

Risk Factors

Ngā Āhuatanga Whakararu

■ Introduction

We have already considered the development of the scale of material well-being (Chapter Five) and the social and economic features of the sample (Chapter Four). In this chapter we bring these ingredients together to examine the central issue of how variations in social, economic, cultural and other circumstances impact on the material well-being of older Māori:

- The first section describes a general statistical model that relates standards of living amongst Māori to a number of key factors that include income, savings and accommodation costs as well as a number of other factors. This model is then used to illustrate the ways in which these factors combine to determine levels of material well-being.
- The second section extends the first section to examine the issue of the relationship between cultural identification and material well-being. This section addresses two key questions. First, to what extent is cultural identification related to material well-being? Second, what factors and processes explain linkages between cultural identification and material well-being?
- The third section then examines the extent to which material well-being varies with household type. The section focuses on the extent of differences between single and partnered Māori and the factors that may explain these differences. This section also looks at the issue of gender differences in material well-being amongst the single respondents.
- The final section explores the issue of the relative material disadvantage of older Māori compared to older non-Māori.

■ Factors influencing material well-being amongst Māori

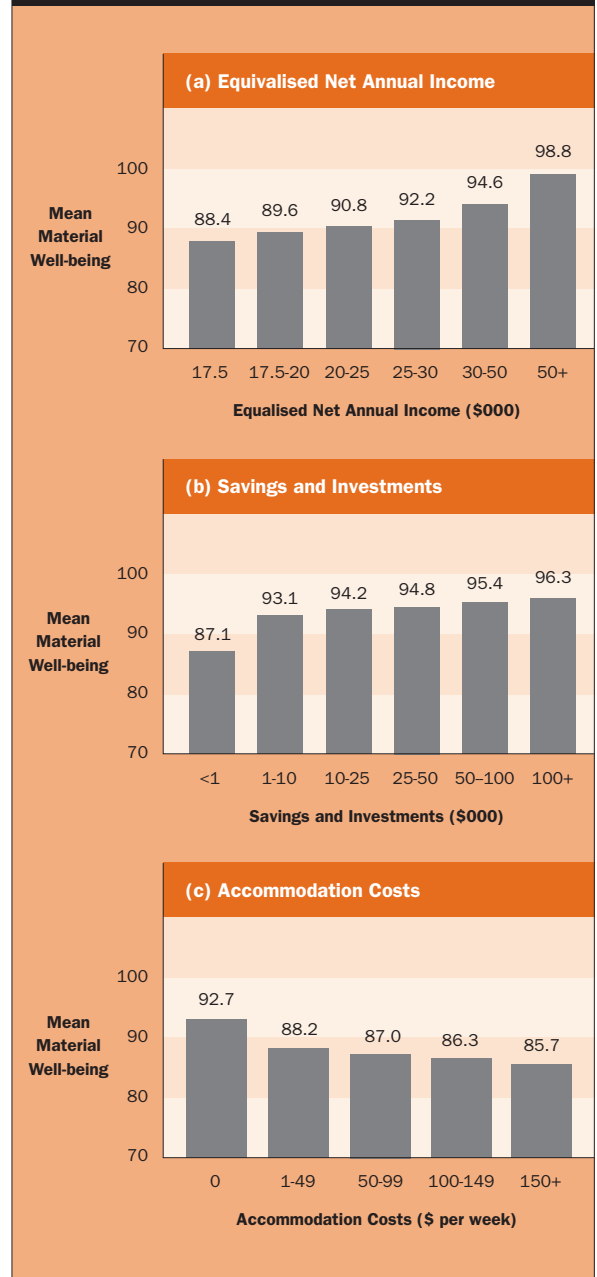
The previous research into the material well-being of all older people has identified a series of factors that were predictors of material well-being (Fergusson et al, 2001a). This analysis involved the technique of multiple linear regression which identified a series of economic and social factors that predicted variation in the material well-being of older people. The same method was applied to the data gathered on the Māori sample (see Technical Appendix).

This method identified the following predictors of material well-being among older Māori:

1. **Income:** As would be expected, variations in annual income were related to variations in material well-being, with increasing income being associated with increasing material well-being. This relationship is depicted in Figure 9(a) which shows the relationships between net annual income¹⁶ and mean material well-being scores. The figure shows that married couples with an income in excess of \$50,000 p.a. had mean scale scores that were more than 10 points higher than those with incomes of less than \$17,500 p.a.
2. **Saving and investments:** A second important predictor of material well-being was the level of savings and investments held by the household, with increasing assets being associated with rising living standards (see Figure 9(b)). The figure shows that those with savings and investments of over \$100,000 had mean scale scores that were nine points higher than those with savings and investments of less than \$1,000.
3. **Accommodation costs:** Income and savings are components of the wealth of the household but, as might be expected, levels of material well-being were also influenced by the costs faced by the household. One important component of these costs is the amount paid by the household per week for accommodation. Figure 9(c) shows the ways in which mean living standards were related to weekly accommodation costs. The figure shows that those paying more than \$150 per week for accommodation costs (rental, mortgage) had mean scale scores that were seven points lower than those who did not pay rent or mortgage.
4. **Recent financial stresses:** In addition to the influence of the economic factors of income, savings and accommodation costs, the material well-being of older Māori was also influenced by their recent exposure to

