



Social, Leisure & Everyday Activities that Occupy People Living in Advanced Age

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Acknowledgements



- The Maori & non-Maori participants who gave generously of their time and contributed the precious information gathered
- My co-presenters: Professor Ngaire Kerse as lead researcher of the study, Dr Lorna Dyall as co-investigator and Karen Hayman as project manager
- The HRC for funding the study
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Overview of the Presentation



- Aim of the Living to Advanced Age study
- The purpose of this paper
- Background to researching elders' social, leisure & everyday activities
- The outcome measures used
- The findings
- What do they mean?

In this Presentation I will

Introduce the Aim of the Living to Advanced Age study

Outline The purpose of this paper

Discuss the Background to researching elders' social, leisure & everyday activities

Present the outcome measures used to evaluate activity participation

Summarise the findings, and briefly discuss

What they mean?

Aim of the Living to Advanced Age_ A feasibility for cohort study



To establish the feasibility for all aspects
of a longitudinal study of the long-lived

The Feasibility for Cohort Study



- 112 elders were enrolled across 3 North Island, urban and rural locations
 - 33 Maori elders, aged 75-79 years
 - 79 non-Maori elders, 85 years
 - 64 women (57%) and 48 men (43%)
- Comprehensive questionnaire and physical assessment
- 10 participants (5 Maori & 5 non-Maori) completed the Yesterday Interview

As a brief overview of the Feasibility for Cohort Study:

• 112 elders were enrolled across 3 North Island, urban and rural locations during 2008. The full dataset includes 9 pilot participants. The participants were:

- 33 Maori elders aged 75-79 years
- 79 non-Maori elders aged 85 years (and born 1922)
- 64 women (57%) and 48 men (43%)

• Data gathering was by way of a comprehensive questionnaire encompassing health, social, environmental, physiological & psychological outcome measures as well as a physical assessment.

• 10 of the participants (5 Maori & 5 non-Maori) completed a further interview, the Yesterday Interview

Having set the scene, I now move to the main focus of this presentation.

The purpose of this paper



- To present the methods used for researching elder's engagement and participation in social, leisure and everyday activities; and
- An interpretation of what such findings suggest for practice

The purpose of this paper is to present the methods used for researching elder's engagement and participation in social, leisure and everyday activities, with an interpretation of what such findings suggest.

So why include measures of activity and participation in a longitudinal study?

Findings of several international studies suggest a relationship between activity engagement and well-being, and longevity.

Background_ 'Aging in Manitoba' study



"The odds of dying within 6 years of the initial interview were reduced for participants with greater activity level" (Menec, p. S78)

"Participating in church related or mass [social group] activities predicted better function 6 years later" (p. S79).

The Aging in Manitoba study was a 6-year longitudinal project which enrolled nearly 1,500 participants aged 67 to 95 years of age. The study utilised a 21 item checklist of activities and examined the relationship between function, well-being and mortality (Menec, 2003, p. S74). The findings showed:

- "The odds of dying within 6 years of the initial interview were reduced for participants with greater activity level" (p. S78)
- and
- "Participating in church related or mass [social group] activities predicted better function 6 years later" (p. S79).

These activities have a social dimension which may be a mediating factor. However...

Background_ 'Aging in Manitoba' study



Elders who “engaged in handiwork hobbies, music/art/theatre, or reading and writing were happier after 6 years than those who did not” (p. S79).

“Although activity level declined with age, older age was not correspondingly linked to less happiness, even when function clearly decreased with increasing age” (p. S79).

(Menec, 2003)

Participation in several solitary activities was related to happiness and well-being. In particular, those who

- “engaged in handiwork hobbies, music/art/theatre, or reading and writing were happier after 6 years than those who did not” (p. S79) and
- “Although activity level declined with age, older age was not correspondingly linked to less happiness, even when function clearly decreased with increasing age” (p. S79).

Background_New Haven Study



“Social and productive activities were observed to confer equivalent survival advantages compared with fitness activities” (p. 480).

“The effect of social and productive activity on mortality was the strongest among the least physically active” (p. 480).

