



What are the risk factors for loneliness in a longitudinal cohort of older Māori and non-Māori



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Whare Wānanga o Tāmaki Makaurau

COMPASS Colloquium 2018

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This research has been made possible by a generous bequest from Dr Jeanette Crossley. We honour her lived experience, her courage in adversity, and her compassion in helping others.

Acknowledgements

- Dr Jeanette Crossley (Fellowship)
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 - ➦ LiLACS NZ (*HRC, Ministry of Health, Rotorua Energy Charitable Trust, Ngā Pae o te Māramatanga, Oakley Mental Health Research Foundation, Heart Foundation*)

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Outline



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- Overview
 - Background
 - Our research question
- Methods, data source – LiLACS
- Results
- Conclusion
- Questions

Background: What is loneliness?



- The gap between the social relationships we have and what we want
 - perceived social isolation (*socially isolated may have higher risk*)
- Affects all ages from young to old
- Detrimental consequences for health and well-being of the individual (and the community)
 - e.g. poor mental & physical health, cognitive decline, premature mortality, lower quality of life, and worse social & economic outcomes
- Of policy concern, e.g. UK 'Campaign To End Loneliness', and Minister for Loneliness

Research question



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Whare Wānanga o Tāmaki Makaurau

- What are the 'modifiable' risk factors for loneliness in older people living in New Zealand?
 - Important for designing interventions

Te Puāwaitanga o Ngā Tapuwae Kia Ora Tonu. Life and Living in Advanced Age: a Cohort Study in New Zealand

LiLACS NZ

- To learn about issues related to wellbeing in advanced age
- Bicultural cohort of older people followed 2010-15
- All Māori aged 80-90, & non-Māori aged 85, living in Bay of Plenty & Lakes DHB areas invited to participate
- Wave 1, n=937: 421 Māori & 516 non-Māori

Loneliness at baseline (2010 - Wave 1)

*Would you say that you:
Always / often / sometimes / never feel lonely*

- 5.1% of Māori and 5.5% of non- Māori reported **always/often** feeling lonely
- 39.8% of Māori and 28.1% of non- Māori reported **always/often/sometimes** being lonely – statistically significant difference
- Working definition: **Lonely** / Not lonely

Loneliness: Conceptual framework



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Loneliness

Successful aging outcomes

Quality of life

Health

*LiLACS – wealth of information – extensive list of variables identified based on literature
– then selected by statistical significance – may have missed important variables due to small sample sizes*

Separate analyses for Māori and non-Māori ...

1. Loneliness levels - by socio-demographics
 2. Loneliness levels - by significant risk factors (chi-square, $p < 0.05$) for either Māori or non-Māori
-
1. Each risk factor for loneliness – odds ratio adjusted for socio-demographics (logistic regression)

Loneliness levels – by socio-demographics



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| Sociodemographics | Non-Māori (% lonely) | Māori (% lonely) |
|--|----------------------|------------------|
| Gender: Male | 25.0 | 38.0 |
| <i>Female</i> | 31.0 | 40.9 |
| Highest ed. qual: None/Primary | 29.0 | 45.8 |
| <i>Secondary</i> | 26.5 | 36.7 |
| <i>Post-secondary</i> | 28.1 | 37.8 |
| Main family occupation: Prof'l. | 27.4 | 38.7 |
| <i>Technical/trade</i> | 30.6 | 35.6 |
| <i>Other</i> | 27.6 | 42.7 |
| Marital status: Partnered | 14.2 * | 26.5 * |
| <i>Widowed</i> | 42.4 | 45.7 |
| <i>Sep'd/div'd/never partnered</i> | 20.6 | 47.1 |
| Retired from paid work: No | 30.3 | 21.4 * |
| <i>Yes</i> | 27.3 | 43.4 |

New Zealand

The University of Auckland

Loneliness levels – by significant risk factors



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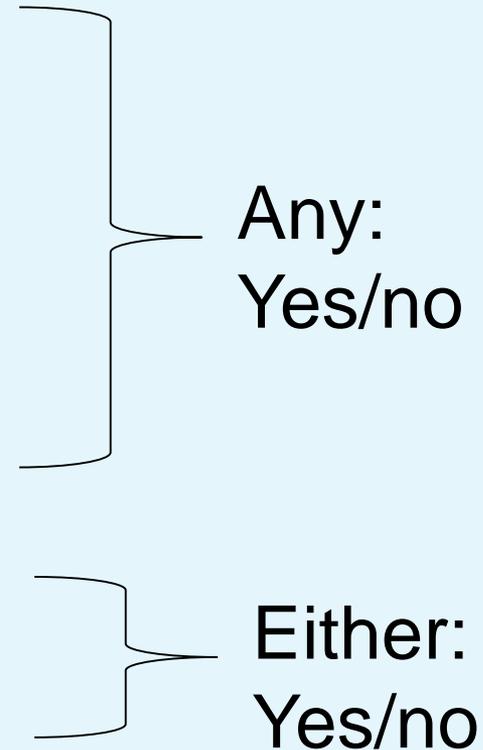
DOMAINS

- Standard of living
- Psychosocial attitudes
- Health factors
- Social connectedness

Standard of living (last 12 months)



- Economising behaviours
 - *gone without fresh fruit/veges*
 - *put off buying clothes*
 - *stayed in bed longer*
 - *put off visits to doctor*
 - *spent less time on hobbies*
- Food insecurity
 - eat less
 - limited variety of food



Economising behaviours



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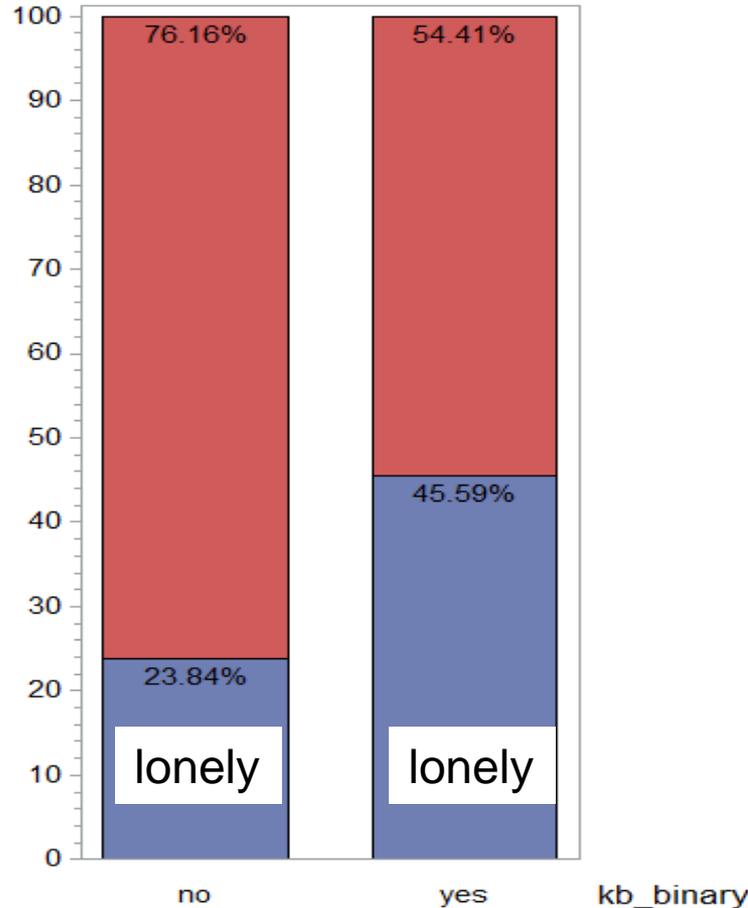
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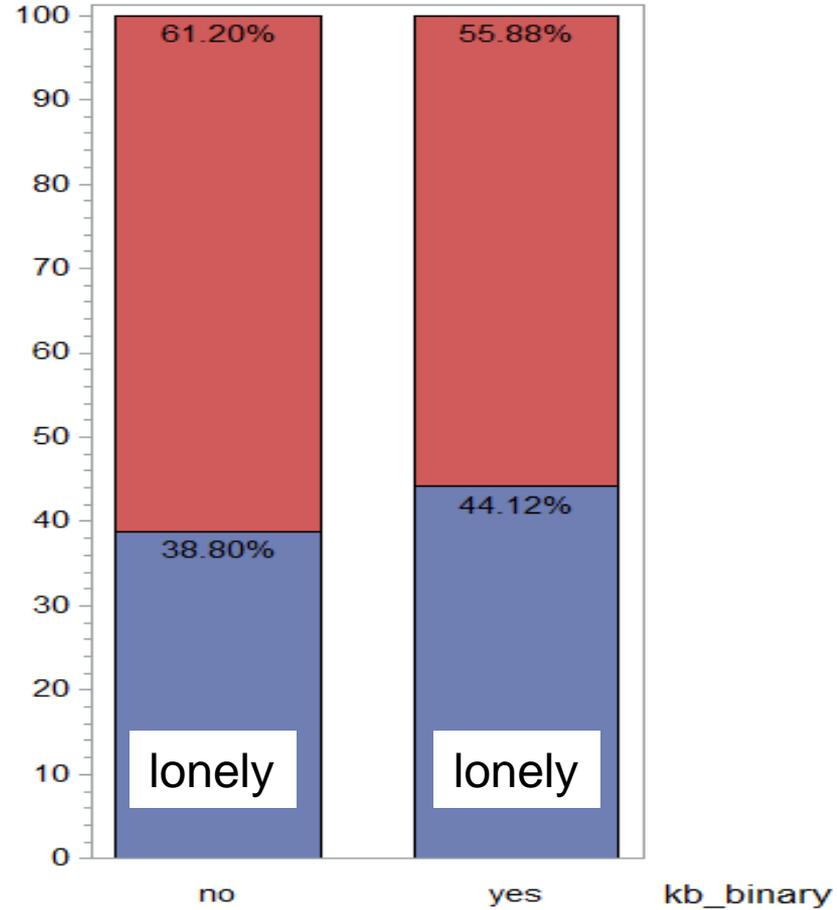