Figure 9: Associations between key predictors and levels of Material Well-being

Note: All associations have been adjusted for the effects of all predictors



¹⁶ In this figure income has been “equivalised” by dividing by a factor of 0.65 to scale single income levels up to the married couple equivalent. The justification for this scaling factor has been described in the previous report (Fergusson et al, 2001b). The figure thus shows the ways in which mean material well-being scores change for a given change in the annual income of a married couple. To obtain the same graph for single people the income estimates should be multiplied by 0.65.

financial stresses, such things as: unexpected bills; replacement of household effects; and household maintenance (see Table 11, Chapter Four). This relationship is shown in Figure 9(d), which shows the ways in which mean material well-being scores declined as a result of exposure to recent economic stress. The figure shows that those reporting three or more financial stresses in the last year had mean scale scores that were over 10 points lower than those not experiencing financial stress.

5. *Economic adversity prior to the age of 60:* Another factor that was found to influence the material well-being of older Māori was the extent of their exposure to adverse economic life events during their fifties, including such things as: redundancy; separation/divorce; major illness; and death of a partner (see Table 10, Chapter Four). Figure 9(e) shows the ways in which exposure to economic life events prior to age 60 was related to the material well-being of older Māori. Those reporting multiple (3+) adverse economic life events prior to age 60 had mean material well-being scores that were three points lower than those who did not report such stresses.
6. *Number of children raised:* The final factor that contributed to the material well-being of older Māori was the number of children that they had raised throughout their life, with increasing numbers of children being associated with lower living standards. The association between number of children raised and mean material well-being is shown in Figure 9(f). Those who reared 12 or more children had mean material well-being scores that were six points lower than those who raised two or fewer children.

The relationships shown in Figure 9 are all adjusted for the effects of all of the factors shown in these graphs and thus show the likely net effects of each factor on the living standards of older Māori.

Figure 9 (continued)

Note: All associations have been adjusted for the effects of all predictors



As older Māori experienced progressively more of these various risk factors, there was a corresponding decrease in their material well-being. A simple way in which to assess the effect these risk factors had on the material well-being of the survey participants was to add the risk factors together. This made it possible to deduce the mix of circumstances leading to material deprivation amongst older Māori and the mix of circumstances leading to material advantage amongst older Māori.

The mix of circumstances that was most likely to lead to material deprivation amongst older Māori was:

- relying solely on NZS for income
- having no savings or assets
- paying rent or mortgage
- having faced financial stress in the last year
- having faced economic adversities when aged 50-59
- having brought up eight or more children.

In the region of one in 12 (8%) of older Māori had experienced five or more of these factors. It was estimated that respondents with this profile had a mean material well-being score of 67, compared with the mean material well-being score of 90.4 for the entire sample.

At the other extreme, the mix of factors that maximised material well-being and affluence for older Māori was:

- having an equivalent family income of over \$50,000 per annum
- having savings or assets of over \$100,000
- paying no mortgage or rent
- having no recent financial stress
- having no financial adversity during the period from age 50-59
- having reared fewer than four children.

It was estimated that less than 2% of older Māori had this favourable profile. This group had a mean material well-being score of 108.

More generally these results suggested that the key factors influencing the material well-being of older Māori were largely economic (income, savings, accommodation costs), but their living standards were also influenced by past and current financial stress and by their history of parenting and childrearing.

■ Cultural identification

A limitation of the analysis presented in the previous section is that it treats Māori as a culturally homogeneous group and fails to take account the variations in cultural identification within the sample. It will be recalled from Chapter Four that within this sample there was a spectrum of cultural identification that ranged from those with little or no identification with Māori culture and tradition (notional) to those with high involvement in Māori culture (secure).

Given this variation in cultural identification, two important questions arise. First, to what extent are variations in cultural identification related to variations in living standards? Second, if cultural identification and material well-being are related, what factors and processes explain this association? These questions are addressed below.

Cultural identification and material well-being

Table 14 shows the relationship between the extent of Māori cultural identification classified into three groups (notional, positive, secure) and mean material well-being scores. The table shows a clear trend for a more secure Māori cultural identity to be associated with declining material well-being. Those with a more secure cultural identification had mean material well-being scores that were over 10 points lower than those with a notional cultural identification. These results clearly support the conclusion that amongst older Māori, increasing Māori identification was associated with increasing material disadvantage.

