

Māori Women: Mapping Inequalities and Pointing Ways Forward

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Ministry of Women's Affairs

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FOREWORD

This landmark report by the Ministry of Women's Affairs significantly advances our knowledge of the differences in the experiences of Māori and non-Māori women. It is another milestone in providing a model for the analysis of data by gender and ethnicity. Using gender disparity indicators across six sectors, *Māori Women* identifies inequalities that exist between Māori women, Māori men, non-Māori women and non-Māori men and, through further analysis, provides new information about the existing status of Māori women and girls.

The report is a resource for whānau, hapū and iwi to assist them in identifying their own priorities for development. The findings also indicate that government agencies need to engage with Māori women and, in partnership with them, build on the rich, diverse experience and insights Māori women themselves have to devise programmes and enterprises which affirm, celebrate and enhance their success and advance their progress. Fundamental in this work is observance of the Crown's Treaty of Waitangi principles of partnership, participation and protection.

Māori Women emphasises the need for a more strategic approach to improving outcomes for Māori women. Areas for action in each of the six sectors are identified. Moreover, the links between housing, employment, income, education, health and criminal justice highlighted by the research provide the basis for the suggestion in the report that inter-departmental co-operation and co-ordination are the key to maximising benefits for Māori women. Such co-ordination should also enable a more integrated and holistic approach to policy development and implementation across sectors. The Ministry of Women's Affairs' contribution to this work will be through consultation with Māori women and other agencies during the development of a Women's Strategy, and its work with key agencies to ensure analysis and monitoring is consistently carried out to improve outcomes for Māori women.

Te Korowai Wahine, the Ministry's Māori Advisory Group, supports the findings of *Māori Women*. Members affirm its value for raising awareness of the lives of Māori women and girls and the opportunities for enhancement.

I hope this report will be a catalyst for a new dialogue between the Government and Māori women. It should inspire departments to actively engage with Māori women to ensure they are fully involved in charting their futures.

Hon Laila Harré
Minister of Women's Affairs

EXECUTIVE SUMMARY

Introduction

This report presents a set of gender disparity indicators from six sectors covering education, employment, income, health, housing, and criminal justice.

The two main purposes of the Report are to:

- Identify the disparities that exist between Māori women, Māori men, non-Māori women, and non-Māori men across the sectors of education, employment, income, health, housing, and criminal justice, using a selection of indicators.
- Analyse the status of Māori women and girls, relative to other groups, and against progress towards achieving the Government's Goals for Women of equity, opportunity and choice; full and active participation; adequate resources; no discrimination; and, a society that values the contribution of women.

The data and information in this report are a tool to assist agencies to undertake gender analysis as it applies to Māori women and their roles within whānau, hapū, iwi and Māori society.

The Report provides the necessary background information to identify where concrete action is required across the six sectors to address the disparities identified in the Report.

The indicators and most of the associated data in this report are based on populations of individuals, rather than whānau, hapū or iwi. Therefore, care should be taken in interpreting the findings of this report, as it does not provide a full picture of Māori women's aspirations and successes. Rather, the Report has been compiled to assist government agencies to be more responsive to Māori women and to develop approaches and solutions in partnership with Māori women that support the Crown's Treaty of Waitangi principles of partnership, participation and protection.

Key Issues

Gender and Ethnic Disparities

Gender and ethnicity interact in complex ways. It is important, therefore, for all sectors to identify both gender and ethnic disparities in order to understand the position of Māori women and girls. For example, Māori women, compared to Māori men, receive generally lower incomes and Māori women share similarities with non-Māori women in their labour force participation and employment rates. However, Māori women and girls tend to do better on all education indicators than Māori boys and men. In the health area, disparities between Māori and non-Māori are greater than between Māori men and women, e.g. Māori experience shorter life expectancies and higher mortality rates than non-Māori.

Information Needs

The report emphasises the need for improvement in the collection and analysis of data disaggregated by sex and ethnicity. The existence of high quality, readily available and reliable information disaggregated by sex and ethnicity varied considerably across each of the six sectors.

There are also research gaps. For example, there is a lack of research on income in relation to Māori generally, and Māori women in particular. There is little information on non-standard forms of employment, and the gender pay gap. Very little is known about housing issues, such as the nature and extent of Māori women's housing need. There is also little research on Māori women's offending.

Intersectoral Approach

Improving the status of Maori women cannot be addressed by focusing on each of the six sectors in isolation. Māori women's lives are not split into sectors. There is increasing evidence that deprivation in one area flows on to deprivation in other areas. The report therefore emphasises intersectoral dependencies and calls for a 'whole of government' approach to policy initiatives aimed at addressing the disparities. An approach that analyses impacts and links policy initiatives across sectors is required. A partnership approach is also required where agencies engage with Māori women and with Māori women's initiatives that are successful.

Sector Findings

Education

At all levels of education except tertiary enrolment at age 30 and above, the disparities between Maori and non-Māori are greater than the disparities between Māori women/girls and Māori men/boys. In terms of participation, achievement and progress non-Māori girls tend to do best, followed by non-Māori boys, Māori girls and Māori boys in that order. This pattern endures throughout compulsory education.

There are clear disparities between Māori and non-Māori:

- There is substantial disparity between Māori and non-Māori enrolments in early childhood services, especially for 4-year-olds.
- While Māori retention rates at senior school levels have improved since the 1980s, they are still lower than those of non-Māori.
- Māori are far more likely to be suspended from school than their non-Māori counterparts.
- Considerably higher proportions of non-Māori leave school with qualifications than do Māori.
- Higher proportions of non-Māori gain awards at degree or postgraduate level.

On all education indicators, Māori girls do better than Māori boys. While disparities between Māori girls and boys in early childhood education are negligible, by the time they reach the end of schooling, there are significant disparities in participation and achievement, with Māori girls doing better than Māori boys. However, participation and achievement need to be raised for all Māori students. In key areas, such as numeracy and literacy, retention at age 16, suspensions and school qualifications, Māori girls do not do as well as non-Māori girls or non-Māori boys.

In the 1990s, Māori women made the greatest gains in tertiary enrolments proportionate to population. As a proportion of all those aged 15 and over, Māori women were more likely than any other group to be enrolled in a tertiary education institution in 1999.

Increasing educational participation and achievement is critical to Māori girls and women and girls gaining paid employment and maintaining sustainable incomes. Improving educational opportunities for Māori women and girls at all stages from early childhood to tertiary education should therefore be a high priority.

Participation in early childhood education sets the foundation for participation and achievement at the compulsory school level. Key barriers to early childhood education participation are the costs of services and access to services, particularly in rural areas.

The young age of the Māori population mean that Māori will continue to make up significant proportions of the school population in the future. Over 85% of Māori students are educated in the general schools system; therefore, the responsiveness and quality of mainstream schools will be critical for Māori girl's success in education.

The transition to post-compulsory education and training is critical to Māori women's employment and income. Focusing priority on the following areas for Māori women and girls will enhance their training, employment and earnings prospects:

- Increasing the retention of Māori girls in schools.
- Raising the achievement levels for Māori girls.
- Enabling Māori women to raise their levels of post-compulsory education and training by ensuring access and support that takes account of women's child-rearing responsibilities, e.g. access to affordable and appropriate childcare.

Employment

The disparities between women's and men's labour force participation are larger than the disparities between Māori and non-Māori. Both Māori and non-Māori women have lower participation rates and employment rates than their male counterparts. Focusing on Māori women, the indicators show:

- Māori women's participation rates and employment rates have been considerably lower than Māori men's over the past 15 years, although their participation has steadily increased.
- Māori women have the lowest full-time employment rates of all groups (Māori women, Māori men, non-Māori women and non-Māori men).
- Māori women are considerably less likely than non-Māori women to participate in the labour force in the 15-34 age group.
- The percentage of those employed people wanting more hours of paid work has risen steeply, most noticeably for Māori women.

When unemployment rates and jobless rates are considered, the disparities between Māori and non-Māori are much larger than the disparities between male and female rates. Unemployment rates and jobless rates for Māori women and men have been consistently higher than non-Māori rates since the early 1990s. With regard to Māori women:

- Māori women have the highest unemployment rate of all groups (Māori women, Māori men, non-Māori women and non-Māori men).
- The unemployment rates for Māori women and Māori men have been similar from 1986 to 2000.
- Both Māori women and Māori men have been concentrated in segments of the labour market where job losses have been the heaviest.
- Māori women and men are well over twice as likely as non-Māori women and men to be unemployed long-term.
- Māori women have the highest jobless rate of all groups (Māori women, Māori men, non-Māori women and non-Māori men).

Unpaid work continues to play a much greater role for women, particularly Māori women, than for men. Women, especially Māori women, are more likely to take part in unpaid work outside the home, and spend roughly twice as many hours as men on unpaid work.

Increasing employment opportunities for Māori women is critical to their and their children's financial independence and security. Key areas to be considered in facilitating greater of Māori women in the labour market include:

- Availability of and access to suitable and affordable childcare.
- Access to a range of educational and training opportunities.

- Reducing the impacts of violence against Māori women as this affects their ability to enter and remain in paid employment.
- Disincentives and barriers facing sole parents in seeking and sustaining viable employment.
- The effects of Māori women's involvement in casual/temporary work and the kinds of support required to make such employment a viable option.
- Contributions made and resource costs involved in undertaking unpaid work, including community-based work and caring for others.

Income

Income disparities are related most strongly to gender. Māori women are in the worst position of the four groups for five out of the seven income indicators. Compared to Māori men, non-Māori women and non-Māori men, Māori women have:

- The highest proportion with hourly earnings below the national median.
- The lowest proportion in the highest income quintile.
- The lowest proportion receiving income from wages, salaries or self-employment.
- The highest proportion receiving the DPB.
- The highest proportion to have household income below \$20,000.

There is a significant gender gap in incomes. The median incomes of Māori women and non-Māori women are similar over their lifetimes. In particular, there is a considerable gap between the pay received by women and men in employment. Lower earnings over a women's lifetime exposes her to financial hardship, insecurity and vulnerability. It impacts on her ability to meet housing costs, to provide for children, to own her own home, to cope with illness and disability, and to save for retirement.

Key issues for Māori women therefore are:

- Raising levels of education, training and work experience in ways that can lead to improved incomes.
- Removing barriers and disincentives to sole parents seeking and sustaining employment.

Health

Health disparities are related to both gender and ethnicity. Māori health status is considerably lower than non-Māori health status across all indicators, from life expectancy at birth to morbidity and mortality. There are clear differences in the health status of Māori and non-Māori women:

- Māori girls under 15 are more likely than non-Māori girls to be admitted to hospital for meningococcal disease, acute respiratory infections, asthma, and homicide and injury deliberately inflicted by others.
- Young Māori women are more likely to die from suicide or self-inflicted injury than young non-Māori women, but the rate of hospitalisation for suicide or self-inflicted injury is highest for young non-Māori women.
- The fertility rate for young Māori women aged 11-17 is over four times the rate for young non-Māori women.
- Adult mortality rates, specifically for lung cancer, heart disease and cervical cancer, are considerably higher for Māori women than non-Māori women.

Generally, the health status of Māori men is lower than that of Māori women:

- Māori women have a better life expectancy than Māori men.

- Māori boys have the highest rate of hospitalisations of all four groups from homicide and injury purposely inflicted by other persons, although the actual number of deaths per year is small.
- Among young Māori men there are considerably more suicide and self-injury deaths than for young Maori women.
- Young Māori men have the highest number of motor vehicle traffic accident mortality of all groups. Such accidents are also a major cause of death for young Māori women.
- Māori men have considerably higher mortality rates than Māori women. Of all four groups Māori men have the highest rates of mortality from lung cancer and from ischemic heart disease.

However, Māori women's smoking rates are higher than those for men, and Māori women are more likely than Māori men or non-Māori women and men to suffer from osteoporosis, diabetes, hypertension, arthritis and most immune disorders.

