



A. PEDro's World-Wide Journal Club on training bicycle riding in ambulant children with cerebral palsy is now available

Welcome to the PEDro World-Wide Journal Club. The purpose of the PEDro World-Wide Journal Club is to encourage the global physiotherapy community to read trials, reviews and guidelines that have important implications for clinical practice. We hope that facilitating discussion of this research will help physiotherapists to implement the results into their clinical practice.

Journal clubs are a great way to translate research into practice. In March 2020 PEDro published a blog that outlined some key features of running a successful journal club. Since then, PEDro has run nine journal clubs which have been well received. The idea is for physiotherapists to use resources provided by PEDro as the basis for running a local journal club with their peers.

This PEDro World-Wide Journal Club is about training bicycle riding in ambulant children with cerebral palsy. We will be discussing the randomised controlled trial by [Toovey et al \(2022\)](#). We encourage physiotherapists with an interest in paediatrics and neurological physiotherapy to participate in a five-step process:

1. invite your colleagues to be involved
2. [read the article](#)
3. [watch \(or listen to\) the video](#) summarising the training bicycle riding in ambulant children with cerebral palsy trial
4. [watch \(or listen to\) the video](#) of the panel discussing the training bicycle riding in ambulant children with cerebral palsy trial

5. meet with your colleagues to have your own discussion about the training bicycle riding in ambulant children with cerebral palsy trial.

If you are interested in being involved, please visit the [PEDro web-site for more information](#).

B. #PEDroTacklesBarriers - Confidence Intervals

The '#PEDroTacklesBarriers to evidence-based physiotherapy' campaign will help you to tackle the four biggest barriers to evidence-based physiotherapy – lack of time, language, lack of access, and lack of statistical skills.

If you are new to the campaign, we suggest that you start at the beginning by looking at earlier posts on strategies to tackle the barriers of lack of time and language. These are available on the [campaign webpage](#), [blog](#), [Twitter \(@PEDro_database\)](#) or [Facebook \(@PhysiotherapyEvidenceDatabase.PEDro\)](#).

A lack of statistical skills is a common barrier to interpreting evidence and implementing evidence-based physiotherapy. Last month, the #PEDroTacklesBarriers campaign focused on understanding intention-to-treat analysis in trials. This month, we focus on the [importance of confidence intervals with three clinician-researchers](#).





Aidan Cashin

Exercise Physiologist and researcher, University of New South Wales, Australia

Area of practice: Comparative effectiveness of interventions for people with chronic pain



Kate Scrivener

Physiotherapist, educator and researcher, Macquarie University, Australia

Area of practice: Post-stroke physiotherapy intervention and research.



Mark Elkins

Scientific Editor of *Journal of Physiotherapy*

Area of practice: Physical and pharmacological therapies in respiratory disease and improving the understanding and application of published research by clinicians.

How precise is the reported effect of an intervention in a trial for my patient?

The point of studies that compare the effects of treatments is to give readers an idea about what would happen if a patient received one treatment versus another. The study does this by producing an 'effect estimate'. For continuous measures this is the between-group difference; the mean outcome score for the intervention group minus the mean outcome score for the control group. Note that we are not talking about p-values here, for a range of reasons p-values are not useful for informing treatment decisions.

It is important to recognise though that the effect in the study comes from a study sample. One implication of this is that the best the researchers can do is provide an *estimate* of the effect in the whole population. All estimates are imprecise, and it matters how imprecise they might be. The most important and useful tool researchers have to describe the precision of an effect estimate is the confidence interval.

Confidence intervals are often misinterpreted. They do not represent the range of effects that 95% of patients will experience, or the largest and smallest effects an individual

patient can expect.

The technical explanation of a confidence interval is quite complicated but there is a way to interpret them that is close enough for clinical purposes. The confidence interval is the range of values that the population effect most likely falls into. So, if a trial has a mean between-group difference of 2 points, with a confidence interval from 1 to 3, then the best estimate of the treatment effect is 2 points, but it could be anywhere from 1 point to 3 points.

For a clinician, the range of plausible effects (values within the confidence interval) can form part of the discussion with a patient about treatment options in coming to a shared decision.

#PEDroTacklesBarriers campaign

#PEDroTacklesBarriers to evidence-based physiotherapy has shared tips about tackling the barriers of Time, Language, Access and Statistics.

#PEDroTacklesBarriers to evidence-based physiotherapy campaign is available in 4 languages

- [Portuguese](#)
- [French](#)
- [Italian](#)
- [English](#)

Find out more: <https://pedro.org.au/english/learn/pedrotacklesbarriers/>

C. Thank you to the 2022 PEDro volunteers

PEDro received assistance from a large number of volunteers during 2022. These physiotherapists have donated time and skills to confirm that articles are eligible for indexing in PEDro, apply search codes, and rate trials indexed in PEDro using the PEDro scale.

