

# 2021 Postgraduate Research Conference

*“Out of the Ivory tower -  
Broadening our perspectives to  
think about the big picture in research”*

# Contents

<b>Acknowledgements .....</b>	<b>3</b>
<b>Conference Venue .....</b>	<b>5</b>
<b>Conference program .....</b>	<b>6</b>
Keynote Speakers .....	10
Panel Member .....	12
<b>Abstracts .....</b>	<b>13</b>
<b>Stream: Musculoskeletal: Movement in health .....</b>	<b>13</b>
Karime Mescouto (PT 01).....	13
Rachel Worman (PT 02) .....	14
Yousef Alyousef (PT 03).....	15
Alana Dinsdale (PT 06).....	16
Terra Bredy (OT 02) .....	17
Germaine Sim (PT 07).....	18
Joshua Toloui-Wallace (PT 08) .....	19
Alana Dinsdale (PT 06).....	20
<b>Stream: Professional education.....</b>	<b>21</b>
Samantha Robertson (PT 11).....	21
Angela Wood (OT 01).....	22
Lena Babaeer (PH 03).....	23
Shaun Tan (HN 01).....	24
<b>Stream: Neurorehabilitation and ageing .....</b>	<b>25</b>
Amelia Tan (OT 03) .....	25
Bethany Best (SP 03) .....	26
Neelam Nayak (PT 10) .....	27
Sarah Davies (OT 06).....	28
Helen Wallace (SP 06) .....	29
Lucy Ribbe Kelso (HN 03) .....	30
Carolin Bontrup (PT 12).....	31
Katherine Goodchild (OT 04).....	32
Neve Cavanagh (HN 05) .....	33
<b>Stream: Communication .....</b>	<b>34</b>
Bridget Forrester (HN 04) .....	34
Lisa Anemaat (SP 05).....	35
Shahnawaz Ahmed (PH 01) .....	36
Claire Bennington (SP 04) .....	37
<b>Stream: Paediatrics: Healthy start to life .....</b>	<b>38</b>
Amelia Braithwaite (HN 02) .....	38
Jumanah Albabtain (AU 01) .....	39
Davina Lo (SP 02) .....	40
Aisling Ryan (PT 09).....	41
<b>Stream: Knowledge translations and impact .....</b>	<b>42</b>
Andrew Phan (HN 06).....	42
Erin Crofton (OT 05) .....	43
Miriam Dillon (PT 13) .....	44
Mehwish Nisar (PH 02).....	45
<b>Health and Rehabilitation clinics @UQ .....</b>	<b>46</b>
<b>Notes .....</b>	<b>47</b>

## Acknowledgements

### **The 2021 Postgraduate Research Conference Committee**

Sarah Davies (Chair)

Terra Brady (Co-chair)

Neelam Nayak

### **Volunteers on the day**

Felipe Retamal-Walter

Jumanah AlBabtain

Karime Mescouto

Mehwish Nisar

Sarah Swan

### **With special thanks to**

Professor Paul Hodges

Professor David Copeland

Ms Pascale Nijssen

Dr Chris Gibbons

Mr Matt Jewell

Dr Jenny Setchell

and the Postgraduate Research Committee

We would like to thank our sponsors



## Conference Venue

Building 11 A, Modwest Building, The University of Queensland, St Lucia, 4072



Link to the map: <https://link.mazemap.com/X0VLX8kt>

QR code for accessing map:



## Conference program

7.45	Registration	
8.30 -9.00	<b>Opening plenary (Room 121)</b>	
	Acknowledgement of Country Opening Ceremony (Professor Sandy Brauer)	
9.00-9.30	<u>Qualitative research and subjective experience for people with disabilities</u> Keynote speaker: Dr Merrill Turpin	
9.30-10.00	<u>Participatory and experience co-design</u> Keynote speaker: Professor Victoria Palmer	
10.00-10.30	<u>Knowledge translation and improving social outcomes</u> Keynote speaker: Dr Tamika Heiden	
10.30-11.00	Panel discussion with Dr Kathryn Mainstone	
11.00-11.05	UQ Student services	
11.05-11.20	Morning Tea	
	<b>Concurrent session 1</b>	
	<b>Movement in Health + Professional Education (Room 130)</b>	<b>Neurorehabilitation and Ageing +Communication (Room 121)</b>
11.20-11.32	Towards an ethical multiplicity in healthcare of people with back pain: beyond the biopsychosocial model <i>Karime Mescouto (PT 01)</i>	Exploring the cross-cultural clinical utility of a decision-making aid for upper limb neurorehabilitation <i>Amelia Tan (OT 03)</i>

11.32-11.44	What is the evidence for overactivity/increased tone in pelvic health conditions? A systematic review <i>Rachel Worman (PT 02)</i>	"I've missed my music": the usability of a purpose-built music listening application for daily music listening with people who have post-stroke aphasia living in the community. <i>Bethany Best (SP 03)</i>
11.44-11.56	Impact of an Electronic Medical Record (EMR) on interprofessional practice: a systematic review <i>Samantha Robertson (PT 11)</i>	Aphasia Centre Science: what makes an aphasia centre work? <i>Bridget Forrester (HN 04)</i>
11.56-12.08	Exploring the professional development needs of new graduate physiotherapists within Australian hospital settings <i>Shaun Tan (HN 01)</i>	Factors predicting walking and physical activity outcomes after stroke: A Systematic review <i>Neelam Nayak (PT 10)</i>
12.08-12.20	Is interprofessional identity the missing link in interprofessional collaborative practice? <i>Angela Wood (OT 01)</i>	Insights from goal setting and early implementation of Cognitive Orientation to daily Occupational Performance (CO-OP) for adults with Parkinson's disease. <i>Sarah Davies (OT 06)</i>
12.20-12.32	Physical activity, sedentary behavior and educational outcomes among Australian university students: Cross-sectional and longitudinal associations <i>Lena Babaeer (PH 03)</i>	Co-Design of aphasia services: Exploring the experiences and unmet needs of speech pathologists in Queensland <i>Lisa Anemaat (SP 05)</i>
11.32-12.44	The effect of lower limb osteoarthritis on work-related outcomes: a systematic review <i>Yousef Alyousef (PT 03)</i>	International Aphasia Awareness Agenda: Research Plan <i>Claire Bennington (SP 04)</i>
12.45-1.20	Lunch	
<b>Concurrent session 2</b>		
Movement in Health + Professional Education (cont.)		Neurorehabilitation and Ageing +Communication (cont.)

(Room 130)		(Room 121)
1.20-1.32	-	What is known about driving and aphasia following stroke? A scoping review <i>Helen Wallace (SP 06)</i>
1.32-1.44	“What if it doesn't unlock?”: a qualitative study into the lived experiences of adults with persistent intra-articular temporomandibular disorders <i>Alana Dinsdale (PT 06)</i>	The influence of communal spaces on patient activity in rehabilitation: A mixed methods study. <i>Lucy Ribbe Kelso (HN 03)</i>
1.44-1.56	Enhancing Occupational Performance in Adult Orthopedic Trauma Patients with Distal Radial Fracture <i>Terra Bredy (OT 02)</i>	Exploring the concept of work ability in older workers – a qualitative approach <i>Carolyn Bontrup (PT 12)</i>
1.56-2.08	Mobilizing orthoses in the management of post-traumatic elbow contractures: A survey of Australian hand therapy practice. <i>Germaine Sim (PT 07)</i>	Translating the evidence to improve occupational therapy assessment of functional cognition following traumatic brain injury in acute care. <i>Katherine Goodchild (OT 04)</i>
2.08-2.20	“Same but different”: Physiotherapists’, chiropractors’ and osteopaths’ experiences of working together <i>Joshua Toloui-Wallace (PT 08)</i>	Trends and determinants of organised sports participation in immigrant and Australian children <i>Shahnawaz Ahmed (PH 01)</i>
2.20-2.32	Management experiences, needs and preferences of adults with persistent intra-articular temporomandibular disorders <i>Alana Dinsdale (PT 06)</i>	Patient perspectives of the need for Allied Health services for Myasthenia Gravis <i>Neve Cavanagh (HN 05)</i>
<b>Concurrent session 3</b>		
Healthy start to life (Room 130)		Knowledge Translation (Room 121)



