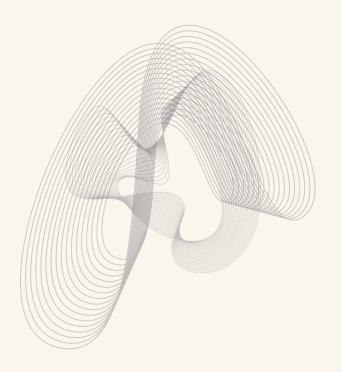
# Embodied Identity

Making a connection between Dementia Prevention and Dance Movement Therapy in Aotearoa, New Zealand



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#### My grandmother and I in 2012



My grandmother passed away in 2018 because of dementia at the age of 93. At her death, my grandmother no longer remembered who I was.



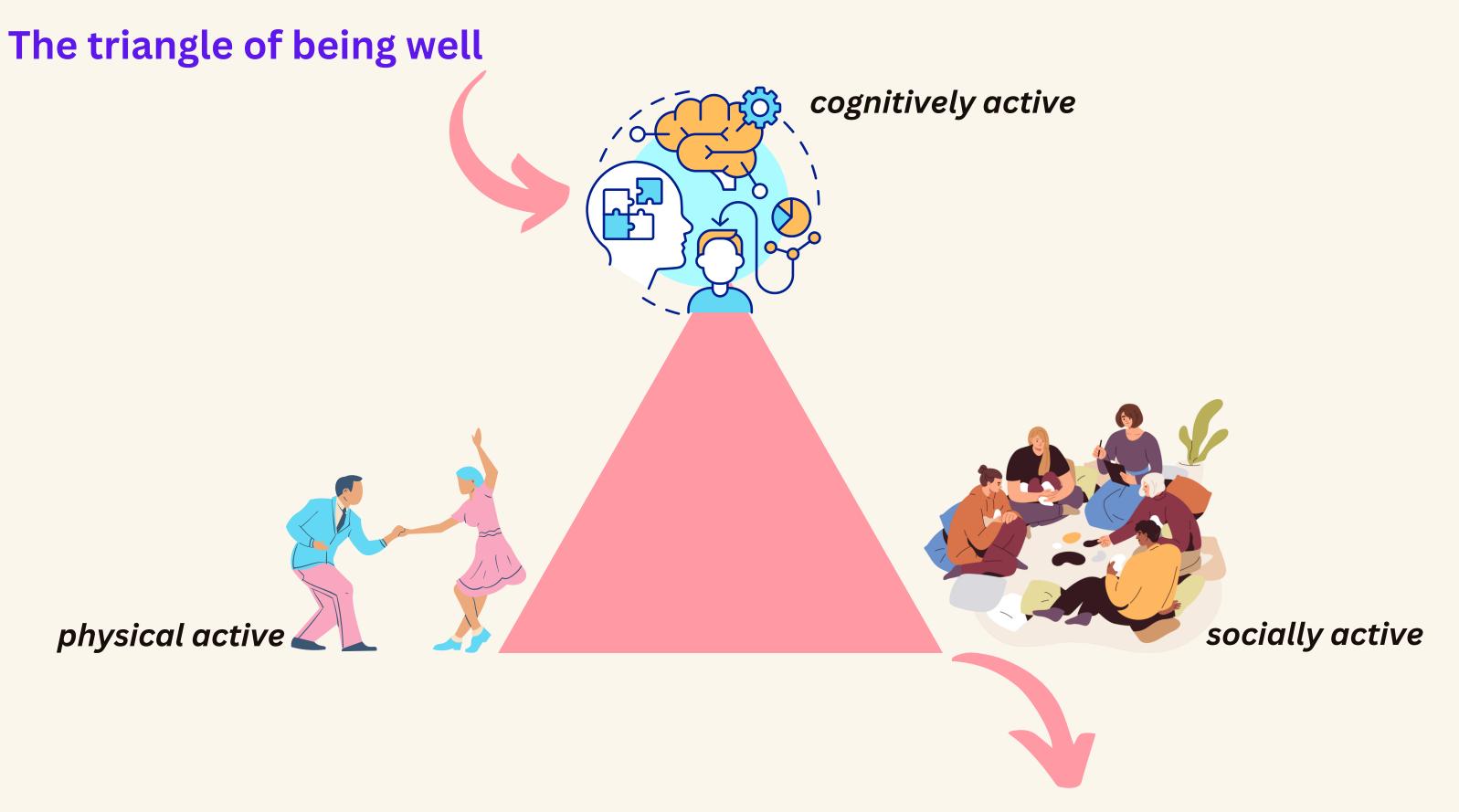
- is a group of symptoms characterised by a decline in cognitive function, memory, language, behaviour, and the ability to perform functional skills (World Health Organisation [WHO], 2022).
- Dementia is used here as an inclusive term related to various diseases, including Alzheimer's Disease (AD). It is also linked to primary or secondary injuries, such as stroke, that cause progressive and degenerative damage to the brain (Ivan et al., 2004).
- There is no cure or treatment to stop its progression, and available treatment options have symptomatic effects (Perneczky, 2019).
- Optimising physical health, cognition, activity, and wellbeing for quality of life is one of many principal goals for dementia care (New Zealand Ministry of Health [MoH], 2013).

