

**17th National Conference of
Emerging Researchers in Ageing**

**BRINGING RESEARCHERS
AND THE COMMUNITY TOGETHER**

19th November - 20th November, 2018 — Melbourne

Conference Program & Proceedings





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The Monash University Dementia, Ageing, and Neurodegeneration Research
Network

proudly welcomes you to the

17th National Conference of Emerging Researchers in Ageing
‘Bringing Researchers and the Community Together’

#ERA2018MONASH

19th November to 20th November, 2018



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Welcome from the ERA 2018 Convenor



I am delighted to welcome you to the 2018 Emerging Researchers in Ageing Conference at Monash University, Melbourne. I wish to acknowledge the people of the Kulin Nations, on whose land we are gathered today. I pay my respects to their Elders, past and present.

I am very excited about the theme of this year's conference, 'Bringing Researchers and the Community Together'. Too often, researchers do not get the opportunity to meet, engage and learn from members of the community who live with a particular illness, or their carers. This is particularly the case for researchers in the basic sciences. Engaging with community members living with an illness provides invaluable insight for the researcher, and can be used to shape interpretation of data, as well as guide research decisions to ensure that we maximise the benefit for people living with these illnesses. We will also explore how to deliver your research message to varied audiences, from discipline-specific peer-reviewed journals, to media platforms that reach the general community. On the other hand, we hope that our conference provides a beneficial forum for our community members to share with us the most important issues that impact your day-to-day life, and what you would like our research to focus on. I thank you for giving up your time to be with us at ERA 2018.

I thank the members of this year's Local Organising Committee, Ian, Yifat, Lucy, Xiaoping and Esa, for their hard work, and being always ready to pitch in! I thank the Monash University Dementia, Ageing, and Neurodegeneration Research Network, our generous sponsors who have supported the event, and our keynotes and workshop presenters for their enthusiasm this year. It has been a pleasure to work with you all.

Let's get conferencing!

Dr Sharna Jamadar

Welcome from the ERA National Convenor

It is with great pleasure that I welcome you to the 17th National Conference of Emerging Researchers in Ageing. As a targeted conference supporting research students and early career researchers, it is a unique opportunity to get feedback from others at a similar point in their research journeys.

I encourage all participants to take up the opportunity to network during the conference, as the connections you make in ERA could end up sustaining you throughout your career in research and possibly beyond.

I would like to thank Dr Sharna Jamadar and the team from the Monash University Dementia, Ageing and Neurodegeneration Network for their hard efforts in bringing this conference to fruition. I am particularly excited to see my own university host the ERA conference for the first time since 2009. I am also really pleased to have Professor Helen Bartlett (Vice-Chancellor & President, Federation University Australia) at the conference this year. Helen founded ERA 17 years ago and it will be great to welcome her back to the conference.

I would also like to thank all our conference sponsors, especially the ARC Centre of Excellence in Population Ageing Research (CEPAR) who are the primary sponsors of the ERA initiative, the Australian Government Department of Health and the Australian Association of Gerontology as our Gold and Silver sponsors respectively as well as the host of other great organisations which have supported the conference this year.

I look forward to meeting you all in Melbourne!

Matthew Carroll



Acknowledgements

We appreciate the generous support of the following sponsors for ERA 2018

Primary ERA Sponsor

ARC Centre for Excellence in Population Ageing Research



Gold Sponsor

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Session Sponsor

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Community Voices Workshop Sponsor

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The ERA 2018 Conference Organising Committee includes :

- | | |
|---------------------------------------------------|-------------------------------------------|
| * Chair: Sharna Jamadar, Monash University | * Xiaoping Lin, Monash University |
| * Esa Chen, Monash University | * Lucy Vivash, Monash University |
| * Yifat Glikmann-Johnston, Monash University | * Matthew Carroll, Monash University/ERA |
| * Ian Harding, Monash University | * Courtney Hempton, Monash University/ERA |

Message from our Sponsors - CEPAR



ARC CENTRE OF EXCELLENCE IN
POPULATION AGEING RESEARCH

CEPAR - the ARC Centre of Excellence in Population Ageing Research - is a unique collaboration bringing together academia, government, and industry to address one of the major challenges of the twenty first century.

Based at the University of New South Wales with nodes at the Australian National University, University of Sydney, University of Melbourne, and Curtin University, CEPAR produces world-class research, provides global solutions to the economic and social challenges of population ageing, and fosters a new generation of researchers with an appreciation of the multidisciplinary nature of population ageing.



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Message from our Sponsors - Fronditha Care and NARI



With a rich tradition of love and care, Fronditha Care is a not-for-profit charitable organisation that has been providing culturally appropriate residential and community aged care services for elders and their families in Australia since 1977. The organisation provides a wide range of community services and nursing home care to the elderly of the Greek community throughout Metropolitan Melbourne, and has branched out its residential care arm to the broader CALD community in regional NSW.

Our bounty of care ethos drives us to go beyond physical and health needs to embrace a culturally rich environment that inspires celebration, fosters belonging and enhances wellbeing. With exceptional residential facilities and community services, we provide choices and tailored care plans to empower elders to live the way they want, and enjoy what they love.

This year, our organisation launched the Anna Matthews OAM Scholarship. Our award can give up to \$20,000 per year for post-graduate research students conducting research that contributes to the wellbeing and care of ageing adults from a CALD background. Researchers in the field are encouraged to contact us for further information on 9552 4100 or at frondithacare.org.au/about-us/anna-matthews-scholarship-program/



The National Ageing Research Institute (NARI) has for the past four decades been bringing research to life to improve health outcomes and aged care practice as well as to guide policy to invest in solutions for positive ageing for Australia's older people.

Our vision is to improve the health and wellbeing of older people through research translation onto policy and practice.

We are a national leader in ageing research, producing work of international significance to apply to real lives which includes:

- falls and balance
- pain
- dementia
- physical activity
- healthy ageing
- mental health, and
- health systems evaluation.

If **you** are interested in learning more about our work or career opportunities within NARI, please contact us:

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E: info@nari.edu.au

W: <https://www.nari.net.au/about-us/careers>

Proudly sponsoring the Welcome Reception at the 2018 Emerging Researchers in Ageing conference

Message from our Sponsors - Bolton Clarke Research Institute and the NHMRC National Institute for Dementia Research



A personal message from Dr Judy Lowthian, Head of Research, Bolton Clarke Research Institute

We care about the research you are doing, because it matters.

Like you, many of us started building our careers presenting at ERA. Now we work at the Bolton Clarke Research Institute taking an evidence-based approach to help people live and age with dignity and independence. This includes using co-design and incorporating social care practices, putting the older person at the centre of care.

Bolton Clarke has 200 years of combined experience serving clients and residents as RDNS and RSL Care. We are one of Australia's most trusted not-for-profit providers of independent living and residential aged care.

We partner with leaders to conduct, publish and translate research into policies and practice to improve the wellbeing of our clients, residents and the wider community.

Congratulations on being an ERA delegate. We wish you success at this conference and beyond.

Judy

www.boltonclarke.com.au/research

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19

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on the impact of
dementia research*

13-14 JUNE 2019, HOBART TASMANIA

Join us to examine how best to maximise the impact and benefit of dementia research to the whole community - for people living with dementia, their families and carers, and those at risk of dementia - through accelerated research translation.

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Australian Government

NHMRC National Institute for Dementia Research

Keynote Speakers



Professor Susan Kurrle is a geriatrician practising at Hornsby Ku-ring-gai Hospital in northern Sydney and is the Curran Professor in Health Care of Older People in the Faculty of Medicine at The University of Sydney, where she leads the NHMRC Cognitive Decline Partnership Centre. Professor Kurrle's research focuses on aspects of dementia care.



Laureate Professor Rob Sanson-Fisher AO is Director of the Priority Research Centre for Health Behaviour at the University of Newcastle. His current research interests include exploring health care provider behaviour and adoption of best evidence practice, and the development, implementation and evaluation of interventions to improve health outcomes for vulnerable population groups.

Prizes

ERA Best Oral Presentation (\$250)

Presented by Dr Sharna Jamadar

Presenting an oral paper at a research conference requires the ability to present a complicated research program in a clear, visually appealing and engaging manner. The presenter considered by the judging panel to be the best oral presenter will be awarded a prize to the value of \$250, and a certificate.

ERA Best Poster (\$250)

Presented by Dr Sharna Jamadar

Successful poster presentations require great skill in displaying just the right amount of content in an eye-catching way in order to get the desired message across. The poster considered by the judging panel to be the best will be awarded a prize to the value of \$250, and a certificate.

ERA Best Full Paper (\$250)

Presented by Dr Sharna Jamadar

ERA prides itself on providing the opportunity to conference presenters to submit a full paper for peer review and have these papers included in the conference proceedings. The full paper considered by the judging panel to be the best will be awarded a prize to the value of \$250, and a certificate.

Best presentation by an AAG Student or Early Career Member (\$250)

Presented by Dr Matthew Carroll on behalf of the AAG Student and Early Career Group

The AAG is pleased to also sponsor the Best Presentation by an AAG Student or Early Career Member Prize. The recipient will be awarded a prize to the value of \$250, and a certificate.

Helen Bartlett Prize for Innovation in Ageing Research (\$250)

Presented by Professor Helen Bartlett, ERA Founder

The Helen Bartlett Prize for Innovation is awarded for the most original and creative research presented at the conference (oral presentation or poster). The prize recognises the outstanding contribution made by Professor Helen Bartlett, Vice-Chancellor, Federation University Australia, to the field of ageing research in Australia, particularly as the founder of the ERA initiative. A prize to the value of \$250, and a certificate, will be awarded to the winning student.

Hal Kendig CEPAR PhD Prize for best thesis in 2017

Presented by Professor Helen Bartlett, ERA Founder

The CEPAR PhD prize recognises the best PhD thesis completed by a PhD student associated with CEPAR. This year the prize has been awarded to Dr Mengyi Xu. The prize has been named in honour of the late Professor Hal Kendig, in recognition of his outstanding contribution to the field of ageing research in Australia and internationally.



Bursaries

One of the ways the ERA initiative provides support for the training of a new generation of emerging researchers is through the provision of travel bursaries to ERA 2018 participants. This year 8 bursaries, valued at \$150 (local) and \$350 (interstate), were offered to higher degree students to assist with the expenses of participating in the conference.

The 2018 Bursary Recipients are:

The University of Melbourne

Christa Dang

The University of Adelaide

Belinda Fuss

Curtin University

Jo-Aine Hang

University of Tasmania

Daniel Hoyle

University of South Australia

Georgina Kamm

Samantha Lai

Griffith University

Jenny Murfield

Monash University

Edwina Orchard

Conference Program

Monday 19th November 2018

8:30 – 9:00

Registration - H116 Exhibition space

9:00 – 10:15

Opening Plenary - H116 Exhibition space

Welcome

Dr Sharna Jamadar, ERA 2018 Chair

Monash Institute of Cognitive and Clinical Neurosciences, Monash University

Dr Matthew Carroll, ERA National Convenor

Monash University

Opening

Professor John McNeil AM

Head, School of Public Health and Preventive Medicine, Monash University

Keynote Address

Collaborations in care: consumer engagement from research question to implementation

Professor Susan Kurrle

Curran Professor in Health Care of Older People
Faculty of Medicine, The University of Sydney

10:15 – 10:45

Morning Tea and Poster Viewing - H1 Function Space

Conference Program

	Session A	Session B	Session C
10:45-12:00	Biomedical Aspects of Ageing H220 Tutorial Room Chair: Ian Harding <p>Processing of speech under adverse conditions in Huntington's disease Branislava Godic Monash University</p> <p>Does parenthood lead to life-long changes in the human brain? Edwina Orchard Monash University</p> <p>Applications of next generation sequencing in healthy ageing Moeen Riaz Monash University</p> <p>Deep brain stimulation and changes in personality and identity: A qualitative evaluation of clinician perspectives Cassandra Thomson Monash University</p> <p>Association between DNA methylation of the <i>KITLG</i> gene and cortisol levels under stress in older individuals Jo Wrigglesworth Monash University</p>	Social and Economic Participation H222 Tutorial Room Chair: Matthew Carroll <p>Social participation tools in community aged care: Initial findings from client and support staff focus groups Lindsey Brett Macquarie University</p> <p>A systematic review of the relationship between computer-mediated communication use and social connectedness among community dwelling older adults Belinda Fuss The University of Adelaide</p> <p>Development of the retirement confidence index Eraj Ghafouri Monash University</p> <p>Same as it ever was: Comparing young adults' age bias toward older workers from 1989 to 2015 Gretchen Petery Curtin University</p> <p>The impact of the MAXCOG cognitive rehabilitation intervention on people with MCI and dementia: Qualitative and quantitative outcomes Bridget Regan La Trobe University</p>	Measurement and methodology H125 Lecture Theatre Chair: Xiaoping Lin <p>The global prevalence and measurements of elder abuse in residential aged care settings: Systematic review Maria Agalotis University of New South Wales</p> <p>Long term care insurance incorporating systematic trends and uncertainty: Design and pricing for Australian market Héloïse Labit Hardy University of New South Wales</p> <p>Constructing occupation-specific life tables for China Han Li Macquarie University</p> <p>Practical strategies for recruiting older adults into qualitative studies Meg Polacsek Victoria University</p> <p>Bringing researchers and communities together to develop a pilot dementia registry in Victoria Elizabeth Pritchard Monash University</p>