AB2_m=Maori

PERCENT



PERCENT



loneli yes no

loneli yes no

Food insecurity



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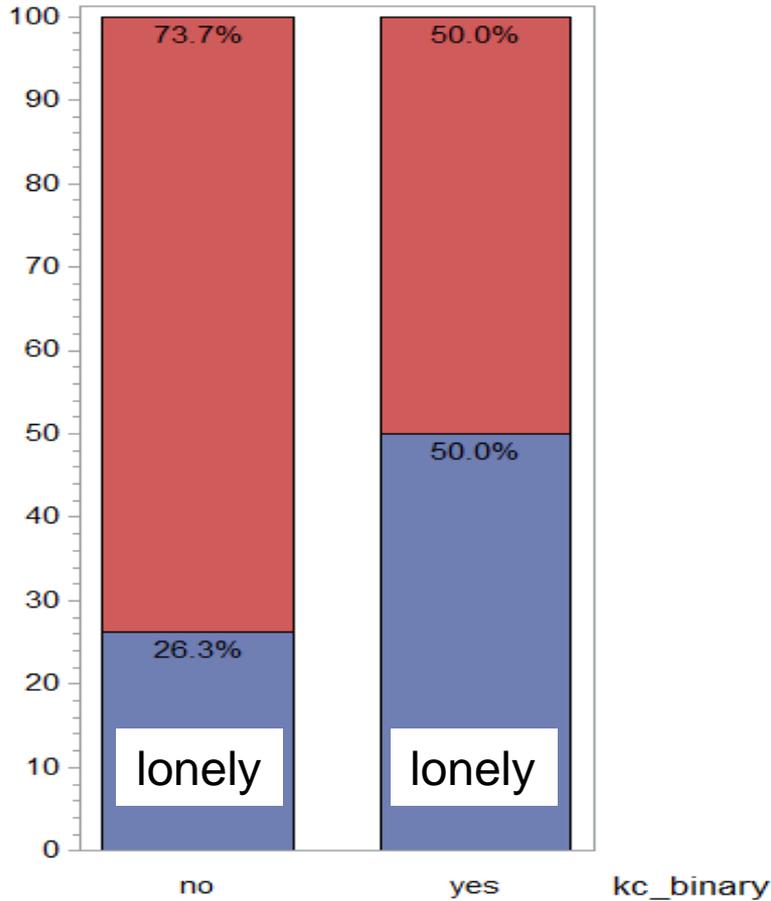
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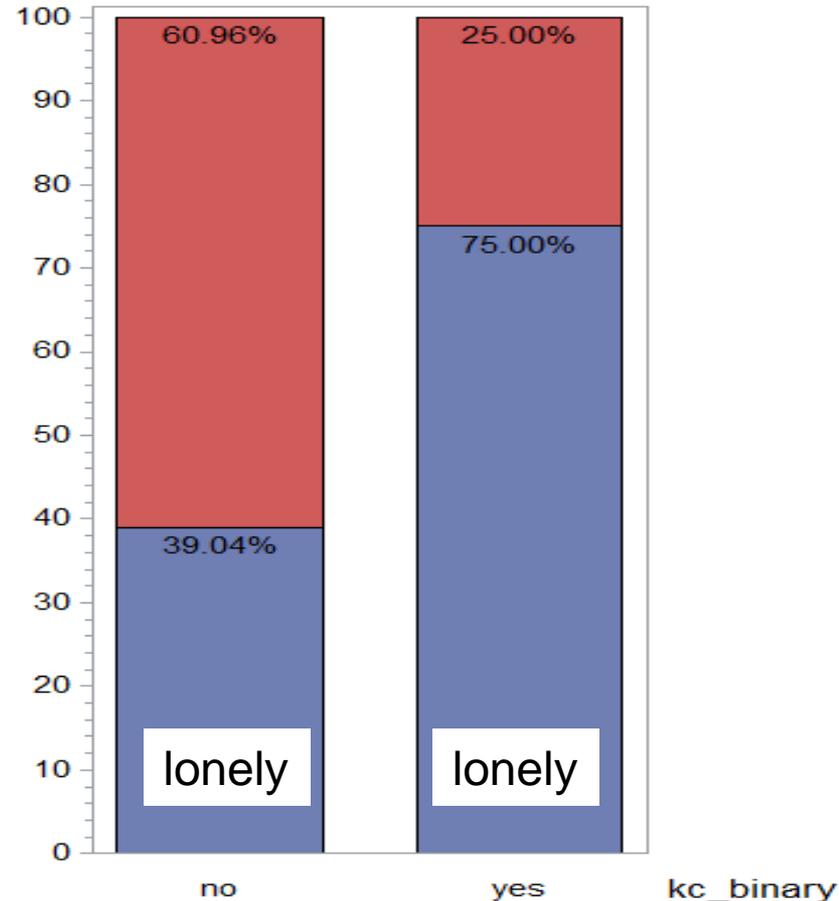
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AB2_m=Maori



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loneli yes no

loneli yes no

Psycho-social attitudes



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Whare Wānanga o Tāmaki Makaurau

- Growing older has been positive or negative experience?

Growing older has been positive or negative experience?



