8. Conclusions and Policy Themes

The research described in this report raises a number of theoretical and methodological issues about the measurement of material well-being and the factors and life processes that contribute to variation in living standards amongst older people. These issues are reviewed below.

8.1 The Advantages and Limitations of Direct Measures of Living Standards

A defining feature of this study has been the use of methods of confirmatory factor analysis to identify and define a scale of material well-being based on measures of ownership, social participation, economising and respondent self evaluation. As described in Chapter Five the use of confirmatory factor analysis suggested the presence of an underlying dimension of material well-being that ranked CEUs from the most materially disadvantaged to the most materially advantaged. This scale appeared to apply to both single CEUs and partnered CEUs and showed evidence of factorial, concurrent and predictive validity. Taken at face value, the study was successful in its objective of devising a measure of material well-being based on direct observations of individual living conditions. As pointed out in Chapter Two, the major advantage of such measures is that they provide an account of the actual living circumstances of respondents rather than an indirect assessment based on measures such as income or expenditure.

The findings of this study also highlight the fact that measures of living standards based on direct observation and measures based on income may give very different impressions of the overall living standards of older people. The reason for this is that income is only moderately correlated with the scale score devised in this study. Accordingly, an income-based measure is likely to give only a very approximate picture of the material living standards of older people.

This result has important implications for the interpretation of a relatively large literature on poverty that has used income based methods to assess levels of poverty within the general population and amongst older people. As income levels are only moderately correlated with direct measures of living standards it is open to debate whether estimates of poverty based on income values give a realistic estimate of the fractions of a population facing material hardship. While income based measures may provide an indication of the distribution of household income, these measures may give a poor indication of the fraction of the population in poverty. Given the modest correlations between current income and material well-being, the results of this study, in common with other indicator studies (Townsend, 1979; Mack and Lansley 1985; Nolan and Whelan, 1996; Travers and Robertson, 1996; and Gordon et al, 2000), suggest that by no means all of those on low incomes are in hardship and not all of those in hardship have low incomes.

Although direct measures of living standards have a number of conceptual advantages over indirect measures based on income or expenditure, they also have a number of liabilities that should be recognised. These liabilities include:

1. Variable precision over the range of the scale

The items that contribute to the material well-being are largely reports about the extent to which CEUs are subject to various forms of deprivation in the areas of ownership, social participation and consumption. These features mean that the scale is likely to be most precise in its descriptions of CEUs subject to material deprivation and less precise in its descriptions of the well to do. This feature is reflected in the analysis reported in Chapter Six which shows that for CEUs with scale scores over 105 variations in levels of material well-being are largely determined by variations in self report data rather than measures of ownership, social participation of consumption items. These features may mean that the scale gives a far more precise description of those suffering deprivation of various forms than it does of those enjoying varying degrees of comfort and affluence.

2. Failure to take account of quality or consumption patterns

In addition, a limitation of the scale is that it does not address issues relating to the quality of ownership or consumption. It seems reasonable to assume that in contemporary societies much of what distinguishes the poor from the rich is not the complete lack of certain amenities or consumer goods, but rather more subtle distinctions between the quality of ownership and consumption patterns. The present study has not addressed the distribution of quality, which may influence the precision of scale score estimates. For example, two CEUs having apparently the same material well-being scores could, in theory, differ quite considerably in the quality of their ownership and consumption patterns with this being particularly likely for those with high scale scores.

3. Distinguishing between choice and deprivation

Assessments of quality were not included in the study. This was partly because they add substantially to the burden on the survey respondents and partly because they have a subjective element. The latter feature raises issues about both the validity and utility of such measures. The issue of subjectivity also highlights a source of conceptual strain that underlies the development of all direct measures of material well-being. In particular, a CEU's material well-being score being partly based on items that include judgements about restriction, already includes an unavoidable element of subjectivity. What one respondent may see as a prudent and sound pattern of consumption, may be seen by another respondent as being intolerably restrictive even though objectively they may have the same pattern of consumption. Differences in choice, preference and desire will introduce sources of both imprecision and invalidity into the scale measures.

4. The effects of social and historical context

A potential limitation of the scale measure developed in this study is that it scales variation in material well-being in a way that is specific to a given social and economic context. This means that scale values obtained at one time may not be comparable with scale values obtained at another time. To provide an example of this: in the 1974 Survey of the Aged, access to a telephone was a scale item found to predict variation in the lower end of the scale. In the SOP, this item did not prove to be informative as it was almost universally owned. This specificity of direct measures to a particular social

and economic context limits the extent to which such measures may be used in time series and for the purposes of monitoring.