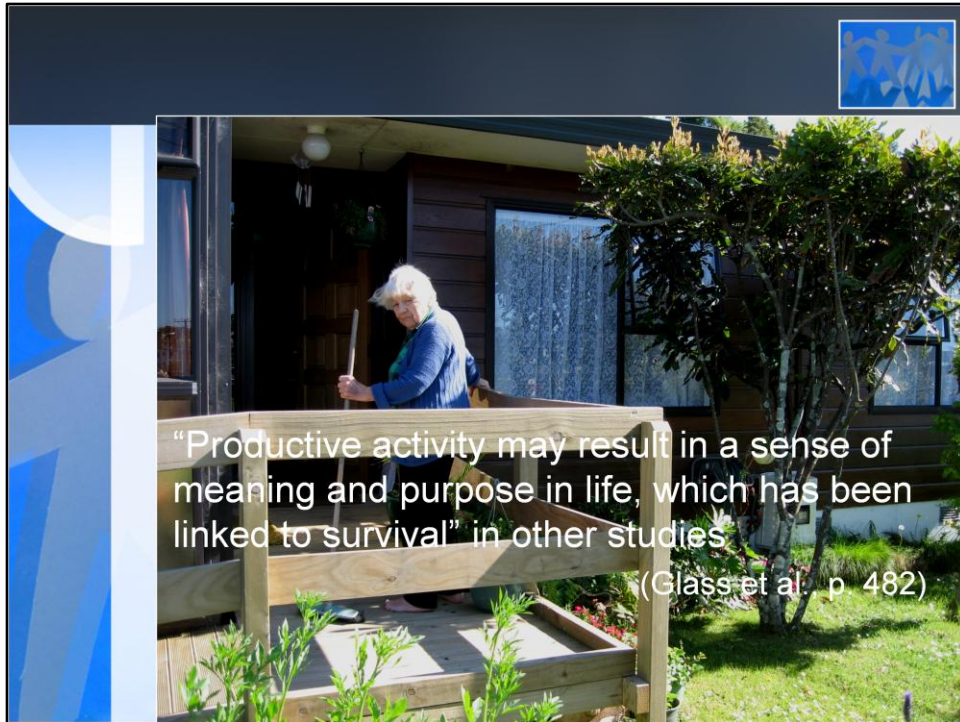
(Glass et al., 1999).

In a prospective cohort study conducted in New Haven, Connecticut, structured interviews were done with a randomised sample of nearly 3,000 people aged 65 and older living at home in the community. Participants reported on their health and frequency of performing 14 common social, productive and fitness activities over the previous month, and were followed up for mortality over 13 years (Glass et al., 1999, p. 479).

- “Social and productive activities [such as gardening, preparing meals and shopping] were observed to confer equivalent survival advantages compared with fitness activities” (p. 480).

and

- “The effect of social and productive activity on mortality was the strongest among the least physically active” (p. 480).



Like other longitudinal studies, these findings only show a correlation between activity participation and longevity, and not causation. It may be that people who are long-living will be those with greater health and ongoing capacity to engage in an active, productive life. All the same,

- “Productive activity may result in a sense of meaning and purpose in life, which has been linked to survival” in other studies (p. 482)

The consistency of findings across these and other longitudinal studies suggest something is going on that we do not completely understand.

Background_Being in the Everyday



And finally as background, In my recent qualitative study of the meaning of being aged, 15 community-dwelling, Maori and non-Maori elders aged between 71 and 97 were interviewed. Their stories of going about their day showed that

- always having something to do, having one treasured activity and having a purpose in the everyday matters.

Two outcome measures were included in the Living to Advanced Age feasibility study to gather data on how elders occupy their time, whether the things they do are important to them, and how much they enjoy the things they do in their day.

The Outcome Measures



- The Modified NPS (Norling, Pettersson, Selander) Interest Checklist, standardised for use with older people (Nilsson & Fisher, 2006)
- Adapted for the NZ context through consultation with kuamatua and kuia
- 66 types of social, leisure and everyday activities, clustered under 8 categories
 - Do you do the activity now?
 - How often do you do the activity?
 - How important are these activities for your well being?