Health initiatives need to be developed and delivered in ways that are specifically focused on the health needs of Māori women. Māori women's health needs are not synonymous with Māori health needs, nor with women's health needs, although there are overlaps.

Improving Māori women's health status requires consideration of:

- How policy interventions might address socio-economic disparities that negatively impact on health. Factors such as low incomes, unemployment, poor housing, living in unsafe neighbourhoods and low participation and achievement in education are recognised as important determinants of poor health and shorter lives.
- Māori women's access to health services including:
 - Promoting a focus on the holistic Māori view of health.
 - Enhancing Māori women's choices about their health provider, including the opportunity to access programmes run by Māori women.
 - Effectively providing for the diverse needs of Māori women of different ages and life stages, with different levels of attachment to hapu and iwi structures.
 - Improving the capacity of mainstream health providers to deliver services to Māori.
 - Increasing the numbers and qualifications of the Māori health workforce, including greater recognition and training of Māori community health workers, and a process for involving traditional healers in health care provision.

Housing

Housing disparities are primarily related to ethnicity. Māori women and men are more likely than non-Māori women and men to live in:

- Rental accommodation rather than owner-occupied housing.
- Temporary housing.
- Housing that uses no heating and housing that heats water only by burning wood.
- Crowded accommodation (except for Pacific men and women, who are the most likely to live in crowded accommodation).

Māori women experience particular housing difficulties, which are more acute for the 30 percent of Māori women living with children in households with a household income below \$20,000 per annum. Housing costs place a major burden on household incomes for many Māori women.

Māori women constitute the largest single group of people living in households that are the most crowded (with a Crowding Index of 1.5 or more). Māori women also have comparatively long stays in

refuge accommodation (although the stays of Pacific women are longer), indicating that Māori women find it difficult to find safe permanent housing.

Lack of affordable, safe housing in good physical condition can result in negative impacts on health and wellbeing for them and their families. A range of factors is expected to continue to affect Māori women's housing choices and opportunities: for example, the age structure and size of the Māori population; the trend to one-parent families; increasing Māori movement to rural areas; rising housing costs in relation to income; declining home-ownership; increasing dilapidation of housing stock, especially in rural areas.

Māori women's housing situation will be improved by:

- Supporting Māori women's access to home ownership as well as affordable and quality rental accommodation.
- Measures to ensure that the housing stock is appropriate both in quality and quantity.
- Catering for the specific housing needs of large families and diverse whānau responsibilities.
- Improving the alignment of housing and welfare policies in the operation of the Accommodation Supplement and Income Related Rents.
- Encouraging a wider mix of housing providers including iwi, Māori and community-based providers.
- Identifying and developing specific housing initiatives that are responsive to the particular needs of Māori women.
- Giving particular attention to the housing needs of Māori women in emergency housing, refuges, and in transition between accommodation.

Housing solutions for Māori women should be developed in partnership with them. In particular, public rental housing providers should work in partnership with Māori women on building design, siting and standards of rental accommodation.

Criminal Justice

In this sector the disparities tend to be predominantly gender-related. Men tend to be offenders and women are over-represented as victims. Both Māori and non-Māori women are more likely to suffer victimisation in relation to committing offences than their male counterparts.

With regard to victimisation:

- Māori women are over-represented among victims of domestic violence and are more likely to experience repeat victimisation from a partner.
- A higher proportion of Māori women than non-Māori women apply for protection orders under the Domestic Violence Act 1995.
- Māori women and children are heavy users of women's refuge services. There is some evidence that Māori women do not access other services for victims at the rate that might be expected.

With regard to offending:

- Both female and male Māori youth are far more likely to be apprehended and prosecuted than their non-Māori counterparts.
- Māori women are five times more likely to be prosecuted for an offence than non-Māori women, and Māori men are over three times more likely to be prosecuted than are non-Māori men.
- Although far fewer Māori women than Māori men offend, there are some indications that Māori women are becoming increasingly involved in offending.

- Māori women make up over 60% of total numbers of sentenced women imprisoned, a higher percentage than Māori men compared to non-Māori men (around 50%).

Establishing and maintaining sustainable families, whānau and communities is seriously threatened by:

- The high incidence of domestic violence experienced by Māori women.
- The disproportionately high representation of Māori women in offending.
- The significant and rising over-representation of young Māori women in the criminal justice system.
- Impacts of the offending of male partners on Māori women.
- Impacts of Māori offending on children.
- High rates of Māori re-offending.

Addressing socio-economic disparities in areas such as health, education and employment have the potential to impact on crime. For example, crime prevention approaches that include a wider focus on the social and economic development of Māori should be considered.

In addition, specific interventions could be considered, such as:

- Rehabilitative interventions for Māori women offenders.
- Victims' services which are developed to be effective and responsive to Māori women's needs.
- Suitable interventions specifically designed to respond to young Māori women's offending.
- Greater provision of services by Maori providers.
- Support for Māori service providers to develop the necessary skills to work with Māori offenders.

Agreed Actions

The report sets out further work being undertaken by government agencies and the Ministry of Women's Affairs to improve outcomes for women. These include:

Ministry of Education

Consideration of how gaps in current policies and programmes can address the following issues:

- Funding and access to affordable and quality childcare and ECE services, including Māori language immersion services.
- Increasing retention of Māori girls and boys in schools.
- Raising achievement for Māori girls and boys in schools.
- Enabling Māori women to raise their levels of post-compulsory education and training.

The Ministry of Education will be reporting on further work that is required to address gaps in current policies and programmes to address the issues highlighted in this report.

Department of Labour

- Developing options for improving analysis and reporting on closing the gender pay gap, with particular attention to factors that have strongest impact on Māori women (e.g. occupational segregation, educational and training qualifications).

Ministry of Social Policy

- Developing options for removing barriers and disincentives to sole parents seeking and sustaining employment.

Ministry of Health

The Ministry of Health will be reporting on how it will contribute to monitoring the improvement of outcomes for Māori women by:

- Developing a plan of action, consistent with the New Zealand Health Strategy to reduce ethnic, socio-economic, and gender inequalities in health, and which also improves Māori women's access to health services, including Māori-based services. This plan will include an inter-sectoral approach and a population health approach.

Housing New Zealand Limited

- Developing options for improving Māori women's access to affordable, quality and safe housing.

Ministry of Justice

- Developing a strategy to reduce crime that will include analysis of gender and ethnicity implications.

Department of Corrections

- Developing options for the delivery of better rehabilitation programmes and reintegrative services for Māori women and their whānau, including the participation of Māori women and their whānau in the development and delivery of programmes and services.

Ministry of Women's Affairs

- Working with agencies on the issues identified in the report, including encouraging them to incorporate gender analysis in policy.
- Working with women's organisations to develop effective solutions for Māori women.
- Specific initiatives, such as the:
 - Development of a Women's Strategy for advancing Government's Goals for Women which addresses the diverse lives of women, including Māori women.
 - Establishment with Statistics New Zealand, of a framework and set of indicators to highlight the status of women including Māori women, that is also able to measure progress towards Government's Goals for Women
 - Preparation of a research strategy with government agencies to investigate critical inequalities for Māori women, which constitute barriers to their participation in society.

Further Work

The agreed actions are only part of the Government's response to this report and there are several critical issues for Māori women that require further action. It is important to note that Māori women have not yet been fully consulted on priorities for further work. Consultation with Māori women will occur during the development of a Women's Strategy by the Ministry of Women's Affairs over the next year. It is envisaged that Māori women will define their own aspirations and the pathways to achieving them. All further work should be based on government agencies working towards fulfilling their Treaty of Waitangi obligations to Māori women by upholding the principles of partnership, participation and protection.

The work requiring further action and identified in the Report includes:

- improvements in the numeracy and literacy levels of Māori girls
- a reduction in the suspension rate of Māori girls
- monitoring of the new National Certificate of Educational Achievement to assess impacts on Māori girls
- measures to increase Māori women's employment opportunities and participation in employment, including full-time employment. Māori women's contribution to unpaid work, community based work and carer roles needs to be taken into consideration.
- increasing Māori women's access to a range of educational and training opportunities
- reducing the impact of violence on Māori women as violence has an effect on Māori women's activity and outcomes in a range of sectors
- improvement in the health status of Māori women by:
 - provision of appropriate sexual and reproductive health services to young Māori women and girls
 - reduction in mortality rates for lung cancer, heart disease, and cervical cancer
 - reducing morbidity rates for asthma, meningococcal disease, immune disorders and acute respiratory infections
 - reduction in smoking by Māori women
- encouraging a range of housing providers to meet Māori women's housing needs
- meeting the housing needs of Māori women for emergency housing, refuge housing and transitional accommodation
- research into the patterns of victimisation and offending for Māori women
- ensuring victims services are appropriate for and responsive to Māori women
- measures to reduce offending amongst Māori women (particularly young Māori women).

The Ministry of Women's Affairs' contribution to this work will be through consultation with Māori women and other agencies during the development of a Women's Strategy, and its work with key agencies to ensure analysis and monitoring is carried out to improve outcomes for Māori women.

INTRODUCTION

Background to the Report

On 30 May 2000, the Cabinet Committee on Closing the Gaps considered the report *Progress Towards Closing the Social and Economic Gaps Between Māori and Non-Māori* to the Minister of Māori Affairs. That report, known as the Te Puni Kokiri report, provided information on Māori and non-Māori across a range of social and economic sectors: education, employment, health, housing, income, and criminal justice. It drew on a selection of indicators used to measure the status of Māori for each of those sectors.

While the overall disparities between Māori and non-Māori were obvious and significant, Ministers wanted clarification on whether the findings of the Te Puni Kokiri report represented the “average” experience of those two groups. In particular, did the outcomes experienced by Māori adequately reflect the typical experiences of both Māori men and Māori women?

In order to gain more clarity on the nature of the disparities between Māori and non-Māori, and the inter-relationships between Māori women, Māori men, non-Māori women, and non-Māori men, Cabinet agreed that:

the Ministry of Women's Affairs (lead), in consultation with relevant agencies, report back to the Cabinet Committee on Closing the Gaps by the end of June 2000 on a gender analysis of gaps in education, employment, health, housing and criminal justice.

A paper was developed responding to that directive. In particular, it identified that further work needed to be undertaken to provide a fuller review of the disparities that exist between Māori women, Māori men, non-Māori women, and non-Māori men across the five sectors. On 23 August 2000, the Cabinet Committee on Closing the Gaps (GAP) then directed the Ministry of Women's Affairs:

to report back to GAP with an agreed set of gender disparity indicators for each of the five sectors by the end of September 2000; and

to submit a gender disparity report to GAP by the end of February 2001, that reports on disparities between Māori women, Māori men, non-Māori women, and non-Māori men for the education, employment, health, housing, and criminal justice sectors [GAP (00) M 14/1 refers].

In response to the first directive, on 6 December 2000, GAP agreed to a set of indicators to be used as the basis for this report. Indicators for an additional sector, income, were included to provide greater consistency with the Te Puni Kokiri report. The selected indicators were designed to produce information which, in conjunction with analysis and research, would provide a more comprehensive picture of disparities.

This report responds to the second directive.

Purposes of the Report

The two main purposes of the Report are to:

- Identify the disparities that exist between Māori women, Māori men, non-Māori women, and non-Māori men across the sectors of education, employment, income, health, housing, and criminal justice, using a selection of indicators.

- Analyse the status of Māori women and girls, both relative to other groups, and against progress towards achieving the Government's outcomes for women. As acknowledged by Cabinet on 11 December 2000, these outcomes are:

equity, opportunity and choice; full and active participation; adequate resources; no discrimination; and, a society that values the contribution of women.

The data and information in this report are a tool to assist agencies to undertake gender analysis as it applies to Māori women and their roles within whānau, hapū, iwi and Māori society.

In addition, the findings of the Report can act as a resource to inform further sector-specific work in each of the sectors, to consider cross-sectoral issues that exist, and to help identify the areas in each sector requiring further research. It is not intended to make recommendations for specific interventions. Rather, by presenting a broad range of indicators, data and commentary, the report provides a foundation for further work to be done.