PEDro extends a big vote of thanks to the following 2022 collaborators: Adrian Cush, Aishath Mahfooza, Alaa Noureldeen Kora, Alessandro Carlucci, Alessandro Pagano, Alessia Girolami, Alexandra Diggles, Alistair Gardner, Alla Melman, Amanda Lee, Anand Kumar, Andrea Gardoni, Angela Huang, Anne Jahn, Anne Moseley, Antonella Saponara, Athilas Braga, Ayyappan Jayavel, Benjamin Fun, Bernadette Petzel, Bernadine Teng, Brenda Lucciano, Brett Doring, Brice Pennicott, Carlos Sanchez Medina, Chen Qizhe, Christine Tadros, Ciara Harris, Clare Walsh, Claudia Sarno, Claudio Cordani, Connor Gleadhill, Daniel

Gurin, Daniele Conte, David Fernandez Hernando, David Liska, Dennis Boer, Diego Poddighe, Donato Fontanarosa, Elena Ierardi, Elif Kirdi, Elisa Ravizzotti, Emre Ilhan, Eurose Majadas, Fereshteh Pourakzemi, Frank Aerts, Gabriel Farhat, Gary Koh, Geraldine Wallbank, Gerardo Candoni, Gessica Tondini, Gul Oznur Karabicak, Gustavo Padovezi, Henriette Jahre, Henry Pak, Hironobu Uzawa, Hubert Makaruk, Hwee Kuan ong, Ilkim Karakaya, Irene Toh, Janio Luiz Correia Junior, Jean-Philippe Regnaud, Jeremy Hobbs, Jess Chan, Jiayen Wong, John Tan, Joris van der Steen, Joshua Zadro, Julia Chevan, Julia Scott, Juliana Wang, Julio Fernandes de Jesus, Junior Vitorino Fandim, Kamil Adamiec, Kathrin Fiedler, Keegan Bow, Kerry West, Kyle Hardie, Lana Erjavec, Laura Crowe-Owen, Laura Marcellis, Leonardo Piano, Letizia Micca, Li Khim Kwah, Llanos de la Iglesia Avila, Lorenzo Vannucci, Louise Lu, Luca Bertazzoni, Lucas Henrique Caetano Carmona dos Santos, Luiz Gomez, Maciej Plaszewski, Mahsa Seydi, Manuela Besomi, Marco Bisozzi, Marco Bravi, Maria Letizia Zuccotti, Maribeth Gelisanga, Matt Cranney, Matteo Gaucci, Matteo Locatelli, Megan Donovan, Megan Ho, Michelle Istria, Michelle Liu, Ming Yi Tay, Monica Castiglioni, Muhammad Norrisman Bin Mohamed Hassan, Mykola Romanyshyn, Nicolas Ferrara, Paoline Li, Pedro Andreo, Peter Geagea, Pirashikah Prahatheesan, Riccardo Guarise, Rik Dawson, Roberto Napoli, Robyn Porep, Rodrigo Cappato, Roger Andrey, Ruth Chua, Ryan Carroll, Sabrina Grappiolo, Sacha Bossina, Seow Yee Teo, Shaimaa Eldeeb, Shalin Patel, Shamala Thilarajah, Sigrid Ryeng Alnes, Siti Khalijah, So Nishimura, Sonam Jethwa, Stefan Liebsch, Stephen Chan, Syl Slatman, Sylvia Liew, Theresa Ford, Tory Toogood, Tracy Ong, Uwe Eggerickx, Valentin Valliant, Venisa Kwok, Viji Navamany, Vladyslav Talalaiev, Weronika Krzepkowska, Wint Shwe Sin, Xavier Lee, Yasmeen Binte Jalani, Yian Nee Chiew, Zoe Nicholas.

Read more:

- [Benefits of being a PEDro rater](#)
- [Raters share their thoughts on the benefits of volunteering with PEDro](#)

D. Support for PEDro comes from the Chartered Society of Physiotherapy and Polish Chamber of Physiotherapy

We thank [Chartered Society of Physiotherapy](#) and [Polish Chamber of Physiotherapy \(Krajowa Izba Fizjoterapeutów\)](#) who have just renewed their partnership with PEDro for another year.

E. PEDro launches satellites

Research into the effects of physiotherapy interventions continues to grow at an exponential rate. As a result, the work of maintaining the PEDro and DiTA databases has also increased. To address this, the PEDro partnership has expanded globally and now includes satellite centres that contribute to the development and operations of the PEDro and DiTA databases. This expansion is in addition to the network of volunteer PEDro raters.

The four satellite centres that are currently contributing to the maintenance of the PEDro and DiTA databases are PEDro Canada (Université de Sherbrooke), PEDro Norway, PEDro Brazil, PEDro Singapore.