Conference Program

	Session D	Session E	Session F
	Dementia and Chronic Diseases	Carers	Health Promotion
12:05-12.50	H220 Tutorial Room Chair: Yifat Glikmann-Johnston Exercise and dementia in residential care: Evidence and policy incoherence Lindsey Brett Macquarie University and the University of Wollongong The roles of the practice nurse in dementia care: A systematic review Caroline Gibson University of Newcastle Remodelling chronic disease management in general practice in the context of cognitive impairment Caroline Gibson University of Newcastle	H222 Tutorial Room Chair: Xiaoping Lin How dementia affects caregiver burden in Singapore Bridget Goh Monash University Life stories, death stories: RAC worker's relationship with death Liana Green University of Newcastle Dear carer, you're the voice, I'll try and understand it: An integrative review of self-compassion, health outcomes, and family carers of older adults Jenny Murfield Griffith University	H125 Lecture Theatre Chair: Ian Harding The effectiveness of a health literacy group education intervention delivered by videoconference to older people at home: The telehealth literacy project Annie Banbury Central Queensland University Evaluating prescribing exercises for older people using a personalised DVD – a pre-post study Jo-Aine Hang Curtin University Recharge your health – developing a community-based healthy ageing education program Elizabeth Low University of Canberra
12:50-1:45	Lunch and Poster Viewing - H1 Function Space		

Conference Program

	Session G	Session H	Session I
	Cognitive and Clinical Neurosciences	Consumer Perspectives	Service Design
1:45 – 3:00	H220 Tutorial Room Chair: Sharna Jamadar Examining resilience to cognitive decline and neurodegeneration due to age and beta-amyloid in superagers Christa Dang University of Melbourne Socio-cognitive and executive dysfunction in behavioural-variant frontotemporal dementia: Benefits of a stronger understanding for clinical and legal communities Andrew Dawson Monash University Understanding normal age effects on prospective memory Simon Haines Australian Catholic University Investigating the cognitive and psychosocial effects of auditory training and hearing aids in adults with hearing loss Joanna Nkyekyer Swinburne University of Technology Predicting longitudinal cognitive training responsiveness in community-dwelling older adults Anna Wolf University of Melbourne	H222 Tutorial Room Chair: Yifat Glikmann-Johnston Bridging the gap between the youngest and oldest members of community through the 'Forget Me Not' program Georgina Kamm & Samantha Lai University of South Australia "Someone really cares about me": Older person's experiences of a hospital admission risk program Annette Peart Monash University Help-seeking experiences of older adults with a diagnosis of moderate depression Meg Polacsek Victoria University What does successful ageing mean to older Australian military veterans? Loretta Watson University of Melbourne	H125 Lecture Theatre Chair: Lucy Vivash Experience of palliative care among Chinese residents in residential aged care: Findings from a literature review Xiaowei Geng Australian Catholic University Clinical impact of antipsychotic and benzodiazepine reduction within residential aged care facilities: Findings from a multicomponent sedative reduction program Daniel Hoyle University of Tasmania Developing an objective tool for evaluating frailty in older populations Hanife Mehmet Monash University Values in motion design: A care robot design methodology Adam Poulsen University of Adelaide A model of life environment disruption to account for premature morbidity and mortality associated with older people moving into long-term care Stephen Richards University of South Australia
	Parallel session sponsored by:		



3:00—3:30

Afternoon Tea and Poster Viewing - H1 Function Space

Conference Program

3:30-5:00

Closing Plenary - H116 Exhibition Space

Keynote Address

*Interactive Q+A address responding to questions from the audience
on all things ageing research*

Laureate Professor Rob Sanson-Fisher AO

Director, Priority Research Centre for Health Behaviour
University of Newcastle

Announcement of Prizes

ERA Best Oral Presentation

ERA Best Poster

ERA Best Full Paper

Best presentation by an AAG Student or Early Career Member –
sponsored by



Helen Bartlett Prize for Innovation in Ageing Research

Hal Kendig CEPAR PhD Prize for best thesis in 2017



Announcement of the ERA Travel Exchange Recipients and ERA 2019 Conference

Courtney Hempton

ERA National Administrator

Conference close

Conference Reception

H1 Function space

Sponsored by

5:00-7:00



Poster Sessions

Posters will be displayed throughout Monday 19th November. Delegates are encouraged to take time during tea and lunch breaks to view the posters and meet the authors.

No.	Title	Authors
1	Accuracy of automated amygdala MRI segmentation approaches in the image-HD cohort	Bonnie Alexander Monash University
2	“Bereavement without death”: Improving psychosocial support of spouses of people with dementia following placement into residential care: A qualitative study	Deborah Brooks Queensland University of Technology
3	Case study: A nurse practitioner's collaborative management of an atypical wound	Chloe Jansz La Trobe university
4	Central auditory processing in relapsing-remitting multiple sclerosis	Pippa Iva Monash University
5	Elder abuse: an exploration of the terminology of abuse among older Australian women from the Australian Longitudinal Study of Women’s Health (ALSWH)	Stephanie Lithgow University of Newcastle
6	Validation of a novel smartphone-based cognitive assessment tool designed for remote assessment of cognitive functioning in Huntington's disease	Brendan McLaren Monash University

Workshop Program—Tuesday 20 November

Tuesday 20 November 2018

9:00-12.00

Workshop 1

Community Voices

H116 Exhibition Space

Chair: Yifat Glikmann-Johnston

In this workshop, sponsored by the NHMRC National Institute for Dementia Research workshop, we will bring young researchers and members of the community together to discuss the issues that community members feel most impact their day-to-day lives, and the issues that they would like research to focus on.

Our panel will comprise clinicians and people living with Alzheimer's disease, Friedreich's ataxia, and Huntington's disease. Short presentations delivered by the clinicians and consumers will be followed by breakout sessions for small-group discussions with each of the community members.

Workshop 2

Scientific Communication

H220 Tutorial room

Chair: Lucy Vivash

This interactive workshop will present and discuss avenues of both traditional and non-traditional scientific communication. Topics will include important considerations when submitting academic manuscripts, avoiding predatory publishers, and translating your research to the public.

Our panel will include A/Prof Michael Farrell (Associate Editor, Human Brain Mapping); Sasha Petrova (Deputy Health and Medicine Editor, The Conversation); and representatives from the Monash University Libraries.

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12.00

Conclusion of Workshops

Conference Abstracts (in alphabetical order)

THE GLOBAL PREVALENCE AND MEASUREMENTS OF ELDER ABUSE IN RESIDENTIAL AGED CARE SETTINGS: SYSTEMATIC REVIEW

AGALOTIS Maria¹, MORRIS Tracey¹, KATZ Ilana¹

¹University of New South Wales (UNSW)

Background Elder abuse within a residential care facility can be difficult to detect with many incidences unreported due to the vulnerable phenomenology. The elder being dependent on the carer staff, while the carer staff being the abuser to the elder. Currently there are numerous instruments that measure abuse and may vary in terms of level of frequency and what constitutes abusive care. **Objective** The purpose of this task were twofold, 1) to perform a literature review of studies measuring the prevalence of elder abuse or neglect, using objective measures and 2) identify current global practices in managing elder abuse in residential aged care settings. **Methods** We performed a systematic review on the global prevalence of elder abuse from staff to resident within residential care settings. Multiple electronic databases were searched for English published literature from 2005 to March 2018, supplemented by a search of the references of all relevant articles. **Results** From the nine hundred and twenty-one articles identified, sixteen studies examined staff-to-resident abuse in residential care settings. Of the sixteen studies, six reported 12-month prevalence of elder 'abuse' or 'maltreatment' from carer staff-to-resident, as committed or observed and reported by a relative, friend, resident, carer staff or the general community. 'Observed' abuse reported by carer staff or administrators over the last 12 months ranged from 54% - 65%, however observed abuse by residents was reported lower, ranging from 5% - 31%. **Conclusion** Performing a systematic review of the literature examining current global practices in managing elder abuse will assist in recognising the need to developing more rigorous standardised measurement tools. In turn this will assist in identifying risk factors to improve elderly care service delivery, especially among the vulnerable in residential long-term aged care settings.

ACCURACY OF AUTOMATED AMYGDALA MRI SEGMENTATION APPROACHES IN THE IMAGE-HD COHORT

ALEXANDER Bonnie^{1,2}, GEORGIOU-KARISTIANIS Nellie¹, BEARE Richard^{1,3}, AHVENINEN Lotta M. ¹, STOUT Julie C.¹, GLIKMANN-JOHNSTON Yifat¹

¹ Monash Institute of Cognitive and Clinical Neurosciences, School of Psychological Sciences, Monash University, Melbourne, Australia

² Murdoch Children's Research Institute, Melbourne, Australia

³ Department of Medicine, Monash University, Melbourne, Australia

Background Huntington's Disease (HD) is a progressive neurodegenerative disorder. Impaired emotional recognition is seen in HD, a function ascribed in part to the amygdala. Previous work from our group in HD manually segmented amgdalae, finding smaller volumes associated with poorer motor and cognitive function. Although manual segmentation is the gold standard in terms of accuracy, it is time consuming, therefore automated segmentation may be preferable. The accuracy of automated methods has not been determined for the amygdala in HD. **Aims** We aimed to determine which of three automated approaches would most accurately segment amygdalae in HD: FreeSurfer, FIRST, and ANTS registration with FIRST segmentation. **Methods** T1-weighted images for the 106 IMAGE-HD participants (23-72 years of age; 59 female; 35 presymptomatic HD ['preHD'], 36 symptomatic HD ['symHD'], and 35 controls) were utilized, and input into the default pipelines of FreeSurfer and FIRST. For the third approach, images were bias corrected, nonlinearly registered to an MNI template using ANTS, then segmented using FIRST. **Results** Manual segmentation showed the greatest sensitivity, with all groups differing significantly from each other. Amygdala volume was smallest for symHD, then preHD, then controls. No automated approach revealed amygdala volume differences between preHD and symHD groups. Differences between symHD and controls were detected with ANTS/FIRST. PreHD and symHD differed from controls with FreeSurfer. FreeSurfer introduced a hemispheric bias not evident with manual segmentation, producing larger right amygdalae. In terms of anatomical accuracy, overlap (Dice) scores between manual segmentations and each automated approach were highest for FIRST (.65), then ANTS/FIRST (.64), then FreeSurfer (.61). **Conclusions** Manual segmentation was more sensitive to group differences in amygdala volume than automated approaches tested, being the only method to detect differences between preHD and symHD groups. If automated methods are used, FreeSurfer may effectively distinguish between controls and both preHD and symHD groups

THE EFFECTIVENESS OF A HEALTH LITERACY GROUP EDUCATION INTERVENTION DELIVERED BY VIDEOCONFERENCE TO OLDER PEOPLE AT HOME: THE TELEHEALTH LITERACY PROJECT

BANBURY Annie¹, NANCARROW Susan², DART Jared³, GRAY Len⁴, PARKINSON Lynne¹

¹ Centre for Regional Advancement of Learning, Equity, Access and Participation, Central Queensland University, Rockhampton, Queensland, Australia

² School of Health and Human Sciences, Southern Cross University, Lismore, New South Wales, Australia

³ Faculty of Health Sciences and Medicine, Bond University, Gold Coast, Queensland, Australia

children care and support to older people. These increase the need for state intervention in ensuring the health, material and emotional needs of older people and their carers (adult children) as the number of older people increases in Ghana.

FAMILY CAREGIVERS' BURDEN IN PROVIDING CARE TO THE HOSPITALISED ELDERLY: FINDINGS FROM HOSPITALS IN KOLKATA, INDIA

BHATTACHARYYA Tulika¹, CHATTERJEE CHOPRA Suhita¹

¹Indian Institute of Technology Kharagpur

Family Caregivers play a vital role in providing physical and emotional care to the aged. Providing care to the ageing family member can be challenging. The care giver may be required to adopt a range of roles which can result in carers being overwhelmed. Furthermore, the personal priorities of the carer might have to be rearranged in order to accommodate caregiving. They frequently face substantial physical, psycho-socio-economic challenges. The study -- conducted on Family Caregivers of the hospitalised elderly -- explores caregiver's burden using Zarit Burden Scale. The data has been collected from randomly selected Multispecialty Public and Private Hospitals in Kolkata (India), after obtaining ethical clearance from the Institutional Review Board of both the Hospitals. The predictors of burden were also assessed using interview schedules. Among fifty-seven caregivers who participated in the study, caregiver's burden was identified among thirty respondents -- with twenty-six having mild to moderate burden and four having moderate to severe burden. Majority of the caregivers' were found to be female, reflecting the gendered nature of caregiving. Family caregivers spent more than six hours per day on caregiving, which severely disturbed their work-life -- including loss of job. The study revealed that the caregivers' marital status, family structure, academic qualification, occupation and time spent on caregiving are related to Family caregivers' burden. The burden of care giving was accentuated by poor access to information, counseling and supportive services. The paper concludes by indicating the need for greater state interventions for family caregivers.

EXERCISE AND DEMENTIA IN RESIDENTIAL CARE: EVIDENCE AND POLICY INCOHERENCE

BRETT Lindsey^{1,2}, TRAYNOR Victoria², STAPLEY Paul², MEEDYA Shahla²

¹Macquarie University

²University of Wollongong

Strong evidence supports the multiple benefits of exercise for older adults. However, many older adults have health issues that impact on their ability to exercise, for example, those living with dementia in residential aged care facilities (RACFs). In recent years there has been an increasing focus on the use of physiotherapy and exercise in dementia care; slowing progression of symptoms and promoting the health and well-being of older adults living with dementia. Despite this, RACFs in Australia, and worldwide, do not commonly implement this evidence, and older adults living with dementia are missing out on the benefits of exercise.