Despite the above qualifications, the results of this study suggest that it is possible to construct a scale of material well-being that ranks the population of older people from the most materially disadvantaged to the least materially disadvantaged. This scale has face validity as a measure of material well-being and also shows evidence of factorial, concurrent and predictive validity. Given these properties, the scale score described in this report offers a useful way of describing variations in the living standards of older people and examining the various social, economic and personal factors that contribute to this variation.

8.2 The Distribution of Material Well-being amongst Older People

The first application of the scale of material well-being is that it provides a means of examining the overall living standards of older people and the extent to which members of this population are facing economic hardship. The evidence reviewed in Chapters Four, Five and Six leads to the view that although the population of older people is characterised by a relatively modest current income, the great majority of older people are not subject to appreciable levels of hardship or material deprivation. This conclusion is supported by a number of lines of evidence.

- In terms of reports of restrictions on patterns of ownership and social participation, very few respondents reported facing restrictions in terms of basic needs and most reports of restrictions related to items involving items that might be considered as luxuries (eg, overseas holidays).
- Similarly, in terms of economising behaviours, most respondents did not report economising on items that may be seen as necessities. Nonetheless, nearly one respondent in 13 reported restricting their use of medical care because of costs and one in seven reported restricting visits to dentists.
- Only a small minority (4.0%) of the sample reported facing severe financial difficulties including being unable to meet bills, having to borrow money or relying upon charity organisations for food clothing or money.
- The majority of respondents (89%) described their income as "adequate" and only 6% described their overall living standards as "low" or "fairly low".

These results convey the impression of a population in which the majority of respondents were not facing noticeable material hardship or difficulties. However, there was a small minority of about 5% of the sample who were facing quite severe financial problems with a further 5% to 10% showing evidence of some material deprivation or restriction.

An important issue raised by these findings concerns the relativity between the levels of material well-being of older people when compared with the remaining population. This issue was explored in Chapter Six with the results suggesting that with respect to the measures of material well-being, the population of older people tended to fare better than the working age population, with these differences holding for both the Māori and Non Māori populations.

Overall, these findings lead to the conclusion that while there is evidence of a minority of older people facing material deprivation and hardship, the overall living standards amongst this population are good and compare favourably with the rest of the New Zealand population. There is certainly no evidence to suggest that older people in New Zealand are a high risk group for poverty or economic hardship despite the relatively constrained income levels of this population.

8.3 Factors Contributing to the Material Well-being of Older People

The findings of this study identified a core group of predictors of material well-being that were very similar to those identified in the 1974 Survey of the Aged (SOA). In the SOA, important predictors of levels of material well-being (ownership; economising) included: current income; savings and investments; home ownership, age (Department of Social Welfare, 1975). This study identified a very similar array of factors: current income; savings and investments; accommodation costs. The fact that two studies spaced 25 years apart identify a very similar core set of predictors of living standards suggests that these findings are robust and are not specific to a given sample or time of measurement.

Other factors examined in the present study and found to be predictors were: age; socioeconomic status; education; ethnicity; current economic stress; previous economic history and region.

Issues relating to the specific contributions of the above factors to variations in living standards have been discussed in detail in Chapter Seven and in the interest of brevity are not repeated in this chapter. The key themes to emerge from the regression model were:

1. The accumulative effects of social, personal and economic factors

Frequently contemporary debates about issues surrounding such matters as material well-being or poverty focus on the role of specific factors and, particularly, current income or benefit levels. However, the findings of the regression model clearly suggest that levels of material well being in older people are determined by an accumulative disadvantage model in which the CEU's level of material well-being reflected the accumulative effects of current income; savings and assets; accommodation costs; household composition; age; socio-economic status; ethnicity and region. An important implication of this result is that government resources will be used most effectively for ensuring the well-being of older people when policy addresses the multiplicity of factors that contribute to material well-being.

2. Model indeterminacy

Overall the model explained 40% of the variability in levels of material well-being of the population of older people. Although this is clearly a significant amount of explained variation, the model estimates imply that there is considerable uncertainty and imprecision in the prediction of individual score values on the basis of the model predictions. As was explained in Chapter Seven these indeterminancies may, in part, be due to errors of measurement in both the predictor and outcome variables. However, it is unlikely that limitations in prediction are solely due to measurement error. Another important contributing reason may be that the study omits some important influences on the material well-being of older people. Some suggestions have been made earlier in Chapter Seven about what some of these unmeasured factors may be.