This Report assembles existing sources of statistical and non-statistical information in order to describe the positions of all four groups in relation to the six sectors, and identify where outcomes may be improved. Data has identified where outcomes may be improved. It is intended that the data will assist other agencies to improve the effectiveness of policy advice.

The indicators used in this Report have been selected to identify the basic socio-economic disparities between the four groups, highlighting the position of Māori women. They build up a picture of the outcomes for Māori women across the six sectors, in comparison with the outcomes for Māori men, non-Māori women and non-Māori men.

The indicators and most of the associated data in this report are based on populations of individuals, rather than whānau, hapū or iwi. It also needs to be acknowledged that indicators do not necessarily show or represent the experience of the whole population of Māori, and of Māori women in particular. The use of aggregates, such as averages, medians and rates, tends to obscure the point that the experiences of Māori women are diverse, both from one another and from Māori men. Those diverse experiences are related to factors such as age, location, education and income. This can mean that the experiences of some Māori women are more like those of women of other ethnic groups who share similar socio-economic characteristics, than those of other Māori women who do not. Accordingly, policy responses need to take into account relevant variances in Māori women's experiences and needs.

The chosen sectors do not represent all available sectors, and the selected indicators do not represent all possible indicators. The indicators and most of the associated data are based on populations of individuals, rather than families, whānau or communities. Therefore care should be taken in interpreting this Report, particularly in terms of the limited breadth of experience it covers and it does not provide a full picture of Māori women's aspirations and successes. It is not intended to be used to represent the totality of the experience of Māori communities and Māori society. Rather, the Report has been compiled to assist government agencies to be more responsive to Māori women and to develop approaches and solutions in partnership with Māori women that support the Crown's Treaty of Waitangi principles of partnership, participation and protection. A partnership approach is also required where agencies engage with Māori women and with Māori women's initiatives that are successful.

Indicators Used in the Report

An initial list of statistical indicators was drawn up, based on the indicators presented in the Te Puni Kokiri report. The selection process also drew on the 1999 report *Māori Women in Focus*, jointly produced by the Ministry of Women's Affairs and Te Puni Kokiri.¹

To ensure that the final set of indicators would help to provide a high level picture of key areas of disparity, the following selection criteria were developed:

Disaggregation	<ul style="list-style-type: none"> All data was available disaggregated by sex, ethnicity and, where possible, by age.
Relevance	<ul style="list-style-type: none"> Indicators should support government's outcomes and goals, and be a priority area of concern or importance in the relevant sector.
Measuring ability	<ul style="list-style-type: none"> Indicators should be able to measure the level of disparities or "gap" between Māori women/girls, Māori men/boys, non-Māori women/girls and non-Māori men/boys. If possible, they should also measure trends within the Māori population.
Clarity	<ul style="list-style-type: none"> Indicators should be simple, easy to use and understand and unambiguous.
Technical soundness	<ul style="list-style-type: none"> Data should be available, reliable, timely and, where possible, age-standardised.
Consistency	<ul style="list-style-type: none"> Indicators should be consistent with those used in the relevant sector and/or used internationally.

From the initial list, the Ministry of Women's Affairs, along with the lead agencies in each of the six sectors, assembled a basic set of indicators which would meet the selection criteria and would illustrate social and economic outcomes for Māori and non-Māori women and men in each sector. Officials identified additional relevant gender indicators for each sector. Part of the selection process was based on work that agencies had already done on gender issues.

For each indicator, the lead sector agency then collated the most recent data available and, where possible, time series data. The section "About the Data", below, discusses the indicators and the statistical data on which they are based in more detail. It identifies issues related to the data, such as methods of defining ethnicity, and notes where caution is required in interpreting the findings.

Organisation of the Report

Six chapters cover the sectors of education, employment, income, health, housing and criminal justice. Each chapter:

- identifies the relevant indicators
- sets out the position of Māori women, providing a set of benchmarks for the future
- describes the disparities between Māori women, non-Māori women, Māori men and non-Māori men
- discusses the findings.

The final chapter, Conclusions, considers inter-sectoral issues, sums up the main findings for each sector, and sets out some key areas where further work is needed. The information gathered in the Report provides a strong indication that there are still considerable policy gaps needing to be addressed to overcome barriers and promote opportunities for Māori women. Innovative thinking, involving Māori women, and considering issues in an inter-sectoral context, rather than confined to one sector, is required.

Gender analysis

Analysing disparities by gender as well as by ethnicity recognises that the average experience of Māori may not fully represent the experience of different groups of Māori. A variety of benchmarks has been used to assess the extent of differences or "gaps" between Māori women and girls, and

others. These include comparisons with Māori men and with non-Māori women and men, as well as with population averages or overall rates as appropriate. This approach supports the original purpose for this report, that is, to examine whether the disparities between Māori and non-Māori affect Māori women and Māori men differently.

A consequence of this approach is a greater reliance on the analytical process to provide a preliminary assessment of the extent and nature of the disparities between Māori women and girls, and others. Indicators in themselves cannot offer any explanation as to how or why the disparities come about. Supplementary data, where this is available, together with existing research and analysis, has therefore been used to build the description and analysis accompanying each set of indicators, in order to give a more detailed understanding of the experience of Māori women and girls in relation to other groups.

This is a key difference from the report *Māori Women in Focus*, which gave an overview of key issues affecting Māori women's lives using primarily statistical information. The use of additional information enables matters such as inter-sectoral links, any weaknesses in the set of indicators, and cultural factors to be considered. In addition, *Māori Women in Focus* did not compare Māori and non-Māori women with Māori and non-Māori men to provide a gender analysis.

About the data

General issues

This report uses a combination of indicators, supporting table data, and existing documented research and analysis to present a picture about Māori women and where they stand in relation to Māori men, non-Māori women and non-Māori men.

The data and supporting table data for each indicator has been created from a mixture of administrative and survey data supplied by Statistics New Zealand (SNZ) and sector agencies such as the Ministry of Justice, Department for Courts, the Ministry of Health, and the Ministry of Education. Additional data was also supplied by the National Collective of Independent Women's Refuges and by Environmental Science and Research Ltd.

As the first part of the Introduction explains, indicators for each sector were selected by developing a set of selection criteria, and in conjunction with relevant sector agencies, applying this to an initial set of indicators. The criteria adopted for selecting the indicators were that the data should be able to be disaggregated, be relevant, measurable, clear and unambiguous, technically sound, and consistent. However, it was found that in practice there were cases where indicators could not meet all these criteria. As a result, the initial list of indicators agreed to by the Cabinet Committee on Closing the Gaps has had to be modified in some cases.

Furthermore, in the process of collating the information, it became clear that the existence of high quality, readily available, and reliable information disaggregated by sex and ethnicity varied considerably across each of the six sectors and subsequently across the set of proposed indicators. Data disaggregated to this level increases the risk of 'statistical noise' associated with small sample sizes, which may affect the reliability of the data. These factors made it difficult in some cases to go far beyond the average experience for each of the four groups in order to analysis disparities by, for example, age group or location.

Wherever possible, time series data have been used in order to discern trends over time. Using time series also avoids the situation where data from one period may not be representative of the typical situation (for example, due to sample or non-sample error). Use of time series data for the Health chapter was limited by a change to the way ethnic information is collected. Caution should be exercised when interpreting the information from this chapter, as results may reflect atypical situations rather than the norm or trend.

Many of the indicators used rely on data that is based on individuals only, and do not take account of differing family, household and whānau circumstances. For example, over 50% of all Māori women

aged 16 and over have dependent children, compared with only 28% of non-Māori women. One in three live in a shared household, compared with fewer than one in six non-Māori women. These issues are addressed in each chapter and in the Conclusions.

Ethnicity

Ethnicity refers to the ethnic group(s) people identify with. SNZ defines an ethnic group as a social group whose members:

- Share a sense of common origins
- Claim a common and distinctive history and destiny
- Possess one or more dimensions of collective cultural individuality; and
- Feel a sense of unique collective solidarity.

The general principle is that ethnicity should be self-defined. In reality, however, this standard is not always applied. This is particularly an issue for administrative data, where issues include the relevance of the concepts, incomplete coverage of the populations of policy interest, inconsistencies in the data over time, duplication of records, non-response, and difficulties in accessing the data.

This report mainly uses ethnic data categorised according to the Standard Classification of Ethnicity.ⁱⁱ This means that individuals may choose up to three (or more) ethnic groups. For output purposes, the three choices are generally priority grouped as follows: those choosing Māori and any other ethnic group(s) are output to 'Māori', those choosing Pacific and any other ethnic group(s) other than Māori are output to 'Pacific Peoples', and so on. The group defined as Māori therefore includes all those who chose Māori as one of their three ethnic groups. The main alternative to outputting in this manner is to output accordingly to the groupings supplied by respondents. For example, Māori, Māori and Pacific, Māori Pacific and European/Pakeha. Use of the priority system may deflate the disparities found in comparison to use of the sole Māori grouping.

For consistency with the Te Puni Kokiri report, data regarding Pacific peoples has generally been incorporated in the 'non-Māori' group. However, it is important to note that the inclusion of data relating to Pacific peoples in the non-Māori population may also deflate the size of disparities found between Māori and non-Māori. This is generally because the experiences of Pacific peoples are often more similar to the experiences of Māori than to those of other non-Māori. However, given that Pacific peoples form a relatively small proportion of the non-Māori population, the extent to which disparities between Māori and non-Māori may be deflated is relatively small.

Population

The 1996 Census gave the total usually resident New Zealand population aged 15 and over as 2,786,220. Māori women were 6.4% of this population (based on those who specified an ethnicity), and Māori men were 5.9%. Māori women were 12.3% of all women aged 15 and over. Māori men were 12.2% of all men aged 15 and over.

Population figures for census and inter-censal years are prepared by SNZ using information from births and deaths registrations, migration cards, and the Post-Enumeration Survey.ⁱⁱⁱ However, migration cards do not capture information on the ethnicity of those leaving or arriving in the country. This means it is problematic to prepare inter-censal estimates of the population by ethnic group, specifically, the Māori ethnic group.

At the time of the 1996 Census, the Māori population appeared to increase by 20%, whereas SNZ estimated an inter-censal increase of 15-16% (taking the Post-Enumeration Survey results into account). This meant that 4-5% of the inter-censal growth in the Māori population was unaccounted for. Two reasons have been suggested for this discrepancy:

- Changes to the question format for the 1996 Census, which may have encouraged more people to answer the question according to descent rather than ethnicity.
- There may have been a general shift in response whereby people are more inclined to identify with the Māori ethnic group.

SNZ have produced population estimates based solely on the 1996 Census and back-cast to 1991, using birth and death registrations, migration cards, and Post-Enumeration Survey results. This series has also been forward-cast to 1999, using 'best estimates' of migration. SNZ recommend using this series (available on the SNZ web site) for inter-censal population estimates of Māori, non-Māori and total population. This is the series that has been used for population denominators, wherever required, in this report.

The Ministry of Education and the Ministry of Health are averse to using SNZ inter-censal population estimates, because of the discrepancies outlined above. However, the series based solely on the 1996 Census results appear to answer these criticisms, and the advantages were deemed to outweigh the disadvantages for the purposes of this report.

Rates

Most of the measures for the indicators in this report use either within survey population figures or population figures from the series based on the 1996 Census for denominators, in order to create rates. This approach enables the extent of over-representation or under-representation of Māori women to be known. It also avoids situations where an indicator measure appears to increase (or decrease) simply because the underlying population has increased (or decreased).

In applying this methodology to administrative data, it has been assumed that the numerator ethnic data is collected and categorised according to the Standard Classification of Ethnicity and output according to the priority system outlined previously (ie is the same as the denominator). In practice, administrative ethnic data may not be collected through self identification or only one ethnic group may be collected. Mis-matches between the numerator and the denominator can affect the validity of the rates.

