The title of my presentation is, the Social, Leisure & Everyday Activities that Occupy People Living in Advanced Age

Dr Valerie Wright-St Clair, Dr Ngaire Kerse, Karen Hayman, & Dr Lorna Dyall
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Firstly, are

• 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 kuia, and Karen Hayman as project manager

• The HRC for funding the study

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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?
The content of this presentation represents one aspect of Living to Advanced Age—a feasibility for cohort study. The aim of the study itself was to establish the feasibility for all aspects of a longitudinal study of the long-lived. In this way, the project was designed to inform a main, total population cohort study through:

- Trialling identification of a cohort of elders;
- Testing recruitment methods & establishing response rates;
- Evaluating diverse measures as possible predictors of health and living well;
- Exploring the acceptability and reliability of measures; and
- Ascertaining outcomes, such as quality of life, functional status, residential care placement or mortality.
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%)

- Comprehensive questionnaire and physical assessment
- 10 participants (5 Maori & 5 non-Maori) completed the Yesterday Interview

Having set the scene, I now move to the main focus of this presentation.
The purpose of this paper is 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.

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.
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)

• “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...
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).

(Menec, 2003)
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).
- “The effect of social and productive activity on mortality was the strongest among the least physically active” (p. 480). (Glass et al., 1999).
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.
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 first Outcome Measure chosen was:

• 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 kaumatua and kuia
• 66 types of social, leisure and everyday activities, clustered under 8 categories
  o Do you do the activity now?
  o How often do you do the activity?
  o How important are these activities for your well being?

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.
17 of them rated Exercise & Sporting Activities as being “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

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%)
Only 1 person rated Social and Friendship Activities as being “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

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
9 people said Social, Cultural & Religious Activities are “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%)
9 people rated Problem Solving & Learning Activities as being “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%).
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
12 people rated Creative Activities 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

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%)
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%)
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**
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.

The second outcome measure in the activity and participation aspect of the study was 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)
• 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 necessary 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).
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.
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
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
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
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

1.3 hrs 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,

1.3 hrs 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.
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?
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.


Questions & discussion