We explored this issue by reviewing current evidence that supports exercise for older adults living with dementia in RACFs, alongside policies, such as the Accreditation Standards and Aged Care Funding Instrument (ACFI), to identify limits imposed on how physiotherapists can practice in RACFs. There is evidence and policies in Australia to support a re-enablement approach in RACFs, but the ACFI hinders the implementation of this approach by allocating funding based on assessing the dependency of older adults. RACFs would benefit from implementing evidence-based interventions which promote re-enablement for older adults living with dementia. To help achieve this, ACFI could be redesigned to encourage the implementation of interventions that are feasible and promote re-enablement for older adults living with dementia in RACFs, such as exercise interventions utilised in current research.

SOCIAL PARTICIPATION TOOLS IN COMMUNITY AGED CARE: INITIAL FINDINGS FROM CLIENT AND SUPPORT STAFF FOCUS GROUPS

BRETT Lindsey¹, GEORGIU Andrew¹, JORGENSEN, Mikaela¹, SIETTE Joyce¹, WESTBROOK Johanna¹

¹ Macquarie University

Background: The Australian Community Participation Questionnaire (ACPQ) and the ICEpop CAPability measure for Older people (ICECAP-O) can be utilised to quantify social participation and quality of life (QoL) for older adults. However, few studies have evaluated acceptability of these tools in community aged care from client and support staff perspectives. Objective: To report client and support staff perspectives of the ACPQ and the ICECAP-O as tools to measure and facilitate discussions about social participation and QoL in community aged care. Method: Focus groups were conducted over 14 weeks with community aged care clients (n=26) and support staff (n=6) that completed the ACPQ and ICECAP-O as part of routine needs assessments. Questions focused on the acceptability of the tools, and if the tools helped to facilitate discussions about social participation. Thematic analysis of all transcripts was completed by two members of the research team. Results: Clients often felt valued after completing the tools with support staff as it gave them the opportunity to discuss their social participation needs in depth. At times the discussions resulted in the uptake of additional community aged care services, such as social support groups. Clients reported that community aged care services helped them to develop new friendships with others. Support staff felt the tools and consequent discussions gave them the chance to learn more about their client's life, such as past experiences, family support and future considerations. Support staff then used this information to tailor services to client's individual preferences and goals. Conclusion: Initial findings suggest acceptability of the ACPQ and the ICECAP-O tools was high among clients and support workers. The tools helped to enhance community aged care assessments and the client-support staff relationship.

"BEREAVEMENT WITHOUT DEATH": IMPROVING PSYCHOSOCIAL SUPPORT OF SPOUSES OF PEOPLE WITH DEMENTIA FOLLOWING PLACEMENT INTO RESIDENTIAL CARE: A QUALITATIVE STUDY

BROOKS Deborah¹, BEATTIE Elizabeth¹, EDWARDS Helen¹, FIELDING Elaine¹

¹Queensland University of Technology

Background: In Australia, many people with dementia will move into permanent residential care. For spousal carers, negative impacts include ongoing stress, depression, loneliness, and grief. However the need for continued psychological and emotional support is not always recognised and formal supports are lacking. Objective: This qualitative study aimed to gain a deeper understanding of the support needs of spouses once their partner with dementia moved into residential care. Method: Semi-structured interviews were conducted with eight wives and one husband, whose partners with dementia had been in residential care from between two and twenty-four months. A combination of interviews (n=6) and two small group discussions (n=5) were also held with a range of care staff members within the Brisbane area. Data was analysed using the 'Framework' approach (drawing both on theoretical concepts and emergent themes) and interpreted with respect to the underpinning models of stress-grief process in dementia caregiving. Results: Spouses' experiences of placement were framed in terms of caring and relationship losses, as well as stressors related to the context and process of admission, financial stress, interpersonal conflicts, perceptions of care provided and the facility environment. Whilst a number of coping strategies were identified, better emotional and practical support was needed during and following placement. Social support was considered an important coping mechanism. Improving understanding of dementia progression and residential care provision may help manage expectations and reduce distress. Spouses who received grief counselling felt it needed to be dementia-specific. All agreed that support should be individually tailored as each carer's needs are unique. Conclusion: Findings support the piloting of an individualised multicomponent psychosocial intervention that targets the management of grief and loss as well as stress in spousal carers post-placement, and includes psychoeducation about dementia and residential care, dementia-specific grief counselling, stress reduction techniques, and peer support as required.

EXAMINING RESILIENCE TO COGNITIVE DECLINE AND NEURODEGENERATION DUE TO AGE AND BETA-AMYLOID IN SUPERAGERS

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Background: SuperAgers are older adults who exhibit verbal memory performance equivalent to, or better than, that of individuals 20-30 years younger, with no impairment in any other cognitive domains. Reduced rates of cortical atrophy have been observed in SuperAgers compared to older adults who are cognitively normal for their age (CNFA). This suggests that SuperAgers can resist typical age-associated cognitive decline and neurodegeneration; however, it remains unknown whether these individuals are resilient to cognitive decline and cortical volume loss associated with the presence of neuropathological changes characteristic of Alzheimer's disease (i.e. elevated b-amyloid (Ab+)). Objective: To determine whether older adults (³60 years old) classified as SuperAgers are resilient to age- or A β -associated cognitive decline and neurodegeneration compared to CNFA. Methods: SuperAgers (n=172) and CNFA (n=172) adults from the AIBL study were case-matched by age, sex, education and follow-up time (up to 8 years). Linear mixed models examined rates of cognitive change and neurodegeneration by SuperAger classification and Ab status (-/+). Results: Prevalence of Ab+ was equivalent between SuperAgers and CNFA. Ab+ was significantly associated with greater rate of cognitive decline and cortical volume loss in all participants, while Ab- individuals displayed stable cognition and less volume loss over 8 years. No group differences were observed between SuperAgers and CNFA on rate of change for any measure, nor were these groups differentially affected by Ab+. Conclusions: Contrary to popular belief, cognitive decline in ageing is not inevitable. Resistance to cognitive decline and neuropathological changes such as Ab+ is possible and does not necessitate having had exceptional cognitive ability characteristic of "SuperAgeing". Normal levels of cortical Ab were associated with better cognitive and brain morphological outcomes than were Ab+ irrespective of baseline cognitive performance. These findings suggest that the psychometric construct of "SuperAgeing" be redefined to incorporate biomarkers of age-associated diseases.

SOCIO-COGNITIVE AND EXECUTIVE DYSFUNCTION IN BEHAVIOURAL-VARIANT FRONTOTEMPORAL DEMENTIA: BENEFITS OF A STRONGER UNDERSTANDING FOR CLINICAL AND LEGAL COMMUNITIES

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It is becoming widely appreciated in clinical research that socio-cognitive and executive dysfunction appear to characterise behavioural-variant frontotemporal dementia (bvFTD). From a neuro-cognitive and -affective perspective, however, 'socio-cognitive dysfunction' and 'executive dysfunction' are vague umbrella terms that shed no meaningful light on the precise capacities purported to be dysfunctional in individuals with bvFTD. There have been admirable but incomplete attempts to parse these constructs into appropriate dimensions (e.g., *theory of mind*, *response inhibition*) in recent work aimed at systematically reviewing the relevant neuro-cognitive and -affective literature. We firstly show how future work could

improve upon these attempts by, for instance, incorporating parallel ‘higher-order’ dimensions such as *cognitive and affective empathy* and *moral judgment* as well as other ‘lower-order’, arguably more mechanistic neurocomputational dimensions such as *reinforcement/habit learning* and *temporal discounting*. We argue this exercise is crucial to developing a conceptually and empirically defensible picture of affected individuals’ capacities. Not only will this picture provide the *clinical community* with opportunities to optimise interventions (we discuss how), it will assist the *legal community* in determining questions of insanity and ‘irresistible impulses’ following bvFTD-related offending. Despite around a third of individuals with bvFTD coming into contact with the criminal justice system, the legal community is still arguably searching for an appropriate strategy of dealing with bvFTD offenders that is sensitive to both the condition and societal expectations. We suggest it stands to gain as much as the clinical community from increased dialogue with neuro-cognitive and -affective researchers tackling this often unrecognised and misunderstood form of dementia.

A SYSTEMATIC REVIEW OF THE RELATIONSHIP BETWEEN COMPUTER-MEDIATED COMMUNICATION USE AND SOCIAL CONNECTEDNESS AMONG COMMUNITY DWELLING OLDER ADULTS.

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Background: With computer-mediated communication (CMC) – the use of digital technology to facilitate human communication – being increasingly used for everyday social interaction, the ways in which older adults use these tools has rapidly become a subject of interest. While previous reviews have focused on social isolation and loneliness, recent research has focused instead on fostering social support and connectedness. **Method:** A systematic review was performed between August 2017 and March 2018, investigating the relationships between social functioning and frequency of CMC in older adults. To be included, studies needed to target community dwelling older adults (mean age 55 and over) and examine the association between frequency of CMC and social functioning (defined as social connectedness or social support, based on standardised multi-item measures). **Results:** A search of the Embase, PubMed and PsycInfo databases identified 10 eligible cross-sectional studies (N = 7,425 participants) using seven individual measures of social functioning. Correlation *r* was the primary effect estimate, with associated 95% CIs and *p* values calculated for each study. Potential sources of methodological bias were evaluated using the *QualSyst* tool and concerns were considered before studies were deemed adequate for review. Findings suggest a weak, albeit significant relationship: frequent CMC was associated with higher levels of social functioning. One discrepant effect (*r* = -.164, *p* = 0.027) was noted, involving a distinct sample of gamers. CMC appears to be related to social functioning of older adults, although this may differ based on type of use. **Discussion:** The findings support suggestions that

adequate levels of social support and connectedness facilitate CMC, which may in turn foster better social functioning. More work is needed to establish the directionality and impact of this relationship. Further research exploring differentiated types of CMC will improve current understanding of the relationship between CMC and overall wellbeing of older adults.

EXPERIENCE OF PALLIATIVE CARE AMONG CHINESE RESIDENTS IN RESIDENTIAL AGED CARE: FINDINGS FROM A LITERATURE REVIEW

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This paper discusses the results of a literature review which was conducted as part of my PhD to answer, which intends to answer the research question: “What are the experiences of Chinese Australians receiving palliative care in Residential Aged Care Facilities (RACFs)?” Answering this question is central to bringing researchers and the aged care community together to better understand the needs of Chinese people who reside in RACFs and deliver culturally appropriate palliative care for this group. The purpose of this literature review is to identify the current knowledge and contemporary practice of palliative care as experienced by Chinese people, their family and nurses in RACFs in both western and non-western countries. Chinese people in this literature review are referred to as residents who identify themselves as Chinese ethnicity. A systematic search of the literature was conducted. Thirty-four records published between 1990 and 2018 were retained for the literature review after database and internet searches. Key aspects related to Chinese people were: (1) knowledge and preferences; (2) decision-making; (3) cultural barriers; (4) care models. Nurses’ perspective included: (1) knowledge and attitude; (2) challenges in care; (3) best practice; (4) care models. Results of this paper will help to develop culturally appropriate resources and build capacity in staff to deliver care to Chinese people in RACFs. The following gaps in current literature were identified: few studies on exploring experiences of Chinese people and nurses in western countries; no study on developing culturally appropriate resources for Chinese people or building workforce capacity in western countries; no study conducted in Australia. These gaps will inform the prospective study, and it is anticipated that best practice in delivering culturally appropriate palliative care to Chinese people in RACFs will be enhanced.

DEVELOPMENT OF THE RETIREMENT CONFIDENCE INDEX

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Background: Definition of ‘confidence in retirement’ often only captures the financial aspects. However, retirement and transitioning to retirement have other significant ramifications, for example, on health, well-being, social identity and the quality of life. Although some financial aspects can be measured using secondary financial data, research suggests our perception and confidence towards

retirement are complex qualities that incorporate a wider range of factors. Understanding, measuring and preparing for these factors increases the likelihood of a more satisfactory transition to retirement and post retirement quality of life. Currently, research investigating the antecedents of confidence in retirement is fragmented and multiple disciplines have proposed various factors as potential predictors. Objective: To develop a comprehensive and multi-faceted measure of confidence in retirement. Method: The study developed a self-report survey which was completed by a representative sample of respondents aged over 50 ($n = 1,715$). Following Item Response Theory method, both Exploratory Factor Analysis and Confirmatory Factor Analysis were applied to yield the parsimonious item-list predicting confidence in retirement. Results: Nine groups of predictors were clustered under four pillars of financial, health, social and retirement planning. To assess the external validity of the index, the four pillars were regressed onto the single item measure of confidence in retirement ($R^2 = .41$). Conclusion: The study has multiple implications for policy makers, practitioners and the public in planning and preparing for retirement. Future research should evaluate the index using a larger sample of both pre and post retirees.

THE ROLES OF THE PRACTICE NURSE IN DEMENTIA CARE: A SYSTEMATIC REVIEW.