Table 14: Mean material well-being by extent of Māori cultural identification

	Cultural Identification Score		
	0-5 (Notional) (N = 71)	6-12 (Positive) (N = 219)	13-18 (Secure) (N = 247)
Mean material well-being score	97.6	91.9	87.0

Explaining the linkages between cultural identification and material well-being

The findings above raise important issues about the factors that place those with a more secure Māori cultural identity at greater risk of material deprivation. From the results of the prediction model described in the first section of this chapter, it may be conjectured that the reason for this association may be that a more secure Māori cultural identity was associated with increased exposure to the various adverse economic, financial, and life history factors that encouraged material disadvantage. As we show below, this conjecture proves to be correct.

Table 15 shows the association between the extent of Māori cultural identification and measures of: household income; savings and assets; accommodation costs; recent financial stresses and numbers of dependent children. In common with Table 14, this Table shows evidence of a generally clear gradient in which a more secure Māori identity was associated with: declining mean income; declining mean savings and assets; increasing accommodation costs; increasing financial stress; and increasing numbers of children. In all cases these trends were statistically significant, but more importantly, all are in the expected direction of placing older Māori with a more secure cultural identity at greater risk of deprivation than older Māori with a notional cultural identity.

Table 15: Comparison of economic factors, financial stressors and number of children across levels of Māori cultural identification

Measure 1	Cultural Identification Score		
	0-6 (Notional)	7-12 (Positive)	13-18 (Secure)
Mean equivalised net income (\$ pa)	27,473	21,343	23,851
Mean savings/investments (\$)	92,650	25,930	23,295
Mean accommodation costs (\$ pw)	22.60	41.00	43.40
Mean financial stressors (past 12 months)	0.45	0.50	0.89
Mean number of children raised	3.5	5.3	7.5

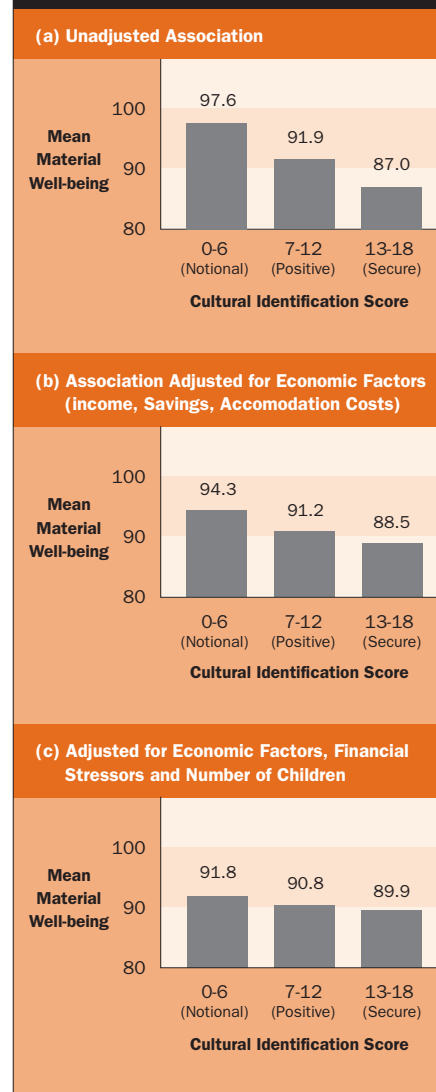
It turns out that the differences in Table 15 do explain the association between cultural identification and material well-being reported in Table 14. This conclusion is depicted in Figure 10, which shows the association between cultural identification and material well-being before adjustment for other factors, and after adjustment for economic and other factors¹⁷. The figure shows that allowing for economic factors (income, savings and assets, accommodation costs) explains most of the relationship between cultural identification and material well-being (Figure 10(b)). This suggests that a major reason for older Māori with a more secure cultural identity having poorer material well-being was because they had lower income, smaller savings and paid higher accommodation costs. However, after allowing for financial stressors and number of children as well as economic factors (Figure 10(c)), virtually all of the relationship between cultural identity and material well-being is explained by these five risk factors.

The results clearly suggest that the relatively disadvantaged status of older Māori with a secure cultural identity arises because of an accumulative adversity model in which the lower income, assets, higher accommodation costs, greater financial stress and larger family sizes all contribute accumulatively to produce this disadvantage.

This study suggests the following conclusions about the linkages between cultural identification and material well-being.