## It is never too early and never too late in the life course for dementia prevention.



- Research indicates that engaging in activities like playing games, using musical instruments, reading, and physical exercise can positively impact brain function and potentially reduce the risk of cognitive decline.
- Cognitive training, including memory training, can indeed improve an individual's overall cognitive function and daily performance.
- Being social improves mental health.

(Livingston et al., 2020)



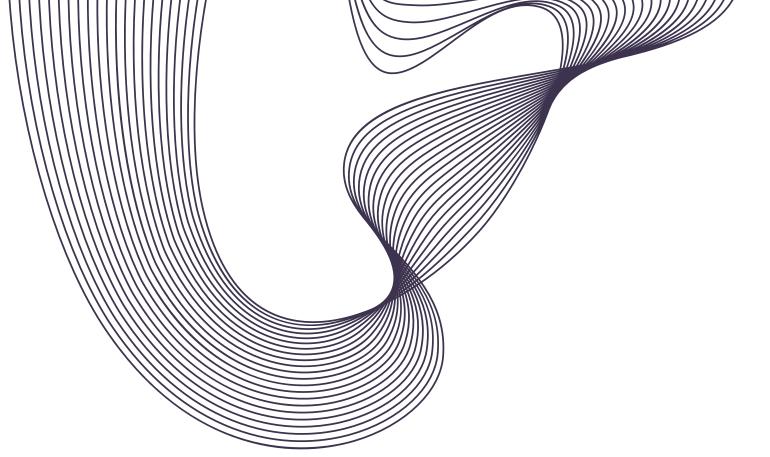
**Body-mind approach in dementia prevention** 

The environment and the brain have a parallel effect on the abilities of the individual with dementia; therefore, interventions that involve social interaction are essential.

Fazio et al. (2018)

Because people are experiencing a decline in verbal memory and abstract thinking, there is a need to offer a therapeutic intervention which is non-verbal and bodyoriented, such as dance movement therapy (DMT).

Karkou et al. (2023)