Age standardisation

The Māori population is much younger than the non-Māori population. The median age for Māori females is 22.2, compared with 35 for non-Māori females. This can affect comparisons between Māori and other population groups. For example, young people are more likely to be unemployed, and if relatively more of the Māori population is younger, then Māori unemployment rates could appear to be higher than otherwise might be the case, simply because of their younger age structure.

To offset the effects of the differing age structures, the indicator measures are based, where possible, on data that is either age standardised, or disaggregated by age. Both means have been used in this report where appropriate and where standardised data is available or able to be calculated. It should be noted that age standardisation is necessary only where prevalence is strongly related to age.

There is no one 'correct' methodology for age standardising data. The principle used in this report has been to age standardise to the denominator population of the rate. Other standardisation issues relating to specific chapters are as follows:

- Employment data has been standardised to the within survey total population. The age groupings are; 15-24, 25-44, 45-64, 65+.
- Personal income and earnings data has been standardised as for employment data.
- Household income data has been equivalised using Luxembourg Income Study methodology^{iv}.
- Health data has been standardised to the world adult population using Segi's international formulae for the standardisation of health data.

- Housing data has not been age-standardised because the housing indicators relate to a house rather than an individual.
- Criminal justice data has been standardised to the inter-censal total-population estimates. The age groupings are; 15-24, 24-44, 45+.

Income disparities

Like the differing age structures of the Māori and non-Māori populations, there are also consistent disparities in Māori and non-Māori income structures that need to be taken into account in order to understand differences between the two populations. For example, a low income can affect a Māori individual's or Māori family's ability to enter home ownership or access health services.

In this Report, the indicators do not systematically control for income levels in presenting disparity data. In many instances, such analysis is not possible, because of lack of available income data or problems of reliability associated with disaggregated data by ethnicity, sex and income levels.

However, one chapter in the Report focuses on income and also considers the inter-relationship between income, education and employment. The Health chapter references Ministry of Health research using the NZDEP96 index of deprivation, which has been used as a proxy for socio-economic status, and notes that this explains some but not all, of the differences between Māori and non-Māori in terms of health. In addition, one of the indicators in the housing chapter relating to housing affordability provides some information on the effects of income on housing.

ⁱ *Māori Women in Focus* gives an overview of the key issues affecting Māori women's lives in terms of demographic trends, family formation, education and training, work, and income. It presents data based primarily on the disparities between Māori women and non-Māori women.

ⁱⁱ See Statistics New Zealand, *New Zealand Standard Classification of Ethnicity 1993*, Statistics NZ, 1993. It should be noted that Statistics New Zealand is currently reviewing this standard classification.

ⁱⁱⁱ The Post-Enumeration Survey attempts to account for those who were not counted in the main Population Census. Typically, those not counted in the main survey are younger males (because they are more mobile). This factor particularly affects the Māori population, because of their younger age structure.

^{iv} The square root of the number of people in the household is used as the equivalence scale.

A. EDUCATION

Indicators

PARAMETER	MEASURE
Enrolment in early childhood education	<ul style="list-style-type: none"> Proportion of Māori girls enrolled in early childhood education
Achievement levels	<ul style="list-style-type: none"> National levels of achievement for Māori girls at age 10
Secondary school retention	<ul style="list-style-type: none"> Proportion of Māori girls staying at school beyond leaving age Suspension rate for Māori girls
Attainment levels of school leavers	<ul style="list-style-type: none"> Proportion of Māori girls leaving school with no school qualifications Proportion of Māori girls leaving school with at least Sixth Form Certificate
Tertiary participation	<ul style="list-style-type: none"> Proportion of Māori female school leavers going on to post-compulsory education/training Proportion of Māori women enrolled in post-compulsory education/training
Tertiary qualifications	<ul style="list-style-type: none"> Proportion of Māori women gaining tertiary qualifications Proportion of Māori women graduates with degree or higher qualification

Introduction

This chapter uses the indicators of participation, achievement, and progress in education to examine education disparities by sex and ethnicity¹ throughout the life span. The education data was supplied by the Ministry of Education, and the population data by Statistics New Zealand.

1. Participation in early childhood education

Participation in early childhood education is measured here by enrolment in an early childhood service. The denominator is all Māori and non-Māori boys and girls below the age of 5. According to inter-censal population estimates produced by Statistics New Zealand, the 0-4-year-old population declined by some 9,220 children in the period 1995 to 1999, while the number who were Māori increased by some 3,980 children. This resulted in an increase in the proportion of children who are Māori.

1.1 Enrolment in early childhood education services

Position of Māori girls: In 1999, the rate of enrolments for Māori girls aged 0-4 years was 42%.

Table A1. Participation in early childhood education*, 1996 and 1999

	Māori				Non-Māori			
	Girls		Boys		Girls		Boys	
	1996	1999	1996	1999	1996	1999	1996	1999
Total numbers of children aged 0-4	35,490	37,260	38,200	39,690	107,200	102,580	113,980	107,990
Numbers of enrolments in early childhood education	14,312	15,502	16,011	16,535	62,792	68,078	67,176	72,045
% enrolled	40	42	42	42	59	66	59	67

* Note this is an apparent participation rate.

Source: Statistics New Zealand, estimated population figures 1996 and 1999; Ministry of Education ECE enrolment data, 1996 and 1999

Table A1 shows the rate of enrolments for Māori and non-Māori girls and boys in 1996 and 1999. Overall, 4 out every 10 Māori children aged 0-4 were enrolled compared with well over 6 out of every 10 non-Māori children. Between 1996 and 1999, Māori enrolments in early childhood education, as a percentage of all Māori children aged 0-4, changed little. There is almost no gender disparity in Māori or non-Māori enrolments. Non-Māori enrolments rose by around 8 percentage points for both boys and girls over this period. Since Māori children now make up more than a quarter of all children aged 0-4, their lower rates of participation in early childhood education in comparison with non-Māori children are of concern (see discussion section). The data indicates that a large number of Māori children are not enrolled in early childhood education.

Enrolment by type of service

Licensed early childhood services include kindergartens, playcentres, education and care services, home based services, the Correspondence School and kohanga reo. There are also licence-exempt groups, such as playgroups, in which parents are present at all sessions. Early childhood services vary in the hours that children may attend, opening hours, age from which children may attend and whether they require the involvement of parents.

Māori and non-Māori children are differently distributed across the different types of service. In 1999, kohanga reo attracted the greatest proportion of Māori enrolments (36%). The second largest proportion of Māori enrolments (26%) were in early childhood education and care centres. The third largest proportion (22%) were enrolled in kindergarten.² For non-Māori children, the greatest proportion were at education and care centres (43%), the second largest at kindergarten (28%), and the third largest at licence-exempt early childhood development playgroups (11%).

It is important to note that participation in early childhood education is voluntary, and because children are often enrolled in more than one service, the data is almost certainly inflated.³ Results from the NZ Childcare Survey 1998 indicate that 60% of children aged 0-4 years were in at least one form of early childhood education or care (Department of Labour and NACEW:1999, 21). However, Māori children may be less likely than non-Māori children to have multiple enrolments, as the largest proportion of Māori pre-schoolers who access early childhood education are in kohanga reo which offer full-day care.

Enrolment by age

Data on enrolment by age provides a more detailed analysis of participation by Māori and non-Māori children. For both Māori and non-Māori, the older the child, the more likely he or she is to be enrolled in some form of early childhood education.

Table A2 shows that in 1996, the Māori/non-Māori disparity in enrolments increased for each age group, and became substantial at ages 3 and 4. Fewer than two out of every three Māori children were enrolled at age 4, compared with almost all non-Māori children.

Data collated by Te Puni Kōkiri⁴ indicate that despite rapid growth in Māori enrolments, the overall Māori/non-Māori disparity in enrolments of 3-year-olds widened over the years 1991 to 1998. In 1991 it was 26 percentage points, and in 1998 it was 32 points. Taken together, these statistics show that enrolments for 3-4-year-old Māori are lower than for non-Māori and this discrepancy has increased over time.

Table A2. Early childhood education participation by age, 1996

Age group	% participating in ECE	
	Māori	Non-Māori
Under 1 year	11	13
1 year	27	30
2 years	42	51
3 years	62	89
4 years	64	102*

* The 2% surplus is most likely the result of multiple enrolments. There may also be an effect from mis-matching between the numerator and denominator.

Source: Ministry of Education July 1996 ECE enrolment data: Statistics NZ 1996 Census population data.

Assessment at entry to school

School Entry Assessment (SEA)/Aro matawai: Urunga-a-Kura (AKA), introduced in 1997, is the first nationally standardised set of assessment procedures available for teachers to use to collect information on the skills, knowledge and understandings of children when they begin school.⁵ It consists of three resources, in both Māori and English, which assess emergent literacy, use of oral language, and numeracy. SEA/AKA is not mandatory, and is not based on a simple random sample.

Because the data is not based on a simple random sample, it is not possible to calculate sample errors. The Ministry of Education reports that while the indications are that the data is representative of the population, they would regard this information source as indicative only. Table A3 shows the average scores for Māori girls and boys and for non-Māori girls and boys.

Table A3. School Entry Assessment average scores, 1997

Area	Māori		Non-Māori	
	Girls	Boys	Girls	Boys
Numeracy	16.0	14.8	19.9	19.0
Oral language	10.4	10.0	11.6	11.2
Reading literacy	8.9	8.0	11.4	10.5

Source: Ministry of Education.

Table A3 shows that in all three areas, there are disparities in the scores on the basis of both ethnicity and gender. The average scores on these school entry assessment tests are highest for non-Māori girls. Māori girls and boys have lower average scores than non-Māori girls and boys, with Māori boys having the lowest scores overall. The weakest areas for Māori students are reading literacy and numeracy, while oral language is a comparative strength, although still lower on average than for non-Māori students.

Overall, what the SEA/KA data show is that, on average, Māori students begin their compulsory schooling experience with lower levels of numeracy, oral language skills and reading literacy in comparison with their non-Māori peers. Numeracy and reading literacy are skills that are enhanced by participation in early childhood education.

2. Achievement levels

Educational achievement indicators measure the performance levels either of groups of children or of countries. They may be measures of individual competence, as in the School Entry Assessment, or average scores from standardised tests of school achievement in particular subjects, international testing programmes, or national examinations.⁶ The results of these tests are given as average scores for the various groups of children in relation to the national mean. Averages do not provide information on the spread of scores within each group, and they can be unduly influenced by a small number of very low or very high scores. Furthermore, while the average scores for some groups of students may be lower than others, individual students within a group may score very highly.

New Zealand has now taken part in five of the international studies of school achievement conducted by the IEA (International Association for the Evaluation of Educational Achievement). The 1990 IEA study on reading literacy provided the data for the first part of the measure used to examine achievement levels at age 9-10 (Table A4). The 1994 IEA study on mathematics and science, known as the Third International Mathematics and Science Study (TIMSS) provided the data for the second part of the measure (Table A5).

2.1 Reading literacy

In 1990 the IEA conducted a study of reading literacy in 177 primary schools and 125 secondary schools using a stratified two stage cluster design.⁷ Samples were drawn from two grade levels, to pick up 9-year-olds and 14-year-olds. In New Zealand the grade levels were Year 5 (Standard 3) and Year 10 (Form 4). Because the data is not based on a simple random sample, it is not possible to calculate simple standard errors. The scores are based on an international scale with a mean of 500 and a standard deviation of 100.

Position of Māori girls: The average level of achievement for Māori girls at age 9-10 in reading literacy, as measured by the 1990 IEA study, was 510.

Table A4. IEA average scores, age 9-10, 1990

	Māori		Non-Maori	
1990	Girls	Boys	Girls	Boys
Year 5	510	483	549	531

Source: Ministry of Education.

Table A4 compares the achievement levels of 9 and 10-year-old Māori and non-Māori girls and boys in reading literacy in 1990. Consistent with the pattern identified in the school entry assessment data (Table A3), non-Maori girls have the highest average score, and non-Maori boys the second highest, with Māori girls and boys scoring third and fourth respectively.