- Stronger Māori cultural identification was associated with lower levels of material well-being amongst older Māori.
- This association was explained by the fact that increasing Māori cultural identification was associated with increased exposure to the factors leading to depressed living standards: low income; limited or no savings, high accommodation costs, exposure to recent financial stresses; and large family size. These factors acted accumulatively to place those with high Māori cultural identification at greater risk of depressed material standards.
- Thus, any direct effect of Māori cultural participation is mediated via the processes whereby those with a strong cultural identity experience cumulative financial disadvantages that limit their potential to prepare financially for retirement. This does not mean there is a causal link between strong cultural identity and financial disadvantages, since it is more likely that historical processes led to these associations.

Figure 10: Mean material well-being score by level of Māori cultural identification before and after adjustment for key risk factors



¹⁷ The adjusted association estimates the relationship between cultural identification and material well-being that would have been observed had all members of the sample had the same level of income, savings, etc irrespective of cultural identification

■ Household composition

Single or partnered

Another important dimension on which the sample varied was that of household composition, with 53% of respondents being married or partnered and 47% of respondents being single (see Chapter Four). An important question that arises is the extent to which there are differences in the material well-being of those in single and partnered households. This issue is examined in Table 16, which compares the mean well-being scores of single and partnered Māori and which shows that there are marked differences in these scores with single Māori having mean scores that were five points lower than partnered Māori.

The difference in material well-being between single Māori and partnered Māori raises important questions about the processes that give rise to this difference. Why is it that older single Māori are faring less well than older partnered Māori? One explanation could be that older single Māori may have greater exposure to the factors that are associated with increased material deprivation. This issue is examined in Table 17, which compares single Māori and Māori couples on measures of economic factors and financial stress. The table shows that as a group older single Māori had higher exposure to a range of factors that were associated with material disadvantage. These factors included lower (equivalised) income; lower levels of savings and assets; higher recent financial stress; and more frequent adverse economic life events prior to age 60. In addition, single Māori paid slightly more in accommodation costs than partnered Māori.

Table 16: Mean well-being scores of single and partnered households

	Household Type	
	Single (N = 251)	Partnered (N = 286)
Mean material well-being	87.7	92.8

Table 17: Comparison of single and partnered households on economic factors and financial stressors

Measure	Single (N = 251)	Partnered (N = 286)
Mean equivalised net income (\$ per annum) ¹	\$21,280	\$25,100
Mean savings/investments (\$) ¹	\$15,400	\$49,925
Mean accommodation costs (\$ per week)	\$44.10	\$35.85
Mean financial stressors (past 12 months) ¹	0.81	0.55
Mean adverse economic life events (age 50-59 years) ²	1.15	0.96

¹ p < 0.005; ² p = 0.06

The above results clearly suggest that as a group older single Māori were subject to far greater exposure to the risk factors that are associated with material disadvantage. As was the case for the association between cultural identity and material well-being, it turns out that the greater economic disadvantage of single Māori explains their relatively impoverished status. This state of affairs is depicted in Figure 11, which shows the association between household type and material well-being before and after adjustment for economic factors and financial stress. The figure shows that after adjustment for economic factors that were associated with both household type and material well-being, the differences between single Māori and Māori couples disappear. These findings clearly suggest that the lower material well-being of single older Māori was largely due to the greater economic disadvantage experienced by this group.

Gender

Of those who were single, 67% were female and 33% were male. This raises the issue of whether there were gender differences in the living standards of single female Māori and single male Māori. Comparison of the mean material well-being score of single males and females showed a small (but statistically non-significant) difference in mean material well-being: single females had a mean material well-being score of 86.3 compared to the mean 90.5 for males.

Table 18 compares single males and females on measures of income, savings and assets, accommodation costs and financial stress. This table shows that the two genders had very similar levels of economic circumstances and history. However, there were small differences between males and females - single females received less income and paid less in accommodation costs.

In general, these results suggest that there were few differences in the material well-being and economic situation of single Māori males and females. Females reported slightly more disadvantage but had similar levels of income, savings, accommodation costs and financial stress.

Figure 11: Comparison of Mean Material Well-being scores for single and partnered households. Before and after adjustment for income, savings and investments, accommodation costs and financial stress

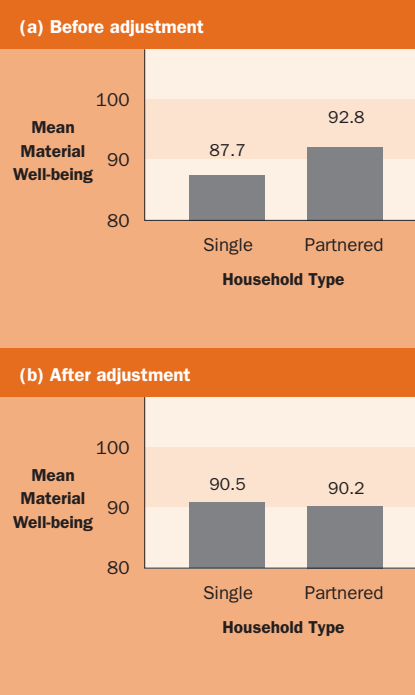


Table 18: Comparison of single females and males on measures of economic situation and financial stress