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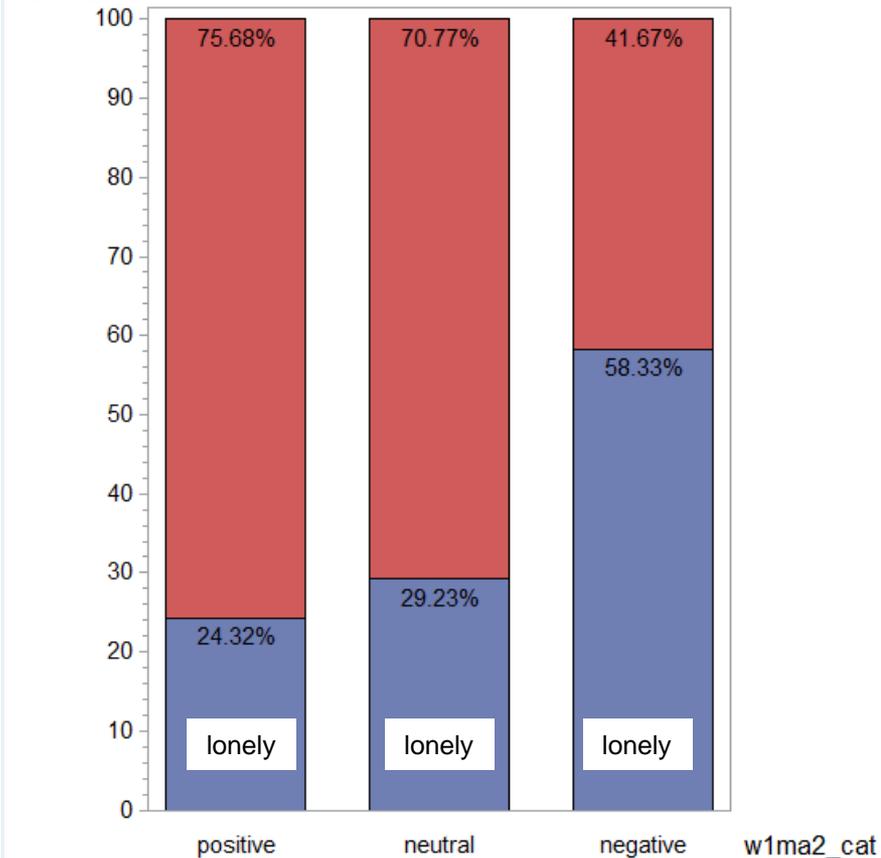
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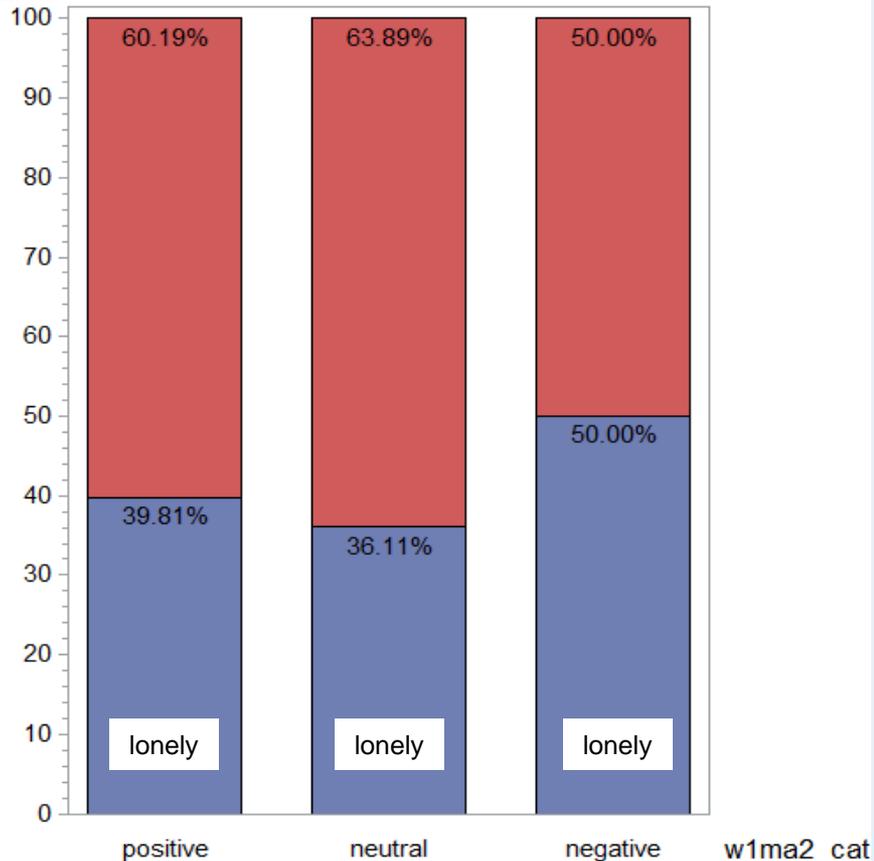


AB2_m=Maori

PERCENT



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loneli yes no

loneli yes no



- Experiencing pain on average (yes/no)
- Number of comorbidities (0-3, 4-5, 6-19)