2.32-2.44	Motor planning, gross motor skills, balance, school readiness <i>Amelia Braithwaite (HN 02)</i>	An investigation of new-graduate physiotherapists' perceived readiness and experiences for working within acute hospital settings. <i>Andrew Phan (HN 06)</i>
2.44-2.56	Early intervention services for children with hearing loss in western and southern Asian developing countries: a scoping review <i>Jumanah Albabtain (AU 01)</i>	Sensory sensitivity in burn-injured patients: a cross-sectional study and secondary analysis <i>Erin Crofton (OT 05)</i>
1.56-3.08	Looking beyond impairments following stroke: A scoping review of impacts during adolescence <i>Davina Lo (SP 02)</i>	How Physiotherapists attend to the human aspects of care when working with people with low back pain: A Thematic Analysis <i>Miriam Dillon (PT 13)</i>
3.08-3.20	Goal setting practices in paediatric intervention: A systematic review Research team <i>Aisling Ryan (PT 09)</i>	Bullying experience among immigrant population of Australia: A mixed-method study <i>Mehwish Nisar (PH 02)</i>
3.20-3.40	Afternoon Tea	
	<b>Closing plenary (Room 121)</b>	
3.40-3.50	Prize distribution	
3.50-4.00	Closing ceremony (Professor Paul Hodges)	

## Keynote Speakers

---



### Dr Merill Turpin

Dr Turpin's research centres on the clinical/professional reasoning of occupational therapists across the spectrum of experience from new graduates to experts, as well as the subjective experiences of people with disabilities. She specialises in the use of qualitative research methods and uses a variety of qualitative research methods in her own research, as well as advising others on these research methods. Dr Turpin has written books and book chapters on occupational therapy models of practice, evidence-based practice, and clinical reasoning, as well as publications on various aspects of people's experience. Dr Turpin has been a teaching and research academic at The University of Queensland since 1992. The connection between theory and practice is central to her research and teaching. As occupational therapists attend to both thinking and experience, they need to use rigorous thinking and a deep understanding of human experience in their practice.

---

### Dr Tamika Heiden

Dr Tamika Heiden is the Principal of the Research Impact Academy. She has more than a decade of career experience as a researcher and research manager in the fields of health, sport and medical research that began with a sports science degree and a PhD in Biomechanics. She has a certification's in Knowledge Translation from the University of Toronto, and from the International School on Research Impact. Tamika is an honorary research fellow at the Murdoch Children's Research Institute in Victoria, an Adjunct Research Fellow at the University of Western Australia, sits on the scientific committee for the Medical Research Foundation at Royal Perth Hospital, and has a formal partnership with SickKids Hospital in Toronto.

Tamika's national and international work brings together researchers and research users to share, create and translate knowledge for the betterment



---

of society. She has worked with many government and non-government organisations to facilitate high-level overviews and strategic thinking, particularly relevant to the Australian research funding landscape where she gave evidence to the Senate Committee enquiry for the Medical Research Future Fund.

Tamika won the 2018 award for Excellence in Knowledge Translation from the SickKids Learning Institute in Toronto and the Award for Innovation from the Institute for Knowledge Mobilization. Tamika has shared her knowledge with a variety of audiences at conferences and symposiums, run workshops, been published in numerous professional and academic journals, and been involved in the development of Knowledge Translation strategies at the organisational and project levels.

---

### **Professor Victoria Palmer**



Victoria is a Professor of Primary Care Mental Health & Co-Design. She is the Director of the ALIVE National Centre for Mental Health Research Translation funded by the NHMRC for which she was lead CIA. Victoria is located in the Department of General Practice at The University of Melbourne. She completed her PhD in Applied Ethics in 2007 and worked in community development, domestic violence and disability support services prior to completion. Over her 13 year research active career she has completed some 30 research projects using qualitative research designs, visual methods and mixed method approaches. Victoria led the first trial of a mental health experience co-design quality improvement method in community mental health and she leads the only primary care randomised controlled trial to improve heart health with people who live with severe mental illness testing a coproduced intervention funded by NHMRC. She established the Co-Design Living Lab Program in 2017 to embed lived-experience informed approaches in end to end research design to translation. This has a member base of some 2000+ people who experience mental illness or care for someone living with mental illness.

---

## Panel Member

### Dr Kathryn Mainstone



Kathryn worked as a busy full-time medical practitioner for 32 years prior to having her stroke three years ago, working in Townsville, Cambridge, Southport, Brisbane, Toowoomba, Mt Morgan, Goondiwindi for 10 years as rural GP then 13 years at Market Street Medical Practice, an all-female practice in the Brisbane CBD. She won the English, French and Latin prizes for five years at Brisbane Girls Grammar School before studying Medicine at UQ. She spent two years of her childhood in Cambridge while her UQ physicist father was pursuing study leave there.

All that full-time work changed in an instant when she experienced a left thalamic infarct on the night of her youngest child's school formal, rendering her unable to work again and commencing her journey towards living a new life in the context of her disabilities, which include both aphasia and memory problems.

Being a GP, she knew of the existence of neuroplasticity so has spent all her waking moments trying to improve her speech and work out ways to stretch herself at every point. She was supported in all this by her 91 year old mother, her two sisters, her two daughters and a son and her good friends, most of whom who have known her since she was a young teenager. After five weeks as an inpatient at RBWH then BIRU at PAH, she spent six months doing twice weekly speech therapy then moved on to a private speech therapist, Deb Kolomeitz, who saw her weekly, fortnightly and now monthly. She continued on the committee of the Queensland Medical Women's Society and joined the committee of the Australian Federation of Medical Women, which made her feel "useful" without any risk of damaging patients. She received enormous amounts of literature to read and listened to Zoom meetings regularly. She was unable to listen to the radio early on but after listening to medical broadcasts daily for about a year, she can now listen to as much of the ABC as she desires. Reading books was an incredible challenge and would exhaust her. The exhaustion was taken as a good attribute as she knew that her brain was working hard so she continued on... She now needs only 7 ½ to 8 hours sleep each night instead of ten to eleven hours. Recently, she performed in the normal range on a memory exam which her OT administered - 80% compared with 40% on the same exam administered eighteen months before. She is now at the stage where she has been accepted into a Diploma of Arts at UQ, attempting only one subject. This is going to be enormously challenging but if she does not try to extend herself, she will stagnate and that is not where she wants to be...

## Abstracts

### Stream: Musculoskeletal: Movement in health

Karime Mescouto (PT 01)

#### **Towards an ethical multiplicity in healthcare of people with back pain: beyond the biopsychosocial model.**

**Authors:** Karime Mescouto, Olson R, Setchell J

#### **Background**

Low back pain (LBP) is a multidimensional condition argued to be best understood through a biopsychosocial model. However, this model fragments LBP to 'bio', 'psycho', and 'social' dimensions.

#### **Purpose**

To explore how LBP is enacted beyond biopsychosocial dimensions and propose how LBP multidimensionality may be 'done well'.

#### **Methods**

Using concepts of 'multiplicity' and 'nomadic ethics', we think differently about LBP. We conducted 93 ethnographic observations of clinical consultations and 20 dialogues with clinicians at two sites: a private physiotherapy clinic and a public multidisciplinary pain clinic. Researchers, clinicians, and people with lived experience of LBP provided input throughout.

#### **Results**

Our analysis suggests clinical practices enact LBP, not as a fixed, singular condition. This multiplicity goes beyond the traditional biopsychosocial model, with LBP enacted by diverse social and material practices: relationships, language, questionnaires, technology, and clinical spaces. To avoid a fragmented approach to this multiplicity, we used Braidotti's 'nomadic ethics' – emphasising relationality, situatedness and accountability – shedding light on how multiplicity may be 'done well'. In engaging with nomadic ethical multiplicity, clinics and clinical encounters move beyond 'sterile environments', to welcome different bodies, and reimagine professionals' 'scopes of practice' fostering more flexibility and creativity: the multiplicity of LBP.

#### **Conclusions**

In practice, LBP is more than a biopsychosocial condition. Using a 'nomadic ethical multiplicity' as a methodology for LBP research and practice allows a greater reimagination of clinical spaces, relationships, and practices.

Rachel Worman (PT 02)

## **What is the evidence for overactivity/increased tone in pelvic health conditions? A systematic review.**

**Authors:** Rachel Worman, Ryan Stafford, David Cowley, Caroline Baldini Prudencio, Paul Hodges

### **Background**

Tone of pelvic floor muscles (PFM) includes active (muscle activation) and passive (viscoelastic tissue properties) components and is argued to be greater than “normal” in some pelvic health conditions, particularly those involving pain.