	Females (N = 171)	Males (N = 80)
Mean net income (\$ per annum)	\$13,430	\$14,720
Mean savings/investments (\$)	\$15,370	\$15,440
Mean accommodation costs (\$ per week)	\$42.20	\$48.10
Mean financial stresses (past 12 months)	0.82	0.78
Mean adverse economic life events (age 50-59 years)	1.13	1.20

■ Differences between Māori and non-Māori

The focus of this research was upon variations in living standards amongst older Māori. However, to place these results in context, it is useful to compare the findings for Māori with comparable data from non-Māori. This approach makes it possible to benchmark the disparities between Māori and non-Māori and to explore the factors that may have contributed to these disparities.

Table 19 compares Māori aged 65-69 with a corresponding series of non-Māori aged 65-69 derived from Fergusson et al (2001b). The two groups are compared on material well-being, economic factors, exposure to financial stress and socio-demographic factors. These comparisons reveal the presence of relatively large and systematic differences between the two populations:

- **Material well-being:** There are clear differences between the mean material well-being of Māori and non-Māori, with Māori having mean material well-being scores that were 8.5 points lower than those of non-Māori (Fergusson et al, 2001a). As discussed earlier (Chapter Five) this difference leads to 20% of Māori having scores of less than 80 compared to only 6% of non-Māori. It is evident from these comparisons then, that material deprivation was more prevalent amongst Māori than it was amongst non-Māori.
- **Economic circumstances:** As might be expected, the relative material disadvantage of Māori was mirrored by relative economic disadvantage. Specifically, Māori had substantially lower annual equivalised income than non-Māori, had far lower savings and assets paid more than twice as much as non-Māori in rental or mortgage,

and had lower rates of home ownership. All of these factors were likely to have conspired to place Māori at significant economic disadvantage.

- **Economic Stress:** In addition to their economically disadvantaged status, Māori were also exposed to greater financial stress and adversity both before and after retirement.
- **Social factors:** In addition to the greater material and economic difficulties facing Māori, more older Māori were widowed (reflecting the higher mortality amongst Māori 65-69), and the number of dependent children who had been reared by Māori was substantially higher.

Table 19: Comparison of Māori and non-Māori aged 65-69 years on measures of material well-being, economic factors, exposure to financial stress and socio-demographic factors

Measure ¹	Māori (N = 537)	Non-Māori (N = 866)
Material Well-being		
Mean well-being score	90.4	98.9
Economic Factors		
Mean equivalised net income (\$ per annum)	\$23,300	\$30,690
Mean savings/investments (\$)	\$33,920	\$85,765
Mean accommodation costs (\$ per week)	\$39.60	\$19.10
% Home ownership	66.1	78.4
Financial Stress		
Mean financial stressors (past 12 months)	0.67	0.40
Mean adverse economic life events (age 50-59 years)	1.05	0.80
Socio-demographic Factors		
% Widowed	29.6	17.9
Mean number of children raised	6.1	3.2

¹ All comparisons between Māori and non-Māori are statistically significant (p<0.001).

The above comparisons clearly suggest a marked and consistent demarcation between the Māori and non-Māori populations, with Māori being consistently at a disadvantage in terms of material and economic well-being. From the comparisons made, it is not difficult to see the ways in which economic deprivation, financial adversity and other factors conspire to place older Māori at a clear and significant material disadvantage when compared to older non-Māori.

In the previous analysis of the material living standards of older people, it was concluded that, relative to the rest of New Zealand, older people were faring relatively well and that there was no pressing need for major changes in the economic provisions to older people (Fergusson et al, 2001a). However, this somewhat reassuring conclusion clearly does not apply to older Māori people. As the results of this report suggest, older Māori are a population that have substantially poorer material conditions and greater economic deprivation than non-Māori. This suggests the need for policies that explicitly address the disadvantaged status of older Māori. Some policy directions and options are explored in the next chapter.

■ Conclusions

1. In common with the previous analysis of well-being amongst the older population in general (Fergusson et al, 2001a), the factors that emerged from this analysis as determinants of well-being were largely related to current economic circumstances and financial history.
2. These risk factors (income, asset value, accommodation costs, recent financial stresses, financial adversity at ages 50 to 59, and number of children raised or supported) combine accumulatively to influence the risk of material disadvantage, such that there is a profile of low material well-being for those with many of these risk factors compared to those with no risk factors.
3. Much of the association between cultural identity and material well-being is statistically explained by the association between cultural identity and economic risk factors, in particular, value of savings/investments, recent financial stresses and the number of children raised or supported. Thus any direct effect of Māori cultural participation is mediated via the processes whereby those with a strong cultural identity experience cumulative financial disadvantages that limit their potential to prepare financially for retirement. Some

of these processes are likely to be of specific cultural relevance (e.g. financial support of whānau, cost of maintaining a Māori identity), but many are likely to reflect the wider structural and economic processes that influence the well-being of all New Zealanders.