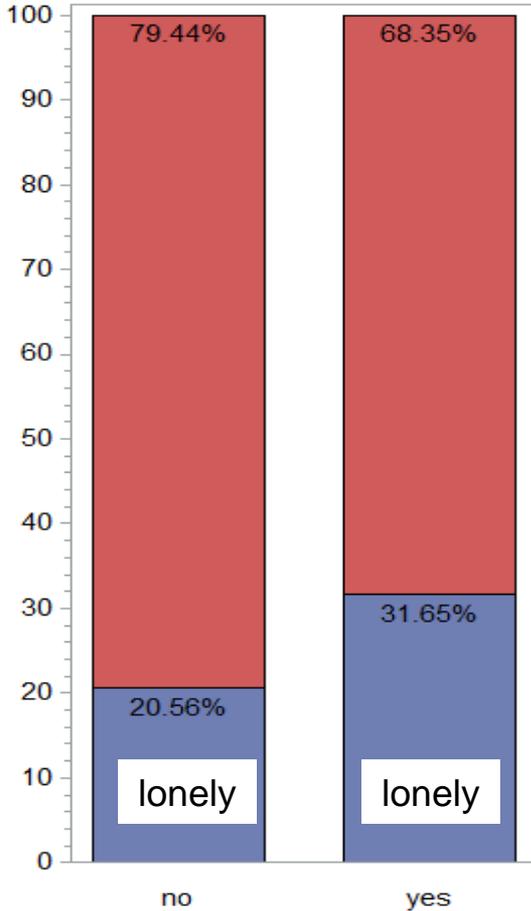
Experiencing pain

AB2_m=Non-Maori

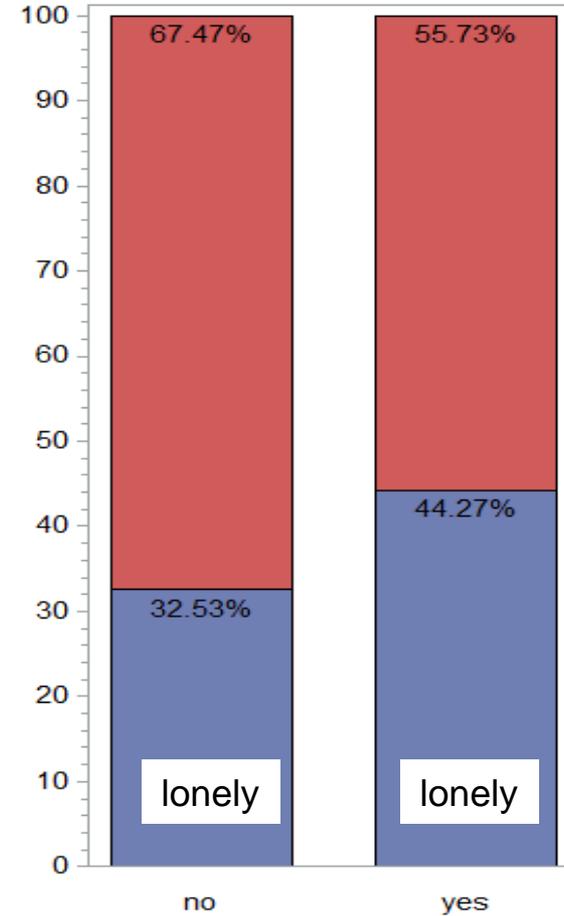


AB2_m=Maori

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loneli yes no

loneli yes no

Number of comorbidities

AB2_m=Non-Maori



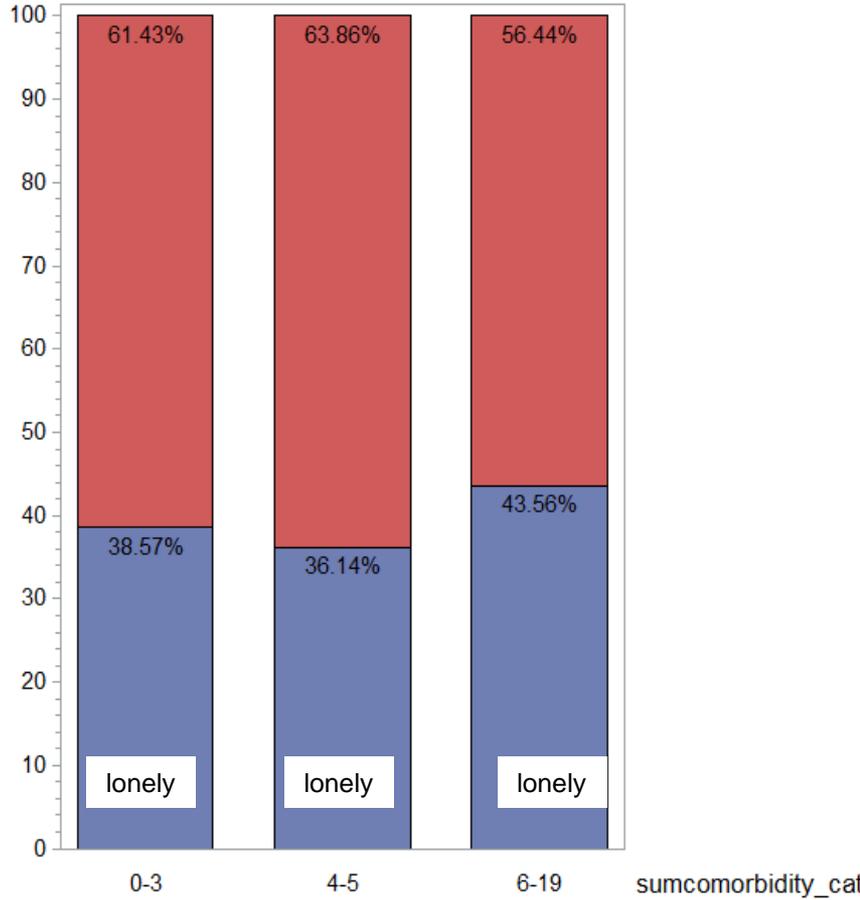
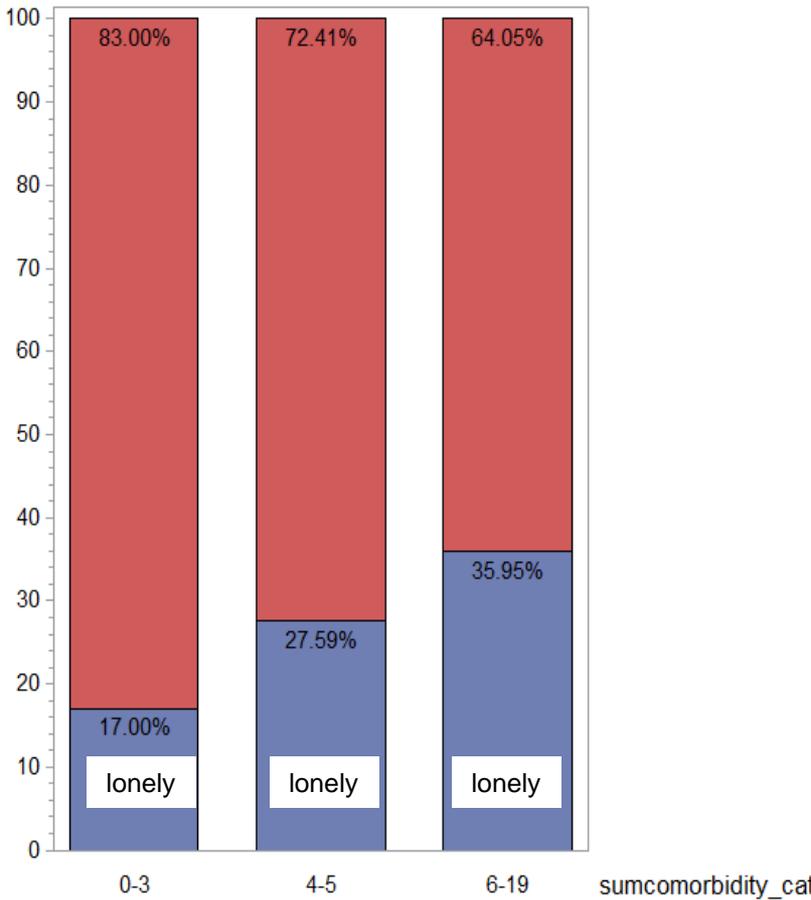
AB2_m=Maori

PERCENT

PERCENT

New Zealand

The University of Auckland



loneli yes no

loneli yes no

Social connectedness

- Who do you live with?
- Eat one or more meals a day with someone?
- Past week, how often engage in moderate sport or recreational activities?
- How much time do you spend alone?

Who do you live with?

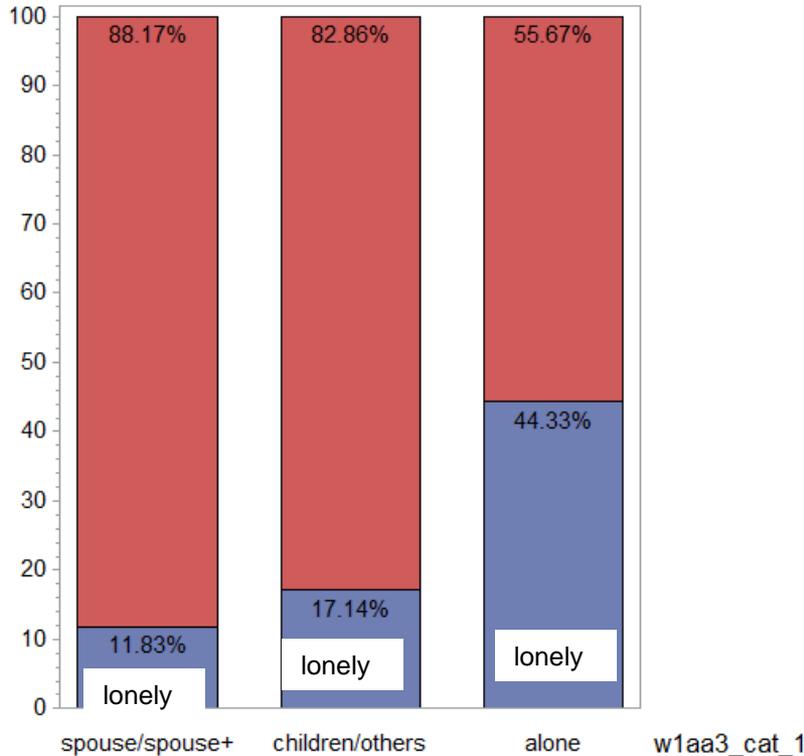
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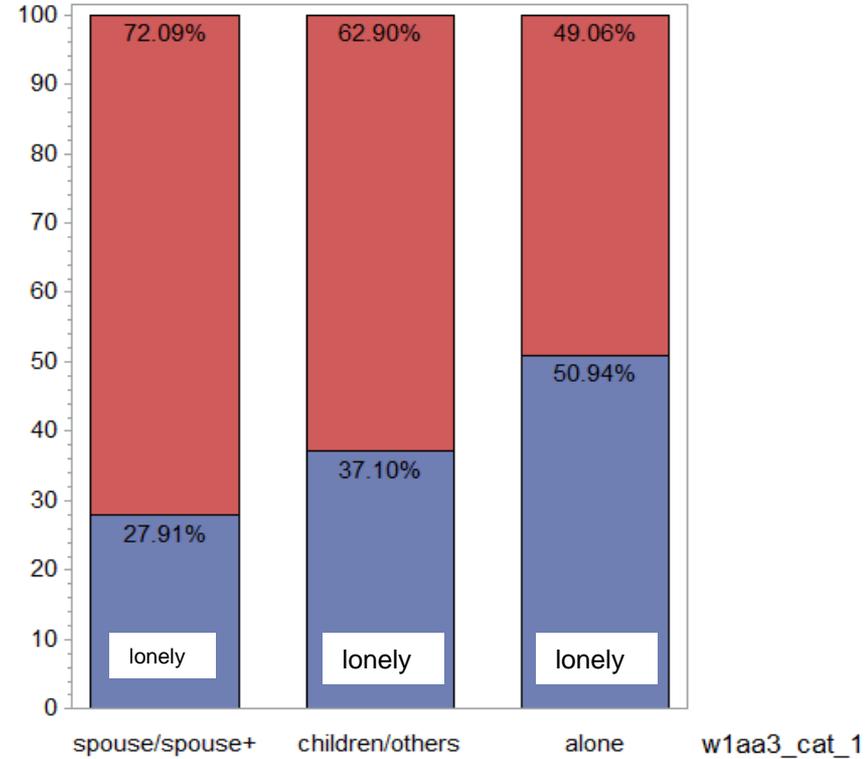
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PERCENT



loneli yes no

loneli yes no

Eat one or more meals a day with someone?