Furthermore, the model may not fully capture the interplay between different factors and, therefore, may miss some of the more fine grained detail that determines differences in individual levels of material well-being. It is a challenge to policy to reflect not only the broad factors that "on average" influence levels of material well-being, but also to reflect the importance of quite specific combinations of needs that may occur.

3. The present and the past

The cross sectional nature of the present study prevents clear delineation of the extent to which the material well-being of older people is influenced: a) by current circumstances and events; and b) by past circumstances and events. However, there are a number of indications that suggest that pre-retirement events and circumstances are likely to play an important role in determining the material well-being of older people. Specifically, the findings suggest that asset accumulations (savings/investments; home ownership) that are likely to have occurred prior to retirement play an important role in determining material well-being. In addition, there was evidence linking retrospective reports of economic stress prior to retirement to subsequent material well-being. All of these results clearly hint at (but by no means prove) that pre-retirement events and circumstances play an important role in determining the material of older people. Ideally, this conclusion needs validation through an appropriate longitudinal study of the transition to retirement and particularly of the extent to which pre-retirement events and circumstances "carryover" to influence levels of material well-being in retirement.

8.4 Key Policy Themes

It is not the purpose of this report to develop Social Policy. Rather the aim has been to describe the variation in the material well-being of older people and to explore the factors that contribute to this variation. Nonetheless, the results suggest a number of key themes around which policy could be based. These themes are outlined below:

1. Sustaining the existing scheme

The survey findings indicate that the current levels of NZS and associated payments such as Accommodation Allowance are sufficient to protect the great majority of older people from hardship and material deprivation. The findings reinforce the importance of income from state superannuation to the well-being of older people. The estimates from this research suggest that over 60% of the income received by single respondents and couples is from this source. These findings clearly suggest an important social policy goal for coming decades is to sustain state income support for older people. There has been ongoing debate and discussion in New Zealand about how this may be achieved, but it is beyond the scope of this report to consider the various options and the strengths and liabilities of these options. The results show that the current system of income support for older people has been successful in protecting the great majority of older people from hardship.

2. Assisting the minority in hardship

Although the findings show that current levels of NZS and other associated payments are adequate to provide the great majority of older people with an adequate level of material well-being, it is also clear that a minority of this population is facing some degree of material and economic hardship. These results raise issues about the policy

response for that minority. The findings of the present study *suggest a number of* policy criteria (income, savings and investments, accommodation costs, etc) that might be used to target additional income to older people facing material hardship.

3. Ensuring parity between older people and other populations

Although the findings of this study suggest that a minority of older people are facing some material hardship, an important question concerns the relativities between the material well-being of older people and that of other populations. The preliminary results reported in Chapter Six strongly suggest that relative to the overall working-age population aged 18-64, older people are a population that is exposed, on average, to less material hardship. A detailed comparison of the older people in receipt of NZS compared with working-age beneficiary populations (e.g. single parents, the unemployed) has yet to be conducted. However, the preliminary results from this study suggest that older people as a group are faring relatively well compared to the working-age population as a whole. This finding invites a wider consideration of the income maintenance needs of various other sections of the New Zealand population with limited incomes.

4. The importance of pre-retirement policies

As noted earlier, a likely implication of a number of the study findings was that many of the factors influencing the material well-being of older people are likely to reflect events and circumstances that occurred prior to retirement rather than their current economic circumstances. These considerations suggest that an important component of social policy concerned with older people should focus on the likely contribution of pre-retirement events and circumstances.

Key issues that could be addressed include:

- The encouragement of saving and investment to meet economic needs in old age and consideration of the mechanisms for encouraging such savings.
- The development of social policy to ensure high levels of employment and adequate income levels over the life course prior to retiring age.

5. Ethnic Differences

There were large and clear ethnic differences in overall levels of material well-being, with Māori respondents having mean material well-being scores that were one standard deviation below those of European-Pakeha/Other respondents. Pacific peoples had mean scores that were lower than both Māori and European-Pakeha/Other respondents. These ethnic differences in material well-being are consistent with a large literature that has identified both Māori and Pacific peoples as suffering from many forms of deprivation (see for example, Te Puni Kokiri, 1998; Ministry of Pacific Island Affairs, 1999; Stephens et al, 2000).

In terms of the major well-being predictors (that is, income, savings and investments, accommodation cost, financial stresses in the last year), both Māori and Pacific peoples were substantially worse off than European-Pakeha/other. Table 8.1 shows the differences between Māori, Pacific peoples and European-Pakeha/other respondents on these factors.