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Research is being undertaken to develop a protocol describing provision of best-practice dementia care by the Practice Nurse (PN). Approximately 70% of people living with dementia (PLWD) live in the community and around 50% of this group are undiagnosed. This suggests a significant number of people attending General Practice may not be having their health care needs met. Exploring new models to improve the identification and management of dementia in the primary care setting is needed. Consequently, we undertook a systematic review of the PN roles in the care of PLWD and the support person (SP) to identify essential components of the role and ascertain how it can be best utilised in General Practice. The conduct of this review followed the PRISMA checklist and flow diagram. Data sources included 7 key electronic databases, the internet, expert consultation and reference lists of included studies. Data was sourced using predefined keywords and limited to full-text English language papers published between 2000 and 2018. Title and abstracts of 1799 papers were screened with 69 papers full text screened. Three RCTs and 10 qualitative/mixed-method studies were identified for inclusion in the review. Findings include that there is little research available on the PN role in care for people with dementia. Nurses who provide dementia care services in General Practice are often located external to the Practice, for example a secondary care Memory Clinic, and act as a source of advice for the GP or provide a home visit assessment on referral from the GP. There is some evidence that dementia education and

provision of guidelines may support PNs in recognition and management of dementia. Findings from this systematic review will contribute to the development of a protocol describing the role of the PN in dementia care that addresses best-practice guidelines and consumer needs.

REMODELING CHRONIC DISEASE MANAGEMENT IN GENERAL PRACTICE IN THE CONTEXT OF COGNITIVE IMPAIRMENT.

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Background: Australian and international literature describe a significant service gap in dementia care provided in primary practice. In 2016, Ballarat Community Health received funds from the Commonwealth Department of Health, Nursing in Primary Health Care Program to develop a dementia care nurse-led clinic. Objective: To develop a clinic operated by a Practice Nurse (PN) with advanced dementia care experience to work with people with cognitive impairment (CI) and their carer using a specifically designed cognitive care pathway and chronic disease management (CDM) framework. Method: A Plan-Do-Study-Act methodology was used to develop the clinic. This iterative process suited the evolving experiential nature of the project. Results: During its development it was realised that the proposed model, a discrete service with separate care planning tools for people identified with CI was flawed as one of the reasons for poor dementia care outcomes in primary care is that people with CI are often not identified. Managing CI and dementia is inclusive of supporting health and well-being and to treat this group separately was to add to the stigma and marginalisation experienced by people living with dementia. Conversations about cognition need to be normalised within a CDM framework so people feel able to speak up about any concerns and feel confident that their primary health care team can support them. Dementia does not exist in isolation of other chronic disease and appropriate and effective CDM must be considered in context of the CI. Conclusion: The outcome of this project was a PN model of dementia care which comprises a care planning pathway and on-line resource for PNs to support CDM with people living with dementia. This refined model, developed within a clinic setting and with input from GPs and PNs, is now being tested for its value and useability with PNs across Western Victoria.

PROCESSING OF SPEECH UNDER ADVERSE CONDITIONS IN HUNTINGTON'S DISEASE

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Background: Huntington's Disease (HD) is a devastating neurodegenerative disease with behavioural, cognitive, sensory and motor deficits. However, little is known of the impact of HD on communication. Speech processing under natural conditions requires attention, working memory and executive 'top-down' control of cognition, all of which are impaired in HD. **Method:** We studied the impact of HD on processing of open-set conversational speech in naturalistic conditions of background noise in participants at different stages of HD – premanifest (n=6), prodromal (n=3), and early-to-moderate HD (n=10) as defined by the Unified HD Rating Scale, compared to age- and gender-matched controls. Tests in a noise background with little attentional demand, speech weighted noise (SWN), and with high attentional demand (multi-talker babble, BN) noise were conducted over a range of signal-to-noise ratios (SNR). We also examined whether HD participants could use two important cues to discriminate speech from BN: spatial separation between speaker and background noise; and contextual cues present in whole sentences compared to isolated words. **Results:** HD participants had impaired speech processing in both SWN ($p < 0.01$) and BN ($p < 0.01$), indicating both low-level masking and high-level attentional interference of noise. Participants with HD were significantly less able than controls to take advantage of either spatial or contextual cues ($p < 0.05$) and performed significantly worse than control participants in both conditions. **Conclusions:** Our data demonstrate that participants with HD have impaired ability to process speech in naturalistic noise-background conditions due to both low-level auditory deficits and high level cognitive deficits. These effects account for the real life difficulties that HD participants report in the novel daily-life questionnaire we have developed to assess difficulties of speech processing in daily situations. These results provide a framework for understanding the communication difficulties experienced in HD to aid in designing compensatory strategies.

HOW DEMENTIA AFFECTS CAREGIVER BURDEN IN SINGAPORE

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Background: With the rise of ageing populations around the world, the increasing number of people with dementia (PWD) will place strain on health services, with governments advocating for the use of community services and reliance on family to support the needs of people with dementia. In order to support PWD, it is essential to understand the needs of their informal caregivers, and in particular cultural perspectives that inform people's understandings about ageing, dementia and therefore service provision **Objective:** This mixed methods study

examined the perspectives of informal carers of PWD in Singapore, where there is an evolving mix of traditional Asian views of caring involving immediate family alongside the introduction of Western views of relying on community services for caregiving. **Method:** Thirty-two participants were recruited to respond to an online survey about their experience of caring for a PWD by advertising at community centres in Singapore and by word-of-mouth. The survey included demographic characteristics of the PWD and caregiver; nature of care provided; awareness, use and satisfaction with a range of support services for PWD in Singapore. Participants were asked about their perceived level of knowledge about dementia before and after completing the Dementia Knowledge Assessment Scale (DKAS). Caregiver burden was measured by the Zarit Burden Interview (ZBI). Both the DKAS and ZBI are statistically validated instruments and have been used in similar studies. **Results:** There was a significant difference in the scores pre and post DKAS; $t(26) = 2.83$, $p = .009$. However, the relationship between caregiver burden and knowledge of dementia was not significant. The analysis sheds light on reasons that prevent caregivers from accessing services, such as the lack of awareness and not knowing when to seek help. **Conclusion:** Overall, the findings from the study highlight the importance of giving caregivers of PWD a platform to be heard to voice their needs which can potentially inform the government and services that reach out to them.

LIFE STORIES, DEATH STORIES: RAC WORKER'S RELATIONSHIP WITH DEATH

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Background: In Australia, 32% of deaths occur in Residential Aged Care (RAC), with Personal Care Attendants (PCA), who represent around two thirds of the RAC workforce, having the closest contact with those dying. These care workers draw on personal experiences to create their own unique existential meanings of death, including constructs of the afterlife, and these inform their reactions and behaviours towards dying residents in their care. Personal meanings can promote resilience but they are often deeply ingrained, unexamined and may unconsciously inform choices and override the facility's or resident's preferences at End of Life (EOL). **Methods:** A Narrative Analysis framework was used to examine in depth the death narratives held by PCAs; how their relationship with death has developed throughout their lives; how personal death narratives influence resilience and preparedness for work in the presence of death; and how these death narratives compare to organisational narratives. 10 PCA, 4 Registered Nurses, and 4 Managers were interviewed across 2 RAC facilities. Each PCA was interviewed 3 times to determine transient and enduring narratives, and how these may evolve. **Results and implications for practice:** Death narratives for some included End of Life Experiences (ELE) such as supernatural narratives of dying people holding one-way conversations with unseen figures, fixating on corners, or attempting to focus on something unseen in their room. Some PCA felt

this was an indication that a loved one had ‘come for them’ and used ELE as one of the clinical indicators of approaching death that triggered contact of resident’s family and to assess the need for initial or further physical provisions of palliative care. Early identification of the commencement of the dying process promotes timely provision of pain and symptom control. This study has provided a greater understanding of ELE as a novel clinical indicator at EOL.

UNDERSTANDING NORMAL AGE EFFECTS ON PROSPECTIVE MEMORY

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Understanding normal age effects on prospective memory (PM)—the memory for future intentions, such as taking medication—is important for providing appropriate support for independent living in the community. Curiously, there is a robust “PM paradox”, with age-related decline in PM reported in laboratory studies but opposite effect in naturalistic-setting studies. These findings may be a function of disparate PM task types across laboratory and naturalistic-setting studies and the conflating of task type subcategories. In particular, laboratory studies are dominated by event-based (perform X when Y occurs) and time-interval tasks (perform X after 2 minutes); while naturalistic PM studies are dominated by ‘time-of-day’ tasks (call researcher at 2pm). To date the distinction between these latter two time-based tasks (which differ substantively in environmental cues) has been conflated. In two studies of age-related effects on PM we tested the disparate task type hypothesis using an established laboratory paradigm (Virtual Week) and a new naturalistic-setting paradigm, utilising a customised smartphone application and camera function on mobile phone device (MEMO). Study 1 compared young (i.e., ≤ 30 years; $n=40$; $Age = 24$ years) and older adults (i.e., ≥ 60 years; $n=53$; $Age = 68$ years) on proportion of PM tasks correct in each setting. Results revealed younger adults performed better than older adults in the laboratory but worse in daily life—with exception of time-interval task showing equivalent performance. Study 2 investigated replicability of age-related effects for young-old (i.e., ≤ 74 years; $n=64$; $Age = 69$ years) and old-old (i.e., ≥ 75 years; $n=40$; $Age = 79$ years) adults using modified (more challenging) versions of the same PM paradigms. Young-old outperformed old-old in the laboratory, however no difference in performance was found in naturalistic-setting. These findings shed light on methodological influences on the PM paradox, and suggest older adults are able to compensate for cognitive decline (reflected in laboratory performance) in naturalistic-settings.

EVALUATING PRESCRIBING EXERCISES FOR OLDER PEOPLE USING A PERSONALISED DVD – A PRE-POST STUDY

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Undertaking restorative exercise is important after an acute episode in the hospital. However, frail deconditioned older people report that medical problems and low motivation are barriers to doing exercises. They require an exercise program that is tailored and adapted for their condition to encourage ongoing participation. The aim of this study was to evaluate the effect of prescribing older deconditioned people a novel home exercise program that was delivered using a personalised DVD. Pre-test – post-test measures were undertaken. Participants received a 30 minute tailored home exercise program contained in personalised DVD. All participants ($n=13$) were assessed at baseline and reassessed after 6 weeks with timed up and go test (TUG), 3 minute walk test (3MWT), health related quality of life measured using the EQ-5D-5L and semi-structured interviews. Quantitative data were compared using Wilcoxon signed-rank tests. Participants [mean age of 79.4 (SD7.5) years] were predominantly female [$n=10$ (76.9%)]. Eight participants (61.5%) had a hip fracture secondary to a fall. Participants’ functional mobility showed significant improvement after the 6 week program with the TUG mean difference of 3.94ms^{-1} (SD4.23, $p\text{-value} = 0.002$) and 3MWT mean difference of 1.68 ms^{-1} (SD0.22, $p\text{-value}=0.004$). There was no significant change in health related quality of life [EQ-5D-5L Visual Analogue Score (VAS) out of a 100 points (74.62 pre, 78.69 post; mean difference = 4.08, SD17.97)]. All participants gave strong positive feedback about the DVD, with comments that it encouraged high levels of engagement, because it provided useful visualisation on the correct exercise technique and raised motivation to engage in the program. Preliminary findings of this study demonstrated that providing tailored exercises using a personalised DVD format promoted adherence to continue their exercise program independently at home to assist in reconditioning after hospital admission. Future research to compare DVD program to other forms of exercise prescription is important, as high levels of exercise engagement can assist older people to optimally benefit from rehabilitation programs.

CLINICAL IMPACT OF ANTIPSYCHOTIC AND BENZODIAZEPINE REDUCTION WITHIN RESIDENTIAL AGED CARE FACILITIES: FINDINGS FROM A MULTICOMPONENT SEDATIVE REDUCTION PROGRAM

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Background: Antipsychotics and benzodiazepines, termed ‘sedatives’ for this research, are widely used in residential aged care facilities (RACFs). Antipsychotics are generally used for behavioural and psychological symptoms and

benzodiazepines are used for insomnia and anxiety, despite modest efficacy and risk of adverse effects. Barriers to sedative reduction include perceived negative effects on the initial symptoms and quality of life (QoL). Whilst interventions to reduce the use of these medications have been developed, their impact on clinical outcomes remains under-reported. Objective: To fill this knowledge gap and minimise barriers to sedative reduction, we investigated the clinical impact that sedative reduction had within the Reducing the Use of Sedatives Project (RedUSE) (Westbury et al., 2018). Method: RedUSE was a multicomponent program comprising of audit, education, and sedative review. We recruited permanent residents taking antipsychotics and/or benzodiazepines regularly, from 28 of the 150 RACFs involved in RedUSE across Australia. Behavioural and psychological symptoms, QoL and social engagement were assessed at baseline and four months using validated measures. Antipsychotic and benzodiazepine doses at baseline and four months were converted to chlorpromazine and diazepam daily dose equivalences, respectively. Accordingly, we classified residents as antipsychotic and/or benzodiazepine 'reducers' and 'non-reducers' to compare clinical outcomes using multiple linear regression. Results: Follow-up data was available for 179 residents. There was no obvious deterioration in behavioural and psychological symptoms, QoL or social engagement when comparing antipsychotic reducers (n=30) against non-reducers (n=53), or benzodiazepine reducers (n=42) against non-reducers (n=76). Antipsychotic reducers displayed improved physically non-aggressive behaviour ($p=0.02$). Additionally, antipsychotic reducers had indications of an improvement in overall QoL and reduced deterioration in social engagement, albeit these results were non-significant with our sample size. Conclusion: The results suggest that sedative reduction was unlikely to harm residents and antipsychotic reduction may have positive effects on behaviour, QoL and social engagement.