4. Having more children has been described as a risk factor for older Māori because of the association with lower material well-being. However, it must be noted that for many Māori, children are viewed as an asset. The relationship with their children (and grandchildren) typically continues throughout their lives, with the direction (and nature) of the flow of resources slowly changing with age. The flow shifts from parents directing all available resources to their children when they are young, to receiving resources (e.g. money, food, help around the house) in their advancing age. It may be that this traditional pattern is changing, perhaps affected by factors such as migration. In some cases, where adult children are economically disadvantaged, the flow of resources may continue to be from older parents to children and grandchildren.
5. Older Māori women typically had a marginally lower income than males, although they paid less in accommodation costs. Overall, however, there was little or no difference between males and females for any of the risk factors identified.
6. While single older Māori appear to be at particular risk for material disadvantage in comparison to couples, it would appear that this differential can be explained by historical processes that appear to place single older Māori at particular risk for financial adversity. This is primarily because the majority of single Māori alive at age 65-69 are female and were once part of a couple. It is likely that this couple has had a poor history of asset accumulation and a higher risk of paying substantial accommodation costs. With the death of the spouse the widow was placed in a worse financial position than before, making preparation for retirement far more difficult.
7. Older Māori consistently demonstrated higher scores on the risk factor scale than those in the general population aged 65 or older. Across these risk factors, older Māori earned less, had fewer assets, paid far more in accommodation, had experienced more recent stressors and more stressors in their fifties than the general older population.



Conclusions and Policy Themes

Ngā Whakataunga me te Whakarāpopoto i ngā Kaupapa Here

■ Introduction

In this study, we have used data on over 500 Māori aged 65-69 to examine the living standards and factors associated with living standards amongst older Māori. This research represents the largest single study into the material living standards of Māori that has been conducted to date. The major themes that emerged from the research and their implications are reviewed below.

■ Measuring material well-being amongst Māori

In recent years there has been increasing recognition of the need to study key issues relating to the health and well-being status of Māori in New Zealand. In turn, this increasing recognition has led to debates about the appropriate methodology by which such research might, or should, be conducted. A major theme in this debate has been the recurrent claim that research on Māori should be conducted by Māori, for Māori, and using methodologies founded in Māori culture. The present research does not meet such criteria. Rather, the research derives from a bicultural model in which the research methodology employed has been adapted from existing research using a mainstream social survey methodology, with this process of adaptation being overseen and approved by a Māori research group.

A central aim of the research was to examine the extent to which methods used to measure material well-being in older non-Māori could be applied to older Māori. The weight of the evidence from this study supports the view that those methods, which were used to investigate older non-Māori, were also applicable to Māori. The application of the same statistical methods (see Technical Appendix) to the data collected for older Māori sample showed that the material well-being of older Māori could be measured in much the same way as older New Zealanders.

Furthermore, comparing the importance that Māori and non-Māori assigned to various aspects of ownership and consumption, revealed that there was little difference between Māori and non-Māori in how they rated the importance of items on the ownership and consumption lists. These results suggested that, with some exceptions, older Māori and non-Māori held similar views about the mix of goods, services and opportunities that were important to them. This similarity provides a justification for creating a scale of Material Well-being for older Māori that was comparable with the scale applied to older non-Māori. The advantages of measuring both populations using a common methodology is that it become possible to devise objective measures of the extent of differences in the material well-being of Māori relative to that of non-Māori.

Whilst the methodology used in this research has the advantage of assessing both Māori and non-Māori using comparable methods, it may be seen as lacking cultural validity to the extent that it relies on research methods and assumptions that have been imported from Western quantitative social science. Some may find this a serious shortcoming of the present research. In response to such concerns we would make the point that although the methodology may be derived from a Western quantitative research tradition, the conclusions it reaches are strongly consistent with the concerns that Māori have raised about disparities between Māori and non-Māori in terms of living standards (see for example Te Puni Kōkiri, 2000). These considerations may suggest that in situations in which clear disparities exist between two populations, the choice of research methodology to illuminate these disparities may not be critical and that similar conclusions may be reached by a range of methodologies.

Two key findings of this study are the relatively high rate of material disadvantage amongst Māori and the clear disparities between the living standards of older Māori and non-Māori. In particular, a previous study suggested that a scale score of less than 80 implied quite marked material hardship and restrictions (Fergusson et al, 2001). The present analysis (Figure 8) shows that amongst older Māori aged 65-69, one in five (20%) had material well-being scores below this bench mark. In contrast only 6% of older non-Māori fell below this level. These results clearly suggest that the prevalence of poverty and material hardship amongst older Māori was three to four times higher than amongst non-Māori.