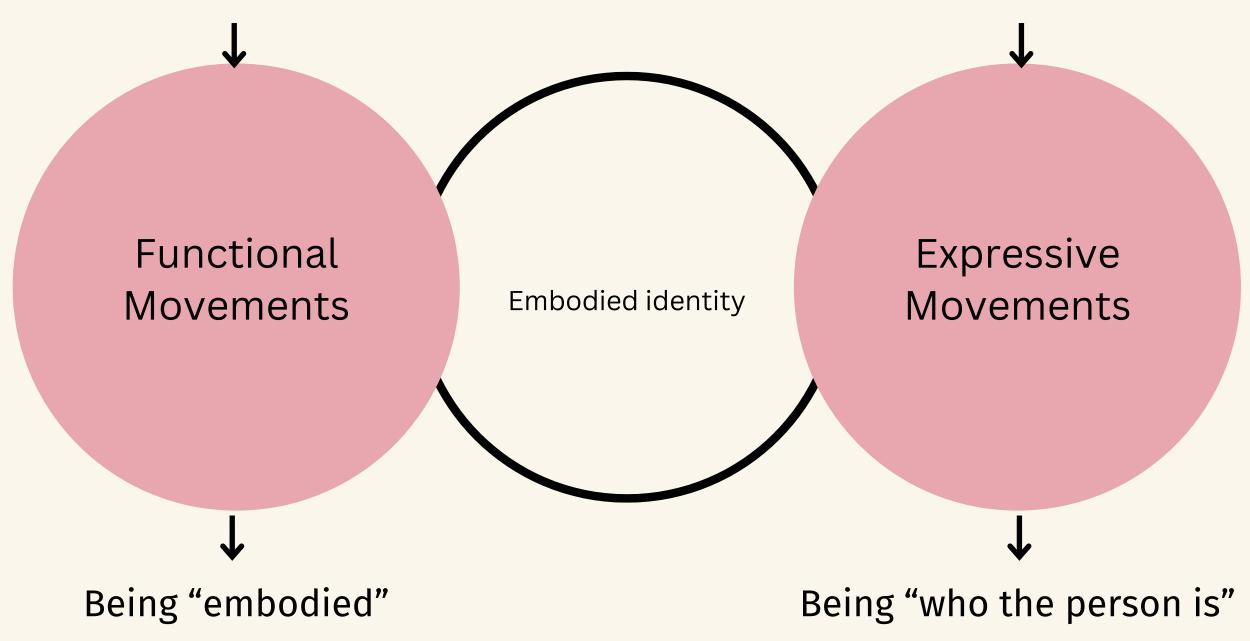
### What is Dance Movement Therapy (DMT)?

- Dance/movement therapy (DMT, as known in the US, 2024) or dance movement psychotherapy (DMP, as known in the UK, 2024) is an embodied psychotherapy approach that emphasises the connection between the mind and the body.
- The aim of DMT/P is often to increase the awareness of the mind and body using movement, dance, and the creative process as key components in practice.

## How does Dance Movement Therapy foster embodied identity in individuals living with dementia?

In dementia, the basic human needs are under threat because of the decline in the individual's ability to maintain activities of daily life (Kitwood, 1993).

Many aspects of the individual's life and identity are undermined, including past experiences, occupation, and attachment to others (Lyons, 2018).



Research on the benefits of dance in dementia care is limited in Aotearoa (Choo, Barak & East, 2019), and DMT has not been thoroughly investigated (Ho et al., 2020; Karkou et al., 2023; Menezes, Drumond & Shigaeff, 2022).

Can DMT potentially provide effective intervention for individuals with dementia as a non-pharmacological method?



aims to investigate the role of DMT in preventing dementia, particularly in individuals living with Mild Cognitive Impairment (MCI).