_	Ethnic Group		
	Māori	Pacific Peoples	European- Pakeha/Other
Measure	(2.7%)	(1.5%)	(95.8%)
Mean net income (\$ per annum)	18,470	14,340	22,240
Mean value of savings/investments (\$)	29,620	6,910	66,000
Mean accommodation costs (\$ per week)	53.33	70.47	15.93
Mean financial stresses in last year	0.62	0.48	0.34

Table 8.1. Ethnic differences in the economic circumstances of older people.

The poor position of Māori and Pacific peoples on the predictor variables goes a considerable way to explaining their lower levels of material well-being (as measured by their scale scores). However, a statistically significant part of the disparity is unexplained. In other words, the disparities are greater than can be accounted for by the measured socioeconomic and other differences. The reasons for the unaccounted part of the disparities in material well-being are a potential focus for future research.

In general terms, the findings on ethnicity reinforce themes in New Zealand social policy concerning the importance of remedying the pervasive social and economic disparities between Māori and Pacific peoples and the remainder of the New Zealand population. The present study demonstrates that the well-documented material disadvantages experienced by Māori and Pacific peoples extend into old age and also indicates that a large amount of this disadvantage reflects various economic disadvantages experienced by Māori and Pacific people in old age. The survey findings clearly underwrite current policies aimed at reducing the social, educational and economic disparities between Māori people, Pacific peoples and the rest of New Zealand.

8.5 Future Research

The present report is the first in a series of Ministry of Social Policy reports aimed at examining variations in the living standards of older people and other groups and at examining the social, personal and economic factors that influence the material well-being of these populations. This report has attempted to lay the foundations for these investigations by addressing two fundamental questions about issues of material well-being amongst older people. The first question concerned whether it was technically feasible to develop a valid and reliable measure of material well-being based on direct indicators of living conditions. This has been shown to be the case. The second question concerned the social, personal, and economic factors that predicted levels of material well-being amongst older people. This analysis suggested that a range of factors operate cumulatively and interactively to influence the overall well-being of older people.

This preliminary investigation raises a large number of issues that require further investigation. These issues include:

 examination of the use of different income measures as predictors of material wellbeing

- cross-validation of model conclusions using alternative measures of material well-being (eg, subjective report; Benefit Datum Line (Easton, 1994))
- refinement of measures of ethnicity and ethnic composition of CEUs
- more detailed analysis of savings/investments and expenditure data
- detailed analysis of the origins of age differences in material well-being.

It is envisaged that future Ministry of Social Policy research reports on living standards will include the following:

1. The living standards of older Māori

The present study included a preliminary analysis of the information collected in the supplementary survey of 542 Māori aged 65 to 69 years. A separate research initiative is being advanced by the Ministry of Social Policy regarding the living standards of older Māori. This includes facilitating work on Māori perspectives on living standards and undertaking a complementary study to the analysis reported here to investigate the living standards of older Māori aged 65 to 69 years.

2. The living standards of working-age people

A further research initiative being advanced is the investigation of whether a living standards measure similar to the one developed for the present study can be constructed for working-age people, and ultimately to represent the total population. These measures can then be used to describe the distribution of living standards for different sub-groups (for example by ethnicity, regional location or family type) in the population. The ability to construct a generic scale representative of the full population will enable direct comparisons to be made between different sub-groups.

3. The determinants of the living standards of working-age people

A further survey is also planned, that will parallel the Survey of Older People, to provide comprehensive information about the potential determinants of variation in the living standards of working-age people and sub-groups of working-age people.

The data pertaining to the main Survey of Older People (SOP) and supplementary sample of older Māori (SOP-MS) is available to other government agencies and bona fide researchers to conduct their own analyses, including those that extend the analysis that has been reported here. It is hoped that researchers will take up this opportunity, and those wishing to do so should contact Statistics New Zealand, or the Ministry of Social Policy, New Zealand.²⁹

Data pertaining to the Survey of Working-Age People will be made available towards the end of 2001 following the completion of an analysis of this data by the Ministry of Social Policy.

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Glossary

Accommodation Supplement

The Accommodation Supplement is a supplementary income programme provided by government that assists people with limited income and cash assets to pay accommodation costs above a threshold.

Adjusted R-squared

An R-squared statistics gives an estimate of how much the independent variables in the regression analysis explain the dependent variable. The adjusted R-squared makes an adjustment for the number of independent variables.

Adjusted scale scores

The adjusted scale scores show the net effect of each predictor on material wellbeing after adjustment for the correlated effects of other predictors.

Community Services Card

The Community Services Card is an entitlement card provided by government which people on low incomes or receiving income support may use to obtain discounts on doctor's fees and prescriptions.

