models for local planning are needed, alongside standards for underrepresented groups. Finally, longitudinal studies should examine how accessibility improvements influence sustained and equitable sport participation.

References:

- Ming, J., Heung, S., Azenkot, S., & Vashistha, A. (2021). Accept or address? Researchers' perspectives on response bias in accessibility research. In Proceedings of the 23rd International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '21) (S. 1–13). ACM. <https://doi.org/10.1145/3441852.3471216>
- Wibowo, J., Haut, J. & Müller, L. (2025). What Kind of Information About the Accessibility of Sports Facilities Is Useful? *Adapted physical activity quarterly: APAQ*, 1–23. <https://doi.org/10.1123/apaq.2024-0203>
- Wright, A., Roberts, R., Bowman, G. & Crettenden, A. (2019). Barriers and facilitators to physical activity participation for children with physical disability: comparing and contrasting the views of children, young people, and their clinicians. *Disability and rehabilitation*, 41 (13), 1499–1507. doi:10.1080/09638288.2018.1432702

Czech Paralympic development: Reflections, projects, and best practices

M. Kudláček¹, R. Suda², J. Hadrava³, Š. Cagaň⁴, J. Šindler⁵

¹Palacky University, Faculty of Physical Culture, Olomouc, Czech Republic; ²Czech Paralympic Committee; ³Czech Para Table Tennis; ⁴Czech Para Swimming; ⁵Czech Para Ice Hockey, Czech Republic

This moderated symposium presents the Czech Paralympic Committee's comprehensive approach to parasport development in the Czech Republic. The session offers a retrospective analysis of parasport evolution in the country, highlighting key milestones and transformative moments that have shaped the current landscape.

Participants will gain insights into ongoing national projects, including Czech Paralympic Committee strategy „There is only one sport“, Pararestart (a program supporting athletes returning to sport after injury or life changes) and Parahrátky (an initiative promoting parasport among children and youth). The symposium features three examples of good practice among Czech Paralympic Sports (Swimming, Table Tennis and Para Ice Hockey) showcasing diverse pathways to Paralympic sport and sharing practical examples of successful implementation strategies.

Through interactive discussion, attendees will explore evidence-based approaches to parasport development, scalable program models, and collaborative frameworks that can be adapted to various national contexts. The session emphasizes knowledge exchange between practitioners, researchers, and policymakers working to advance adapted physical activity and Paralympic sport.

Authors Index

- Akgül, 78
Akpınar, 141
Aksen, 18, 97, 125
Albanidou, 111
Altıparmak, 21
Alves, I. d. S., 107
Alves, M. L. T., 103, 107, 113
Andersson, 57
Ângelo, 102
Ansons, 49
Aquilina, 83
Araújo, 19
Arellano, 42, 112
Arnošt, 32
Arroyo-Rojas, 66, 157
Asonitou, 29
Ataíde, 95
Augustovičová, 119
Baca, 50, 51
Bahçekapılı, 78
Baker, 81
Baloun, 48
Barak, 36
Barcalová, 142
Barquero, 31, 96, 115, 145
Barral, 108
Barrett, 20
Bastilha, 26
Batista, 101
Beach, 25, 46, 97, 99, 100
Beck, 80
Bekada, 98
Beyazoğlu, 21
Billík, 119
Bittner, 22
Blommestein, 23
Bofill-Ródenas, 152
Boitel, 37
Borg Amaira, 83
Boylan, 24
Brian, 25, 99, 100
Bükers, 80
Bundová, 148
Cagaň, 166
Camargo, 116
Čambal, 119
Campos, 95, 101, 102
Cardoso, 26
Caron, 27
Carvalho, 103, 107
Castelo-Branco, 95
Castillo, 47
Castro-Sancho, 28, 153
Celebańska, 104
Čepička, 86
Chacon, 113
Charitou, 29
Charriere, 37
Chetty, 62
Childs, 99, 154
Chmelík, 143
Cho, 105
Climent-Oltra, 30, 153
Coates, 162
Columna, 31, 96, 109, 115, 145
Concepción, 31, 96
Cornejo, 47, 106
Corrêa, 103, 107
Cudré, 108
Cuebas, 31, 96, 115
Cuebas Garcia, 109
Daďová, 32, 52, 53, 110, 117, 120, 142
De Luna, 76
Dědičová, 86
Demetriou, 80
Denzler, 40
Descamps, 33
Dineen, 34
Dobrev, 151
Dokuztuğ Üçsular, 78
Dolívková, 110
Doulkeridou, 35, 111
Dunová, 119
Dunsky, 36
Duquet, 37, 38
Dygrýn, 143
Eghbalpour, 80
Einarsson, 39
El-Rajab, 80
Epiney, 40
Errekagorri, 47
Esteve-Ibáñez, 28, 153
Evaggelinou, 82
Fagher, 15
Farrugia, 41
Febles-Castro, 42, 112
Feldhaus, 80
Fernández-Vivó, 109
Ferreira, 43, 95, 102
Figueiredo, 113, 137
Fjellström, 57
Flygare Wallén, 56, 57
Fogão, 103
Galeja, 49
Galli, 37, 38
Geppert, 114, 163
Giese, 60, 156, 158, 160
Giustiniani, 37, 38
Göb, 44
Gomes, 19
Gómez-Barrios, 133
González, 71
Greve, 44
Gutiérrez, 18, 125
Hadrava, 166
Haegle, 45, 109, 128, 159
Haffen, 37, 38