CENTRAL AUDITORY PROCESSING IN RELAPSING-REMITTING MULTIPLE SCLEROSIS

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Multiple Sclerosis (MS) is an autoimmune demyelinating disorder of the central nervous system (CNS) that causes progressive neurological disability over time. MS is not fatal, thus, in parallel with their disease, MS patients will have an impact of ageing on their health. We addressed the question of how MS impacted on auditory processing which is known to deteriorate with ageing. Ageing is often associated with increased difficulties understanding speech in unfavourable conditions, even in the absence of hearing loss and there is good evidence that central auditory processing and cognitive decline are also likely to contribute to the effects in normal ageing. Given the CNS

problems in MS, we studied whether MS patients suffered a greater impact of age-related deterioration in speech processing in difficult conditions, specifically in noisy backgrounds like those in everyday life. Using a non-invasive, easy-to-administer auditory test battery we compared auditory processing in MS patients in the relapsing-remitting stage and age-matched normal adults. In the normal population, ageing per se (20-27 vs 54-65 years), did not affect perception in speech in noise tasks as long as hearing was normal. However, older MS patients had small but significant difficulties in speech perception in multi-talker babble backgrounds but not in non-attentionally-demanding noise backgrounds. Several significant correlations were found between MS participant performance on SiN tasks and standardised neuropsychological measures of attention, working memory, inhibition and information processing. A low-level binaural task evaluating cues used for sound localisation is currently being developed to determine the influence of auditory temporal processing on speech discrimination. As well as providing a means to evaluate the impact of audition on daily communication, and ultimately quality of life, our test battery appears to link to auditory dysfunction impacting on daily communication-based tasks.

CASE STUDY: A NURSE PRACTITIONER'S COLLABORATIVE MANAGEMENT OF AN ATYPICAL WOUND

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Chronic venous insufficiency (CVI) affects 0.6% of the world's population and is categorised as insufficiencies within the veins, related to; valvular obstruction or incompetence, renal impairment or cardiac disease. Venous leg ulcers (VLU) are a complication of CVI. VLU's account for approximately 80% of wounds in western countries, and are often incorrectly diagnosed with 10% of skin cancers mistakenly categorised, annually. A Nurse Practitioner is a registered nurse endorsed with authority to function autonomously and collaboratively in an advanced clinical role to; diagnose, prescribe and refer. Along with completing a comprehensive wound assessment, the practitioner strives to find a dressing regime that is cost-effective, increases wound healing rates and optimises patient's quality of life. This case study depicts a 90 year old female, with; Atrial Fibrillation, Chronic Venous Insufficiency, Type 2 Diabetes, Osteoporosis, Anticoagulation Therapy and Osteoarthritis, in which a multidisciplinary team approach was an integral part to her care. The multidisciplinary teams' main components were a Nurse Practitioner and a Plastic Reconstructive Surgeon, who advocated for the patient, managed her multiple chronic comorbidities, along with maintaining continuity. The case study was of a VLU which on further diagnosis was two malignant spindle cell neoplasm with features favouring atypical fibroxanthoma of 3cm, an atypical complex cancerous wound. The collaborative approach between the Nurse Practitioner and specialist within aged care, successfully avoided surgical debridement and multiple hospital transfers. This case study demonstrated

the importance of a comprehensive examination and cohesive collaborative approach, to find the correct diagnosis. Where surgical sharps debridement requiring anesthetic was not a viable option, due to the case study's multiple comorbidities. This collaborative approach highlighted the advancements required within our aging population. This in turn, allowed the patient to avoid ceasing anticoagulant therapy, and limited the possible adverse effects of polypharmacy, to go onto complete healing.

BRIDGING THE GAP BETWEEN THE YOUNGEST AND OLDEST MEMBERS OF COMMUNITY THROUGH THE 'FORGET ME NOT' PROGRAM

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Background: Intergenerational programs are a psychosocial strategy for dementia rehabilitation, which are gaining popularity in current dementia research. Such programs intentionally bring together the older and younger generations of society for mutually beneficial interventions. Through this, people living with dementia are able to fulfil their social, psychological and physical needs and in turn younger generations get the opportunity to learn from older generations through positive interactions. Objective: To assess quality of life outcomes in people living with dementia, and dementia-related knowledge and attitudes among Year 4/5 students (range 8-11), following participation in an intergenerational dementia education program. Additionally, to explore the general experiences of all participants via interviews. Method: An eight-week intergenerational program, titled *Forget Me Not*, was conducted in Term 1, 2018. 90 Year 4/5 students participated in weekly lessons on dementia and dementia-related topics. Of these, 60 students visited a community day facility for people living with dementia, to interact through art, music, sport and gardening activities. These activities were centered around the theme "The Corner Store", prompting students and those living with dementia to bond through conversations surrounding past and present shopping experiences. Results: This presentation will draw on both quantitative and qualitative findings. Preliminary analysis indicates that children's dementia-related knowledge and attitudes improved after the program, with scores on the Kids Insight into Dementia Survey (range 14-70) increasing by 6.9 ± 7.3 points, $p < .0001$. Quality of life scores for the older adults were relatively high at baseline, with an average score of 42.6 ± 5.7 . Analysis of quality of life and thematic analysis of

interviews post program is still ongoing. Final results and themes will be showcased at this presentation, following analysis in August 2018. Benefits and barriers to participation and suggested improvements will also be discussed to help guide future interventional dementia education programs.

USING PHOTOGRAPHS TO FACILITATE COLLECTIVE STORYTELLING WITH AGED CARE RESIDENTS

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Background: Visual methodologies employed within qualitative research projects can add deep insight and reflexivity to interview or observational data and are an ideal tool to facilitate storytelling, reminiscence and encourage socialisation. This presentation draws upon research using photography as a dual-purpose data collection and data dissemination tool set within a residential aged care environment and explores photographs as positive reminiscence tools to facilitate life review. Using photo elicitation techniques with residents of a residential aged care facility in Brisbane, the research explores the collective connectivity and social reminiscence which arose from photo sharing sessions. Method: A group of ten residents (who ranged between two months and 25 years living in aged care) were asked to select and bring photographs to share with the group and prompt discussions. Common personal themes of meaning, pride, accomplishments and family arose from the discussions of the selected images as well as larger conversations around public events which the residents collectively remembered and discussed to form a larger collective recall. These sessions allowed residents to provide a narrative discourse of their own images but also prompted other residents to discuss issue using the concrete photographic object as a framing point. Using photo elicitation both individually and in groups encouraged residents to share and invest in the own stories as well as learn and participate in the stories of their peers. Analysis: The narratives which emerged from the sessions were transcribed and, coupled with researcher produced photographs documenting the sessions, were thematically analysed. This paper will report on the outcomes of these dual-purpose data collection and data dissemination sessions which served to create clear connections between the residents through their lived experiences and history. It will propose that photo elicitation is a technique that has potential to increase socialisation, add a greater sense of connectivity and inclusion, and ultimately enhance well-being among residents in an aged care environment.

LONG TERM CARE INSURANCE INCORPORATING SYSTEMATIC TRENDS AND UNCERTAINTY: DESIGN AND PRICING FOR AUSTRALIAN MARKET

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Background: Increases in life expectancy pose challenges in estimating the costs of health services and aged care. Indeed, mortality is evolving over the years, as well as the morbidity. In 2015, at age 65, Australians could expect to live on average half of their remaining life expectancy with some level of disability, i.e. 10 years for a total remaining life expectancy of 20 years, whereas in 2003, it was 10 years over a total of 18 years. Improvement of mortality and morbidity makes the estimation and modelling of the total and healthy life expectancy more complex. Further data investigation and modelling are then needed to better assess this systematic risk---the uncertainty inherent around the future survival probability of the population. **Objective:** To inform product policy development, this project extends current functional disability and health status models in order to estimate the rate at which individuals transition between health states at older ages. **Method:** In this study we include health modelling, systematic trends and uncertainty. Current actuarial modelling of functional disability and health status estimated from individual data assumes the rate of health state transition varies by gender and age but not over time. However, systematic risk is time-sensitive. That is, the improvement in mortality and morbidity over time differs from year to year. To account for this, we consider including a factor that represents unpredictable mortality improvement over time. **Application:** This project has been developed for use in the design and pricing of Long Term Care (LTC) insurance products, particularly to improve estimation of government expenditures and assess the impact of the design of private LTC insurance in Australia. **Keywords:** Long Term Care insurance, longevity risk, disability risk.

CONSTRUCTING OCCUPATION-SPECIFIC LIFE TABLES FOR CHINA

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Background: China is one of the most rapidly ageing countries in the world. Life expectancy in China has been continuously increasing over the past half-century. This leads to substantial financial burdens for the Chinese social security system due to higher health care and pension costs. Therefore, the Chinese government is encouraging the development of private health insurance and annuity markets. **Objective:** In this project, we compute the most up-to-date occupational life tables for male and female urban employees in China based on administrative data from the Beijing Public Pension System for the period 2005-2009. A life table contains probability of death for a

selected age group as well as their remaining life expectancies. **Method:** We categorize death counts and population exposure based on occupation-type and construct occupation-specific life tables. Occupations considered in our study include private-sector high-skilled professionals, low-skilled workers, service sector workers, and government or state-owned enterprise employees. **Results:** The findings provide a more complete picture of how longevity and health have improved in China. Our results show that the inequality in mortality experience exists in China, especially across different occupations. For example, blue-collar works generally have lower life expectancies than service-sector employees. **Conclusion:** The specific life tables by occupation could inform the design of pension and healthcare policies as well as the development of the Enterprise Annuity industry and long term care insurance market in China.

ELDER ABUSE: AN EXPLORATION OF THE TERMINOLOGY OF ABUSE AMONG OLDER AUSTRALIAN WOMEN FROM THE AUSTRALIAN LONGITUDINAL STUDY OF WOMEN'S HEALTH (ALSWH).

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Abstract text: Detection of elder abuse (EA) is fundamental to prevention. Women are more likely to experience and report EA, however terminology used may be subtle. Moreover, dementia may preclude women from reporting, making this group particularly vulnerable, and a priority for safeguarding. This study will examine the terminology of EA among older women, especially those living with dementia. The insights gained will contribute to the evaluation of current methods of EA detection, and inform possible education programs for those who work with older people. **Aims:** 1) To describe the terminology older women use around experiences of EA, 2) To compare and contrast EA terminology for women who are/are not living with dementia. **Method:** Qualitative analyses of collated free text comments from participants of the ALSWH. The sample is a random selection of participants aged 65+, who indicated they experienced EA at the time of survey completion, and provided a free text comment in the ALSWH survey. The sample will be split into two groups: 1) living without dementia and 2) living with dementia successively sampled until saturation of themes is reached for each group. Assessment of 'abuse' and 'dementia' status will be via ALSWH and linked data. Four ALSWH surveys contain the data items required for this study (2008 and 2011 of the 1921-26 cohort; 2013 and 2016 of the 1946-51 cohort). **Analyses include:** 1) Inductive thematic analysis using NVivo software; and 2) keyword searches driven by NVivo results with subsequent narrative analysis, capturing longitudinal information from multiple contributors. **Limitations and significance:** Women living with dementia may have a proxy complete their survey, decreasing available data for this group. Under-detection and under-reporting of EA are acknowledged, but not well understood phenomena. A method of detection circumventing overt reporting, through recognition of subtle terminology may provide better avenues for assessment.

RECHARGE YOUR HEALTH – DEVELOPING A COMMUNITY-BASED HEALTHY AGEING EDUCATION PROGRAM

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Population ageing is a well-documented issue, as are the resultant public and population health challenges. The role healthy eating and physical activity play in healthy ageing reflects the importance of effective public health initiatives as preventative measures for non-communicable/chronic diseases; and an essential enabling factor for maintaining independence and quality of life for older Australians. However, there is limited research describing components that make healthy ageing programs appealing to potential participants. Currently about 40% of the Australian population is aged over 45 years. To promote increased healthy life years through earlier adoption of healthy lifestyle behaviours, a healthy ageing program targeting this population was proposed. This study identifies strategies contributing to a community-based education program promoting healthy ageing; and develops a program framework targeting those aged over 45. A literature search was undertaken focussing on enablers and barriers to program uptake and outcome maintenance. A proposed program framework and supporting strategies were developed integrating feedback sought through informal focus groups and surveys (online/ paper-based). Respondents, aged 45 and over, were recruited through local seniors groups and existing online senior subscriber networks. Surveys were completed by 209 respondents (n=150 online, n=59 paper) with 57% of respondents aged between 45-64 years. Respondents preferred a mix of activities and range of topics (exercise and nutrition-related) encompassing face-to-face and online components. Older respondents preferred face-to-face delivery with regular follow-up information sessions to maintain motivation. Stakeholder analysis identified discrete groups of respondents highlighting the need for flexibility and tailoring. Literature, focus group findings and survey responses suggest a framework comprising a core program of interactive face-to-face sessions over a six-week period supplemented by optional online and face-to-face components. While content can be standardised, delivery needs to be tailored. Solutions to overcome uptake barriers were developed and integrated into the resulting program strategies/framework for future pilot and evaluation.