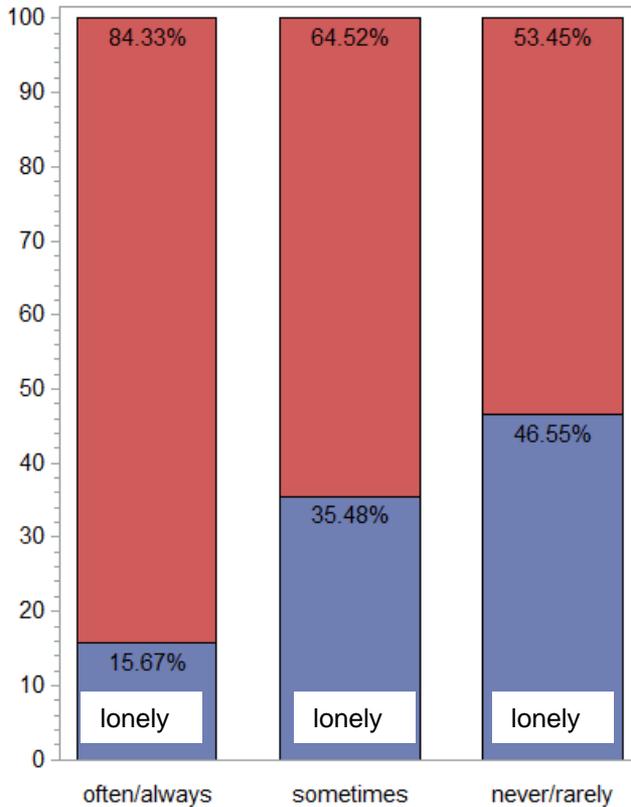
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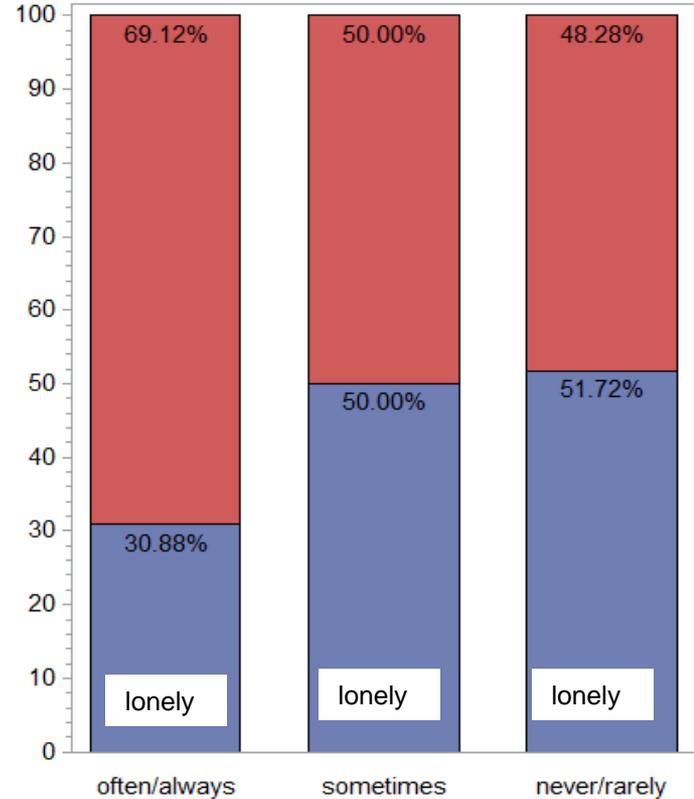
AB2_m=Maori



PERCENT



PERCENT



loneli  yes  no

loneli  yes  no

Past week, how often engage in moderate sport or recreational activities?



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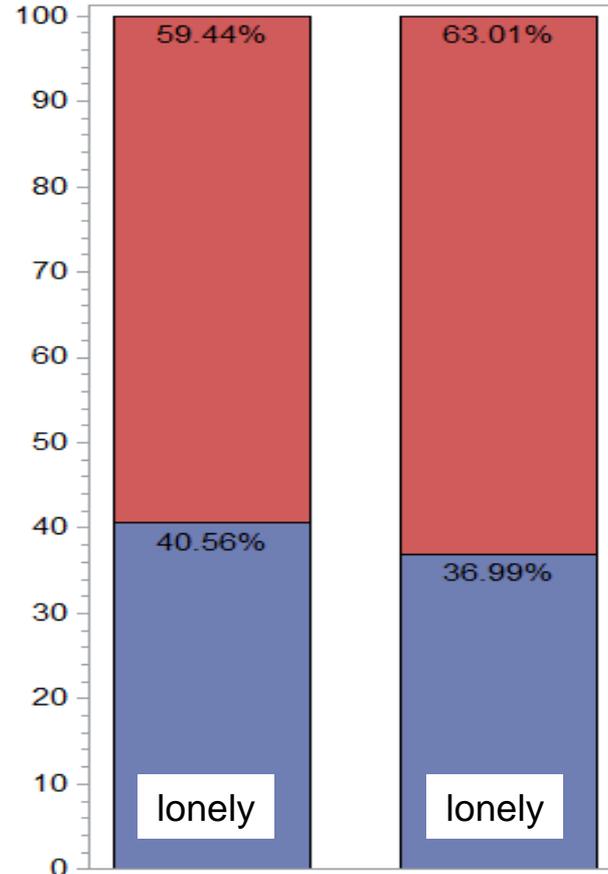
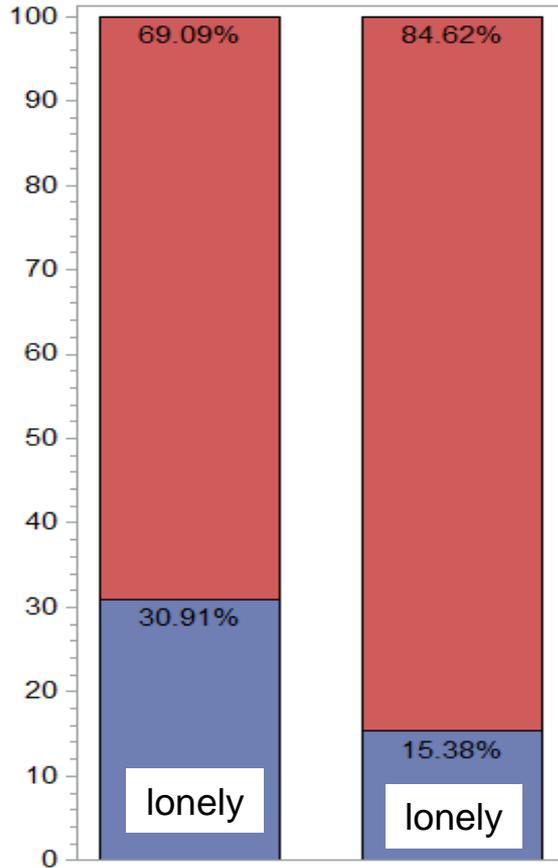
AB2_m=Non-Maori



AB2_m=Maori

PERCENT

PERCENT



loneli yes no

loneli yes no

How much time do you spend alone? (isolated=always/often)