- Hakkinen, 88
Hämälä, 65
Hany, 40
Hanzlíčková, 155
Harminc, 119
Haut, 165
Hazzan, 46
Healy, 34, 75
Henríquez, 47, 106
Hernández-Jaña, 106
Hettinga, 76
Höger, 160
Holland, 122
Hong, 126
Hořín, 84, 88
Hornová, 87
Hughes, 34
Ichihara, 45
Jaime-Concepción, 115, 145
Jeréz Cofre, 116
Ješina, 20, 48, 84, 119
Ježová, 117
Jiménez-Monteagudo, 28, 30, 121, 153
Jirchářová, 120
Jorgic, 77
Kalbarczyk, 136
Kalistová, 86
Kanchev, 93, 151
Kantor, 48
Kara, 21
Karinharju, 78
Karpavičiūtė, 131
Kavalířová, 86
Kavangh, 163
Kaya Aytutuldu, 78
Kearney, 34
Keene, 164
Keser, 78
Khudair, 76
Kim, H., 144
Kim, J., 105, 144
Kim, S., 126
Kirillov, 89
Kirk, 122
Kiuppis, 44
Klavina, 49, 76, 130, 139
Klenk, 40
Klugar, 48
Knappová, 86
Komosa, 136
Kons, 106
Korhelíková, 119
Kornfeind, 50, 51
Kosmol, 94
Kotlík, 110
Kotz, 52
Koželská, 118
Kraček, 119
Kreinbacher-Bekele, 73
Křivánková, 53
Ku, 31, 96, 115, 145
Kucharčuková, 88
Kudláček, 16, 48, 84, 119, 166
Kurt, 21
Kuusiluoma, 78
Lee, S-Y., 144
Lee, Y., 146
Leger, 108
Leung, 46
Li, 48
Lieberman, 25, 27, 46, 54, 92, 97, 99, 100, 136, 154
Lins, 103, 107
Liptáková, 142
Liu, 117
Lloyd, 55
López-Belmonte, 42, 112
Lund Ohlsson, 56, 57
Lywood, 55
Machado, 103
MacLachlan, 114, 163
Maher, 156, 157, 158
Mahrová, 68, 110, 120, 142
Majorová, 142
Málková, 86
Mamo, 128
Manova, 151
Marek, 58
Markov-Glazer, 79
Marszałek, 78
Martin, 12
Martínez Cormenzana, 121
Martín-Rodríguez, 153
Massart, 102
Mauny, 37
Mazurek, 86
McCauley Lambe, 24
McCreanor, 62
McKay, 122
McMullen, 54
Mediavilla-Saldaña, 133
Meier, 158, 160
Messiaen, 59
Meyer, 31, 60, 115
Miçooğulları, 141
Mihajlovic, 123
Mikeška, 155
Mohoridou, 35
Molik, 78
Morgulec-Adamowicz, 13, 94, 136
Mpalanou, 35
Müller, 165
Muñoz, 106
Muñoz-Hinrichsen, 61, 116
Murphy, 24
Murtagh, 34
Mutluay, 78
Nagel, 40
Naidoo, 62
Nalcı, 78
Naujoke, 129
Nemček, 63, 64, 89, 119, 124, 148
Neshev, 93, 151