At the same time, although a greater proportion of Māori were in poverty and hardship it is also important to note that the great majority of Māori (80% approximately) did not have scores below 80 and the majority (60%) attained scores in the average range of 90-110. It was not the case that all Māori were disadvantaged in old age; rather, there was evidence of a disproportionate number of Māori who received low standard of living scores. All measures suggest that as a population, older Māori were substantially disadvantaged when compared with older non-Māori.

■ Factors associated with the material well-being of older Māori

An important feature of the present research was that it collected data on a range of factors that may have contributed to the material well-being of older Māori. The analysis of this information identified six factors that were associated with variations in living standards:

- **Economic factors** including current income, current savings and investment, and current accommodation costs. These results showed, predictably, that the mix of circumstances that combined to increase material disadvantage amongst Māori were low income; the absence of savings and investments, and high accommodation costs. It seems likely that these economic factors represent the major policy levers by which issues relating to the disadvantage of older Māori may be addressed.
- **Exposure to economic stresses:** A second set of factors that was related to disadvantage amongst Māori was exposure to recent economic stresses to meet unexpected bills or to economic problems such as redundancy, marriage breakdown etc in the decade prior to retirement. These results highlight the fact that while current economic circumstances play an important role in determining the material well-being of older Māori, the patterns of material well-being can also be disrupted by unexpected shocks occurring both in the past and more recently.
- **Number of children raised:** The findings on the role of economic factors and economic stresses for Māori were very similar to the findings for non-Māori suggesting that in both populations a similar set of factors determined levels of affluence and material well-being.

However, for the Māori population a further factor was identified in terms of the number of children the respondent(s) had raised. Many older Māori reported raising many children and the study clearly suggests that raising many children over their lifetime led to an economic disadvantage that carried over into older age. This factor did not appear to apply to older non-Māori as non-Māori tended to raise fewer children. These results suggest that culturally determined differences in family structures and sizes acted in a way that placed older Māori at a material disadvantage.

■ Cultural identification and material well-being

Although policy debates often treat Māori as an homogeneous population sharing common views, attitudes and values, there has been increasing recognition that within the Māori population there is considerable diversity in cultural identification and participation (Durie, 1997). For these reasons, it becomes important to explore the variability within the Māori population in terms of cultural identification. In the present study, there were clear differences in cultural identification amongst those surveyed ranging from a minority who had little or no identification with, or participation in, Māori culture, to those reporting a more secure level of identity.

The results showed a clear trend for a more secure Māori identity to be associated with reduced material well-being. In turn, the results raise the important issue of the factors that explained the greater disadvantage of older Māori with a more secure cultural identity.

The present analysis showed that the immediate cause of these differences were that older Māori with a more secure cultural identity had greater exposure to a mix of adverse factors including: low income; limited savings and investments; high accommodation costs; greater exposure to past and present economic stress and larger number of children raised that combined to place them at risk of material disadvantage. However, this account does not explain the historical and other processes by which individuals with a more secure Māori cultural identity came to be placed in a position of material disadvantage within New Zealand society. These processes are likely to have included: a poor history of asset accumulation, poor health - leading to the early death of their partner, and the expense of a bereavement or a divorce. The present

findings suggest that the impacts of these historical processes on Māori varied with cultural identity, with those older Māori who have retained a more secure cultural identity experiencing the greatest disadvantage¹⁸. Further research is being undertaken by the Ministry of Social Development that includes an examination of the relationship between cultural identity and material well-being amongst Māori adults generally.

■ Household composition and material well-being

Although a similar set of factors affected the living standards of Māori and non-Māori, there was an important difference between the two populations in terms of the linkages between material living standards and household composition. In the non-Māori population, the living standards of single non-Māori and non-Māori couples proved to be similar, whereas amongst Māori, single respondents were significantly more disadvantaged than Māori couples. The immediate causes of this difference between single Māori and Māori couples were that single respondents had lower equivalised (refer technical appendix) incomes, smaller savings and assets, paid more for accommodation and had been exposed to other adverse factors. These differences in the background of single Māori and Māori couples proved to be sufficient to explain the relative material hardship and poverty of single older Māori. In turn, these differences may prove to be the consequence of other adversity that afflicts Māori. In particular, it has been well documented that Māori have higher rates of mortality in their fifties and sixties than non-Māori. This produces a situation in which the Māori population aged 60-65 contains a disproportionate number of single people (as a result of bereavement) than the non-Māori population.