### **Purpose**

This study aimed to systematically review the evidence for increased pelvic floor muscle tone in pelvic health conditions, with emphasis on the quality of the evidence, measures and outcomes.

### **Methods**

This was a systematic review with a narrative synthesis. Study quality was analysed using a modified Robins I tool and a scoring system that reflected whether the design was adequate to draw convincing conclusions.

### **Results**

The search identified 7,844 studies from which 154 were included. These studies reported 8 different methods. The most common condition was pelvic pain (n=91 papers). Most studies were cross-sectional (n=88 papers). Few studies included a healthy control group for comparison. Most studies used methods that have not been validated or had methodological issues that preclude interpretation. Of the 20 methods that provided convincing evidence, 14 demonstrated greater tone in pelvic health conditions (mostly pain), and 6 did not.

### **Conclusions**

The comprehensive review found evidence for increased pelvic floor muscle tone in pelvic health conditions, but the majority of studies use methods that preclude convincing interpretation. To advance evidence in this field for use in clinical practice, futures studies should include clearly defined control/comparison groups, use of validated outcome measures and careful application of methods.



Yousef Alyousef (PT 03)

## **The effect of lower limb osteoarthritis on work-related outcomes: a systematic review**

**Authors:** Yousef Alyousef, Venerina Johnston, Rebecca Mellor, Melanie Plinsinga, Michelle D Smith

### **Background**

Osteoarthritis (OA), particularly that of the lower limb, is a prevalent health condition affecting millions of people worldwide. Lower limb OA has a profound impact on an individual's life in several domains, including occupational activities.

### **Purpose**

To describe work-related outcomes (e.g. employment status, absenteeism, and productivity loss) in individuals with lower limb OA compared to controls.

### **Methods**

Five databases were systematically searched from inception until 16 September 2021 using strings of terms relating to osteoarthritis, the joints of the lower limb and work. Studies were eligible for inclusion if they were published in English and compared work-related outcomes between individuals with lower limb OA and healthy controls or the general population. Title/abstract and full-text screening, data extraction and quality assessment (using the Epidemiological Appraisal Instrument) were undertaken by two reviewers independently.

### **Results**

Six of the 26,586 studies identified in the search met the inclusion criteria. These studies reported the following work-related outcomes: employment status (n=5 studies), absenteeism from work (n=2 studies), presenteeism (reduced productivity while at work; n=1 study), and functional capacity at work (n=1 study). These data showed OA individuals were less frequently in paid employment, have greater absenteeism and presenteeism and poorer functional capacity than healthy controls.

### **Conclusion**

This systematic review suggests that OA individuals, specifically hip and knee OA, have poorer work-related outcomes than those without OA. Healthcare professionals and employers should work together to establish efficacious strategies to support workers with OA remain healthy in the workforce.

Alana Dinsdale (PT 06)

## **“What if it doesn't unlock?”: a qualitative study into the lived experiences of adults with persistent intra-articular temporomandibular disorders**

**Author:** Alana Dinsdale

### **Background**

Temporomandibular disorders (TMD) are associated with self-reported disability and psychosocial issues, although little is known about those who specifically experience intra-articular signs and symptoms such as clicking and locking. Understanding the lived experiences of individuals with persistent intra-articular TMD is an important first step to gaining insight into specific domains of self-reported disability associated with these conditions. This information can be helpful to improve clinical management of this subgroup.

### **Purpose**

To explore the lived experiences of adults with persistent intra-articular TMD, including its impact on activity, participation and psychological wellbeing, and the influence of contextual factors on disability.

### **Methods**

Qualitative study using semi-structured interviews. Data were analysed using thematic analysis. Participants were recruited via purposive sampling from private physiotherapy and dental practices, and the community.

### **Results**

Sixteen participants were interviewed. Four themes were generated: i) The challenge of living with intra-articular TMD, ii) Living with uncertainty, iii) Seeking control, and iv) Learning to live with it. Novel findings included the impact of persistent intra-articular TMD on dreams, work, intimacy and socialising; and the role of non-pain symptoms (e.g. locking) in disability.

### **Conclusions**

Persistent intra-articular TMD is associated with numerous activity limitations, participation restrictions and psychological issues. Disability is complex and multi-directional, and influenced by various contextual factors including individuals' thoughts, beliefs and support networks. These findings emphasise the need for biopsychosocial and person-centred care in clinical practice.



Terra Bredy (OT 02)

## **Enhancing Occupational Performance in Adult Orthopaedic Trauma Patients with Distal Radial Fracture.**

**Authors:** Terra Bredy

### **Abstract**

Distal radius fracture is a common injury that is treated by occupational and physiotherapists who specialise in hand and upper extremity rehabilitation. A biomechanical intervention approach is standard practice, and most patients are discharged within 12 weeks. However, a significant number of individuals report ongoing complications such as pain, oedema and joint stiffness that impedes their return to daily activities. In this study, we seek to better understand the many patient and environmental factors that influence the return to pre-injury activity and occupational performance. Further, our aim is to identify specific biases within the current hand therapy practice and to determine whether they can be modified to enhance occupational performance following distal radius fracture in the Australian population. Our preliminary data suggest that the majority of Australian hand therapists focus on a biomechanical treatment approach that includes range of motion, strengthening and oedema management. In contrast, the majority do not consider key patient factors such as culture, socioeconomic status and age when treating patients with distal radius fracture. Earlier studies have indicated that these factors may have an important role in return to occupational performance. It is proposed that an occupation-based approach that is structured to maximise patient participation, promote success through meaningful occupations, encourage function within their environment, should improve overall occupational performance following distal radius fracture.

Germaine Sim (PT 07)

## **Mobilizing orthoses in the management of post-traumatic elbow contractures: A survey of Australian hand therapy practice.**

**Authors:** Germaine Sim, Jennifer Fleming, Celeste Glasgow

### **Background**

Elbow stiffness and contractures often develop after trauma. There is a lack of evidence on mobilizing orthoses and the factors guiding orthotic prescription.

### **Purpose of study**

To investigate hand therapists' orthotic preferences for varying extension and flexion deficits, and describe the factors affecting orthotic choice for post-traumatic elbow contractures.

### **Study Design**

Mixed-methods survey.

### **Methods**

103 members responded to the electronic survey via the Australian Hand Therapy Association mailing list. Five post-surgical scenarios were used to gather information regarding orthotic preferences, reasons and orthotic protocol: (1) week 8 with 55 extension deficit; (2) week 12 with 30 extension deficit; (3) week 12 with 55 extension deficit; (4) week 8 with flexion limited to 100 ; (5) week 12 with limited flexion.

### **Results**

Most responders (89.9%) used mobilizing orthoses, predominantly for extension (88.5%). Orthotic preferences for scenarios 1 to 5 were (1) serial static (78.3%); (2) custom-made three-point static progressive (38.8%); (3) custom-made turnbuckle static progressive (33.8%); (4) "no orthosis" (27.9%); and (5) custom-made hinged (27.1%) and nonhinged (27.1%) dynamic. Choices were based on "effectiveness," "ease for patients to apply and wear," and "ease of fabrication/previous experience/comfortable with design." The recommended daily dosage for extension was 6 to 12 hour.

### **Discussion**

This is the first known study that reflects on the use of mobilizing orthoses in post-traumatic elbows in Australia.

### **Conclusions**

Mobilizing orthoses are used routinely for post-traumatic elbows in Australia. Extension deficits are managed with serial static and static progressive orthoses at weeks 8 and 12, respectively. Research is needed to assess whether orthotic intervention before 12 weeks is beneficial in reducing contractures.

Joshua Toloui-Wallace (PT 08)

## **“Same but different”: Physiotherapists’, chiropractors’ and osteopaths’ experiences of working together.**

**Authors:** Joshua Toloui-Wallace, Roma Forbes, Oliver Thomson, Jenny Setchell

### **Background**

In Australia, people with musculoskeletal conditions often seek treatment from chiropractors, osteopaths, and physiotherapists, sometimes simultaneously. Questions about professional identity, similarities and differences are often raised, yet little is known about how these professions collaborate or manage potential tension.