2.2 Mathematics and science

In 1994 New Zealand took part in the IEA Third International Mathematics and Science Study, known as TIMSS.⁸ This study used a different sampling frame from the IEA reading literacy study but a similar sample design. It drew its samples from the two grades at which most 9-year-olds were located (Years 4 and 5 in New Zealand) and the two grades at which most 13-year-olds were located (Years 8 and 9 in New Zealand).

Position of Māori girls: The average level of achievement for Māori girls at age 9-10, as measured by the 1994 TIMSS scores, was 446 for mathematics and 478 for science.

Table A5. TIMSS average scores, age 9-10, 1994

	Maori		Non-Maori	
	Girls	Boys	Girls	Boys
Mathematics	446	405	484	487
Science	478	432	524	523

Source: Ministry of Education.

Table A5 shows that non-Māori students scored more highly, on average, than their Māori peers in both mathematics and science. There were gender differences within ethnic groups, with Māori girls scoring more highly than Māori boys on both tests. Similar gender disparities are found in other countries. Non-Māori girls performed better than Māori girls and non-Māori boys performed better than Māori boys. The difference between the two samples of girls was narrower than the difference between the two samples of boy although the t-values indicate the differences are statistically significant in both cases⁹.

3. Secondary school retention

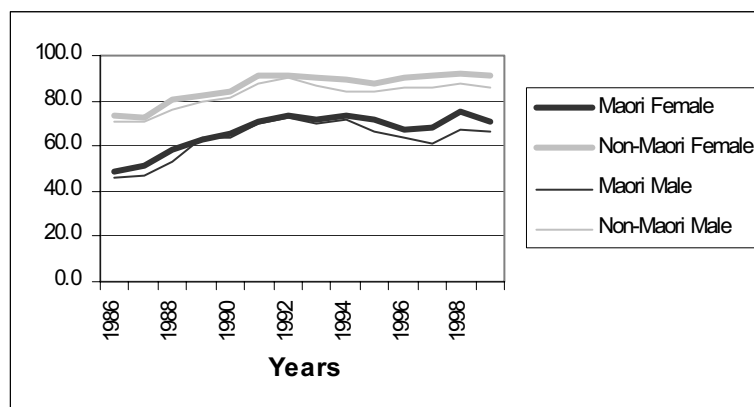
Secondary school retention is measured as the proportion of students who were enrolled at age 14 and are still in school after their sixteenth birthday (the school leaving age). The measure used here is the proportion of Māori girls enrolled at age 14 who are still in school at age 16, 17 and 18. As an additional piece of information, the suspension rate for Māori female school students has been included, and compared with suspension rates for Māori boys, non-Māori girls and non-Māori boys.

3.1 Staying at school beyond school leaving age

Position of Māori girls: In 1999, 71% of Māori girls enrolled in secondary school at age 14 were still enrolled when they were aged 16. The comparable figure for those aged 17 was 45%, and for those aged 18 it was 10%.

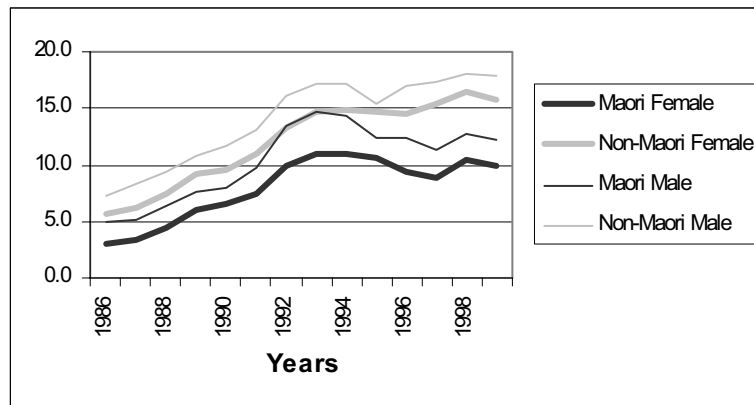
The New Zealand school leaving age was raised from 15 years to 16 years in January 1993. However, Figures A1 and A2, covering the years 1986-1999, show that rates of retention to age 16 and age 18 began to rise well before 1993, for both Māori and non-Māori.

Figure A1. Age 16 enrolments as a proportion of age 14 enrolments two years earlier, 1986-1999¹⁰



Source: Ministry of Education enrolment data.

Figure A2. Age 18 enrolments as a proportion of age 14 enrolments four years earlier, 1986-1999



Note: The scale in Figure A2 differs from that presented in Figure A1.

Source: Ministry of Education enrolment data.

Figure A1 shows that non-Māori females have the highest rates of retention in terms of the percentage of 14-year-olds still at school at age 16. The retention rate for all groups of students increased markedly from 1986 to 1992 and 1993, but has since remained broadly steady.

With respect to Māori girls, 48% of those who had been in school in 1984, aged 14, were still in school in 1986, aged 16. This proportion rose to around 72% in the years 1991-1995, fell slightly in the next two years, and rose again to 71% in 1999. The pattern was similar for Māori boys, although their rates of retention have been lower than for Māori girls every year since 1986 – except 1989.

At age 18, as Figure A2 shows, the picture changes. In 1999, a greater proportion of Māori boys aged 18 (12%) than Māori girls aged 18 (10%) were still in school. It may seem that because Māori boys appear to have a greater school retention rate at age 18 than girls do, the boys are doing better. However, this higher rate of retention may indicate that on average, Māori boys take longer to get to the same class level as Māori girls.¹¹ In terms of qualifications obtained, at age 18 Māori girls are more likely than Māori boys to have left school with qualifications.

3.2 Suspension from school

Position of Māori girls: In 1999/2000, 9.9 of every 1,000 Māori girls enrolled in primary, intermediate or secondary schools were suspended from school.

Table A6. School suspensions per 1,000 enrolled students, 1999/00 June Year

Māori		Non-Māori	
Girls	Boys	Girls	Boys
9.9	23.1	1.9	7.1

Source: Ministry of Education suspension data.

Table A6 covers the period from July 1999 to June 2000 only. This is because new rules on suspension, the Education (Suspension) Rules, came into force in July 1999.¹² These provided

boards with guidelines on managing difficulties with student behaviour. They gave boards increased flexibility to impose conditions when a student is permitted to return to school, or to extend a suspension with conditions. They also provided boards with the option of a stand-down, which allows a student to be removed for a specified period (no more than 5 days in any term or 10 days in a school year).

The suspension rate for Māori girls (9.9 per 1,000 students enrolled) is around five times as high as the rate for non-Māori girls, who have the lowest rate (1.9 per 1,000). Māori boys have the highest rate of suspension (23.1 per 1,000 students enrolled). This rate is more than twice that for Māori girls, and more than three times the rate for non-Māori boys (7.1 per 1,000).

4. Attainment levels of school leavers

The qualifications with which students leave school affect their ability to proceed to tertiary education and employment. They also affect earnings capability and job security. The two measures for this indicator are the proportion leaving school with no qualifications, and the proportion leaving with at least Sixth Form Certificate.

4.1 School leaving qualifications

Position of Māori girls: In 1999, 31.8% of Māori girls left school with no qualification, and 46.4% left with at least Sixth Form Certificate.

Table A7. Percent of school leavers by highest qualification, 1996 and 1999

Year	Qualification	Māori		Non-Māori	
		Girls	Boys	Girls	Boys
1996	No qualifications	35.3	42.6	12.2	16.9
	School Certificate only*	24.4	22.9	15.1	18.6
	At least Sixth Form Certificate**	40.3	34.5	72.6	64.6
1999	No qualifications	31.8	38.3	10.7	15.6
	School Certificate only*	21.8	22.2	13.7	17.7
	At least Sixth Form Certificate**	46.4	39.6	75.7	66.7

* Defined as gaining a School Certificate examination grade in at least one subject, or gaining 12 or more credits at Level 1 or above.

** Defined as gaining at least one or more subjects for Sixth Form Certificate, irrespective of the grade awarded. This includes any higher school qualification.

Source: Ministry of Education.

So far, this chapter has documented the lower rates of participation of Māori children in early childhood education, the lower average rates of achievement at ages 9-10, the lower rates of retention

at secondary school and the higher rates of suspension for Māori students in comparison with their non-Māori peers. These lower rates of participation, achievement and retention are reflected in the lower qualifications of Māori school leavers (Table A7). However, Māori girls are on average leaving school with higher qualifications than Māori boys.

No qualifications

Table A7 shows that for 1996 and 1999, Māori students were more likely than non-Māori students to leave school with no qualifications, with Māori boys being the most likely of all students to leave school with no qualifications. However, between 1996 and 1999, the percentage of students leaving school with no qualifications has declined for all groups, with the percentage of Māori students in this least-qualified group showing the biggest decline.

School Certificate only

In both 1996 and 1999, Māori students were more likely than non-Māori students to leave school with "School Certificate only" as their highest qualification. In 1996 Māori girls were more likely than Māori boys to have "School Certificate only" as their highest qualification, whereas by 1999 Māori boys were slightly more likely to be in this category. This reflects the increased percentage of Māori girls leaving school with higher qualifications than School Certificate.

There are disparities by sex and ethnicity in whether students attempt a particular examination and whether they gain sufficient grades at the required level to go further with their education. School Certificate data on candidates and grades obtained shows that in 1999, 42% of Māori girl candidates and 36% of Māori boy candidates sitting School Certificate obtained A, B, or C grades. For non-Māori girls, the comparable percentage was 67% and for non-Māori boys it was 60%.

At least Sixth Form Certificate

An increased proportion of all groups are going on to attain "at least Sixth Form Certificate". Using this measure, in the three years from 1996 to 1999, Māori girls have made the greatest progress of all the population groups. However, in 1999, their rate of attainment of higher school qualifications remained below that of non-Māori boys and girls. Māori boys have the lowest rate of attainment, although they too made progress between 1996 and 1999.

The attainment of "at least Sixth Form Certificate" shown in Table A7 can be further broken down to examine rates of attainment of University Bursaries and University Scholarships. University Bursaries have traditionally provided access to degree level study, whether at university, polytechnic, or private training establishments. University Scholarships are awarded to top scholars in the Bursaries examination. There are both single subject awards and scholarships for high performance across subjects.

In 1999, 5% of Māori girls and 4% of Māori boys left school with University Bursary, compared with 26% of non-Māori girls and 20% of non-Māori boys. Overall, these percentages have changed little since 1996.

5. Tertiary participation

The final sections of this chapter look at the participation and attainment of students in tertiary education. The first indicator, tertiary participation, is examined using the following measures: the proportions of school leavers going on to post-compulsory education and training, and the proportions of all those aged 15 and over enrolled in post-compulsory education and training or tertiary education institutions.

5.1 Secondary school students going directly on to post-compulsory education and training

Position of Māori women: Of Māori women who left school in 1997, 26.3% were enrolled in some form of tertiary education by July 1998. An additional 10.9% were enrolled in a Training Opportunities Programme (TOP).

Table A8. Estimated percentages of 1997 school leavers enrolled in tertiary education by July 1998

Tertiary Sector	Māori		Non-Māori	
	Women	Men	Women	Men
College of Education	1.0	0.3	2.1	0.4
Polytechnic	13.9	12.4	19.2	19.0
University	9.4	6.6	27.0	22.8
Wananga	0.6	0.7	0.0	0.0
PTE*	1.5	0.5	4.5	1.6
Total	26.3	20.4	52.8	43.8
Plus TOP**	10.9	11.7	2.7	3.0
Total including TOP	37.3	32.1	55.5	46.8

* Government Funded Private Training Establishments

** Training Opportunities Programmes

Source: Ministry of Education.