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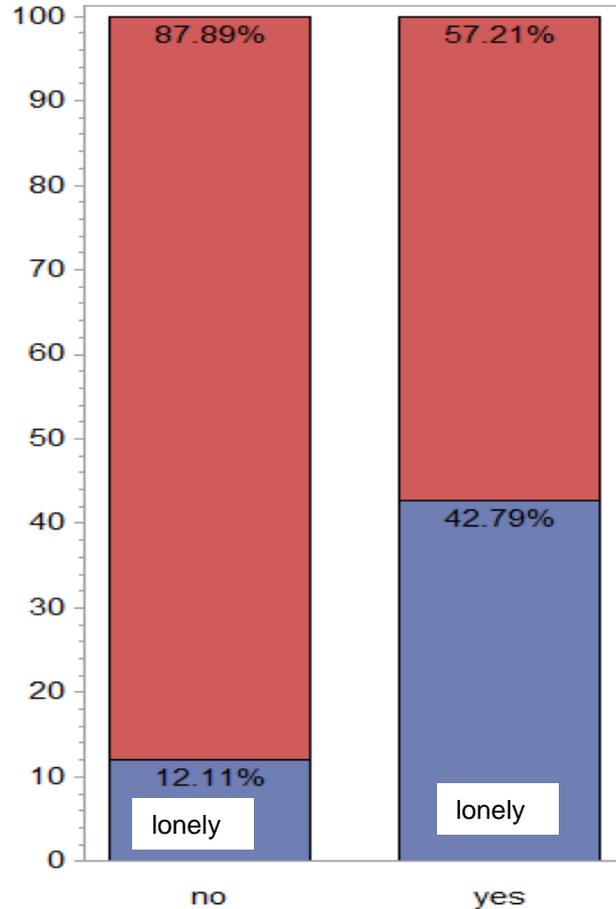
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AB2_m=Non-Maori



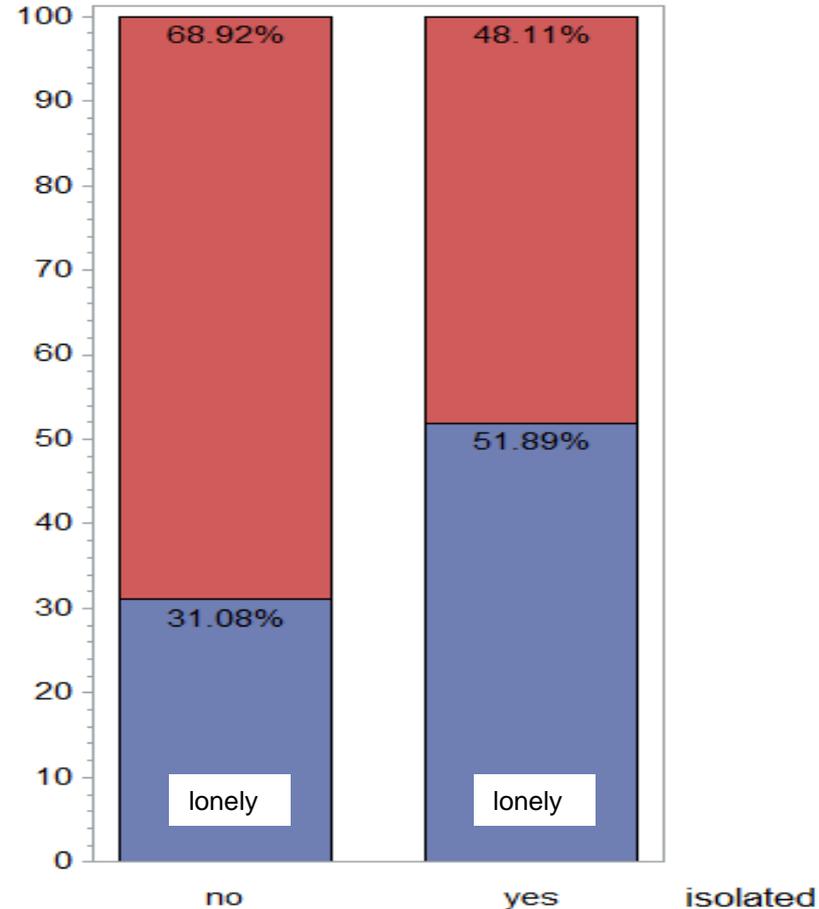
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AB2_m=Maori



PERCENT



loneli yes no

loneli yes no

Do you use the internet?