### **Purpose**

To investigate experiences of collaboration or tension between osteopaths, physiotherapists and chiropractors who work together in the same clinic and explore their attitudes towards each other.

### **Methods**

Utilising a qualitative design, we conducted semi-structured interviews with 13 physiotherapists, chiropractors and osteopaths who work in the same clinic with at least one clinician from these other professions. Interviews were analysed thematically.

### **Preliminary results**

Initial results indicate various types of collaboration. Participants discussed several collaborative practices between clinicians of the different professions and often characterised perceived differences between the professions as strengths. Although explicit descriptions of tensions between the practitioners in these clinics were rare, there were subtle indications of tensions or contest, and acknowledgement of tensions in the wider healthcare community. Our analysis identified several elements that appeared to create conditions to reduce/resist these tensions.

### **Preliminary conclusions**

Physiotherapists, chiropractors and osteopaths report largely positive experiences of collaborative clinical practice. Collaborative clinical environments may mitigate the culture of contest between the professions that is perceived to be prevalent in the wider healthcare community. Future research is planned to better understand the experiences, knowledge, and attitudes towards collaboration of these professions in other environments.

Alana Dinsdale (PT 06)

## **Management experiences, needs and preferences of adults with persistent intra-articular temporomandibular disorders**

**Author:** Alana Dinsdale

### **Background**

Little is known about the management experiences, needs and preferences of individuals seeking care for persistent intra-articular temporomandibular disorders (TMD). Investigating these experiences may improve understanding of the impact management has on individuals, and factors that shape these experiences. This information may advance current practice and guide future management of individuals with intra-articular TMD.

### **Purpose**

To investigate the management experiences, needs and preferences of individuals with persistent intra-articular TMD.

### **Methods**

A qualitative study was performed. Thirteen eligible participants (mean age 32.7 years, 12 female) were recruited via purposive sampling, and interviewed using a semi-structured framework. Data were analysed using a thematic analysis approach.

### **Results**

Four themes were established from interview data: i) Searching for help; ii) Wanting answers; iii) Trying to regain control; and iv) Meeting needs, preferences and expectations, and the implications on care. Numerous factors influenced the experiences of those seeking care, including the ability to navigate care and management expectations. Specific to intra-articular TMD, the absence of pain made seeking care harder, and often patients perceived neglect of mechanical symptoms by healthcare practitioners which negatively impacted care. Often, those wanting management expressed the need for answers and to regain control over their jaw symptoms.

### **Conclusions**

Strategies to improve healthcare navigation are needed for those wanting help for intra-articular TMD. Within management, a person-centred approach is encouraged. Practitioners should respect individuals' specific needs and preferences, and address underlying management expectations, to facilitate positive care experiences. Consideration of symptoms other than pain in intra-articular TMD populations is paramount.

## Stream: Professional education

Samantha Robertson (PT 11)

### **Impact of an Electronic Medical Record (EMR) on interprofessional practice: a systematic review.**

**Authors:** Samantha Robertson, Ingrid Rosbergen, Andrew Burton-Jones, Rohan Grimley, Sandy Brauer.

#### **Background**

As digital aspects of health care have increased, face to face communication amongst professions has decreased. The hospital electronic medical record (EMR) has the potential to improve interprofessional collaborative practice, however the opposite effect is also reported, with disconnected teams and 'information overload'.

#### **Purpose**

To systematically appraise the literature to determine the effect of an EMR on interprofessional practice in an inpatient hospital setting.

#### **Methods**

PubMed, Embase, CINAHL, Cochrane, Scopus, Web of Science and ACM Digital Library were searched to identify eligible studies including those in a hospital setting and intervention as the EMR or modification to the EMR (i.e., dashboard). Outcomes could be measured via teamwork, communication, coordination or staff perceptions of interprofessional practice. The review was registered with PROSPERO (CRD42021247103). The web-based software platform Covidence® was used for screening and data extraction. The Quality Assessment Tool for Studies with Diverse Designs (QATSDD) was used to assess risk of bias.

#### **Results**

Of 2880 publications, 17 met the inclusion criteria. They included 5 non-randomised pre-post studies and 12 observational studies. Most studies focused on communication and coordination, with few studies examining teamwork and interprofessional collaboration in relation to the EMR.

#### **Conclusions**

It is clear the EMR has changed the way clinicians work. There were mixed findings on the value of EMRs/EMR modifications for interprofessional practice and a lack of high quality evidence on this topic. Modifications to the EMR can have potential benefits to clinical practice including enhanced communication and coordination amongst team members, however, further research is required.

Angela Wood (OT 01)

## Is interprofessional identity the missing link in interprofessional collaborative practice?

**Authors:** Angela Wood, Anne Hill, Neil Cottrell, Jodie Copley

### Background

Contemporary healthcare requires various professionals to work collaboratively to provide optimal care for increasingly complex patients. The World Health Organisation (WHO) has recognised interprofessional collaborative practice (IPCP) as an important strategy to strengthen healthcare and optimise health outcomes, yet IP collaboration does not occur consistently in practice. This may be due to the influence of professional identity, as clinicians adopt the values, beliefs and behaviours of their profession, sometimes to the detriment of 'others'. Clinician identity in an IP context is less explored than the dominant professional identity, despite the call for IPCP.

### Purpose

To understand the nature of interprofessional identity in clinicians.

### Method

A scoping review was conducted following Arksey & O'Malley's (2005) framework to understand 'what is known about the nature of IP identity in clinicians?' From an initial 1746 papers, title, abstract, and then full text screening yielded 95 articles for data charting.

### Results

Most papers (66%) explored professional identity in an IP context. Of the four papers (4%) focussed on IP identity, three developed IP identity measures. Socialisation, context (e.g., setting), leadership and previous experiences emerged with potential to influence IP identity. Given identity impacts behaviour, IP identity conversations are imperative in developing IPCP.

### Conclusions

Further research is required to understand interprofessional identity, and its influence on IPCP. A qualitative study has commenced using interpretive phenomenological analysis (IPA) to understand the lived experience of key informants with a strong interprofessional identity, and meaning they attribute to 'being' interprofessional.

Lena Babaeer (PH 03)

## Physical activity, sedentary behavior and educational outcomes among Australian university students: Cross-sectional and longitudinal associations

**Authors:** Lena Babaeer, Stylianou, Michalis, Gomersall, Sjaan R.

### Background

This study aimed to examine cross-sectional and longitudinal associations between physical activity (PA), sedentary behavior (SB), and educational outcomes (EO) in first-year university students in Australia.

### Method

Participants (N = 80) engaged in three data collection points (semesters 1, 2, 3) that included self-reported and device-based PA and SB, and objective EO measures. Cross-sectional associations were examined using linear and binary logistic regressions, and longitudinal associations were examined using Generalized Estimating Equation.

### Result

Overall, results indicated some positive but weak cross-sectional associations between some device-based and self-reported measures of PA and EO outcomes when controlling for confounders. Self-reported SB was negatively associated with semester GPA at time point three after adjusting for confounders ( $\beta = -0.224$ , 95%CI:  $-0.446 - -0.001$ ,  $p < 0.05$ ). No other significant cross-sectional or longitudinal associations were identified.

### Conclusion

Our findings suggest that SB may be more important target health behavior than PA when aiming to influence EO, and that related interventions may be more appropriate in second rather than first year university students. Further research is needed to better understand this relationship that uses larger sample sizes, follows students beyond first year, and includes measures that distinguish between leisure and educational screen time.

Shaun Tan (HN 01)

## **Exploring the professional development needs of new graduate physiotherapists within Australian hospital settings: a qualitative study.**

**Authors:** Shaun Tan, Andrew Phan, Roma Forbes, Romany Martin, Allison Mandrusiak

### **Background**

The transition from student to independent clinician has been identified as overwhelming, leaving new graduates reportedly feeling anxious and stressed. Professional development plays a major role in facilitating the transition from student to clinician. However, the professional development needs of new graduates along with the factors which influence their decision-making remain relatively unknown.

### **Purpose**

The aim of this study was to explore the professional development needs of new graduate physiotherapists' working in hospital settings, and to explore their decision-making related to engagement in professional development.

### **Methods**

A qualitative interpretative phenomenological approach was used to investigate new graduate physiotherapist's experiences. Telephone interviews were conducted and subjected to thematic analysis.