PEDro Canada (Université de Sherbrooke)

Role: Continuous update (living systematic review) of the Diagnostic Test Accuracy database (DiTA), a database that indexes primary studies and systematic reviews of diagnostic test accuracy studies related to physiotherapy practice. We also plan to expand this review process to include prognostic studies and create a repertoire of clinically useful prognostic tools and/or models.

Key people:



Professor Yannick Tousignant-Laflamme

Université de Sherbrooke, Canada

Yannick is a professor at the School of Rehabilitation at Université de Sherbrooke. His research interests are pain management of musculoskeletal disorders and the personalization of rehabilitation services.



Assistant Professor Simon Décary

Université de Sherbrooke, Canada

Simon is an assistant professor at the School of Rehabilitation at Université de Sherbrooke. His research interests are musculoskeletal health, health services, person-centered approach and primary care.



Mr Christian Longtin

Université de Sherbrooke, Canada

Christian is a physical therapist and PhD candidate at the Université de Sherbrooke. His research interests are low back pain self-management and effectiveness of rehabilitation interventions.

PEDro Brazil

Role: Assisting with the production of the PEDro database including screening for articles meeting the PEDro criteria for indexing and rating trials.

Key people:



Professor Leonardo Oliveira Pena Costa

Universidade Cidade de São Paulo, Brazil

Leonardo is professor at the Masters and Doctoral Programs in Physical Therapy at Universidade Cidade de São Paulo. His research interests are the methodological features that influence research findings, systematic reviews and clinical trials.



Professor Luciola da Cunha Menezes Costa

Universidade Cidade de São Paulo, Brazil

Luciola is professor at the Masters and Doctoral Programs in Physical Therapy at Universidade Cidade de São Paulo. Her research interest is epidemiology of musculoskeletal conditions.



Dr Tiê Parma Yamato

Universidade Cidade de São Paulo, Brazil; The University of Sydney, Australia

Tiê is an assistant professor at the Masters and Doctoral Programs in Physical Therapy at Universidade Cidade de São Paulo and Research Fellow at The University of Sydney. Her research interests are epidemiology, implementation and measurement properties of research for the musculoskeletal pain area in children and adolescents.



Dr Bruno Tirotti Saragiotto

University of Technology Sydney, Australia

Bruno is a Senior Lecturer at the Discipline of Physiotherapy at University of Technology Sydney. His research interests are digital health implementation research, systematic review and clinical trials for musculoskeletal conditions.

PEDro Singapore

Role: To lead the training of PEDro raters in Singapore and facilitate the adoption of best available evidence in physiotherapy clinical practice.

Key people:



Associate Professor Kwah Li Khim

Singapore Institute of Technology; Singapore Physiotherapy Association, Singapore

Khim is the director of programmes at the Health and Social Sciences Cluster of Singapore Institute of Technology, and Honorary Secretary and Mentor to Education Committee at the Singapore Physiotherapy Association. Her research interests are stroke rehabilitation, evidence-based practice and implementation science.



Mr John Tan

Singapore General Hospital; Singapore Physiotherapy Association, Singapore

John is the Senior Principal Physiotherapist at Singapore General Hospital and the Chair of Education Committee at the Singapore Physiotherapy Association. His research interest is clinical outcomes for patients following knee arthroplasty.

PEDro Norway

More information to come

The PEDro Steering Committee is grateful for these satellite centres and all volunteers involved. We would like you to get to know them too. Over the coming months, we will introduce each of the satellites and the staff that work in them in more detail. We will let

you know a bit about each satellite key member's research interests, and the specific contribution they are making to PEDro or DiTA.

Perhaps you could contribute to an existing satellite centre or start a new satellite centre.

Contact: sph.pedro@sydney.edu.au or <https://pedro.org.au/english/about/contact-details/>

F. DiTA's most accessed articles in 2022

In 2022, the Diagnostic Test Accuracy database (DiTA) was searched over 23,000 times by users in 143 countries.

The most accessed articles by DiTA users were reviews even though DiTA contains more primary diagnostic test accuracy studies than reviews of such studies. This reinforces the preference of many physiotherapists for using synthesized forms of high-quality evidence to guide their practice.