Confirmatory factor analysis

Confirmatory factor analysis is a multivariate technique that is used to test or confirm a pre-specified relationship (for further information see the texts referred to below).

Core economic unit

A core economic unit (CEU) comprises the respondent, the respondent's partner (regardless of their age) and any dependent children (aged less than 18 years). As few people aged 65 years or over have dependent children, for the purposes of this research, the CEU comprises a single respondent or a respondent and their partner.

Disability Allowance

Disability Allowance reimburses people for actual and on-going regular costs that they incur because they have a disability or a personal health need. It only covers costs that are not funded, subsidised or otherwise covered by other agencies.

Dummy variable

A dummy variable is a dichotomous (two-category) variable usually coded 1 to indicate the presence of an attribute and 0 to indicate its absence.

Equivalised income

Equivalised income is income that has been adjusted for differences in household size and in some cases, the number and ages of adults and children in the household.

Government Valuation

The Government Valuation is the valuation of a property overseen by government to establish the level of local authority rates paid by property owners.

Indicator approach

Living standards indicators provide a general description of people's lifestyles by obtaining information such as whether they have specified possessions, participate in particular activities and economise in specific ways.

Inflation adjusted

Inflation adjusted figures have been adjusted for price changes as measured by the New Zealand Consumers Price Index.

Interaction terms

An interaction term gives the joint effect of two or more independent variables on a dependent variable. Interactions occur when the relation between two variables differs depending on the value of another variable. For example, the effect on material well-being of living in Auckland is different for single people than those living with their partners.

Koha

Koha is a gift or contribution, particularly in the context of reciprocal exchange between visitors and hosts. Traditionally koha were in the form of food or precious materials, whereas money is a common form of koha today.

Living standards

For the purposes of this research, living standards are defined in terms of a person's material conditions and consumption.

Main effects model

A main effects model is a model that contains only main effects. A main effect is the simple effect of an independent variable on a dependent variable not taking into account any interactions.

Material conditions and consumption

Material conditions and consumption refers to the goods that people have and consume (for example, possessions such as electrical appliances and consumption of food) and to whether they can participate in common social activities.

Material well-being

For the purposes of this research, this term refers to material conditions and consumption that a person desires but which they lack due to economic restrictions.

Model parameters

A model parameter is an estimate of the population value based on the model.

New Zealand Superannuation

New Zealand Superannuation is a taxpayer funded pension scheme that provides a source of income to people who have reached the qualifying age of 65 and meet the residential requirements. For payment rate purposes, people eligible to receive New Zealand Superannuation are classified into three main groups: couples, single people living alone and single people living with others. Married couples and couples living together as married are entitled to the married rate of New Zealand Superannuation (although in cases where one partner is living in a residential rest home the other partner may be eligible for the living alone payment rate). Single people who live alone are eligible for the living alone payment rate. Living alone is defined as having exclusive occupation of a dwelling, with exclusive use of kitchen, bathroom and toilet facilities. Single people who live with other adults are eligible for the normal single rate of New Zealand Superannuation.

Partnered

A person is defined as partnered if they *live* with their legal or de facto spouse.

Permanent private dwellings

A permanent private dwelling is a physically fixed dwelling, or mobile dwelling at a permanent location on land. It has cooking facilities common to all people who sleep at that dwelling. This definition usually includes granny flats and self-contained units in retirement villages.

Poverty line

A poverty line stipulates the *amount of income* that a person or family with specified characteristics needs to avoid being in poverty.

Prioritised ethnicity

Ethnicity data was further coded to one prioritised ethnicity code such that if a person identified more than one ethnic group they were coded to one group according to the following order of priority: Māori, Pacific peoples, Other and European. For example, if a person specified both Māori and European ethnicity they were coded under the priority system to the Māori ethnic group.

Regression analysis

A method of explaining or predicting the variability of a dependent variable using information about one or more independent variables.

Regression coefficient

The regression coefficient represents the amount of change in the dependent variable for a one-unit change in the independent variable.

Special Needs Grants

Special Needs Grants are ad hoc payments made by government to those who have an immediate need or an emergency and have no other way of paying for what they need.

Standardisation

Standardisation is a process of turning individual observations into standard scores to allow for aggregation or comparison across different metrics.

Unadjusted scale scores

Unadjusted scale scores show the relationships between each predictor and material well-being scores before adjustment for other factors.

This glossary was compiled using the following sources:

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Vogt, W P. 1993, Dictionary of Statistics and Methodology, Sage Publications, London.