The first Outcome Measure chosen was:

- The Modified NPS (Norling, Pettersson, Selander) Interest Checklist

It was developed from a Scandinavian survey of non-disabled people. 74 leisure activities were identified which were collapsed into 20 activity areas. Nilsson & Fisher then conducted a study with 156 volunteers born between 1904 and 1917 to determine whether a modified version of the NPS Interest Checklist could be developed for a standardised evaluation of leisure use with older people" (Nilsson & Fisher, 2006, p. 31).

Measures of validity and reliability were established.

- Acceptability within the New Zealand context, particularly for use with Maori elders, was explored through group discussion with the study's Kaitiaki group of kaumatua and kuia.

- The 20 activity areas in the Modified NPS were expanded to 66 activities. For ease of administration with a large cohort, these were clustered into 8 categories of social, leisure and everyday activities, excluding Activities of Daily Living.

For each activity, Participants were asked if they "Do they do the activity now? How often they do the activity? And How important the category of activities was for their well being?" Importance for well-being was rated on a 5-point scale of 'not at all', 'somewhat', 'moderately', 'very important', or 'extremely important'.

Let's now look at the most commonly reported activities and the rating of importance for well-being participants gave each category. For the presentation I have selected only the ratings at each end of the scale.

101 participants completed the Modified NPS Interest Checklist.

Exercise & Sporting Activities



- ✓ 17 rated them “Not at all important”
- ✓ 31 rated them “Very important”
- ✓ 20 rated them as “Extremely important”
- ✓ Overall 56% participate in walking, jogging, walking the dog
 - ✓ 58% of men and 54% of the women
 - ✓ 65% of Maori and 53% of non-Maori
- ✓ 18% played bowls

- ✓ 17 of them rated Exercise & Sporting Activities as being “Not at all important”
- ✓ Whereas a total of 51 rated them as either “Very important” or “Extremely important” for their well-being.

Interestingly, exercise and sporting activities were least important to the greatest number of participants.

- ✓ Walking, jogging, or walking the dog was the most commonly reported activity in this category (56%), with no statistically significant difference in participation by men, women, Maori or non-Maori

- ✓ [58% of the men and 54% of the women
- ✓ 65% of Maori and 53% of non-Maori]

- ✓ Playing bowls was the next most common activity (18%)

Social Friendship Activities



- ✓ Only 1 rated them “Not at all important”
- ✓ 48 rated them as “Very important”
- ✓ 25 rated them as “Extremely important”
- ✓ Overall 92% participate in **talking on the phone with family or friends**
 - ✓ 90% of men and 95% of women
 - ✓ 97% of Maori and 91% of non-Maori
- ✓ 84%_Family gatherings and celebrations

✓ Only 1 person rated Social and Friendship Activities as being “Not at all important”
✓ Whereas a total of 73 rated them as either “Very important” or “Extremely important” for their well-being.

✓ Talking on the phone with family or friends was the most commonly reported activity in this category (92%), with almost all Maori men (97%) indicating this was something they did.

- ✓ [90% of the men and 95% of the women
- ✓ 97% of Maori and 91% of non-Maori]

✓ At 84% participation, engaging in Family gatherings and celebrations, such as birthdays and Christmas was a close 2nd

Social, Cultural & Religious Activities



- ✓ 9 people rated “Not at all important”
- ✓ 42 rated them as “Very important”
- ✓ 10 rated them as “Extremely important”
- ✓ Overall 63% go on outings & visits, car trips, bus trips
 - ✓ 63% of men and 64% of the women
 - ✓ 75% of Maori and 58% of non-Maori
- ✓ 56% go to church or have time in prayer

✓ 9 people said Social, Cultural & Religious Activities are “Not at all important”
✓ Whereas a total of 52 said they are “Very important” or “Extremely important” for their well-being.

✓ Almost 2/3 of participants said they go on outings & visits, car trips, or bus trips. Maori men reported the highest level of participation (75%) which may reflect their level of engagement within the Maori community.