The top 10 articles accessed in DiTA during 2022 were:

1. Sadiq et al. 'Hand on Hip' sign: a novel screening test and diagnostic tool in piriformis syndrome. *Journal of Orthopaedics, Trauma and Rehabilitation* 2020 Oct 7:Epub ahead of print. [Read more on DiTA.](#)
2. Hanchard et al. Physical tests for shoulder impingements and local lesions of bursa, tendon or labrum that may accompany impingement. *Cochrane Database of Systematic Reviews* 2013;Issue 4. [Read more on DiTA.](#)
3. Sokal et al. The diagnostic accuracy of clinical tests for anterior cruciate ligament tears are comparable but the Lachman Test has been previously overestimated: a systematic review and meta-analysis. *Knee Surgery, Sports Traumatology, Arthroscopy* 2022;30(10):3287-303. [Read more on DiTA.](#)
4. Gomes et al. Diagnostic accuracy of the Ottawa Ankle Rule to exclude fractures in acute ankle injuries in adults: a systematic review and meta-analysis. *BMC Musculoskeletal Disorders* 2022;23(885):Epub. [Read more on DiTA.](#)
5. van der Windt et al. Physical examination for lumbar radiculopathy due to disc herniation in patients with low-back pain. *Cochrane Database of Systematic Reviews* 2010;Issue 2. [Read more on DiTA.](#)
6. Kasitinon et al. Physical examination and patellofemoral pain syndrome: an updated review. *Current Reviews in Musculoskeletal Medicine* 2021;14(6):406-12. [Read more on DiTA.](#)
7. Wright et al. Diagnostic accuracy of patient history in the diagnosis of hip-related pain: a systematic review. *Archives of Physical Medicine and Rehabilitation* 2021;102(12):2454-63. [Read more on DiTA.](#)

8. Nunez de Arenas-Arroyo et al. Accuracy of the most common provocation tests for diagnosing carpal tunnel syndrome: a systematic review with meta-analysis. *The Journal of Orthopaedic and Sports Physical Therapy* 2022;52(8):522-31. [Read more on DiTA.](#)
 9. Reddy et al. Clinico-radiological correlation of shoulder pain. *European Journal of Molecular and Clinical Medicine* 2022;9(4):60-9. [Read more on DiTA.](#)
 10. Saueressig et al. Diagnostic accuracy of clusters of pain provocation tests for detecting sacroiliac joint pain: systematic review with meta-analysis. *The Journal of Orthopaedic and Sports Physical Therapy* 2021;51(9):422-31. [Read more on DiTA.](#)
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G. PEDro update (6 February 2023)

[PEDro](#) contains 57,600 records. In the 6 February 2023 update you will find:

- 43,946 reports of randomised controlled trials (42,980 of these trials have confirmed ratings of methodological quality using the PEDro scale)
- 12,975 reports of systematic reviews, and
- 739 reports of evidence-based clinical practice guidelines.

For latest guidelines, reviews and trials in physiotherapy visit [Evidence in your inbox](#).

H. DiTA update (6 February 2023)

[DiTA](#) contains 2,401 records. In the 6 February 2023 update you will find:

- 2,145 reports of primary studies, and
- 256 reports of systematic reviews.

For the latest primary studies and systematic reviews evaluating diagnostic tests in physiotherapy visit [Evidence in your inbox](#).

I. Infographic for systematic review found mobility strategies led to an increase in mobility in adults after surgery for hip fracture compared to usual care

Last month we summarised the [systematic review by Fairhall et al 2022](#). The review

concluded that interventions targeting mobility after hip fracture may cause clinically meaningful improvements in mobility in hospital and post-hospital settings, compared with conventional care. The certainty of evidence was rated as low for hospital settings and high for post-hospital settings.

Some findings are included in this infographic.

INTERVENTIONS FOR IMPROVING MOBILITY AFTER HIP FRACTURE SURGERY IN ADULTS

Fairhall NJ, Dyer SM, Mak JC, Diong J, Kwok WS, Sherrington C
Cochrane Database of Systematic Reviews, 2022, Issue 9. Art. No.: CD001704

WHAT DID THEY DO?

Study design: Systematic review of 40 randomised controlled trials.

Population: Adults following hip fracture surgery. Review included 4,059 participants, average age = 80 years, 80% female.

Intervention: Mobility strategies (eg, exercise or muscle stimulation).

Comparator: Usual care.

Outcome: Mobility.



FINDINGS

- Based on low-certainty evidence, mobility strategies may provide moderate increases in mobility (SMD 0.53, 95% CI 0.10 to 0.96) in hospital settings.
- Based on high-certainty evidence, mobility strategies may provide small increases in mobility (SMD 0.32, 95% CI 0.11 to 0.54) in post-hospital settings.

Note: All trials had unclear or high risk of bias for one or more domains.

Interventions targeting mobility after hip fracture may cause clinically meaningful improvements in mobility in hospital and post-hospital settings, compared with conventional care

Fairhall NJ, Dyer SM, Mak JC, Diong J, Kwok WS, Sherrington C. Interventions for improving mobility after hip fracture surgery in adults. *Cochrane Database Syst Rev.* 2022 Sep 7;9(9):CD001704.

[Read more on PEDro.](#)

J. Next PEDro and DiTA updates (March 2023)

The next [PEDro](#) and [DiTA](#) updates are on 6 March 2023.

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