### **Results**

Fourteen participants met the inclusion criteria, with a total of eleven females and three males. Five key were generated following analysis; 1) practical and clinical relevance, 2) influence of external supports, 3) translation to practice, 4) accessing professional development, and 5) professional development for the future.

### **Conclusion**

This study has highlighted the importance of understanding new graduate physiotherapists' decision-making and perceived needs surrounding professional development, in order to better facilitate the transition from student to clinician. Even though the hospital workplace provided sufficient resources for professional development, guidance from supervisors and colleagues was greatly valued by participants and facilitated a more effective transition into the workplace. Other challenges included financial assistance and appropriate time off, which have been consistent with previous literature. Recommendations are made for additional research to better understand other roles involved in the professional development process.



## Stream: Neurorehabilitation and ageing

Amelia Tan (OT 03)

### **Exploring the cross-cultural clinical utility of a decision-making aid for upper limb neurorehabilitation.**

**Authors:** Amelia Tan, Jodie Copley, Jennifer Fleming

#### **Background**

Clinical reasoning in upper limb (UL) neurorehabilitation is complex. The Hypertonicity Intervention Planning Model (HIPM) is a decision-making aid which guides therapists to individualise UL management. Research supports its conceptual meaningfulness, but evidence of clinical utility is required.

#### **Purpose**

To examine the HIPM's cross-cultural utility through gathering therapists' perceptions of its usefulness and challenges of applying it in clinical practice.

#### **Method**

Participants were 44 occupational therapists working in UL neurorehabilitation in Australia or Singapore who had received HIPM training. Using a modified nominal group technique, three group discussions were conducted. Qualitative data were analysed using interpretive description.

#### **Results**

Participants in both countries found the HIPM useful in guiding a systematic approach to clinical decision-making for assessment, goal-setting, and intervention. Its utility was influenced by: 1) systemic or organisational supports and barriers such as organisational readiness and openness to change, teamwork and inter-disciplinary collaboration, and availability of resources, time, and funding; 2) therapist factors such as confidence and skills to apply the HIPM, openness to changing practice, and exposure to suitable clients; and 3) client factors such as acceptance or compliance with HIPM interventions.

#### **Conclusion**

Organisational support is key to optimising clinical utility of the HIPM. Incorporating the HIPM into consistent processes for documentation and referrals may improve teamwork and inter-disciplinary collaboration, which facilitates use of the HIPM in practice. Supplementary resources, progressive tiers of training or different formats of the HIPM to suit therapist experience levels, and refresher training may improve therapists' skills and confidence, thereby enhancing utility.

Bethany Best (SP 03)

## **“I’ve missed my music”: the usability of a purpose built music listening application for daily music listening with people who have post-stroke aphasia living in the community**

**Author:** Bethany Best

### **Background**

Music technology is continuing to evolve and with it, the potential for application and use within a range of clinical populations such as post-stroke aphasia. Aphasia effects up to 38% of individual's post-stroke, impacting speech and language. Daily listening to vocal music has been shown to enhance language recovery related outcomes post-stroke. However, the specific use of music listening technology with people who have post-stroke aphasia, has not yet been explored.

### **Purpose**

This study seeks to understand the usability of a purpose built ‘aphasia friendly’ music listening application and its daily use within the post-stroke aphasia community.

### **Methods**

Using an iterative mixed method design, twenty adults with chronic post-stroke aphasia were recruited through local community aphasia networks. Participants listened to self-preferred music for two weeks using the purpose-built music listening application. Questionnaires and semi-structured interviews were completed to determine aphasia severity; prior technology use and confidence; music preferences and background; system usability and overall experience.

### **Results**

Nineteen participants completed the study. The mean usability rating of the music listening application was 75.3 out of 100 suggesting a high usability. Participants reported an overall satisfaction with the technology and provided valuable feedback for ongoing development.

### **Conclusions**

This research provides novel, preliminary insight into the usability of music listening technology in the care people with post-stroke aphasia. Whilst clear clinical implications and practice mechanisms for implementation are yet to be defined, this research highlights the role of daily music listening in chronic care.

Neelam Nayak (PT 10)

## **Factors predicting walking and physical activity outcomes after stroke: A Systematic review**

**Authors:** Neelam Nayak, Niru Mahendran, Suzanne Kuys, and Sandy Brauer

### **Background**

Physical activity is low after stroke and while walking is a common approach to increase activity, it is often impaired. Spontaneous and intervention- related recovery is maximal for 1-3 months after stroke as there is higher plasticity within this time window. This time window is vital to influence walking and physical activity after stroke. Understanding factors early after stroke associated with walking and physical activity outcomes would help designing an appropriate intervention.

### **Aims**

To identify factors early after stroke predict walking and physical activity outcomes in first 6 months after stroke.

### **Methods**

Search strategy was applied in five databases. Studies with adult stroke survivors and reporting on walking and/or physical activity outcomes, where the measure/s are recorded early after stroke and followed up six months, were included.

### **Results**

Eighteen studies were identified. Fourteen studies reported factors early after stroke predictive of walking outcomes: Leg muscle strength, cognition and self-efficacy were predictive of walking outcomes six months after stroke. Light intensity physical activity, balance and mobility were predictive of walking outcomes three months after stroke. Four studies reported factors predictive of physical activity outcomes and included pre-stroke physical activity and cognition, walking speed and endurance six months after stroke.

### **Conclusion**

This systematic review suggested a range of factors predictive of walking and physical activity outcomes. Most of the studies investigated physical capacity factors such as balance and mobility. Contribution of motivation and self-efficacy related factors to walking and physical activity outcomes appear to be less explored within the scientific literature.

## Sarah Davies (OT 06)

Insights from goal setting and early implementation of Cognitive Orientation to daily Occupational Performance (CO-OP) for adults with Parkinson's disease.

**Authors:** Sarah Davies, Hannah Gullo, Emmah Doig

### Background

People with Parkinson's disease (PD) experience cognitive dysfunction which limits their occupational performance. Establishing a clinically viable, effective, and evidence-based intervention to address cognitive dysfunction in people with PD has been identified as a research priority. This clinical trial will evaluate the efficacy of a CO-OP treatment approach for people with PD.

### Purpose

This will be the first study to evaluate the efficacy of CO-OP with people with PD. This research aims to improve quality of life, confidence and reduce the impact of cognitive decline on the lives of people with PD. This research will lead to new, evidence-based services for older people with PD, based on their preferences and priorities and wide dissemination of findings to clinicians will increase access to new treatment options.

### Method

A parallel-group assessor blinded randomized controlled trial (RCT) will investigate the effectiveness of the CO-OP treatment approach for adults with PD. The primary outcome of goal attainment is measured subjectively using self-rated performance and satisfaction scores on the Canadian Occupational Performance Measure (COPM), and objectively by blinded assessor rating of performance using the Goal Attainment Scale (GAS) and recorded performance from pre- and post – intervention.

### Discussion

This presentation shares insights from the goal setting process and details adaptations of the CO-OP protocol that have been required due to the nature of the goals of adults with PD.

Helen Wallace (SP 06)

## What is known about driving and aphasia following stroke? A scoping review

**Authors:** Helen Wallace, Gullo, H. L., Copland, D.A., & Wallace, S.J.

### Background

Little is known about whether or not aphasia impacts on driving performance and people with aphasia post-stroke have identified returning to driving as a top ten research priority.

### Purpose

This review aimed to explore what is known about driving and aphasia following stroke and specifically: (1) the impacts and perceived impacts of post-stroke aphasia on the driving task; (2) the impact of aphasia on the process of returning to drive and; (3) the lived experience of returning to driving or not for people with aphasia.

### Methods

Database and secondary search methods identified relevant literature and clinical guidelines. Following screening by title and abstract, two reviewers independently assessed full-texts against identified inclusion criteria. Data were extracted in relation to source details, characteristics and review objectives.

### Results

Forty-four sources and 17 clinical guidelines met inclusion criteria for this review. Six studies specifically investigated driving with aphasia, with the remaining sources contributing to the evidence base.

### Conclusions

The evidence-base regarding driving with aphasia is limited, inconsistent, and lacking in quality, methodological rigour and currency. We do not know if aphasia has an impact on driving performance. People with aphasia face unique barriers in returning to driving after stroke due to uncertainty about the role of language in driving; low levels of awareness and knowledge of aphasia and; linguistic and communication demands in the evaluation process. People with aphasia may be particularly impacted by driving cessation due to difficulty with accessing alternatives and support.