Ness, 46
Ng, 65, 76, 130
Nováková, 142
Nowland, 45
Nowland-Christmas, 66
Nugent, 34
Ocete, 18, 125
Oddsson, 39
Odek, 141
Oh, 126
Oldörp, 67, 127
Ollila, 128
Orzel, 154
Osičková, 48
Oskarsson, 56
Ostaseviciene, 129, 130, 132
Özcan, 141
Ozols, 49
Padilla, 31, 96
Palečková, 140
Pardo Tamayo, 61
Pastor, 75
Pauliukonyte, 129
Pavlová, 52, 68, 110, 120
Peltonen, 138
Pennell, 25
Pérez-Tejero, 61, 70, 76, 133, 134
Perimal-Lewis, 48
Perreault, 92, 97
Petkutė, 131
Petter, 51
Pickett, 109
Pikkupeura-Riikilä, 65
Pittet, 27
Pohjavirta, 65
Pokvytytė, 78
Pourgholi, 77
Pozeriene, 130, 132
Prechtel, 73
Prieto, 66
Radtke, 69, 85
Ramirez-Forero, 66
Ramos, 30
Ramos-López, 153
Redondo, 76
Redondo-Fernández, 70, 133, 134
Reimers, 80
Reina, 47, 59, 71, 72, 74, 75, 106
Reklaitiene, 130, 131, 132, 135
Reponen, 20
Reuter, 73
Richil, 26
Rodrigues, 107
Roldán, 59, 71, 72, 74, 75
Romarate, 42, 112
Rosolek, 104, 136
Ruin, 77, 156, 159
Ruiz-Navarro, 42, 112
Saavedra, 39
Sadarangani, 106
Sakalidis, 76
Salar, 77
Saltan, 78
Samalot, 92
Sanchez, 81
Sánchez-Sanz, 153
Sandbichler, 160
Santos, 137
Sarmiento, 101
Schaefer, 31, 96
Schliermann, 79
Schoo, 123
Schott, 80
Seemüller, 80
Sharpe, 81, 162
Sherwin, 34
Siivonen, 138
Simpson, 22
Šindler, 166
Šípová, 86
Skiadopoulos, 82
Skordilis, 29, 35
Skucas, 78
Slottheden Olivemark, 141
Smith, 114, 163
Socias Marfan, 61
Stankov, 93, 151
Starková, 53
Staunton, 57
Stojanovic, 77
Strazdina, 49, 139
Strejcová, 86
Suda, 166
Süßenbach, 44
Švecová, 124
Svobodová, 48
Swarup, 31, 96, 115
Taliaferro, 100
Tarragó, 152
Tobias, 113, 137
Tomišková, 140, 141
Tonna Grima, 83
Valentukonyte, 132
Van Biesen, 75
Vanlandewijck, 17
Vařeková, 52, 110, 117, 118, 120, 142
Vengale, 129
Vernerová, 143
Vetter, 14
Vodáková, 84
Vogel, 69, 85
Vokurka, A., 86
Vokurka, S, 86
Vveinhardt, 135
Vyhlídal, 119
Waller, 39
Warner, 54
Wegrzyk, 108
Weiß, 160
Wibowo, 161, 165
Wickman, 56
Wilson, 45
Wittmannová, 48, 84, 87, 88

Wogulis, 22	Zacharová, 63, 64, 89,	Zheleva, 93, 151
Woo, 144	148	Zhu, 66
Yadav, 31, 96, 115, 145	Zaliene, 91, 149, 150	Zjawiony, 94, 136
Yamnia, 145	Zamberlin, 92	Zmeškal, 119
Yanci, 47	Zariopi, 29	Zwierzchowska, 104,
Yang, 146	Żebrowska, 104	136
Yi, 147	Zemguliene, 91	
Yoon, 144	Zenati, 98	



© 2026 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).