NB 31% of Non- Māori, 14% of Māori

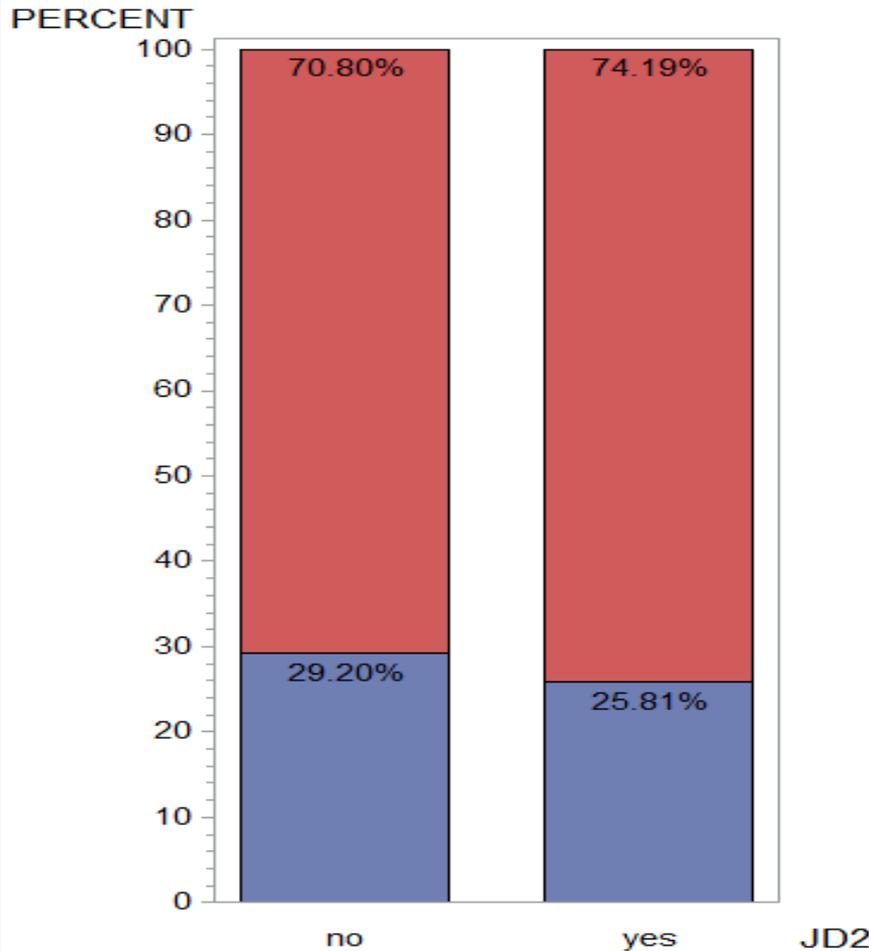


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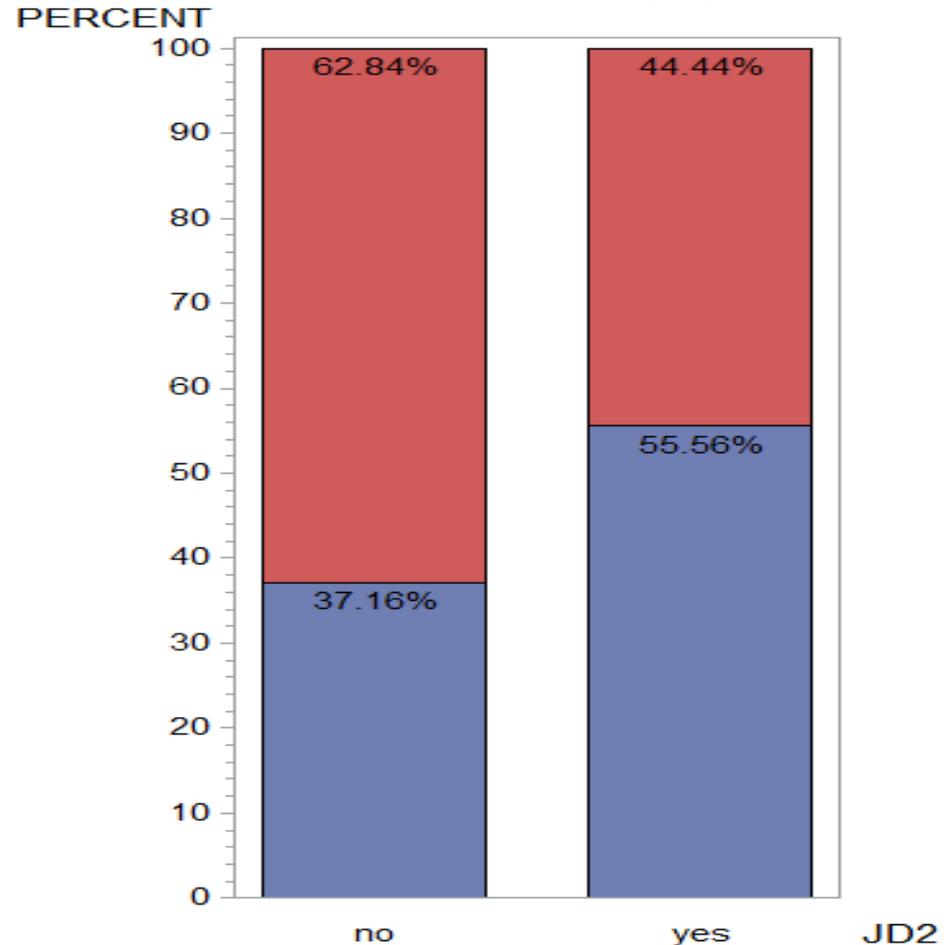
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AB2_m=Maori



loneli yes no

loneli yes no

Separate analyses for Māori and non-Māori ...

1. Loneliness levels - by socio-demographics
2. Loneliness levels - by significant risk factors (chi-square, $p < 0.05$) for either Māori or non-Māori
3. What happens when each risk factor is adjusted for socio-demographics (using logistic regression)?

Risk factors for loneliness – adjusted for socio-demographics

Non-Māori

OR (95% CI)

Food insecurity



5.68 (1.74-18.52)

Isolated (always-often alone)



4.14 (2.16-7.96)

No. of comorbidities
(hi vs lo)



3.27 (1.64-6.49)

Economising behaviour



2.39 (1.32-4.33)

Experiencing pain



1.87 (1.00-3.50)

Engage in moderate sport/recreation



0.40 (0.19-0.84)

Eat meal with someone daily



0.38 (0.18-0.79)

Growing older is positive experience



0.18 (0.08-0.40)

Living with spouse (vs alone)



0.10 (0.03-0.35)

0 1 2 3 4 5 6

Odds Ratio (95% CI)

Risk factors for loneliness – adjusted for socio-demographics

Māori

OR (95% CI)

Food insecurity

3.23 (0.76-13.65)

Isolated (always-often alone)

2.24 (1.22-4.14)

No. of comorbidities
(hi vs lo)

0.99 (0.49-1.99)

Economising behaviour

1.07 (0.58-1.97)

Experiencing pain

1.52 (0.82-2.83)

Engage in moderate sport/recreation

0.87 (0.46-1.63)

Eat meal with someone daily

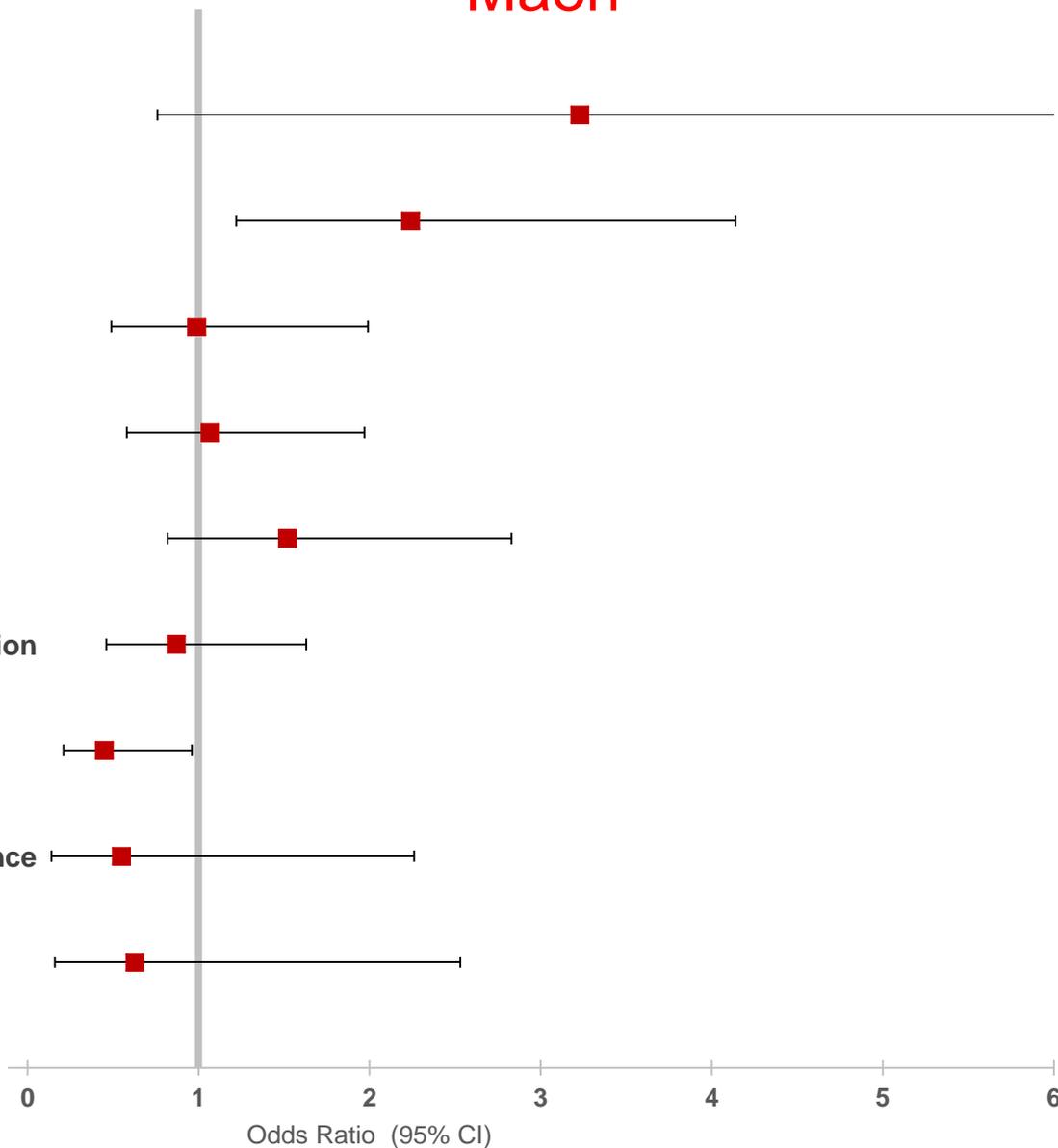
0.45 (0.21-0.96)