#### Research motivation

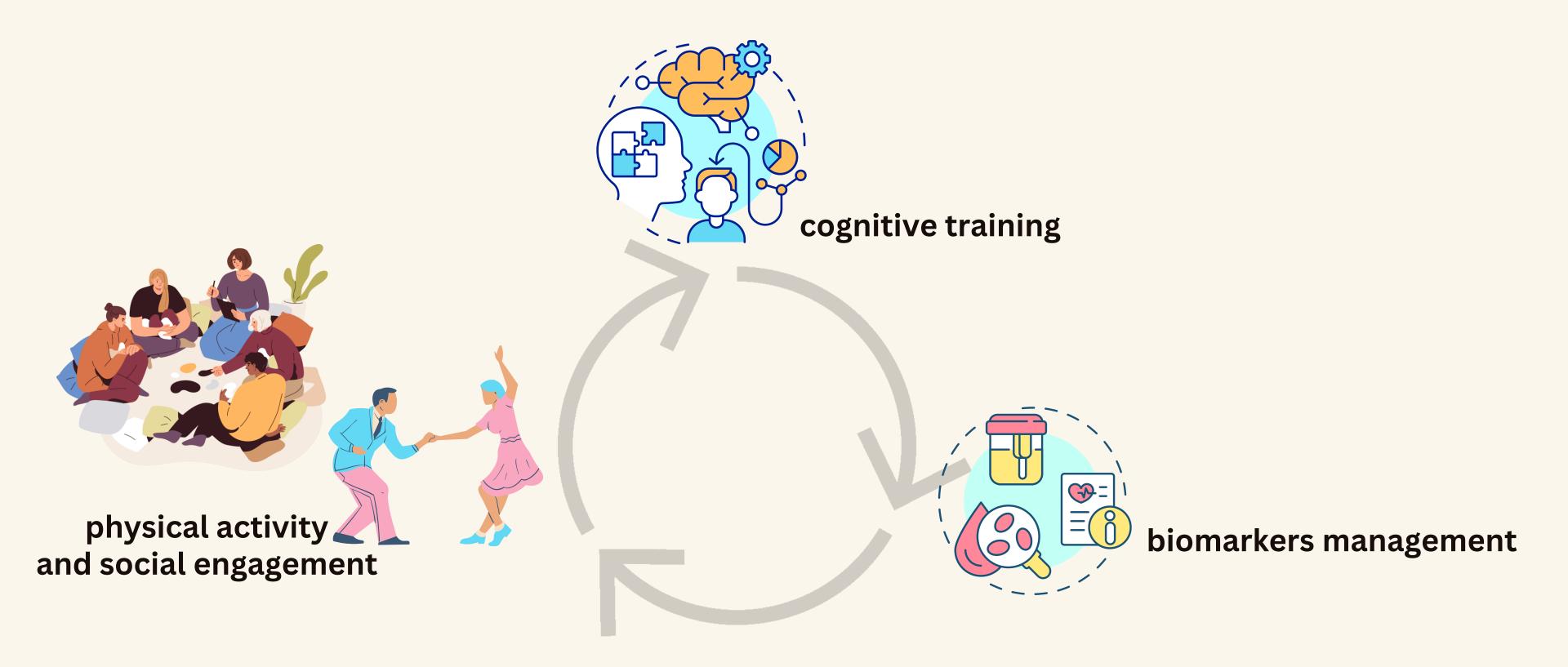
- To explore the therapeutic benefits of DMT for individuals living with MCI in Aotearoa, New Zealand, with the aim of reducing the risks of dementia while improving well-being.
- To include caregiver perspectives ensures a comprehensive understanding of how DMT can benefit both individuals at risk of dementia and their support networks.



- Mild cognitive impairment (MCI) is a condition in which people have more memory or thinking problems than other people their age (Alzheimer's Association, 2024).
- Individuals with MCI are at a greater risk of developing Alzheimer's disease or related dementia.
- In many cases, the symptoms of MCI stay the same or even improve.
- Individuals with MCI can usually take care of themselves and carry out their normal daily activities.

# Why include caregivers of individuals living with MCI?

- Dementia deeply affects the lives of individuals and their families, caregivers, and societies (Kim, Noh, & Kim, 2021).
- The altruistic satisfaction that caregivers derive from their role can enhance the quality of informal care provided to individuals with dementia (Basu & Rosenman, 2014).
- Caregivers who often experience isolation (Terada et al., 2019) may find participation meaningful, as it offers a sense of acknowledgement and purpose (Ross, Ziegert & Rodriguez, 2024).