- ✓ [63% of the men and 64% of the women
- ✓ 75% of Maori and 58% of non-Maori]

✓ Next on the frequency list, Over half participated in Going to church or time in prayer (56%)

Problem Solving & Learning Activities



- ✓ 9 people rated them “Not at all important”
- ✓ 20 rated them as “Very important”
- ✓ 12 rated them as “Extremely important”
- ✓ Overall 59% do puzzles, crosswords, sudoku, or table games
 - ✓ 38% of men and 78%*** of the women
 - ✓ 59% of Maori and non-Maori
- ✓ 31% play cards, solitaire, or bridge

- ✓ 9 people rated Problem Solving & Learning Activities as being “Not at all important”
- ✓ Whereas 32 rated them as “Very important” or “Extremely important”

✓ Doing puzzles, crosswords, sudoku, and table games were most commonly reported in this category (59%). There is a strong statistically significant difference between elder women’s high level of participation (over 3/4) compared to men’s.

- ✓ [38% of men and 78%*** of the women
 - ✓ 59% of Maori and non-Maori]
- ***p<0.001

- ✓ Next most frequent, nearly a third reported playing cards, solitaire, or bridge (31%).

Solitary Sedentary Activities



- ✓ No one rated them as “Not at all important”
- ✓ 40 rated them as “Very important”
- ✓ 22 rated them “Extremely important”
- ✓ Overall 93% watch television shows or videos
 - ✓ 88% of men and 98%* of the women
 - ✓ 100% of Maori and 91% non-Maori
- ✓ 90% read newspapers or magazines

- ✓ No one rated Solitary Sedentary Activities as “Not at all important”
- ✓ Whereas a total of 62 people rated them as either “Very important” or “Extremely important”

✓ Watching television shows, or videos was most commonly reported (93%). With a statistically significant difference between elder women’s participation compared to men’s.

- ✓ [88% of men and 98%* of the women
- ✓ 100% of Maori and 91% non-Maori]
- * $p < 0.05$

✓ Next most common was reading the newspaper or magazines, reported by 90% of participants

Creative Activities



- ✓ 12 rated them as “Not at all important”
- ✓ 23 rated them as “Very important”
- ✓ 7 rated them as “Extremely important”
- ✓ Overall 41% participate in **writing memoirs, family history, poems, stories**
 - ✓ 46% of men and 36% of the women
 - ✓ 63% of Maori and 31%** non-Maori
- ✓ 30% do handicrafts, knitting, sewing, weaving or carving

- ✓ 12 people rated Creative Activities as “Not at all important”
- ✓ Whereas a total of 30 rated them as “Very important” or “Extremely important”

✓ Writing memoirs, family history, poems, or stories were the most commonly reported creative activities (41%). Statistically, significantly more Maori than non-Maori elders engaged in such activities. The researchers did not explore the answers further, but it is interesting to speculate on the nature of elder Maori involvement in writing things down and recording the past.

- ✓ 46% of men and 36% of the women
- ✓ 63% of Maori and 31%** non-Maori
- ** $p < 0.01$

- ✓ Doing handicrafts, knitting, sewing, weaving or carving featured as the next most common creative activities (30%)

Restorative & Restive Activities



- ✓ 4 rated them “Not at all important”
- ✓ 33 rated them as “Very important”
- ✓ 8 rated them as “Extremely important”
- ✓ Overall 83% spend time **reminiscing or thinking about the past**
 - ✓ 85% of men and 81% of the women
 - ✓ 94% of Maori and 78%* non-Maori
- ✓ 77% spend time thinking about life

- ✓ Only 4 people rated Restorative & Restive Activities as being “Not at all important”
- ✓ Whereas a total of 41 rated them as “Very important” or “Extremely important”

✓ Reminiscing, or thinking about the past was the most commonly reported activity (83%) in this category. Participation by Maori was significantly higher than non-Maori elders.