Note that columns may not add due to rounding

Table A8 shows the estimated¹³ percentages of 1997 school leavers who were enrolled in various forms of tertiary education and training in July 1998, broken down by ethnicity and sex. Overall, non-Māori school leavers are more likely than Māori school leavers to be enrolled in some form of tertiary education and training, and women are more likely than men to be enrolled. For both Māori and non-Māori, women are more likely than men to proceed directly from school to some form of tertiary education.

The greatest ethnic disparity according to institution is in enrolment at university, with non-Māori school leavers more likely to be enrolled at university than Māori school leavers in 1998, and female Māori and non-Māori school leavers more likely than their male peers to be enrolled at university. In 1998, polytechnic courses (excluding TOP courses) absorbed the largest proportion of enrolled Māori, particularly women.

Other data show that the overall national trend is for an increasing proportion of all groups to enrol in some form of tertiary education upon leaving school. While rates of participation are lower for Māori than for non-Māori, looking at tertiary enrolments apart from TOP courses, and comparing 1997 school-leavers with those who left in 1995, Māori women had the greatest increase in participation (up 4.1 percentage points), followed by non-Māori men (up 3.9 points), non-Māori women (up 3.4 points) and Māori men (up 3.1 points).

5.2 Participation in post-compulsory education and training

While the previous measure of participation examines the percentage of school leavers who are enrolled in tertiary education and training the year after they leave school, it is also important to consider the rates of participation for all age groups. This is particularly important for Māori women, who are more likely to participate in tertiary education from the age of 30 and upwards.

Position of Māori women: In 1999, 9.2% of Māori women aged 16 and over were enrolled in Tertiary Education Institutions.

Table A9. Enrolment in Tertiary Education Institutions, by age group, 1999

Age	Māori		Non-Māori	
	Women	Men	Women	Men
18-21, % enrolled	20.1	14.8	41.5	34.9
22-29, % enrolled	11.2	8.4	13.6	12.3
30-39, % enrolled	9.3	5.7	7.8	5.7
40 and over, % enrolled	5.1	2.6	2.8	1.5
Total 16 and over, % enrolled	9.2	6.2	7.8	6.4
Total 16 and over, number enrolled*	17,017	10,820	101,666	78,847

* A relatively small number of these students – 268 Māori women, 262 Māori men, 277 non-Māori women and 253 non-Māori men – were enrolled in TOP, Skill Enhancement and Skill Pathways courses.

Source: Ministry of Education tertiary enrolment data.

Table A9 gives data on enrolments in Tertiary Education Institutions (TEIs) by age group, ethnicity and sex in 1999. Tertiary Education Institutions (TEIs) are essentially the universities, polytechnics, wananga, and colleges of education. Among all those aged 16 and over, Māori women had the highest percentage of their population (9.2%) enrolled in a TEI.

The greatest concentration of tertiary students is found in two age groups: those aged 18-21, and those aged 22-29. In the 18-21 age group, Māori women are half as likely to be enrolled as non-Māori women, who have the highest proportion enrolled. There is a similar disparity between Māori and non-Māori men.

In the 30-39 age group, 9.3% of Māori women were enrolled in TEIs in 1999, up from 6.6% in 1994. Māori women had the highest participation rate in this age group. Both in overall rates of participation and at ages 30-39 and 40 and over, Māori women were more likely to be enrolled in TEIs in 1999 than any other group. Māori men had overall rates of participation almost equal to those of non-Māori men, and for age 30-39, rates for both groups of men were exactly the same.

Turning 17 and passing bursary examinations remain the benchmarks for entry to a degree course for younger students. However, growth in the number of students aged 40+ has been particularly strong in the 1990s. Tertiary providers are increasingly catering to mature students¹⁴. Data shows that for the population aged 16 and over, the proportion enrolled in TEIs increased over the years 1994 to 1999.

However, the greatest gains, proportionate to population, were made by Māori women. Their participation rate increased from 7.0% in 1994 to 9.2% in 1999.

Among all Māori women enrolled at TEIs in 1999, the three most popular fields of study were education (18% of enrolments) and commercial/business (also 18%), followed by humanities (15%). For Māori men, the three most popular fields were commercial/business (16%), humanities (15%) and industrial trades/crafts (11%). Commercial/business was also the most popular field for non-Māori women (23%) and non-Māori men (25%). For non-Māori women, education came second (15%), followed by humanities (13%). The second most popular field for non-Māori men was natural and applied sciences (11%), with industrial trades and crafts third (10%).

6. Tertiary qualifications

Two measures of the attainment of tertiary qualifications are used: the total proportion gaining a tertiary programme award, and the proportion of graduates with a degree or higher qualification.

6.1 Tertiary programme awards

Position of Māori women: In 1998, 2.6% of all Māori women aged 16 and over gained a tertiary programme award, and 30.6% of these awards were degrees or post-graduate awards.

Table A10. Tertiary programme awards gained,*1994 and 1998

	Māori		Non-Māori**	
	Women	Men	Women	Men
1994				
% of those aged 16+ gaining any award	1.6	1.4	1.5	1.4
Of those gaining awards, % gaining award at degree or post-graduate level	23.6	24.4	47.1	50.3
1998				
% of those aged 16+ gaining any award	2.6	1.7	2.1	1.6
Of those gaining awards, % gaining award at degree or post-graduate level	30.6	31.5	52.7	54.9

* Percentages gaining awards have been adjusted for multiple awards.

** Excludes international students and those who did not state ethnicity

Source: Statistics NZ, estimated inter-censal population data; Ministry of Education, tertiary programme awards data.

Table A10 shows the percentage of Māori and non-Māori men and women who gained a tertiary award in 1994 and 1998, and the percentage of those gaining a tertiary award who gained a degree or post-graduate level award. There has been an increase from 1994 to 1998 in the percentage of all groups who gained some type of tertiary award. The group that experienced the greatest gain has been Māori women: in 1998, they were more likely than any other group to gain a tertiary award¹⁵.

The proportion of awards to Māori men and women at degree level or above grew by a similar extent from 1994 to 1998, but the higher proportion of Māori women gaining tertiary awards overall means that more Māori women (1,464) than Māori men (910) are now gaining degrees or post-graduate awards. Non-Māori women are in a similar situation.

7. Discussion

7.1 Early childhood education (ECE)

It is clear that the major disparity in early childhood education comes at ages 3 and 4, when only around 6 out of every 10 Māori girls and boys are enrolled in an ECE service, compared with at least 9 out of every 10 non-Māori girls and boys (see Table A2). There is little research focusing on Māori families and ECE enrolment. However, research by the National Advisory Committee on the Employment of Women (NACEW) and the Department of Labour provides some information about likely reasons for this disparity. In 1998 they jointly sponsored a national survey on the use of early childhood education and care and after school care for children 0-14. The survey was conducted as a supplement to the Household Labour Force Survey.¹⁶

Demand for ECE

Apart from the 1998 childcare survey, there has been little research on demand for ECE and care arrangements in general, or among Māori parents in particular.¹⁷ However, there are indications that there is unmet demand for ECE and care services for Māori children as well as for non-Māori children.

The NZ Childcare Survey 1998 reported that 53% of Māori preschool children were using some form of ECE and care outside the home, compared with 66% of European/Pakeha preschool children. This disparity is narrower than the disparity in ECE service enrolment between Māori children (41%) and non-Māori children (66%). It indicates that demand among Māori parents for ECE and care arrangements for preschool children is markedly higher than the current rate of ECE enrolment among Māori preschool children might suggest.

In the childcare survey, Māori parents, sole parents and low income parents were more likely to report problems accessing ECE and care, and to say that these problems affected their employment. Māori parents, sole parents and those with more than one education and care arrangement were also more likely to report that they wanted an increase in current hours of care for children under 5.

Cost of ECE

Cost has been highlighted as a major barrier to participation in early childhood services. The NZ Childcare Survey 1998 cited above showed that enrolment was strongly related to household income. Not only does higher income make it easier to cover the costs of using services, but also parents with higher incomes are likely to be employed for longer hours and therefore to make greater use of early childhood services. The survey found that 74% of children from high income families had enrolled in early childhood services, compared with 61% from middle income families and 52% from lower income families.¹⁸

Māori women are over-represented among those households with lower incomes (see Income). The childcare subsidy for low income parents is accessed for a much higher proportion of Māori than non-Māori children (32% compared with 12%). The subsidy is accessed for 65% of children who attended kohanga reo.¹⁹

The second most common reason for not using ECE and care was the lack of access to informal care by someone known and trusted. It is not clear whether this was the preferred form of care, or whether it was sought because of its low cost. In the national survey, most parents paid \$10.00 or less a week for ECE and care.

Location and transport

Cost may become more of a barrier if transport is also a problem – that is, if the available ECE services are difficult to reach, either because parents have no access to suitable transport, or because services are not locally available. Lack of transport affects ECE participation more for Māori children than for non-Māori children.²⁰ The children of women in rural areas, who are more likely to be Māori, have lower levels of participation than the children of those in urban areas. Major differences in participation between geographic regions also exist.²¹ In the 1998 childcare survey, lack of suitable or flexible hours and lack of local services were the third and fourth most common problems reported in accessing ECE and care.

Benefits to children and parents

Participation in early childhood education has been shown to benefit children's school achievement. In a survey of families in the Wellington region, children from low income families with four years of early childhood education experience achieved as well as high income children for literacy and other forms of competence on entry to school. These gains endured into the early years of schooling. These findings suggest that participation in early childhood education can partly offset the effects of low family income on educational achievement.²²

Lack of attendance at an early childhood service is classified as a barrier to learning by the Education Review Office (1995). Attendance is usually recorded in the child's school enrolment form. The apparent enrolment of 100% of all non-Māori 4-year-olds means that children who have not been to a preschool of some kind are likely to be viewed by their primary schools as not sufficiently prepared.

However, the extent to which early childhood education makes a difference in other respects, for example to the preservation of te reo, to whānau, to a mother's income or education, or to the child's happiness and well-being, is largely unknown. The objectives, ages of children, hours of attendance, years in childhood education and care, staff:children ratios and pedagogical methods all differ across the various early childhood education services. The child's primary caregiver may or may not be involved. Parent education may or may not be offered.

As well as preparing children better for school, early childhood education may help to preserve te reo Māori, and enable parents to engage in paid work or study/training. If the major aim of early childhood enrolment is to prepare children better for school, the main issue is to ensure that all Māori 4-year-olds are enrolled in a form of service that will accomplish this. For the preservation of te reo, the focus should be on enrolling children as young as possible. To enable parents to engage in paid work, the focus should be on good quality childcare.

These three aims for early childhood education are all compatible. However, if parents are sick, out of work, poorly housed or in conflict with the criminal justice system, matters of voluntary participation in an early childhood service become secondary and probably insignificant to the parents involved.²³

The mothers saying they are most in need of more and better childcare are sole Māori mothers of preschool children. There appears to be a strong Maori preference for kohanga reo, particularly for the years 0-3, but playgroups or other forms of informal service may also be required.²⁴ The Māori population will remain younger than the non-Māori population for many years to come, and this will have an impact on all education services. While young Māori women are more likely to become mothers than young non-Māori women, early childbearing is not a barrier to undertaking the training programmes in te reo and early childhood education offered to parents by kohanga reo.²⁵ Other services also provide parent education opportunities.

7.2 Primary and secondary education

The major disparities identified in relation to participation and achievement at primary and secondary school are those between Māori and non-Māori. The participation, achievement and progress of Māori girls and boys in the compulsory school sector suggests that their progress, opportunities and choices are constrained from the time of entry to school, in ways that do not constrain the performance of non-Māori students. However, these constraints interact with factors relating to gender to operate differently for girls and boys.

Recent reviews of the literature relating to different aspects of education for Māori²⁶ tend to focus on Māori as an undifferentiated population. The experiences and achievements of Māori women are recorded in Selby (1992) and Bowkett (1996). There are reports of women's access to higher education in Jefferies (1997) and Carkeek, Davies and Irwin (1994) have reported Māori girls' experiences at school.