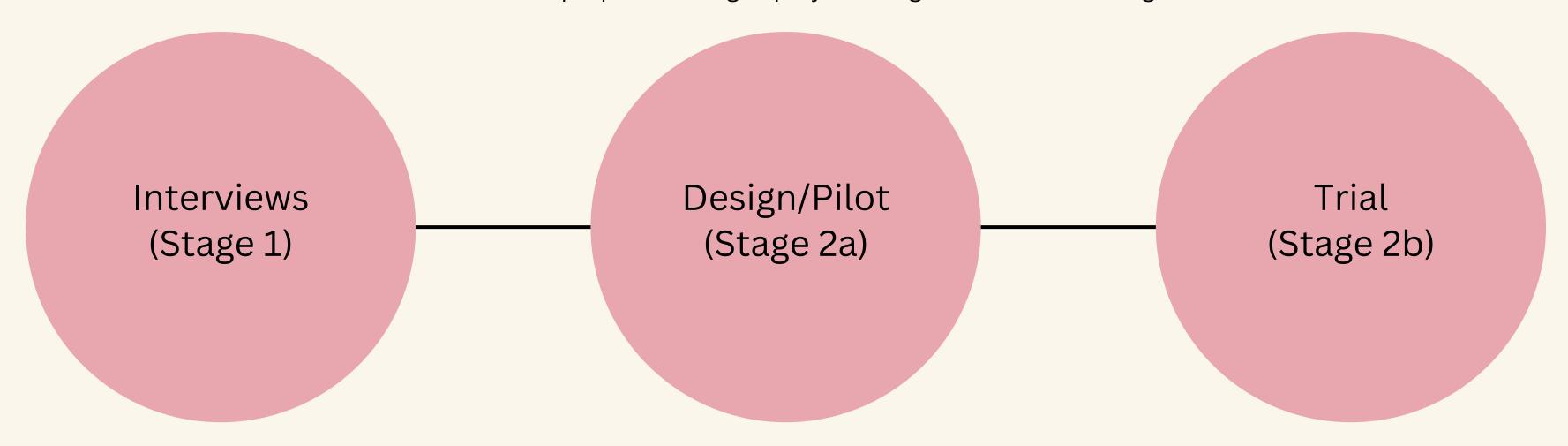


#### Multimodal Approaches

(Mirabnahrazam, et al., 2022; Reas et al., 2023)