- ✓ [85% of men and 81% of the women
- ✓ 94% of Maori and 78%* non-Maori]

✓ Almost as many reported spending time Thinking about life (77%)

Productive Activities



- ✓ 6 rated them “Not at all important”
- ✓ 33 rated them as “Very important”
- ✓ 26 rated them as “Extremely important”
- ✓ Overall 83% do the **shopping**
 - ✓ 77% of men and 88% of the women
 - ✓ 94% of Maori and 78% non-Maori
- ✓ 73% spend time cooking or baking

And finally 6 people rated Productive Activities as “Not at all important”

✓ Whereas 59 rated them as “Very important” or “Extremely important”

✓ Shopping was the most commonly reported productive activity (83%). No statistically significant differences showed between men’s and women’s, or Maori and non-Maori participation.

✓ [77% of men and 88% of the women

✓ 94% of Maori and 78% non-Maori]

✓ Cooking or baking was the next most common productive activity (73%).

When considering the **Feasibility of the Modified NPS**

The Feasibility of the Modified NPS



- Participant and interviewer comments showed it took a long time to administer
- Some participants experienced a sense of repetition of questions asked elsewhere in the questionnaire, such as the PASE
- Further adaptation is required for implementation in the cohort study to reduce respondent burden

Participant and interviewer comments showed it took a long time to administer
Some participants experienced a sense of repetition of questions asked, such as those in the PASE the PHYSICAL ACTIVITY SCALE FOR THE ELDERLY
Further adaptation is required for implementation in the cohort study to reduce respondent burden

The second outcome measure in the activity and participation aspect of the study was the Yesterday Interview.

The Yesterday Interview



- Moss & Lawton (1982) developed the YI to describe how 535 elders spend their days and explore the constraints of environmental settings
- A particular interest in time spent in obligatory and discretionary activities
- Participants recounted their activities in the previous day
- Berlin Aging Study_ *Aging from 70 to 100*

• Moss & Lawton (1982) developed the interview-based instrument as a time budget method to describe how 535 elders spend their days and to explore how the constraints of environmental settings influenced their activity engagement. The 4 environmental settings included independent community residents, public housing tenants, recipients of intensive in-home services, and an institutional waiting list group.

• The researchers had a particular interest in understanding elder's use of time across everyday obligatory activities such as personal care and cooking, and discretionary activities such as social interaction and recreation.

• Participants recounted their activities in the previous day (week days only Monday-Friday), beginning with waking in the morning. A household member informant provided information where relevant.

[Activities were classified into a 68-category code, then further reduced to 20 categories.

In addition, for each activity participants were asked about their location, the social context, and their liking of the activity on a 5-point scale.]

Several longitudinal studies have used the Yesterday Interview including the Berlin Aging Study (Aging from 70-100)

The Yesterday Interview



- One pilot interview
- 5 Maori and 5 non-Maori elders
- Recounting the previous 24 hours
- Identify a 'landmark' or memorable event in the previous day, and then a later landmark event, and so on
- Secondary activities recorded
- Where they were, who was present, and enjoyment on a 5-point scale

- One pilot interview was completed, then
- 5 Maori and 5 non-Maori elders from the feasibility study, volunteered to complete the Yesterday Interview as an additional interview. All were residential in their own homes in Rotorua.
- The interviews took about 1 to 1.5 hours during which the person recounted the previous 24 hours leading up to the morning of the interview.
- First, participants were asked to identify a landmark event in the previous day, such as the time of getting out of bed, and then the time of a later landmark event such as having breakfast, and recalling the activities in between. The previous day's activities were not necessarily recounted in linear sequence, as people recalled doing different things at different times during the conversation. This way of proceeding continued, recording activities in 5-minute blocks, until the previous 24 hours was recorded.
- Participants identified any secondary activities, things that were done at the same time as a primary activity, such as listening to the radio while preparing dinner. Their descriptions were recorded verbatim, in writing, by the interviewer at the time.
- For each primary activity, the participant was asked where the activity took place, who was present and how much they enjoyed each activity on a 5-point scale (disliked a lot – to enjoyed a lot).