Lucy Ribbe Kelso (HN 03)

## **The influence of communal spaces on patient activity in rehabilitation: A mixed methods study**

**Authors:** Lucy Ribbe Kelso, Kellie Stockton, Niruthikha Mahendran, Sandra Brauer, Ingrid Rosbergen

### **Background**

High levels of activity in rehabilitation is an important predictor of functional outcomes. The hospital environment can influence patient activity during rehabilitation, however it is unclear how communal spaces contribute.

### **Purpose**

To compare patient activity during time spent in communal spaces with time spent alone in bedrooms, and to explore patient perspectives on communal spaces.

### **Methods**

A prospective study observed participants in a mixed inpatient rehabilitation unit for up to 3 days from 8am-5pm. Physical, social and cognitive activity levels in communal spaces were compared (using independent t-tests) with activity while alone in bedrooms. Three focus groups explored participants' perspectives on communal spaces for activity, rest and wellbeing using thematic content analysis conducted by three researchers.

### **Results**

Thirty-three participants (age  $71.6 \pm 13.0$ , 39% male) were observed and a subset ( $n=12$ ) (age  $67.3 \pm 16.9$ , 50% male) participated in focus groups. Participants showed increased physical (57.1%, SD32.7) and social (52.9%, SD26.5) activity in communal spaces compared to alone in their bedrooms (physical 34.5%, SD23.4,  $p=.003$  and social 8.8%, SD10.3,  $p<.001$ ). No difference in cognitive activity was found. Participants perceived that communal spaces positively influenced their mood and activity. Reduced independence was a barrier, while visitors, organised activities and an inviting design attracted people to communal areas.

### **Conclusion**

Communal spaces positively influenced patient activity and mood. Thus, use of these areas should be encouraged in rehabilitation environments to support recovery.

Carolyn Bontrup (PT 12)

## Exploring the concept of work ability in older workers – a qualitative approach

**Authors:** Carolyn Bontrup, Shaun O`Leary, Remko Soer, Kirsten Way, Venerina Johnston

### Introduction

The worldwide ageing population will inevitably raise the average age of the general workforce causing new and different challenges to older workers. To support older workers to preserve their ability to remain in the workforce, it will be necessary to identify potential barriers and enablers in order to design effective workplace interventions that aim to promote older workers' ability to work. Hence, this qualitative study aims to explore various factors that promote or hinder work ability among older workers.

### Methods

Fourteen purposively selected older individuals (>45 years) who were either working or recently exited the workplace were interviewed using semi-structured interview guides. Data were recorded using digital software (e.g. Zoom) and transcribed verbatim. Data analysis followed a thematic analysis approach.

### Results

Older workers in this study described various factors that have potential to either limit or support their current and future work ability. Among these barriers and facilitators identified, three themes emerged: Person-related factors (e.g. physical and mental health), workplace-related factors (e.g. flexible working arrangements) and societal factors (e.g. family-related commitments).

### Conclusion

Our findings suggest acknowledging the work ability concept as a multi-dimensional construct that needs to be considered when assessing and designing interventions to support sustained work ability in the ageing workforce.

Katherine Goodchild (OT 04)

## **Translating the evidence to improve occupational therapy assessment of functional cognition following traumatic brain injury in acute care.**

**Authors:** Katherine Goodchild, Jenny Fleming, Jodie Copley

### **Introduction**

It is recommended that occupational therapists use standardised assessments of occupational performance when assessing functional cognition in patients with traumatic brain injury (TBI). However, assessment can be difficult within constraints of the acute care setting. The aims of this project were to determine which performance-based assessments of cognition may be appropriate; examine what is used in practice and explore factors influencing decision-making of occupational therapists choosing a cognitive assessment.

### **Method**

A scoping review of the literature was completed to determine what tests are available for use. An online survey of 81 Australian occupational therapists with experience working in the area of TBI management was conducted. Individual interviews were completed with 15 occupational therapists to analyse the perceptions regarding choice of assessments and influences.

### **Results**

Twenty-five performance-based assessments were identified that may have applicability for acute care settings. Survey results showed the most common methods of assessment were non-standardised observation of functional tasks (94.7%), and carer-report / self-report of functioning (93%).

### **Conclusion**

While a scoping review showed a range of performance-based cognitive assessments are available to assess patients with TBI in acute care, therapists predominantly choose non-standardised observations and interviews. Australian occupational therapists working with patients with TBI are yet to consistently integrate standardised occupational performance-based assessments into practice. Implementation will include an education package to improve assessment practice.



Neve Cavanagh (HN 05)

## **Patient perspectives of the need for Allied Health services for Myasthenia Gravis**

**Author:** Neve Cavanagh

### **Abstract**

This study aimed to explore how people with myasthenia gravis experience impairments in vision, dizziness, hearing, and fatigue, and how these relate to balance confidence, community participation, and health-related quality of life. Additionally, this study investigated the utilisation and perception of the allied health role in managing these impairments in the Australian context. Visual and hearing impairments, along with fatigue, were found to be correlated with health-related quality of life and community participation to varying degrees, while visual impairment and dizziness were correlated with balance confidence. Perception and utilisation of allied health professionals was variable; common barriers to better utilisation included participant perception of clinicians having poor knowledge around myasthenia gravis, previous poor experiences with clinicians, uncertainty about the clinicians' role, and lack of awareness that symptoms were associated with myasthenia gravis. Further research exploring clinicians' knowledge of myasthenia gravis is recommended, along with education for people with the disease about symptoms associated and how to appropriately access care.

## Stream: Communication

Bridget Forrester (HN 04)

### Aphasia Centre Science: what makes an aphasia centre work?

**Author:** Bridget Forrester

#### Background

In a traditional medical model of care, people with aphasia are often discharged from services with chronic communication disability, pervasive challenges in participation and engagement and limited access to longer-term comprehensive supports. This has led to the emergence of alternative, value-based, social models of care, such as aphasia centres. However, further research is needed to explore program variables that contribute to positive outcomes and aphasia centre sustainability.

#### Aims

To describe the structure and operation of aphasia centres and explore expert opinion of the factors that contribute to an aphasia centre's effectiveness and sustainability.

#### Methods and procedures

This study involved two phases of data collection, contributing to a rich understanding of aphasia centres internationally. Participants completed a demographic survey which was quantitatively analysed, and subsequently, partook in an iterative, semi-structured email interview. Interview responses were analysed qualitatively using an inductive thematic analysis approach.

#### Outcomes and results

Centres varied in physical capacity, organisational structure, and infrastructure, however, emulated commonalities in the importance of client-driven services, passionate staff, consumer involvement, the value of group service offerings and the implications of fiscal means for outcomes and service sustainability. Aphasia centres integrate activity and participation aspects of life into service offerings through favouring salient and meaningful tasks. Cultural variations exist in program structuring and funding sources.

#### Conclusions

Aphasia centres are an innovative way to address community need of ongoing aphasia-specific rehabilitation. They encapsulate and focus on the holistic needs of people with chronic aphasia and often utilise a client-centred, immersive co-consumer approach to services. Keeping clients central to all centre operations is perceived as contributing to more effective and sustainable services.

Lisa Anemaat (SP 05)

## **Co-Design of aphasia services: Exploring the experiences and unmet needs of speech pathologists in Queensland.**

**Authors:** Lisa Anemaat, Victoria J Palmer, David Copland, Sarah J Wallace

### **Background/Purpose**

Exploring experiences of care is a key component to improving healthcare quality which may be associated with improved healthcare outcomes. Understanding the service experiences of people with aphasia is crucial if services are to provide care that is needed and in a way that improves experience. To date, the unmet needs of aphasia service providers and users have not been systematically explored.

### **Aim**

To explore positive and negative experiences of post-stroke aphasia care and identify priorities for service development from the perspective of Speech Pathologists.

### **Method**

A combination of 9 semi-structured interviews and 16 focus groups using the nominal group technique with 62 speech pathologists across 21 Queensland Health Hospital and Health Service sites spanning remote, regional and metropolitan Queensland. Qualitative thematic analysis of interview and focus group data.

### **Results**

Speech pathologists have shared 132 experiences of managing care, including their best and most challenging experiences, and have generated a total of 412 potential priorities for aphasia service development.

