



Exercise Physiology: Innovative community based initiatives supporting older Australians in our regions

By Sam Johansen –Senior Exercise Physiologist Hunter Rehabilitation and Health

My 'why'

To **educate** and **empower** all humans to move more and live better



What is an Exercise Physiologist?

*AEPs are university qualified allied health professionals equipped with the knowledge, skills and competencies to design, deliver and evaluate safe and effective exercise interventions for people with **acute**, **sub-acute** or **chronic** medical conditions, injuries or disabilities.*

-Exercise and Sport Science Australia



Types of Clients

- **Medicare** Enhanced Primary Care Plan- 5 sessions per year with a \$56 rebate
- **DVA** - Fully funded
- **Private** - \$129 initial, \$89 subsequent (Private Health Rebates)
- **Workcover/CTP/Life Insurance** – Fully Funded
- **NDIS** – Fully Funded
- **My Aged Care** – Full Funded



Today's Focus

Successful Aging

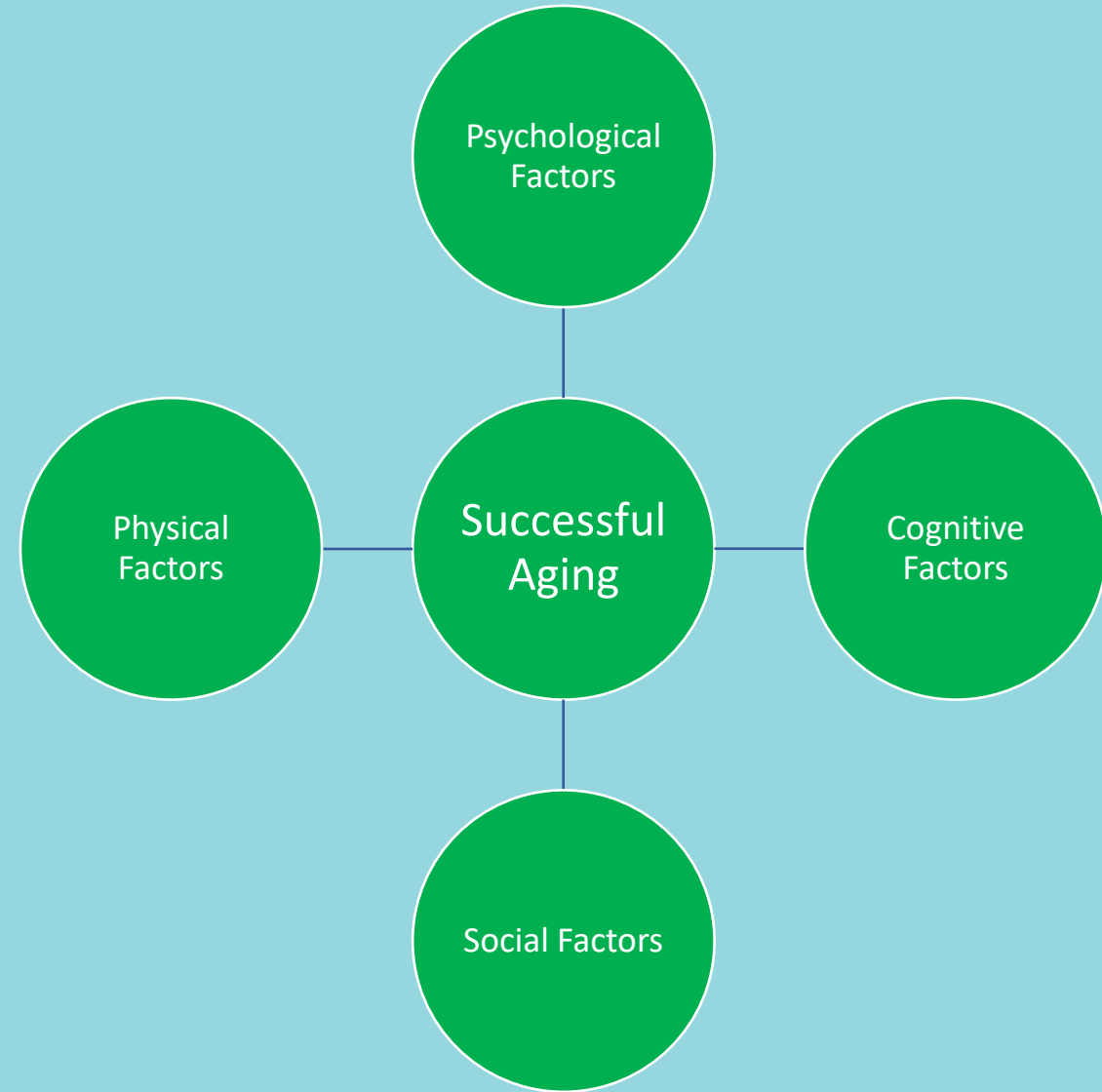
EngAge Program

Evaluation



Successful Aging

‘The process of developing and maintaining **functional ability** that enables **well-being** in older age’ -WHO



Benefits of Successful Aging

- Maintain **independence** and autonomy
- **Purposeful** and meaningful existence
- More opportunities to participate and **contribute** to the community
- Feel happier
- **Healthier**
- **Live longer**



So how can we assist with successful aging?