In terms of gender disparities, there has been a shift in favour of girls on some variables for both Māori and non-Māori. This shift mirrors international trends. For example, it is now common in countries with a high level of literacy for girls on average to perform better on literacy tasks than boys.²⁷ In New Zealand, Alton-Lee and Praat (2000) have reviewed the literature on gender differences in the compulsory school sector, with reference to ethnicity. They stress that education disparities involve inter-relationships of gender, ethnicity, social class, sexuality and identity, so that the important question to ask about gender disparities is "which girls" and "which boys":

The boys who are doing particularly badly are Māori, Pacific and Pakeha boys attending low decile schools. Similarly, the girls who are doing particularly badly are Māori, Pacific and Pakeha girls attending low decile schools...Patterns of gendered performance pervade at low levels across these patterns, by ethnicity and decile level, but vary according to the subject area and school level.²⁸

It has been suggested with regard to the United Kingdom that the raising of the leaving age is a contributing factor to the improved performance of girls in recent years.²⁹ Girls now stay at school long enough to attempt the examinations, whereas previously they or their families might have decided that they should leave. However, the New Zealand data on retention suggest that raising the school leaving age to 16 in 1993 has not had a large influence. A more cogent reason for staying longer in school is probably youth unemployment. What needs to be investigated is why the drivers to stay longer at school and seek higher qualifications appear to be stronger for Māori girls than for Māori boys.

School Certificate has traditionally been considered a major performance indicator by the general public. Results from this examination have dominated thinking about access to the workforce and individuals' evaluations of their own abilities. Any changes arising from the proposed National Certificate of Education Achievement will need to be monitored in the interests of Māori girls and boys.

Retention, age, and school progress

To what extent are the proportions of school leavers with various levels of qualifications a function of progress through the levels of schooling? Unless it is known what class levels the students have reached at the time they leave school, the proportions with qualifications are difficult to interpret. The progress of pupils up the levels of schooling is influenced by factors such as:

- holding pupils in early childhood services
- late entry to school
- delay of pupils' movement up class levels in the early years
- repetition of a class level at examination levels
- interruption in schooling, caused by suspension, reasons such as illness or pregnancy, or unexplained absences.

In the United States, delay in progress up the levels of schooling is an educational indicator, and the trends are monitored by gender and ethnicity. In New Zealand, information on student age by class level and by ethnicity is no longer collected from schools, so the extent to which students are being delayed and becoming over-age for each level of schooling, particularly at secondary school, is unclear. Being over-age can become a barrier to staying in school once the legal leaving age of 16 is reached. In other words, It is important to monitor all delays in progress through school, including whether Māori girls and Māori boys are over-represented among those being delayed, and if so, what the reasons are. In terms of retention, as well as looking at the proportions of age 14 students who

remain in school as their chronological age increases, it is also important to monitor the retention rate of students *up to* age 14.

7.3 Tertiary education

Looking at Māori enrolment in tertiary education across the lifespan provides a different picture from the one gained by looking at school leaver qualifications or at patterns of tertiary enrolment directly from school. The data for tertiary participation and programme awards show that once they are out of the school system, Māori women's participation and performance in education improves markedly and the disparities with non-Māori that have persisted throughout compulsory schooling are greatly reduced. For Māori men, this is not happening to the same extent. There is a growing gap between the educational achievements of Māori men and those of Māori women, particularly in later life. For Māori women aged 30-39, rates of participation in tertiary education are now over 9%.

However, substantial disparities remain between Māori and non-Māori, for both women and men, with regard to levels of tertiary participation at ages 18-21, and resulting qualifications at degree level or above. Gaining higher qualifications in later life delays the benefits of improved employment and earning capacity which higher qualifications bring.

Difficulty in accessing suitable, affordable childcare continues to affect the ability of mothers, especially Māori mothers, to study and/or train. The NZ Childcare Survey 1998 showed that problems accessing appropriate, affordable ECE and care were a barrier to study/training for 21% of sole mothers and 12% of mothers from two-parent families. A higher proportion of Māori than non-Māori mothers reported this barrier. Overall, only 2.4% of fathers reported the same barrier, and the numbers of Māori fathers in this group were too small to be statistically significant.

Data sources

The Ministry of Education (MoE) provided data from its administrative database. It also provided data related to School Entry Assessment (SEA), the International Education Association (IEA) survey of reading literacy, and the Third International Mathematics and Science Study (TIMSS). More information about these surveys can be found in the references noted below.

Notes

- ¹ At entry to preschool and school, parents state the child's ethnicity and this is coded by the enrolling teacher. Tertiary students define their own ethnicity.
- ² Ministry of Education (2000a).
- ³ Ministry of Education (2000a); Smith et al.(2000).
- ⁴ Te Puni Kōkiri (2000b).
- ⁵ See Gilmore (1999).
- ⁶ Education Review Office (1999).
- ⁷ See Wagemaker (1993). Data collection for the next study, the Participation in Reading Literacy Study (PIRLS), will take place at the end of 2001.
- ⁸ See Ministry of Education Research Division (2000); Garden (1997).

Notes (contd.)

- ⁹ The t-values were estimated to be significant if greater than 1.96. The t-value for Māori girls versus non-Māori girls was 4.0%, while that for Māori boys versus non-Māori boys was 5.8%
- ¹⁰ The retention measure excludes migration adjustment.
- ¹¹ McDonald (1988).
- ¹² "Suspension" is the formal removal of a student from school until the board of trustees decides the outcome. "Exclusion" means the formal removal of a student aged under 16 from school for a specified period. "Expulsion" means the formal removal of a student aged 16 or over from the school. "Stand-down" is the formal removal of a student from school for a specified period. The purpose of the rules is to ensure that individual cases are dealt with in a fair and reasonable manner.
- ¹³ This data is drawn from two different sources, and some missing data has been interpolated.
- ¹⁴ Ministry of Education (1999).
- ¹⁵ Note that comparisons between groups may be affected by the different age structures of the Māori and Non-Māori populations.
- ¹⁶ Department of Labour & NACEW (1999); Department of Labour (1999).
- ¹⁷ Department of Labour & NACEW (1999).
- ¹⁸ Ibid. See also Smith et al. (2000).
- ¹⁹ Department of Labour (1999); Department of Labour & NACEW (1999).
- ²⁰ Smith et al. (2000); E. Clark (1995).
- ²¹ Ministry of Women's Affairs (1997); Newell (2000).
- ²² Wylie et al.(1996); Wylie & Thompson (1998).
- ²³ E. Clark (1995).
- ²⁴ E. Clark (1995). The Ministry of Education advises that enrolment statistics show a drop between the number of 3-year-olds and the number of 4-year-olds enrolled in kohanga reo, and an increase in kindergarten enrolments between these ages. This suggests that there may be some switching from kohanga reo to kindergarten. Newell (2000) suggests that up to one third of families may switch from kohanga reo to kindergarten when the child turns 4.
- ²⁵ Rokx (1999).
- ²⁶ See Hirsh (1990), Reedy (1992), Watson (1994), E. Clark (1995), Education Review Office (1995), Jefferies (1997), Wise (1999), Cloher et al. (1999), Johnson (2000), Te Puni Kōkiri (2000b), Watane & Gibson (forthcoming).
- ²⁷ Turner et al. (1995).
- ²⁸ Alton-Lee & Praat (2000), p.301.
- ²⁹ Delamont (1999).

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B. EMPLOYMENT

Indicators

PARAMETER	MEASURE
Employment	<ul style="list-style-type: none"> • Employment rate for Māori women
Unemployment	<ul style="list-style-type: none"> • Unemployment rate for Māori women • Jobless rate for Māori women • Long-term unemployment rate for Māori women
Participation in the labour force	<ul style="list-style-type: none"> • Labour force participation rate for Māori women
Participation in unpaid work	<ul style="list-style-type: none"> • Participation rate in unpaid work for Māori women

Introduction

The income levels of most adults in the working age population depend heavily on both their own and any partner's labour force involvement. The growing proportion of adults living without a partner makes individual involvement increasingly important for both women and men. For parents, paid work involvement or the lack of it determines not only the level of income for themselves and their children, but also the time and energy available for child-rearing. Although decisions about labour force involvement are made by individuals, these decisions are heavily influenced by social relations and commitments, including unpaid work responsibilities.

The data used in this chapter give a broad picture of statistical trends in labour market involvement for Māori women, non-Māori women, Māori men and non-Māori men over the last fifteen years. Indicators are based mainly on the Household Labour Force Survey (HLFS) series, which:

- is a long-term, regular time series, beginning in the December quarter of 1985
- has retained the same definitions of ethnicity throughout¹
- is the official measure of unemployment in New Zealand
- uses international definitions and classifications.²

While HLFS data is seasonally adjusted, this adjustment is not available by sex and ethnicity combined. This tends to have more impact on the data for Māori, especially Māori women, reflecting their greater involvement in casual and seasonal employment – although it should be noted that there is very little information on non-standard forms of employment.

Labour force categories and rates

The HLFS surveys people aged 15 and over in a sample of households. Each person in this age group – the working age population - is assigned to one of three mutually exclusive groups – employed, unemployed or not in the labour force. The use of each category depends on the definition of a person's activity during the survey reference period.

To be defined as participating in the labour force, people must be defined as either employed or unemployed. The unemployed must be without paid work, be available for work, and have actively sought work in the four weeks ending with the survey reference period or have a new job to start

within four weeks. “Actively seeking” means doing more to look for work than just looking in news papers.

Those who are out of work, but temporarily unavailable for work, are defined as “not in the labour force”, and are not counted as unemployed. This means that people with childcare responsibilities (predominantly women) are likely to be defined as “not in the labour force”, even if they want and are looking for paid work, because they are unlikely to have alternative care available immediately.

Joblessness is defined more widely than unemployment. The “jobless” include three groups of people: those who are officially unemployed; those who are without work, and available for paid work, but are not actively seeking it; and those who are without work, and actively seeking paid work, but not available to start immediately (for example, because of childcare responsibilities or because they are studying). The second and third groups are defined as “not in the labour force” because they are not in employment and do not fit the definition of unemployment.

Sample error

The numbers of Māori women and men included in the HLFS are too low to give detailed information when data which is already broken down by sex and ethnicity is then further broken down by categories such as industry, occupation, or long-term unemployment.³ However, because long-term unemployment is one of the indicators selected for this report, this information has been included.

1. Employment

1.1 Employment rate⁴

Position of Māori women: In the year to June 2000, on average of 44.1% of all Māori women aged 15 and over were employed.

Table B1. Employment rates,* average for year to June 2000

Māori		Non-Māori	
Women	Men	Women	Men
44.1%	60.1%	55.0%	69.8%

* *The number of employed expressed as a percentage of the population aged 15 and over.*

Source: Statistics NZ, Household Labour Force Survey (HLFS), age standardised to the total working-age population.

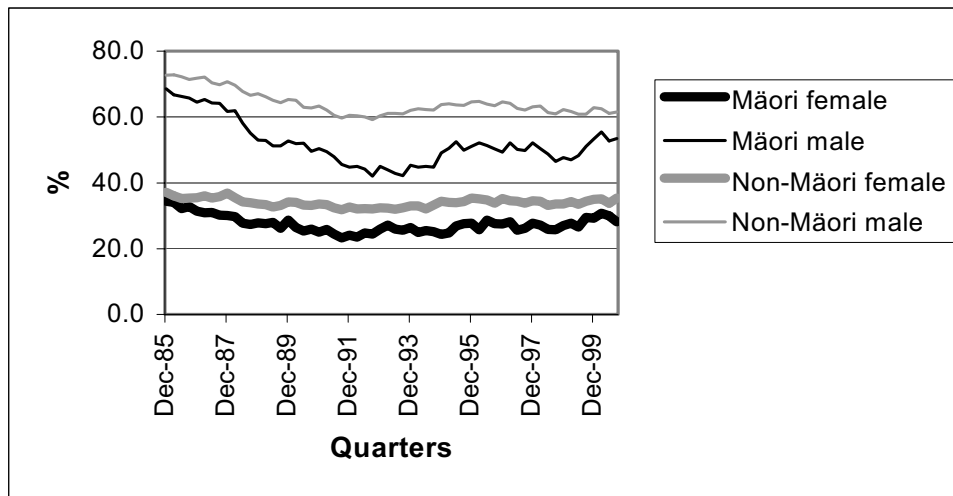
As Table B1 shows, Māori women’s employment rate in the year to June 2000 was on average 11 percentage points lower than the rate for non-Māori women. There was a similar disparity between the rates for Māori and non-Māori men. However, the gender disparities were wider, at 16 percentage points between Māori women and men, and 15 between non-Māori women and men.