VALIDATION OF A NOVEL SMARTPHONE-BASED COGNITIVE ASSESSMENT TOOL DESIGNED FOR REMOTE ASSESSMENT OF COGNITIVE FUNCTIONING IN HUNTINGTON'S DISEASE

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Background: Cognitive assessment tools developed for use on personal electronic devices can allow convenient collection of large amounts of cognitive data. This methodology is novel in HD and validation must proceed before large scale implementation. Objective We aim to demonstrate discriminant and concurrent validity of our cognitive assessment methodology that involves participants utilising a smartphone app to self-administer cognitive tasks in their home environment. Method: We developed a smartphone app for iOS and Android, which includes informed consent, prompts through study procedures, and two cognitive tasks. We are using the app in a HD study, with currently $n = 21$ HD participants (17 pre-symptomatic; 4 symptomatic) and $n = 18$ control participants, across an eight-day period including self-administration of cognitive tasks (speeded tapping and a visual memory task) on day 1, 4, and 8. Cognitive data from ENROLL-HD, a worldwide observational study involving yearly clinical assessments, are available for a subset of HD participants ($n = 11$; pre-symptomatic = 7, symptomatic = 4). Groups were compared on app-based cognitive tasks to assess discriminant validity. For our HD subsample with ENROLL data, app-based and ENROLL cognitive tasks were compared to assess concurrent validity. Results: Tapping speed of the HD group was significantly slower than the control group ($p = .013$, $d = 0.83$) as was their response time on the visual memory task ($p = .018$, $d = 0.82$). Visual memory performance was similar between the two groups. Greater speeded tapping performance and visual memory performance correlated significantly with greater ENROLL HD Symbol Digit Modality Test and verbal fluency performance (Pearson's r values ranged from .61 - .88, p -values from .001 to .046). Conclusions: Current results with a HD sample indicate both promising concurrent and discriminant validity properties of our remote-phone-based cognitive assessment methodology. All participants have completed all tasks, indicating sound usability and acceptability of the app.

DEVELOPING AN OBJECTIVE TOOL FOR EVALUATING FRAILTY IN OLDER POPULATIONS

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Background: Frailty is a biological syndrome of reserve decline in multiple physiologic systems. It is a growing problem in older populations associated with adverse health outcomes such as falls, injuries and mortality. Various measurement tools are available for the diagnosis of frailty; however their applicability are the concerns particularly in applying subjective measures (e.g. self-reports, questionnaires) and in capturing the components of physical frailty. Objective: To develop and validate a new objective tool to efficiently and safely evaluate frailty in older populations.

Methods: Four domains for the validation of the objective tool were explored including content, face, construct and criterion validity. Literature searches were performed to identify different instruments used for the measure of frailty. Studies were included if they utilised objective assessments (e.g. physical measures) for frailty in individuals aged ≥65 years, and assessment protocols that are applicable and safe for older adults. Results: Thirty-three identified instruments for the measure of frailty were reviewed, and four objective assessment items were further examined including: hand grip strength, gait speed, chair rise, and timed-up-and-go (TUG) test. Considering applicability and duplication issues, the TUG test was not included in the final version of the objective tool. The procedures for performing the hand grip strength, gait speed and chair rise test in older people have been standardised during the assessment of content validity. Conclusion: A new objective tool consisting of three items has been developed for the evaluation of frailty. Its content, face and construct validity were ascertained in this study. The criterion validity was not assessed due to the lack of gold standard in this field. This tool will be tested for its reliability following its application in residential aged care facilities. It may potentially assess early stage physical declines in future studies to prevent serious outcomes and implement appropriate health interventions.

DEAR CARER, YOU'RE THE VOICE, I'LL TRY AND UNDERSTAND IT: AN INTEGRATIVE REVIEW OF SELF-COMPASSION, HEALTH OUTCOMES, AND FAMILY CARERS OF OLDER ADULTS

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Caring for an older family member can be, for many, a challenging experience, and well-documented negative effects can include reduced mental and physical health and wellbeing. While existing services are available to support family carers, often this information or support is not what is needed, or is difficult to access. The cultivation of self-compassion may offer an alternate approach that overcomes these challenges by equipping family carers with the skills to intentionally access the body's internal calm and connect system during times of stress. Research conducted with various populations increasingly demonstrates the positive association between improved self-compassion and various health outcomes. That said, however, self-compassion as a resource to help support family carers of older adults appears a neglected, under-researched area. Still in the first stages of my PhD research program, this presentation will outline findings from an, in-progress, integrative review of what is known about the role of self-compassion on health outcomes of family carers of older adults, from the family carer perspective [PROSPERO: CRD42018090450]. To enhance audience attention and engagement, and closely align with the conference's theme of 'Bringing Researchers and the Community Together', the presentation will be framed around the song lyrics of, 'You're the voice' (John Farnham). I will outline: i) why self-compassion may work

with this population ('We're not gonna live in fear'); ii) the current state of knowledge in the area from a qualitative lens ('You're the voice, try and understand it'); iii) any existing gaps in knowledge ('We have the chance, to turn the pages over'); iv) general areas for further research ('We're not gonna sit in silence'); and v) the next planned stages of my PhD program ('Make a noise and make it clear').

INVESTIGATING THE COGNITIVE AND PSYCHOSOCIAL EFFECTS OF AUDITORY TRAINING AND HEARING AIDS IN ADULTS WITH HEARING LOSS

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Background: Hearing loss is an important target for health promotion in the elderly. It is known to be associated with deterioration in speech perception. Studies have suggested that even mild levels of hearing loss increase the long-term risk of cognitive decline and dementia in adults who are cognitively healthy at baseline. A connection between hearing loss, social isolation and depression has recently been reported, and further research has suggested that depression is a risk factor for dementia. Objective: This paper reports the findings of a pilot study assessing the efficacy of hearing loss interventions for improving cognition and psychosocial function in adults with hearing loss. The relationships between hearing loss, speech perception and cognition are also investigated. Method: A 40-person (aged 50 – 90 years) pilot study in Melbourne, Australia, was conducted. Participants with hearing impairment answered the Geriatric Depression Scale-Short Form, questions about social interaction, completed a wide range of cognitive tasks and a speech perception test at baseline, 3 months, and at 6 months. Participants underwent auditory training for 6 months and used hearing aids for 3 months. Results: Correlations and structural equation modelling suggested that several cognitive domains were associated with speech perception at baseline. A negative baseline correlation was observed for hearing loss and Incongruent Stroop, the only cognition measure related to executive function. Hearing aid use reduced problems with communication, and the combined effect of hearing aids and auditory training significantly reduced depressive symptoms. No significant improvements in cognition were observed in 6 months. Conclusion: Baseline results suggested relationships between several cognitive domains, hearing loss and speech perception. The short-term use of hearing aids reduced communication problems and provided evidence of reduced depressive symptoms. Our findings suggest that management of hearing loss could improve quality of life of adults or may reduce the burden associated with dementia. A larger, longer-term study is needed in order to

understand the causal effects of hearing aid usage on cognition.

DOES PARENTHOOD LEAD TO LIFE-LONG CHANGES IN THE HUMAN BRAIN?

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Early motherhood (pregnancy and early post-partum) is a time of great physical, emotional and environmental change, affecting every component of the human body. Emerging evidence suggests that early motherhood results in changes to cortical thickness that are sustained for up to 2-years post-partum. Evidence from preclinical studies indicates that both mothers and fathers show a cognitive benefit associated with parenthood; and, at least in female rodents, these benefits are sustained across the lifespan and into older age. However, very little is known about the enduring effects this period has on the structure and function of the human brain. Even less is known about how fatherhood affects the male brain. In this study, we examined whether cortical thickness in older adults differs between parents and non-parents, for both sexes. We compared cortical thickness in 70 brain regions between individuals with one child and individuals with no children in 82 elderly subjects, $n=36$ male (73.4 ± 3.7 years), $n=46$ female (72.8 ± 3.25 years). For both sexes, superior and medial temporal regions differed in cortical thickness between parents and non-parents. These regions form part of the socio-affective network. In addition to socio-affective regions, females also showed differences in thickness between mothers and non-mothers in the prefrontal cortex, regions that underlie executive function. Our results are the first to demonstrate distributed differences in cortical grey matter thickness between parents and non-parents that are evident beyond the post-partum period and maintained throughout the lifespan. Parents and non-parents differ in their exposure to hormones and environmental complexity. The hormonal changes associated with pregnancy and the post-partum period differ greatly between the sexes, and so are unlikely to be maintained into older age. As such, we suggest that the 'enriched environment' provided by parenthood may contribute to increased cognitive reserve that provides a neuroprotective effect into older age.

"SOMEONE REALLY CARES ABOUT ME": OLDER PERSON'S EXPERIENCES OF A HOSPITAL ADMISSION RISK PROGRAM

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Background: Chronic conditions are associated with over one-third of potentially avoidable hospitalisations in Australia. Hospital Admission Risk Programs (HARP) aim to

reduce unnecessary admissions for people with chronic conditions who require comprehensive assessment, specialist care and care coordination. While there is some research on the impact of these programs on cost, health care use and health status, little is known of the experiences of older people using HARPs, especially in the context of person-centred care. Objective To establish the extent to which principles of person-centred care are incorporated in a HARP for older people with multiple chronic conditions. Method This qualitative study uses a phenomenological approach through interviews with clients of the Complex Care program, a HARP service at Monash Health. A client is eligible for the program if they had at least one avoidable hospital presentation in the last year, or are at imminent risk of hospitalisation, and require integrated care and moderate to intensive care coordination. Up to 25 recently-discharged clients will be recruited purposively via their Care Coordinator as 'information-rich' participants to provide insights into person-centred care. Clients will be asked about their involvement in planning their care, using information to make decisions about their care, and having their needs and preferences identified and incorporated. We will code and analyse interview transcripts using thematic analysis alongside data collection. Results Preliminary findings will be reported on as the data collection and analysis continues. Participants described their program experiences positively, including being listened to and given information to enable them to self-manage their health conditions. Participants also reported they had not experienced this in other healthcare encounters. Conclusion Clients' descriptions of person-centred care in this program may assist to enable them to manage their health conditions. This research will provide a new contribution to the understanding of HARPs for older people with multiple chronic and complex needs.

SAME AS IT EVER WAS: COMPARING YOUNG ADULTS' AGE BIAS TOWARD OLDER WORKERS FROM 1989 TO 2015

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Age biased attitudes and behaviours towards older workers are well documented. Although both positive and negative older worker stereotypes exist, negative beliefs tend to exert greater influence on perceptions about older workers. This negative bias persists, despite research that empirically discredits negative and supports positive older worker stereotypes. Bias from negative stereotypes is problematic because the population is ageing globally, resulting in sharp increases in participation rates of workers age 55 and older within Australia and most other developed nations continuing for the foreseeable future. At the same time, the increased participation of older workers has provided greater opportunities for older workers to be evaluated based on their merit, rather than through stereotyped beliefs. As a result, we expected contemporary endorsements of negative stereotypes to be weaker and of

positive stereotypes to be stronger compared to those of the past. To explore this hypothesis, data from two separate, but similar, groups of students from the same university, one collected in 1989 and the other in 2015, were examined. Unexpectedly, students in 2015 expressed a *stronger* negative bias about older workers compared to students in 1989. However, increased variability in some of the responses from the 2015 sample implies a degradation in the uniformity of agreement in those stereotypic beliefs. Furthermore, and in line with intergroup contact theory, in both samples positive work experience with older workers was associated with more positive attitudes towards older workers in general. These finds suggest that organisations can aid in reducing negative age bias by creating intergenerational work groups that provide ample opportunities for cross-generational interactions and collaboration.

PRACTICAL STRATEGIES FOR RECRUITING OLDER ADULTS WITH MENTAL HEALTH ISSUES INTO QUALITATIVE STUDIES

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Quantitative and qualitative approaches hold important positions in the field of research. Posing specific questions or hypotheses, quantitative researchers typically use surveys, questionnaires or polls to measure objective data. Their results are subjected to statistical analysis. Qualitative researchers, on the other hand, adopt an interpretive, naturalistic approach to the world, as they seek to generate knowledge of human experiences and lives, and the meaning given to them. This approach allows participants' experiences to be understood in context, as the researcher aims to generate an in-depth understanding of the subject. While the research aim and methodology guide participant recruitment, the qualitative researcher strives to achieve data saturation, that is, the point at which there is consistency in the data and all concepts are well represented. However, one of the challenges of qualitative research concerns the recruitment and retention of participants. It is particularly difficult to recruit members of marginalised groups, including older adults and those with mental health issues. Deterrents to participation include stigma, time demands, medical problems and concerns about confidentiality. For the current study on the self-management of depression in older adults, the researcher engaged with 130 organisations over nine months to recruit 32 participants. Developing her own strategy, recruitment occurred mainly through community organisations that provided support to older adults, or to people with mental health issues, including community centres, neighbourhood houses, and activities clubs. Newspaper, social media and radio announcements were also used. Recruitment activities were personalised to different settings and adapted when shown to be effective. Payment for participation was offered. The rich data elicited from participants allowed the researcher to explain the complex processes by which participants self-managed their unique experience of

depression. In the spirit of collaboration, qualitative researchers should share strategies that facilitate recruitment and retention in comparable studies.