In addition, it is likely that those Māori dying prematurely are male and from relatively impoverished backgrounds. The net result of this is to produce a predominantly female single Māori population that is impoverished relative to the population of partnered Māori. This process reflects the way in which one disadvantage (premature mortality amongst Māori males from impoverished backgrounds) may lead to another disadvantage (relative poverty amongst widowed Māori females). These considerations suggest the importance of reducing Māori mortality rates at all ages, including those in their fifties and sixties.

18 From a longer term historical perspective, the relatively disadvantaged position of Māori has been traced back to processes of colonisation and land alienation. See Belich, 1996 for a general account of these processes and Walker, 1990 for a Māori perspective.

■ Policy themes

The findings of this study have a number of implications for social policies directed at sustaining and improving the material well-being of older Māori:

Sustaining the present scheme

In a previous analysis of all older New Zealanders, it was concluded that the current income support schemes were adequate to meet the economic needs of the majority of older people and for this reason it was important that existing levels of support via NZS and supplements to NZS were sustained (Fergusson et al, 2001a). As the New Zealand population ages, and the proportion of older people continues to increase, there may be pressure in the future to reduce the level of NZS. Given the greater disadvantages experienced by Māori, not maintaining the existing level of income support for older people will exacerbate the already disadvantaged status of older Māori.

The need for additional targeted policies dealing with those in hardship

In a previous study of all older people, it was concluded that the fraction of older people facing material hardship was relatively small and that as a consequence there was no pressing need for major revisions to the current benefit structures (Fergusson et al, 2001a). The present in-depth look at older Māori suggests a need for some revision of this conclusion. While it is correct that only a minority of all older people are facing hardship, it is clear that there are subgroups of the population that are highly vulnerable to such hardship. Māori prove to be one such group with one-in-five older Māori people facing significant material hardship and difficulty. This finding suggests the need for targeted policies to provide additional support and assistance to individuals facing financial hardship and difficulties. It also suggests the need to ensure that older Māori are receiving their correct entitlements to existing supplementary assistance.

Whilst this study has focussed on Māori as a group at risk, it is likely that there will also be a group of non-Māori who face a similar plight. Whilst this group may be proportionately far smaller than those Māori facing hardship, it is likely that because of the larger size of the non-

Māori population that more older non-Māori may face hardship than older Māori. This suggests the necessity for any policy directed at addressing hardship amongst older people to directly address need rather than being based on criteria such as ethnicity. Key policy criteria for targeting assistance are likely to involve such factors as income, savings and assets and accommodation costs. Nevertheless, government and community policies to address hardship amongst older Māori can be tailored to meet the specific needs of Māori (e.g. kaumātua housing). Using common criteria to identify hardship does not preclude Māori-specific policy responses.

Strengthening the economic base of Māori

Whilst targeted assistance to older Māori facing severe hardship may be justified, this approach provides only a band-aid solution to the wider issue of ensuring the material well-being of older Māori. It is quite clear from the factors associated with material well-being amongst Māori (and indeed non-Māori) that the older Māori population will remain at risk of relatively depressed living standards for as long as inequities exist between Māori and non-Māori in the areas of economic well-being and health. It would be going beyond the scope of the present study to describe the current economic base of the Māori population and explore specific ways in which it could be strengthened. However, the findings of the study suggest that disadvantage amongst older Māori is to some extent a consequence and continuation of disadvantage at a younger age. This interconnectedness of the well-being of older Māori with the general well-being of the Māori population highlights the need for comprehensive and holistic policies to resolve health educational and economic disparities between Māori and non-Māori in New Zealand.

Developing pre-retirement policies for older Māori

Although strengthening the economic base of Māori in general provides an essential prerequisite for removing the disparities between older Māori and non-Māori, such change may not be sufficient to ensure equity between the populations. In particular, it is evident from research into both Māori and non-Māori populations that events and circumstances prior to retirement play a critical role in ensuring levels of material well-being during retirement. Key factors that appear to

play an important role include: having sources of income additional to NZS; the development of savings and assets; reducing accommodation costs through home ownership; and avoiding redundancy and unemployment in one's fifties. In the previous report, it was advocated that steps were taken to encourage New Zealanders to take an active role in planning for their retirement. As the economic base for Māori grows, this advice will become increasingly relevant to Māori as a pathway for securing sustained material well-being in retirement.

■ Māori research perspectives on material well-being

The present research provides a clear case study of the ways in which survey research methodologies can be used to illuminate issues relating to the material well-being of older Māori. However, despite the utility of such research it is important that the research findings are supplemented by research using culturally relevant research methodologies. The present research provides a starting point for further research into the material well-being of older Māori using Māori research methodologies. Some research possibilities include:

- assessing the nature of the living standards of more culturally conservative (secure) Māori to ensure that the material well-being scale is appropriate for this group
- incorporating the measure into longitudinal surveys to find how material well-being and the risk factors affecting material well-being change over time
- studying the relationship between health, aspects of cultural identity, and material well-being.