### **Conclusions/Discussion**

Speech pathologists have identified a broad range of priorities for aphasia service development. Data analysis will be completed, and full results of study presented.

Shahnawaz Ahmed (PH 01)

## **Trends and determinants of organised sports participation in immigrant and Australian children**

**Authors:** Shahnawaz Ahmed, Sjaan Gomersall, Asaduzzaman Khan

### **Background**

Organised sports participation in children has been studied widely in developed countries; however, there is a scarce of research in specific population groups such as immigrant children.

### **Purpose**

This study aimed to examine longitudinal trends and potential determinants of organised sports participation among children of immigrant parents from low-and-middle-income countries (LMIC), high-income countries (HIC), and Australian children.

### **Methods**

Data were from the birth-cohort of the Longitudinal Study of Australian Children aged 6-15 years: 2010-2018. Organised sports participation was measured using two items about regular participation in team and individual sports. Multilevel binominal logit modelling was used to assess the determinants of organised sports participation across the groups.

### **Results**

Both team sport and individual sport participation increased between 8 and 11 years and declined between 11 and 15 years across the groups. In team sports, LMIC and HIC children had lower odds (OR 0.57; 95% CI 0.52-0.64) and (OR 0.81; 95% CI 0.75-0.87) than Australian children, respectively. Immigrant children from LMIC had lower odds of team sports participation (OR 0.70; 95% CI 0.63-0.79) than HIC children. Female children, high screen time, high strengths and difficulties scores, number of siblings, seasons, and low socio-economic position are identified as determinants of organised sports across the groups.

### **Conclusions**

Immigrant children from LMIC and HIC are less engaged in individual and team sports compared to Australian children, and participation in team sports are less in LMIC than HIC children. Potential strategies to promote organised sports may include targeting culturally appropriate intervention for immigrant children with a special focus on LMIC children.

Claire Bennington (SP 04)

## International Aphasia Awareness Agenda: Research Plan

**Authors:** Claire Bennington, Dr. Sarah Wallace, Jytte Isaksen, Dr Ciara Shiggins and Dr Tanya Rose

### Background

Research has shown that aphasia awareness is low in multiple countries and has not improved significantly over the last 21-years, despite considerable efforts by consumer organisations and key-stakeholders to improve awareness. Simons-Mackie et al., (2020) identified possible reasons for the limited success of awareness campaigns, including: 1) not identifying a unified and compelling message, 2) targeting audiences already aware of aphasia, 3) not using theory and research from marketing, health promotion, and communication research, 4) not including people living with aphasia and health-care professionals in the design, and 5) not evidencing evaluation of the impact.

### Purpose

The overarching aim of this doctoral research is to identify key-stakeholder perspectives about, experience of, and priorities for raising awareness of aphasia to inform the co-design of a unified aphasia awareness campaign.

### Methods

This research program will include four major studies: 1) online surveys of international stakeholders (people with aphasia, family members, clinicians, and researchers) to gather their perspectives and experience of raising awareness of aphasia; 2) interviews with international aphasia consumer organisations about raising awareness of aphasia; 3) focus groups with key stakeholders using nominal group technique to reach consensus on priorities for a unified, global campaign, and 4) co-design of a persuasive aphasia awareness campaign.

### Results

This research will synthesise the opinions and experiences of international stakeholders in the co-design of a unified aphasia awareness campaign.

### Conclusions

The findings will address a research priority for people living with aphasia and increase awareness of a communication difficulty affecting millions of people globally.

## Stream: Paediatrics: Healthy start to life

Amelia Braithwaite (HN 02)

### **The relationship between motor planning and gross motor skills of children starting school.**

**Authors:** Ms Amelia Braithwaite, Associate Professor Leanne Johnston

#### **Background**

The Australian Curriculum stipulates fundamental movement skill requirements for all school aged children, but some school starters struggle significantly and this can impact learning. One hypothesis is that poor auditory and/or visual motor planning (MP) can lead to poor gross motor and balance performance. Early identification and intervention is optimal. However, MP expectations and the relationship with gross motor and balance skills is not well understood.

#### **Purpose**

The aim of this study was to determine the profile of Auditory-MP and Visual-MP and their relationship with gross motor and balance skills in Australian students starting school.

#### **Methods**

Participants were 64 children aged 4.5-6.0 years in their first year of mainstream school. Children completed assessments of Visual-MP and Auditory-MP (Cratty's tests), gross motor skills (Test of Gross Motor Development, version 2 (TGMD-2)) and balance (Bruininks Osteretsky Test, version 2 (BOT-2)).

#### **Results**

The median Total-MP Score was 6 of a possible 10 points. Median Visual-MP and Auditory-MP scores were both 3 of a possible 5 points. When compared to children with higher Auditory-MP scores (3-5 points), children with lower Auditory-MP scores (0-2 points) demonstrated lower gross motor ( $p=xxx$ ) and balance skills ( $p=xxx$ ). No relationship was found with Visual-MP.

#### **Conclusion**

These results support the hypothesis that poorer MP is associated with poorer gross motor and balance function in children starting school. This may have significant educational and functional implications for children in the classroom and during recreational activities and activities of daily living.

Jumanah Albabtain (AU 01)

## Early intervention services for children with hearing loss in Western and Southern Asian developing countries: a scoping review

**Authors:** Jumanah Albabtain, N. Scarinci, M. Nickbakht and R. Nund

### Abstract

Within developed countries, early intervention services for children with hearing loss are effective in providing early detection, fitting of hearing devices, and early communication intervention, leading to improved outcomes for children with hearing loss. Within Western and Southern Asian developing countries however, the development of early intervention programs is still emerging, with limited information reported in the literature on the nature and availability of these services. This study aimed to obtain a clear understanding of early intervention services for children with hearing loss in developing countries in Western and Southern Asia. A scoping review was conducted to understand the available early intervention services for children with hearing loss by mapping out the current literature and identifying current gaps in service delivery. Analysis of the literature showed that many developing countries have some available services, however they are only partially developed. Specifically, (1) newborn hearing screening programs are not available in all hospitals, (2) there are some centres providing amplification devices and cochlear implants, but are limited in number, and (3) difficulties in accessing therapy/intervention due to prolonged waiting times, geographical location, and financial barriers. The current scoping review found that whilst some early intervention services for children with hearing loss are available in developing countries, they are not yet developed to accommodate early detection and intervention for children with hearing loss.

Davina Lo (SP 02)

## **Looking beyond impairments following stroke: A scoping review of impacts during adolescence**

**Authors:** Davina Lo, Dr. Monique Waite, Dr. Tanya Rose

### **Background**

Research related to post-stroke impacts has predominantly focused on the adult population, with limited research on the developmental phase of adolescence. Furthermore, much of the research on paediatric stroke (stroke occurring 28 days to before 18 years of age) has concentrated on impairments of body structures and functions, rather than activity limitations, participation restrictions, and quality of life (QoL).

### **Purpose**

This scoping review aimed to identify the impacts of paediatric stroke on activity, participation, and/or QoL in adolescence.

### **Method**

Electronic databases Pubmed, CINAHL, PsycInfo, Embase, and Web of Science were searched. Peer reviewed articles published from database inception to July 2021, which reported impacts identified by adolescents or their family members/caregivers, were included. Studies not reporting impacts of paediatric stroke experienced during adolescence or original data were excluded. Inductive qualitative content analysis will be used to analyse the extracted data.

### **Results**

A total of 5470 articles have been identified through the database search, with full text screening to be completed. Data to be extracted will include the type and description of activity, participation, and/or QoL impacts, stroke information (e.g., type, age at stroke), the reporting participant (e.g., adolescent), measurement instruments used, and participant information.

### **Conclusions**

Currently little is known about how paediatric stroke impacts the activity, participation, and QoL of adolescents. Findings from this study may inform areas where adolescents can be better supported in stroke rehabilitation and identify priorities in stroke research specific to this developmental phase.



Aisling Ryan (PT 09)

## Goal setting practices in paediatric intervention: A systematic review

**Authors:** Aisling Ryan, Leanne Johnston, Tanya Rose, Laura Miller

### Background

Children with disability who experience restrictions to participation in everyday activities may be at-risk of economic disadvantage and poorer health outcomes. Best practice indicates that participation outcomes can be improved when interventions selected by health professionals are goal-directed. Despite established benefits of involving children in goal setting, there is no consensus regarding optimal methods.