EngAGE

- EngAGE is an online 12week program that looks to provide senior Australians an avenue for fun and socially engaged exercise.
- Core purpose: combat the **social, psychological and physical** burdens of aging.
- Develop authentic learning opportunities for Exercise Physiology students.



EngAGE: Addressing Social Isolation

- Study's have found that older people who experience 'extreme loneliness' are up to **26%** more likely to **die prematurely** (Steptoe et al. 2013)
- Due to the pandemic many older Australians have become even more socially isolated.
- A sense of **connectedness** to the local communities and of **belonging** to others is an important antidote to loneliness for many older people.



EngAGE: Benefits of Exercise

- Among people aged 65 and over **75%** were not sufficiently active in 2014-15 - AIHW 2016
- Physical activity plays a huge role in prevention and management of **physical, functional, mental and cognitive health.**
- Exercise has been shown to be effective for a range of different chronic conditions:
 - Musculoskeletal pain (knee, back, shoulder)
 - Osteoarthritis
 - Osteoporosis
 - Diabetes
 - Depression/Anxiety/PTSD
 - Dementia
 - Fall Preventions



EngAGE: Participation

- EngAGE community program comes at **no cost** to participants
- Participants have access to the **12 week intervention** developed and facilitated by:
 - Accredited Exercise Physiologists
 - Exercise Physiology Students
- Inclusion Criteria:
 - Over **65 years** of age
 - Access to the internet and a device that has zoom capabilities
 - No contraindications to exercise



EngAGE: Community

- **37** community dwelling **older adults** (Over 65)
- Varying physical activity levels:
-**0-375min** per week
- Multiple **comorbidities** across all participants:
 - Diabetes (Type 1 and 2)
 - Overweight
 - Chronic health concerns including cancer, autoimmune disease, musculoskeletal, arthritis
 - Heart disease and stroke
 - Asthma
 - Co-occurring depression, anxiety and other psychological issues associated with a physical illness and social isolation.



EngAGE: Community

- 12 week intervention
 - **2 hour** session, once a week
 - Mixture of **large and small group tasks**
 - Mixture of activities
 - **Participant led** activities

Time	Task
0-15 min	Set up and introductions
15-30 min	Sharing Activity (SG)
30-75 min	Exercise Activities (SG) Warm-up, ROM, Strength and Balance
75-90 min	Creative Activity (SG)
90-120 min	Educational Activity



EngAGE: Community Evaluation

- 2 rotations of the EngAGE program have been completed
- The program recruited **37 older adults** in the region, of which 33 participants continued with the program.
- The **average attendance** was **85%** which equates to 671.22hrs of community engagement across the 2 rotations.
- All participants were required to complete a survey pre, during and post. The preliminary analysis of these surveys show that the program was well received and had a **positive impact**.



EngAGE: Community Evaluation

Question	Agree (%)	Strongly Agree (%)
The EngAGE program was enjoyable and educational	24	72
The EngAGE program provided me with an avenue for social interaction	37.5	40.5
I would recommend the EngAGE program to my friends/family	32.5	64
The EngAGE program improved my feeling of wellbeing	37.5	47
The EngAGE program will have a lasting positive impact for me	65.5	25

EngAGE: Case Study

- Kate is a **72yo** female who is **overweight**, has **arthritis**, and is in the process of recovering from COVID 19.
- Kate explained that she had never completed exercise on a regular basis and was currently doing **0-min of physical activity** per week. Kate also reported that she fatigues easily and has trouble with her balance.
- Kate commenced the engAGE program once a week and was given exercises to do at home between sessions.
- By the end of the 12 weeks Kate had reported:
 - Decreased fatigue
 - Increased ability to perform activities of daily living
 - Increased strength (**Sit to stand score increased from 11reps to 24reps**)
 - Increased balance
 - Increased social interaction



EngAGE: Case Study

“I have enjoyed the group sessions immensely. The interaction and communication has been very uplifting. I didn’t realise how insular that I was becoming since being in lockdown with Covid-19 and staying isolated from so many people and groups.

Over recent weeks I have stepped out of my comfort zone on so many fronts. I am back out having so much needed catch ups with great friends, I have also started exercises at home, plus I feel a bit more energised in myself.”



EngAGE: Student Evaluation

- The program also recruited **7 student practitioners** over the two rotations and provided **480 practicum hours**.
- The student practitioners also reported statistically significant improvements in **self-efficacy** (21% improvement) and **work readiness** (17% improvement).



What's next for EngAGE?

- 2 x rotation in the next 6 months
- **Eligibility criteria:**
 - Over 65years old
 - Access to the internet and a device with zoom capabilities.
 - No contraindications to exercise.
- **University of Newcastle: EngAGE program**
Email: engage@newcastle.edu.au
- **Hunter Rehabilitation and Health**
Email: admin@hunterrehab.com.au