HELP-SEEKING EXPERIENCES OF OLDER ADULTS WITH A DIAGNOSIS OF MODERATE DEPRESSION

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Depression is the most common mental health problem in older adults. Although it is a serious condition at any age, depression is particularly complex in older adults. It often produces adverse effects such as physical illness, a decline in functioning and loss of independence. It is also commonly associated with greater self-neglect and follows a more chronic course than depression earlier in life. Although timely diagnosis and treatment are crucial, older adults often delay formal help-seeking, resulting in longer duration of untreated symptoms and poorer health outcomes. In addition, the health care costs of older adults with depression are higher than those of their non-depressed peers. Early help-seeking and access to appropriate support benefits individuals, while providing better outcomes for health systems constrained by limited resources. The subject of this presentation is based on a qualitative study of the self-management strategies used by older adults with moderate depression to optimise their well-being. Guided by Corbin and Strauss' approach to grounded theory, data were collected in 2016 from individual interviews with 32 participants who met the inclusion criteria. Help-seeking barriers concerned stigma, poor self-motivation, difficulty accessing formal support, ageism and challenges in obtaining an initial diagnosis. Help-seeking facilitators included taking personal responsibility, mental health literacy, therapeutic alliances, and informal support. While person-centred practice is typically presented as the cornerstone of service delivery, participants described how their appointments with health professionals were often conducted in haste, with little opportunity to examine factors that influenced their depression, or to discuss treatment options that may suit their individual needs or preferences. Improved understanding of help-seeking experiences of older adults with depression is crucial to facilitate access, diagnosis and treatment. This is especially important, given that population ageing will require that healthcare systems meet the needs of a growing number of older adults with depression.

VALUES IN MOTION DESIGN: A CARE ROBOT DESIGN METHODOLOGY

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In this presentation I will demonstrate 'values in motion design' (VMD), arguing for its adoption by roboticists conducting elderly care robot (ECR) design. VMD is a methodology for ECR design which provides recommendations for an ECR design and a guide for how to go about design practice. VMD answers the following questions. How does one ethically create an ECR? And,

how does one make the ECRs behaviour ethical? Ethically, VMD is grounded in care ethics and healthcare law. Care ethics describes good care as being practice-determinative; care is determined within the caregiver-patient relationship. An ECR with adaptive and customised behaviours demonstrates good care ethics. Healthcare law expresses good care as being law-determinative; care is determined by objectively required safety and basic care. VMD places these views of care into one ECR design as separate considerations by declaring extrinsic and intrinsic care values for each care practice and designing for them in different ways. Extrinsic values are those that represent a patient's personal desires along the way to attaining an intrinsic value. VMD suggests hardcoding intrinsic values into an ECR and then providing extrinsic values to the ECR itself for it to decide which extrinsic value to respect for each patient dynamically. Traditional methodologies lay the groundwork for making ECRs law-determinative. Currently, designers are considering all values to be intrinsic and thus are embedding extrinsic values into ECRs with no consideration for patient preferences. Such practice creates standardised care whereas good care should also be practice-determinative in addition to being law-determinative. To make the VMD practice ethical, intrinsic value considerations are grounded in healthcare law. Moreover, following care ethics, customised ECR behaviours to respect extrinsic values are determined by elderly persons. Currently, empirical research on VMD is in its early stages, however, a previous study provides backing for its theoretical foundations.

BRINGING RESEARCHERS AND COMMUNITIES TOGETHER TO DEVELOP A PILOT DEMENTIA REGISTRY IN VICTORIA.

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Background: The prevalence of dementia and mild cognitive impairment (MCI) is significantly increasing. Currently more than 425,000 Australians are living with dementia and expected to increase to 530,000 by 2025. Estimated prevalence of MCI is 5.9% and rising. Dementia is the second leading cause of death in Australia, contributing to 10.6% of all deaths (females) and 5.4% (males). Evidence suggests that clinical care delivered to persons living with dementia and MCI needs improvement. Currently there is no systematic way to measure and report on the quality of dementia care. A dementia clinical quality registry (CQR) can address this gap and is aligned with the priority set by The Australian Commission on Safety and Quality in Healthcare (December 2016). **Objective:** To develop a set of clinical quality indicators (CQIs) for a dementia CQR with community engagement to assist with monitoring the diagnosis and care for people living with dementia and MCI

in Australia. **Methods:** A literature review was completed to identify evidence-based CQIs across the trajectory of dementia and MCI (diagnosis, follow-up, management, outcomes). Potential indicators were collated and a 3-phased modified Delphi project was conducted: 1) Online-survey completed by the panel including consumer and carer representatives; 2) Face-to-face meeting to discuss changes, identify feasibility and validity of proposed indicators; 3) Second online-survey of revised indicators to confirm selection for CQR inclusion. **Results:** Nineteen experts across Australia were invited to participate in the project with 17 agreements. Ninety-seven potential indicators were extracted with 33 remaining after duplications removed and clustering was performed. Findings, recommendations and implications for practice will be presented including reflections from the consumer and carer. **Conclusions:** Engaging community representation is important at all stages of the formulation of clinical quality registries. This can enhance bringing together communities and researchers for a more effective model of collecting health data.

UNDERSTANDING THE ASSOCIATION BETWEEN INDOOR AIR POLLUTION AND MENTAL HEALTH OF OLDER ADULTS IN INDIA AND CHINA

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Previous studies on air pollution and health were mainly confined to outdoor air pollution. But, in recent decades, attention has been drawn to indoor air pollution as over half the world's population, mostly from developing countries, use solid fuel for domestic purposes and are exposed to very high concentrations of harmful air pollutants with potential health effects. The effect of indoor air pollution becomes much more severe when it comes to the older people not only because of their weakened immune system as compared to other age-groups but also due to their sedentary lifestyle. Compared with ambient air pollution, little is known about the mental health status in relation to indoor air in India and China. Therefore, this study explores the association between indoor air pollution due to solid fuel use and mental health of older adults in India and China using data from wave 1 of the WHO Study on global AGEing and adult health (SAGE). The methodology consists of statistical models such as Bivariate analysis, Multivariable Linear regression model, and Binary logistic regression model. Our findings indicate that indoor air pollution is strongly associated with mental health problems among older adults in India and China. Further, the effect of indoor air pollution on depression and cognitive impairment was greater for men in India, while it was higher among women in China. The results show higher odds of depression and lower cognitive ability scores among older adults in households using solid fuel. The study suggests that given the large proportion of Indian and Chinese population relying on solid fuel use for cooking, there is a pressing need for more research to inform policy in this area.

PRACTICAL STRATEGIES FOR RECRUITING OLDER ADULTS WITH MENTAL HEALTH ISSUES INTO QUALITATIVE STUDIES

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Quantitative and qualitative approaches hold important positions in the field of research. Posing specific questions or hypotheses, quantitative researchers typically use surveys, questionnaires or polls to measure objective data. Their results are subjected to statistical analysis. Qualitative researchers, on the other hand, adopt an interpretive, naturalistic approach to the world, as they seek to generate knowledge of human experiences and lives, and the meaning given to them. This approach allows participants' experiences to be understood in context, as the researcher aims to generate an in-depth understanding of the subject. While the research aim and methodology guide participant recruitment, the qualitative researcher strives to achieve data saturation, that is, the point at which there is consistency in the data and all concepts are well represented. However, one of the challenges of qualitative research concerns the recruitment and retention of participants. It is particularly difficult to recruit members of marginalised groups, including older adults and those with mental health issues. Deterrents to participation include stigma, time demands, medical problems and concerns about confidentiality. For the current study on the self-management of depression in older adults, the researcher engaged with 130 organisations over nine months to recruit 32 participants. Developing her own strategy, recruitment occurred mainly through community organisations that provided support to older adults, or to people with mental health issues, including community centres, neighbourhood houses, and activities clubs. Newspaper, social media and radio announcements were also used. Recruitment activities were personalised to different settings and adapted when shown to be effective. Payment for participation was offered. The rich data elicited from participants allowed the researcher to explain the complex processes by which participants self-managed their unique experience of

THE IMPACT OF THE MAXCOG COGNITIVE REHABILITATION INTERVENTION ON PEOPLE WITH MCI AND DEMENTIA: QUALITATIVE AND QUANTITATIVE OUTCOMES

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Background: Because currently there is no curative treatment for dementia, the development of effective psychosocial interventions that can address cognitive difficulties and their impact on day-to-day life are critical. Such interventions are typically targeted at the early stages of illness and, if successful, have the potential to improve quality of life and increase duration of independence.

Objective: In order to investigate this potential, we utilised the relatively new approach of cognitive rehabilitation to develop a home-based, four-session, individualised face-to-face cognitive rehabilitation (MAXCOG) intervention for clients with mild cognitive impairment (MCI) or early dementia and their close supporters. Method: A randomised controlled trial comparing the intervention group (MAXCOG) with treatment as usual (control) was undertaken in order to evaluate the efficacy of the intervention. A range of outcome measures, both qualitative and quantitative, were utilised. This paper focuses on findings from the qualitative component. Fifteen MAXCOG participants, fourteen family supporters, and three counsellors were interviewed using the Most Significant Change technique. Subsequently, thirty-five narrative accounts were transcribed and subjected to thematic analysis. Results: Key themes identified included: specific changes such as 'learning new strategies' and 'changing behaviours'; broader changes such as 'gaining insight', 'coming to terms' and 'improving mental state'; and 'supportive factors' and 'hindering factors'. Of interest was the fact that the qualitative findings suggested improvements in quality of life more strongly than the quantitative findings. Conclusion: Qualitative research shows some added benefits over quantitative research in drawing out broader impacts of the intervention on research participants and should be considered for use in future research studies.

APPLICATIONS OF NEXT GENERATION SEQUENCING IN HEALTHY AGEING

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ASpirin in Reducing Events in the Elderly (ASPREE) is a longitudinal study of healthy ageing and Australia's largest clinical trial. ASPREE is comprised of 16,703 Australians aged over 70 years, and 2,411 Americans aged over 65 years, randomized to either daily low-dose aspirin or placebo to examine the preventative benefit of aspirin on a range of clinical outcomes. At baseline, median age of ASPREE participants was 74 years with all confirmed to have no serious CVD history, no prior diagnosis of Alzheimer's disease (AD) or dementia, (as these were exclusion criteria) and Modified Mini-Mental State Examination (3MS) score ≥ 78 . Approximately 15,000 ASPREE participants provided biospecimens, including consent for genetic studies, through the ASPREE Healthy Ageing Biobank. To date, the genomes of 11,541 ASPREE participants have been sequenced using a targeted 'super panel' covering > 750 genes used in clinical testing,

including pan-cancer, cardiovascular, and neurological genes. Sequencing coverage is >97% for all bases, with an average read depth of >200. Here we present genotyping results for the *Apolipoprotein E* (*APOE*) gene, a major cholesterol carrier in the brain and strong genetic risk factor for Alzheimer's disease (AD) and cardiovascular disease (CVD). We stratified the 11,541 ASPREE participants based on *APOE* genotype and identified 169 (1.46%) *APOE* ε4/ε4 homozygotes, with mean age 74 years, comparable to usual prevalence of 1.45% in the AD patients. Despite significantly increased risk of AD and CVD, individuals in ASPREE cohort had no prior history or clinical diagnosis of either at baseline. Absence of detectable disease symptoms, or delayed onset, despite carrying a significant genetic risk factor of high effect size, suggests the possibility of modifiers, or protective genetic factors in the genomes of these individuals, potentially contributing to protection against AD and/or CVD. Further studies are planned to elucidate such factors.

A MODEL OF LIFE ENVIRONMENT DISRUPTION TO ACCOUNT FOR PREMATURE MORBIDITY AND MORTALITY ASSOCIATED WITH OLDER PEOPLE MOVING INTO LONG-TERM CARE.

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After more than seventy years of research, unexplained premature mortality and morbidity associated with older people moving into long-term care (LTC) remains both a subject of research and a puzzle. This is reflected in the ongoing knowledge gap in accounting for the significant levels of depression, consistently reported at over 50% of the LTC population. With over 7,000,000 older people currently in LTC in OECD countries, projected to rise to over 20,000,000 by 2050, it is imperative that the puzzle be addressed. Reviews of the LTC relocation empirical research literature have consistently called for a coherent theory to provide focus for the research as a necessary step in resolving the puzzle. In response to the call, research was undertaken to develop such a theory. The work draws on the philosophical research of Martin Heidegger to establish an alternative paradigmatic framework for depicting the person leading to the development of the theory. The work indicates that a fundamental problem behind the puzzle lies in a flaw inherent in the otherwise successful social contract between medicine/health care and its 'patients' which is exposed in the context of LTC. The flaw relates to the failure to recognise the fundamental difference between life in terms of a functioning body (the focus of medicine) and the life of the human organism (person), which is founded upon the body. The theory postulates that the LTC environment, primarily designed to meet the efficiencies of delivering medical/health care, based on its concept of life, fails to address the characteristics of the living environment necessary to sustain the life of the human organism, leading to premature morbidity/mortality; this is the social contract flaw and the key to the puzzle. The presentation provides an overview of the theory.