### Purpose

To identify goal setting approaches or measures for children aged 0<18years with a disability or delay and examine their clinimetric properties and clinical utility.

### Methods

Six databases were searched (PubMed, EMBASE, CINAHL, Web of Science, Cochrane Reviews, PsycINFO) for papers including: (i) children aged 0<18 years with a disability or delay involved in paediatric rehabilitation, (ii) original data for a goal setting approach or or measure reported in sufficient detail for replication. Papers reporting on medical/surgical interventions were excluded. Secondary searches were performed for titles and authors of included goal setting approaches/measures. Data was extracted using PRISMA guidelines and the CanChild Outcome Measures Rating Form. The Consensus-based Standards for the Selection of Health Measurement Instruments (COSMIN) will be used to examine methodological quality and synthesise results.

### Results

Database searches yielded 9590 articles. Reported results will include characteristics of goal setting approaches (name, primary purpose, respondent, level of measurement), clinimetric properties (validity, reliability, responsiveness), and clinical utility (time, cost, training). Data will be finalised in November 2021.

### Conclusions

Findings will assist health professionals to select approaches and measures for effective goal setting with children with disabilities or delays involved in paediatric rehabilitation and their families.

## Stream: Knowledge translations and impact

Andrew Phan (HN 06)

### **An investigation of new-graduate physiotherapists' perceived readiness and experiences for working within acute hospital settings.**

**Authors:** Andrew Phan, Shaun Tan. Supervisors: Dr Roma Forbes, Dr Allison Mandrusiak, Ms Romany Martin.

#### **Background**

New-graduate physiotherapists experience a steep learning curve when transitioning from students to clinicians. The acute hospital setting is known to present unique challenges, secondary to its specific patient population and environment. Despite this, the preparedness of new-graduate physiotherapists for working within this setting remains unclear.

#### **Purpose**

The aim of this study was to investigate new-graduate physiotherapists' experiences and perceptions of their pre-professional preparation for working within acute hospital settings. Methods: A qualitative study using a general inductive approach was used. Semi-structured interviews of employed new-graduate physiotherapists working in acute hospital settings were undertaken (n = 14). Interview data were subsequently subject to thematic analysis.

#### **Results**

Four key themes were generated from the data: 1) multifactorial and high-pressure nature, 2) relationships with multiple stakeholders, 3) realising responsibility, and 4) constructing realistic experiences.

#### **Conclusion**

This study is the first to explore new-graduate physiotherapists' perceived readiness and experiences of working in an acute hospital setting specifically. The unique, acute environment presented many obstacles for new-graduates. This created additional challenges for new-graduates to address when transitioning from student to clinician. Pre-professional training was perceived to prepare them, however, some felt sheltered from challenging areas of practice as students. Recommendations are made for education providers to enhance pre-professional training through providing authentic experiences specific to the acute hospital setting.

Erin Crofton (OT 05)

## **Sensory sensitivity in burn-injured patients: a cross-sectional study and secondary analysis.**

**Authors:** Erin Crofton, Pamela Meredith, Paul Gray, & Jennifer Strong

### **Introduction**

Sensory changes resulting post burn-injury can significantly impact the individual. There has, however, been no consideration of the impact of individual trait-like sensory processing patterns on burn-related outcomes. Individual differences in sensory processing can result in variable tolerances to sensory input. Active avoidance of benign sensations is termed “sensory over-responsiveness”. The aim of this study is to investigate whether sensory over-responsive patterns of behaviour are associated with non-adherence to compression garment wear, and how these patterns in a burn sample compare to normative data.

### **Methods**

Patients (n=117) attending a quaternary adult burns clinic were assessed using three quantitative sensory tests and completed self-report measures of compression garment adherence and their sensory profile.

### **Results**

Patients who reported a lower pain threshold, lower threshold for light-touch, or higher acuity for two-point discrimination (i.e., more sensory sensitive) were less adherent with garment wear. Garment non-adherence was more likely for individuals who had higher than average sensory sensitive patterns of sensory processing, and lower thresholds for mechanical detection. To provide scale to these findings, a secondary analysis of the data revealed that burn-injured patients in this sample were more likely to exhibit sensory over-responsivity and to have lower detection thresholds for touch and pain compared to normative data.

### **Conclusion**

Following burns, patients were more likely to demonstrate sensory sensitivity compared to normative data. Consistent with evidence that sensitivity can result in active avoidance from sensory input, it was associated with compression garment non-adherence. These findings warrant consideration in terms of potential treatment strategies.

Miriam Dillon (PT 13)

## **How Physiotherapists attend to the human aspects of care when working with people with low back pain: A Thematic Analysis**

**Author:** Miriam Dillon

### **Purpose**

To critically investigate how physiotherapists attend to human (psychosocial, emotional, existential, and moral) aspects of care when working with people with low back pain (LBP).

### **Methods**

We conducted 49 observations of physiotherapy interactions between 42 consumers and 11 physiotherapists at a private physiotherapy clinic. These were discussed reflexively in 10 researcher-clinician meetings. We thematically co-analysed this data with researchers, people with LBP, and clinicians from the clinic. A critical framework was applied using the concept of conforming to, tinkering with or abandoning 'scripts' (scripts = typical ways of acting/thinking).

### **Results**

Analysis created three themes: emotions, time and biology. These themes suggest that when conforming to scripts, clinicians found it challenging to recognise or respond to emotions, that time pressure seemed to limit clinicians in addressing the human aspects of care, and that a biological focus often distracted from linking the whole person experience with LBP. In contrast, tinkering with or abandoning scripts allowed space to broaden the focus, providing opportunities for the human aspects of care to be attended to.

### **Conclusion**

Findings suggest biomedical dominance continues within physiotherapy, often at the expense of the human aspects of care. Yet, our results indicate that biomedical care.

Mehwish Nisar (PH 02)

## **Bullying experience among immigrant population of Australia: A mixed-method study**

**Authors:** Mehwish Nisar, Tracy L Kolbe-Alexander, Asaduzzaman Khan

### **Background**

Bullying is a pervasive problem faced by immigrants all around the world. The aim of this study was to explore perceptions and prevalence of bullying in Australian immigrants.

### **Methods**

Mixed-method exploratory research was employed. Five focus group discussions (FGDs) were conducted to explore South Asian immigrants living in Australia experiences of bullying and to inform an online survey. The online survey included the California Bullying Victimization Scale-Retrospective (CBVS-R) to measure prevalence, types and places of bullying victimization. FGDs data were thematically analysed, and survey data were analysed to identify factors associated with bullying.

### **Results**

The main contributing factors that participants reported during FGDs were ethnic attire (dressing), religion, accent, workplace achievement, skin colour and body shape. The analytical sample of the online survey consisted of 313 participants (44 % women, mean age  $41.0 \pm 10.3$  years). Approximately one in three participating immigrants experienced bullying, with no gender difference (32% in men, 31% in women). Men were mostly bullied (63%) in

their workplaces while women were generally bullied (56%) at bus/train stations. Country of birth, employment status, qualification, and English proficiency was associated with the bullying experience of immigrants ( $p < 0.005$ ).

### **Conclusions**

Bullying affects both men and women immigrants in different forms and settings. A large national assessment is required to evaluate the magnitude of the problem and its consequences on immigrants' health and wellbeing.

### **Keywords**

victimization, racism, migrants, South Asian, Australian immigrants.

## Health and Rehabilitation clinics @UQ

### Providing client-focused health services for UQ and the community

At the UQ Health and Rehabilitation Clinics we offer client-focused health services to the general public, from children through to seniors, including students and staff of UQ, as well as high quality learning opportunities for our students.

All UQ Health & Rehabilitation Clinics now available via telerehabilitation.

[Learn more about telerehabilitation](#)

At the UQ Health and Rehabilitation Clinics, the majority of our services are delivered by student clinicians. Our students are supervised by qualified staff at all times, ensuring that as our client, you receive the best possible assessment, care and treatment.

[Learn more about the Clinics](#)

[illegible]

[illegible]



[illegible]

## Contact details

### School of Health and Rehabilitation Sciences

T +61 7 3365 4506

E [enquiries@uq.edu.au](mailto:enquiries@uq.edu.au)

W [shrs.uq.edu.au](http://shrs.uq.edu.au)

CRICOS Provider Number 00025B