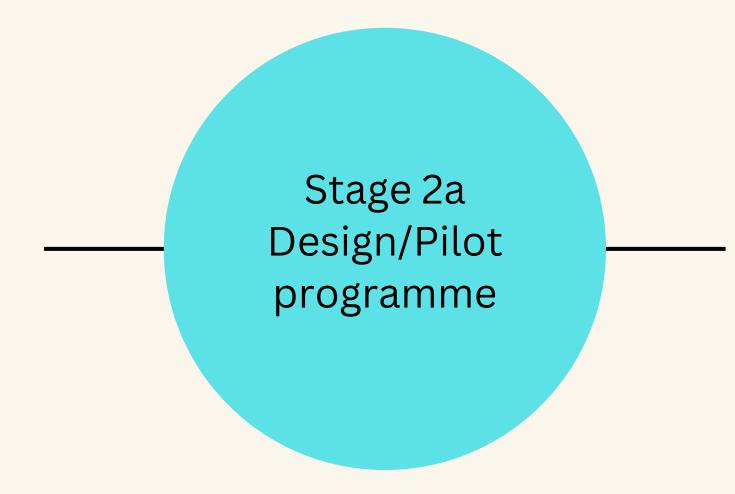
#### Proposed Research Method

The researcher proposes a staged project using various methodologies

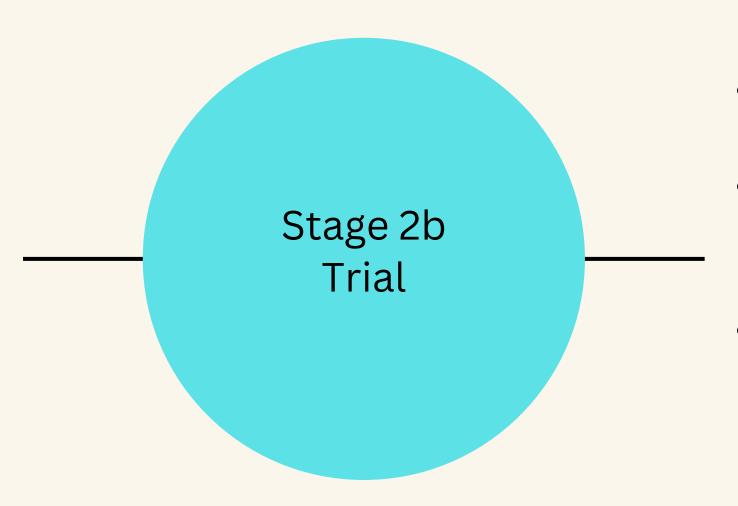




- Aims: to assess the need for DMT for dementia care in Aotearoa, New Zealand.
- **Participants**: (Focus group 1) International DMT practitioners working with dementia individuals; (Focus group 2) local healthcare practitioners who work with this population in New Zealand, and (Focus group 3) local caregivers of people living with MCI.
- Method: Qualitative data through semi-structured interviews
- Analysis: Thematic Analysis (Braun & Clarke, 2022).



- **Aims:** Design and develop a pilot DMT programme for caregivers/healthcare practitioners to facilitate a DMT intervention with MCI individuals
- **Participants**: (a) Caregivers of people with MCI; (b) healthcare practitioners working in the aged-care facilities.
- Proposed Observers: DMT students
- Proposed method: Observation/Self-report/Cocreation
- Proposed analysis: Interobserver agreement (IOA) for movement/observation data (Cruz & Koch, 2019)



- Aims: To deliver the DMT pilot program and test its effectiveness with MCI individuals
- Proposed participants: individuals living with MCI
- **Proposed method**: 2-arm randomised controlled trial (RCT)
- **Proposed analysis:** Mixed analysis for multivariable data (hypothetically, markers of change using blood pressure or using electroencephalogram (EEG) scans for memory testing).

#### Proposed Research Timeline (24 - 36 months)

#### Stage 1

#### Identify the gap

We will conduct one hour of interviews with dance movement therapists working with individuals living with MCI.

To explore how dance movement therapists work (session details, assessment) We will conduct one hour of interviews with local caregivers of people living with MCI and local healthcare practitioners who work in aged care facilities.

To establish the potential need for DMT in Aotearoa, New Zealand.

#### 2a

#### Programme Development

We will develop a pilot DMT programme and invite participants in stage 1 to codesign/partake in the programme.

To design and pilot a DMT workshop with individuals living with MCI

#### Programme Delivery and Feedback

We will pilot the programme and seek feedback from participants to modify, if necessary, and to improve the delivery outcomes of the programme.

To validate the effectiveness of the pilot programme.

#### 2b

#### **Trial**

We will trial the pilot programme with individuals living with MCI and assess the delivery outcomes of the programme.

To validate the effectiveness of DMT as a non-pharmacological intervention



- The effects of DMT on motor function, cognitive deficit, mood, and quality of life in people with neurodegenerative diseases, such as Parkinson's disease (PD), mild cognitive impairment (MCI), Alzheimer's disease (AD) are emerging (Wu et al., 2022).
- The benefit of DMT as an intervention for individuals living with MCI could be considered and applied to reduce the risk of neurodegenerative diseases.
- DMT as an intervention could be an essential tool for improving well-being and cognitive functions and fostering the connection between individuals living with MCI and their surrounding people, including caregivers.

#### Questions to the audience

- What role do you see families and caregivers playing in the care process, and how do you support them?
- Would you like to share any culturally specific approaches or considerations when working with Māori or Pasifika individuals with MCI?
- Have you ever experienced a DMT session in New Zealand? If yes, where and who provides them? What do you think about the approach?

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## Thank you!

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