Growing older is positive experience

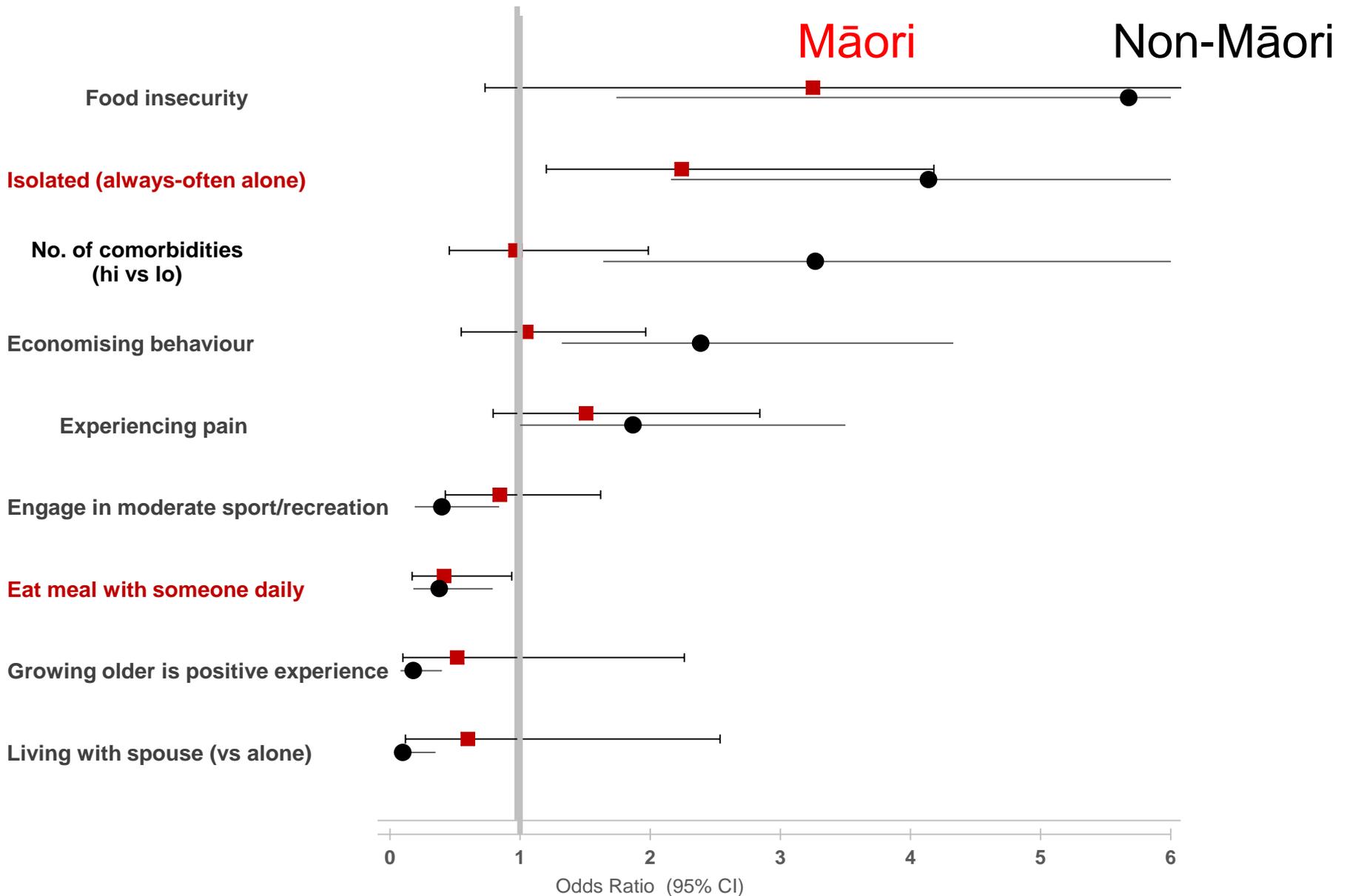
0.55 (0.14-2.26)

Living with spouse (vs alone)

0.63 (0.16-2.53)



Risk factors for loneliness – adjusted for socio-demographics



Next steps



- Longitudinal analysis of risk factors – e.g. ‘fixed effects’ regression – controlling for time-invariant factors – change in risk factor associated with change in loneliness?
- What are the consequences of loneliness, e.g. quality of life, health (preliminary analyses show worse for the lonely)

Conclusion



- Similar risk factors for both Māori and non-Māori (in the same direction), though larger effects for non-Māori
- Māori - smaller sample size – lower power to find an effect
- Non- Māori - effects persist after adjusting for socio-demographics, though attenuated
- Policy implications?
 - Findings support the literature
 - Indicate interventions to promote:
better material conditions, positive attitudes to ageing,
better health, improved social connection and opportunity
for participation ... successful ageing

Questions

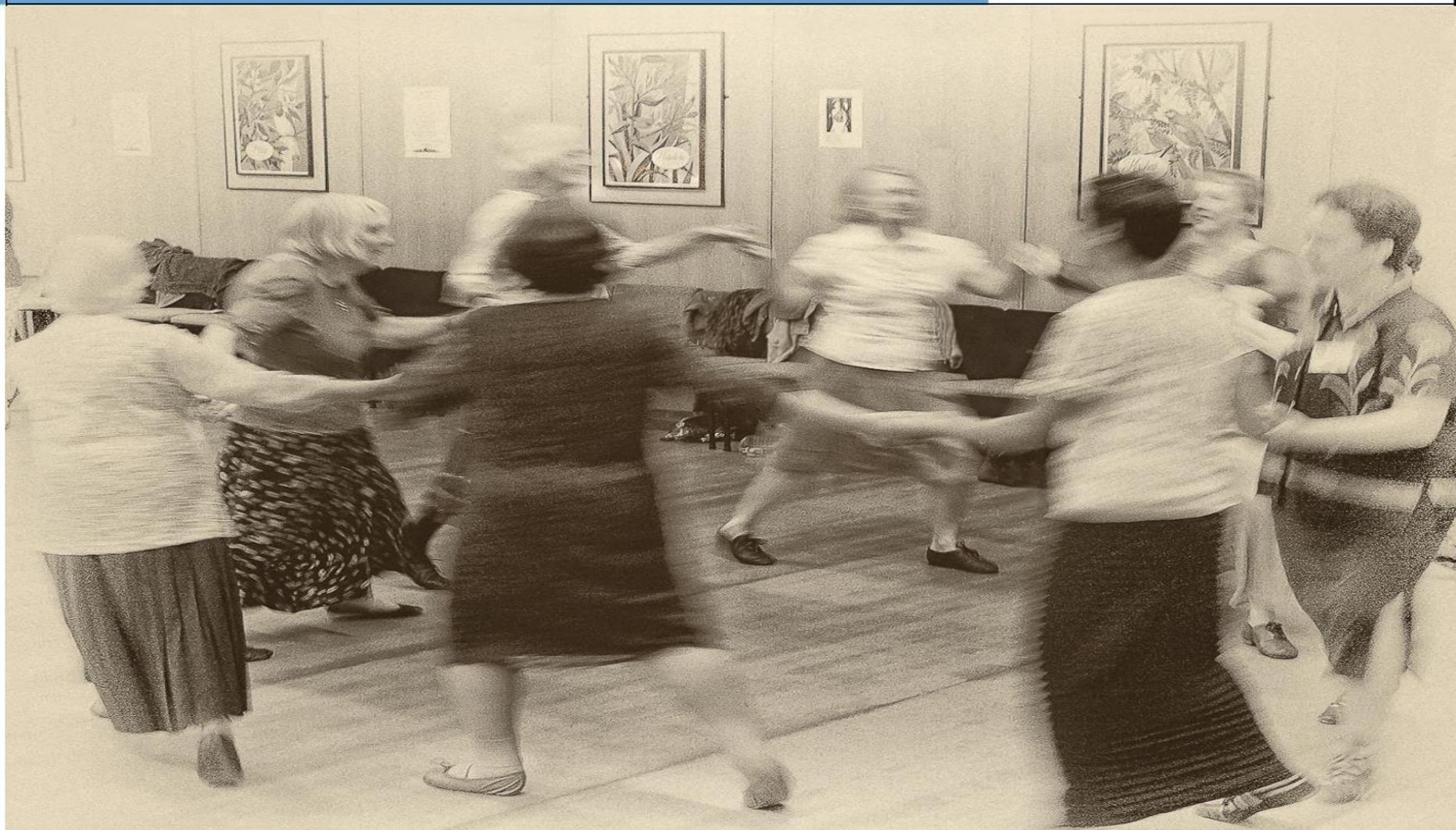
Email: r.layyee@auckland.ac.nz



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‘Let’s dance’ – Bryan Lay Yee