DEEP BRAIN STIMULATION AND CHANGES IN PERSONALITY AND IDENTITY: A QUALITATIVE EVALUATION OF CLINICIAN PERSPECTIVES

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Background: Deep Brain Stimulation is a well-established neurosurgical intervention in movement disorders such as Parkinson's disease, and is an emerging indication in psychiatric conditions including treatment-resistant depression and obsessive-compulsive disorder. DBS has been associated with subtle but significant changes in patient personality, identity and interpersonal relationships. While the prevalence of these issues remains unknown, some clinicians have suggested that the risk of personality change following DBS is far more prevalent and problematic than most appreciate. Objective: the current study explores clinicians' experiences of patient personality and identity change following DBS, as well as clinicians' approaches to discussing, identifying and managing these issues with patients and family. This is the first to examine the views of the Australian DBS medical community on this important issue. Method: qualitative semi-structured interviews were conducted with 15 clinicians from different disciplines with specialisation in DBS for either movement or psychiatric disorders, including depression and OCD. Clinicians were involved in the transfer of information to prospective DBS patients and their follow-up care. A thematic analysis of the interview transcripts was conducted. Results: clinicians described varied experiences with patients following DBS, both positive and negative. These included: the emergence of both subtle and overt personality changes, the restoration of patients' pre-morbid personality or self, and the persistence of personality traits associated with disease development. Opinions on the underlying causes of perceived changes were mixed. A comparison of the perspectives of clinicians working in movement disorders was made with those working with psychiatric populations. Conclusions: the results of the study provide a picture of these important issues and how they are currently managed in Australian clinical DBS practice. The study also highlighted important considerations when discussing the potential for personality change following DBS and will inform guidelines for clinicians when enrolling new patients.

WHAT DOES SUCCESSFUL AGEING MEAN TO OLDER AUSTRALIAN MILITARY VETERANS?

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Successful ageing is an enduring theme in gerontology that is subject to ongoing conceptual debates. Debates centre on the domains of successful ageing, and whether researcher or lay definitions are more appropriate. There is consensus however that the construct is multidimensional and heterogeneous. Support for its heterogeneity is found in a growing body of literature investigating lay perspectives of diverse groups of older adults. Missing from this body of work is the perspective of military

veterans. Understanding veterans' views is important because military experience may disrupt or enhance the successful ageing process, leading to complex ageing trajectories. This understanding will improve efforts to support veterans as they age. To address this knowledge gap, the current study aimed to discover the subjective meaning of successful ageing among older military veterans in Australia. Semi-structured interviews were conducted with 74 veterans of the Australian armed forces (70 male, four female) aged between 60 and 75. Data was thematically analysed. Analysis revealed that veterans included the domains of health, physical and cognitive function, close social ties, and engaging in productive activities in their definitions of successful ageing. These domains align with existing successful ageing models. Factors that contributed to veterans' successful ageing included having psychological resources such as a positive attitude, resilience, creativity, generativity/legacy, and general self-efficacy. Two novel contributors to successful ageing which have not been reported in civilian samples were having a positive help-seeking attitude, and mental health self-efficacy. This highlights a potential difference between veteran and civilian lay perspectives of successful ageing. Veterans may enter older age with multiple physical, mental, and social challenges, so the effectiveness of programs to promote their successful ageing could be enhanced by efforts to strengthen psychological resources. Understanding veterans' perceptions of successful ageing permits its measurement, and a study to address this is currently underway.

PREDICTING LONGITUDINAL COGNITIVE TRAINING RESPONSIVENESS IN COMMUNITY-DWELLING OLDER ADULTS

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Background: Cognitive training is a safe and efficacious approach to enhance or maintain cognitive function in healthy older adults. Emerging evidence highlights distinct phenotypes in cognitive training responsiveness. However, with few larger scale investigations identifying predictors of responsiveness longer-term, it is unclear who best responds to cognitive training. Objective: The current study aimed to examine whether age, sex, education and estimated premorbid IQ predicted longer-term cognitive trajectories following training. Methods: A sample of 315 community-dwelling older adults (age: M = 66.29; SD = 7.13) involved in the Active Cognitive Enhancement (ACE) Program training study were allocated to either an experimental ($n = 253$) or non-active control group ($n = 62$). Experimental participants undertook a 10-week multi-domain training intervention involving one 2–2.5-hour group training session/week. Sessions included education on healthy ageing, mnemonics training, meditation and low intensity exercise. Short- and long-term verbal memory, and executive functioning (EF) were assessed at baseline and at 3- 6- and 12- month follow-ups. Generalised growth mixture models were used to identify homogenous clusters of individuals with different trajectories of cognitive

change, based on intervention group and baseline demographics. Results: ACE was efficacious for EF trajectories over 12 months, but not on memory. Trained participants with lower baseline EF improved more than low EF baseline controls (Cohen's $d = 0.26$). Older age and lower premorbid IQ predicted improved low baseline EF trajectories. Furthermore, individuals demonstrating EF performance gains were less likely to show verbal memory trajectory gains. Conclusion: This study found that individuals with lower baseline performance, older age and lower premorbid IQ benefited most from cognitive training longer-term. That is, training gains were made by those with a greater need for intervention. Whilst further research is required, such findings are useful to develop individually prescribed, cost effective cognitive training for the older adult community.

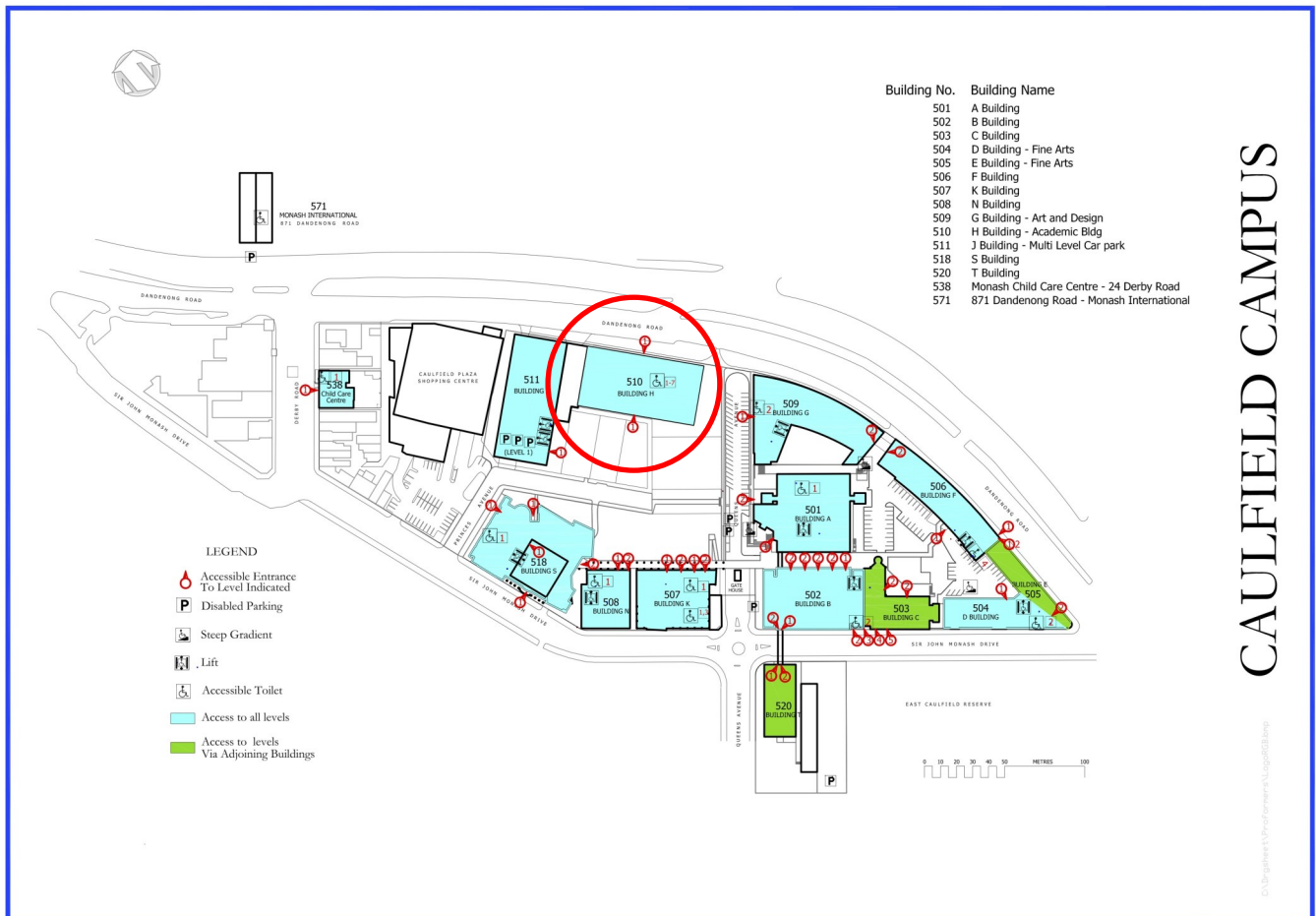
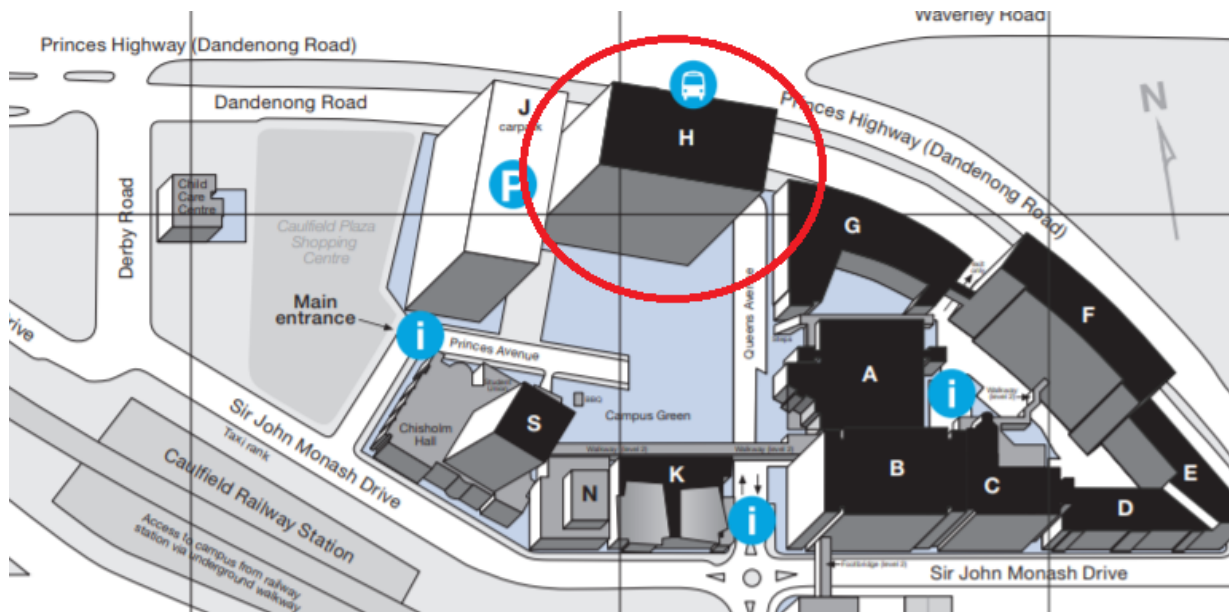
ASSOCIATION BETWEEN DNA METHYLATION OF THE *KITLG* GENE AND CORTISOL LEVELS UNDER STRESS IN OLDER INDIVIDUALS

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Background: A recent study reported for the first time that DNA methylation of the *KITLG* gene is associated with cortisol stress reactivity in adults, and mediates the association between childhood trauma and cortisol levels. Objective: To provide the first independent replication of these findings. Methods: ESPRIT is a prospective study of these findings. Methods: ESPRIT is a prospective study of community-dwelling participants (age ≥ 65), in France. Childhood trauma was ascertained using a validated retrospective 25-item questionnaire. Morning, evening and diurnal salivary cortisol was measured under naturalistic basal ("normal day") and stress ("attending a hospital for lengthy examinations") conditions and determined using direct radioimmunoassay analysis. DNA methylation of the *KITLG* gene was quantified in whole blood using the SEQUENOM MassARRAY EpiTYPER platform. Results: A significant negative association was observed between *KITLG* DNA methylation and both morning cortisol ($\beta = -1.846 \pm 0.666$, $p = 0.007$) and diurnal cortisol (AUC) ($\beta = -19.429 \pm 8.868$, $p = 0.031$) under a stress condition. However only the former association was significant after correcting for multiple testing. Further, this association remained after adjusting for age, sex and depression status. No significant association was observed between childhood trauma and *KITLG* DNA methylation in this older population. Conclusion: These findings support prior work of a direct association between *KITLG* DNA methylation and cortisol levels under stress, and provide the first evidence that the *KITLG* gene may play a role in regulating the stress response in a healthy older population. However, the lack of association with childhood trauma suggests further studies are required to better understand the long term effects of childhood trauma on stress reactivity in older individuals.

ERA 2018 Venue Maps



ERA 2019 National Conference—CEPAR, UNSW



ERA 2019 National Conference – UNSW Sydney

The ERA 2019 National Conference will take place in Sydney on 4 and 5 November and will be hosted by the ARC Centre of Excellence in Population Ageing Research (CEPAR) at UNSW Sydney.

Based at the UNSW Business School, with nodes at the Australian National University, Curtin University, the University of Melbourne and the University of Sydney, CEPAR is a unique collaboration between academia, government and industry, committed to delivering solutions to one of the major social and economic challenges of the 21st century: population ageing.

The Centre is committed to building a new generation of researchers to global standard with an appreciation of the multidisciplinary nature of population ageing.

CEPAR is excited at the prospect of hosting ERA in 2019 and looks forward to welcoming you to Sydney in November next year.

Like this year, ERA 2019 will be immediately prior to the Australian Association of Gerontology conference to make it easy for people to transition between our two ageing conferences.

To keep up to date, join our mailing list at <http://www.era.edu.au/era-register.php>



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