Analysing the Yesterday Interview



- A list of 56 activity descriptions; such as 'doing housework', 'playing cards alone', and 'thinking or reflecting.'
- Coded against the 8 categories in the Modified NPS, and the 8 WHO_ICF Activities & Participation categories
- Analysis within the person, looking at the flow of the day, and across participants, for patterns of everyday activity

•Verbatim descriptions of the activities were collated into a list of 56 activity descriptions; such as 'doing housework', 'playing cards alone', and 'thinking or reflecting.'

•Each activity description was then coded against the 8 categories of the Modified NPS, and the 8 WHO_ICF Activity & Participation categories to permit comparative analysis both within the feasibility study and with other studies of aging.

•Data analysis is looking at each person's activities and flow of the day, as well as across participants, for patterns of everyday activities.

Texture & Flow of a Day



Data analysis is continuing but what the Yesterday Interview reveals is a pattern of engaging in the day shows a rhythm of active participation and restful, restorative participation.

Pausing for a cup of tea, or resting a while in the chair is a way of punctuating the day.

Looking at where the participants spent their time

Where elder's time was spent



On average participants spent

91% inside at home (between 80% - 99%)

2% outside at home

5% in the community, driving or walking

1% at a health or social service

4% at a family member's home

1% at a friend's home

6% visiting in a residential setting

On average they spent **91%** of their day inside at home. This varied between 80% - 99% of the day.

Looking at time spent in other contexts, visiting in a residential setting features most strongly as participants talked about going to visit friends or family who were in a rest home.

2% [outside at home

5% in the community, driving or walking

1% at a health or social service

4% at a family member's home

1% at a friend's home

6% visiting in a residential setting]

Who elders spent their time with



On average participants spent

57% alone (between 1% - 99%)

16% with a partner

9% with whanau or family members

8% with friends

12% with a pet

3% with workers or volunteers

2% with community members in general

On average participants spent 57% of their day alone. This varied between 1% - 99% of the day.

Being with a partner or spouse features next and then spending time with a pet.

[16% with a partner

9% with whanau or family members

8% with friends

12% with a pet

3% with workers or volunteers

2% with community members in general]

* Finally, looking at the enjoyment rating of all daily activities

Rating Enjoyment in the day



On average, participants spent

15 hrs doing something they liked a lot

5 hrs doing something they liked a little

3 hrs they neither liked nor disliked

1.3hrs doing something they disliked a little

10 mins doing something they disliked a lot

On average, participants spent **15 hrs** doing something they liked a lot, which often included having a good night's sleep, and

5 hrs doing something they liked a little,

[**3 hrs** they neither liked nor disliked, which as typically doing things like housework or unpacking groceries,

1.3hrs doing something they disliked a little, and]

At the other end of the scale, on average participants spent **10 mins** doing something they disliked a lot (such as going out in the rain to bring the washing in, or getting up at night to the toilet)

Looking at these scores, mostly the yesterdays were spent doing things people enjoyed a lot.

The Feasibility of the Yesterday Interview



Within the context of a large cohort study, the Yesterday Interview is only feasible for use with a subgroup of the cohort due to the time taken to gather the data and to code all primary and secondary activities.

But it will show things that activity checklists will not.

So what do the findings from these two outcome measures suggest?

What does it mean?



While the Living to Advanced Age project was a feasibility study, the findings have implications for:

designing domestic and community spaces and places which enable people living into advanced age to engage in diverse activities;

They also have implications for designing activity spaces and programmes within residential and supported care that reflect elder's great diversity of interests for doing things that make the day enjoyable;

This includes solitary, thoughtful and restful activities. Even though these participants mostly spent their time alone, on the whole they were doing things that were both important to them and the things they liked to do.

At a macro level, it suggests the need to implement policies that enable elder's participation in diverse activities of choice both within the community and in supported care; and

For those of us who are on the way to living in advanced age, it means, when we get there, unless patterns change, we are likely to mostly spend our time alone doing the things we like and those we feel are important to our well-being.

Thank you.

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Questions & Discussion



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