Full-time employment

Full-time employment is defined as usually working 30 hours or more per week. The HLFS data (Figure B1) show that the gap between the full-time employment rates for Māori and non-Māori women widened through the late 1980s. By June 2000, the rate for Māori women was only a little lower than the rate for non-Māori women. Men’s full-time rates have altered much more than women’s full-time employment rates since December 1985, with a particularly steep fall for Māori men in the early

1990s. By the June quarter of 2000 the disparity between Māori and non-Māori men was 8 percentage points, compared with 6 points in 1986.

Figure B1. Full-time employment rates,* 1985-2000



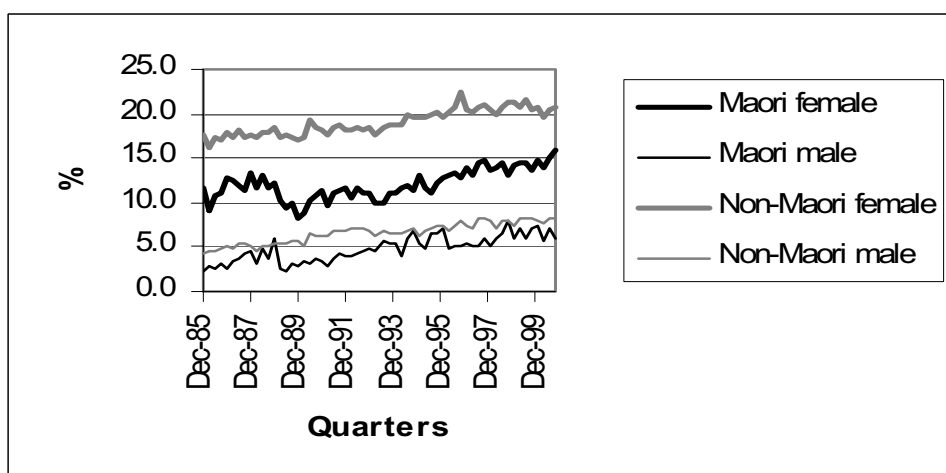
* The number of full-time employed expressed as a percentage of the population aged 15 and over.

Source: Statistics NZ, HLFS, age standardised to the total working-age population.

Part-time employment rates

Part-time employment, defined as usually working for at least 1 hour and less than 30 hours per week, has grown for both women and men since 1985 (Figure B2). But it has not made up the full-time employment shortfall, particularly for Māori. The gap between Māori and non-Māori women widened in the early 1990s, though higher proportions of women in both groups now have part-time jobs. A similar pattern is apparent for men, though the Māori/non-Māori gap is much narrower and the percentages employed part-time are much smaller.

Figure B2. Part-time employment rates,* 1985-2000



Note that the scale in Figure B2 differs from that presented in Figure B1

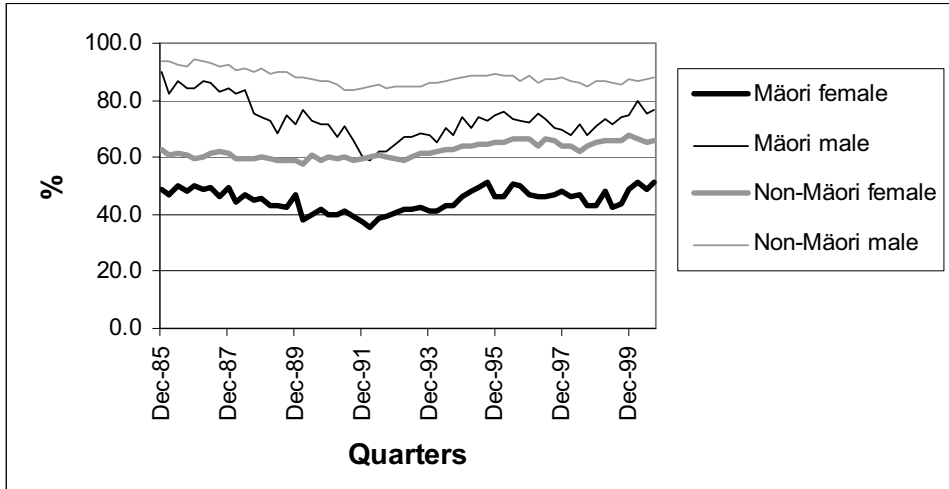
* The number of part-time employed expressed as a percentage of the population aged 15 and over.

Source: Statistics NZ, HLFS, age standardised to the total working-age population.

Employment among those aged 25-54

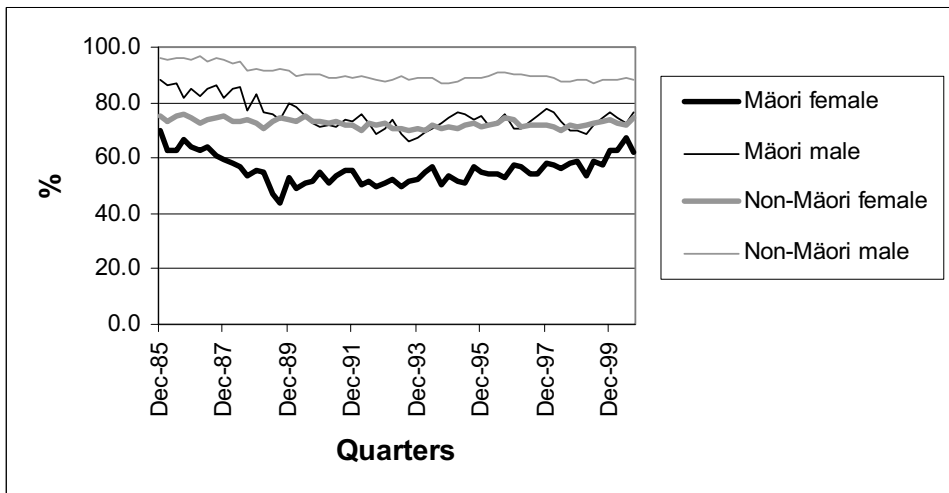
Figures 3, 4 and 5 show employment rate trends since December 1985 for those aged 25-54. These years are generally considered to be the prime working age years.⁵

Figure B3. Employment rates for ages 25-34, 1985-2000



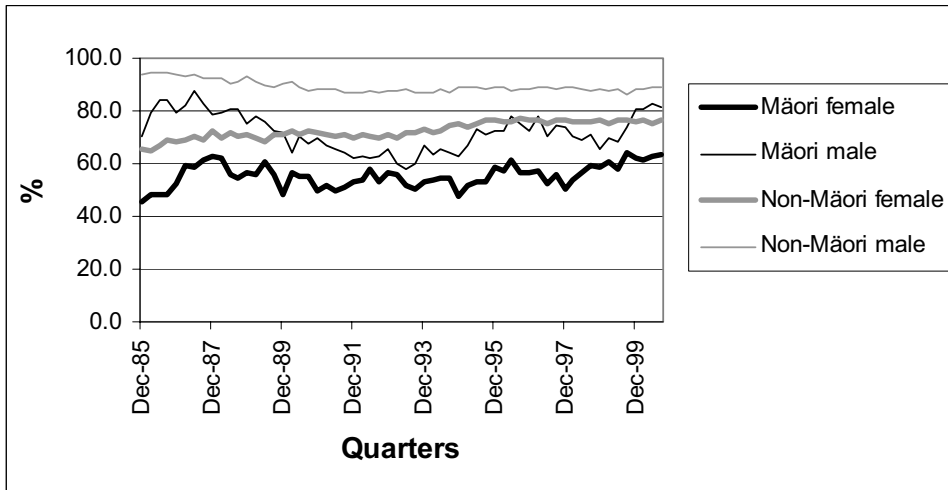
Source: Statistics NZ, HLFS

Figure B4. Employment rates for ages 35-44, 1985-2000



Source: Statistics NZ, HLFS

Figure B5. Employment rates for ages 45-54, 1985-2000



Source: Statistics NZ, Household Labour Force Series.

Age 25-34

As Figure B3 shows, employment rate patterns over the last 15 years differ markedly for each of the four groups aged 25-34. Rates for Māori women and men in this age group have run roughly parallel, though the gap between the two has narrowed because of the overall fall in male employment. Rates for non-Māori women and men also run parallel, though both groups had a much smaller decline in employment in the early 1990s than did Māori women and men. In the 1990s, the overall gender gap between men and women narrowed as men's employment fell and women's rose.

The gaps between Māori and non-Māori employment rates were wider in June 2000 than they were in 1986. For women the gap is widening mainly due to a larger increase in employment for non-Māori women. For men it is due to a larger decrease for Māori men. In the June quarter of 2000, Māori women's employment rate was around 50%, roughly the same as in June 1986. But the rate for non-Māori women was 65%, up from 61%. Māori men's employment rate was a little over 75% in the June quarter of 2000, down from 87% in 1986, whereas non-Māori men's rate was 87%, down from 93%.

Age 35-44

As Figure B4 shows, employment rate disparities among all four groups aged 35-44 have moved differently from disparities for the 25-34 age group. In the June quarter of 2000, employment rates for both Māori women (67%) and non-Māori women (72%) were much the same as they were in 1986, so the disparity between the two was unchanged.

However, the disparity between Māori and non-Māori men widened over the same period. By 2000, Māori men's employment rate was around 72% (about the same as the rate for non-Māori women), compared with 87% in 1986, a drop of 15 percentage points. Non-Māori men's employment rate was around 89%, down from over 96% in 1986, a drop of 7 percentage points.

Age 45-54

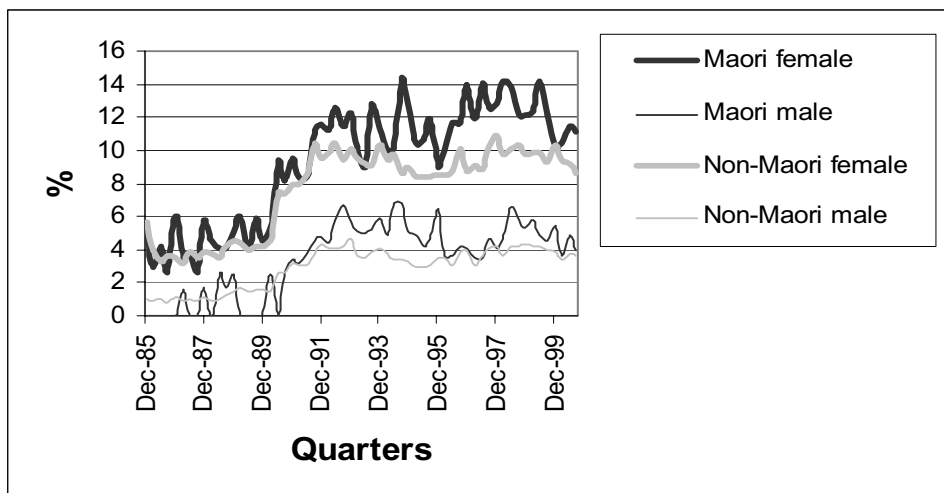
Rates for Māori women and men in this group run along similar lines over the last 15 years (Figure B5), though the gap between the two narrowed because of the overall fall in male employment in the late 1980s/early 1990s. A recent increase in Māori male employment suggests that the gap is widening again. Rates for non-Māori women and men also run along similar lines, though both groups had a much smaller decline in employment in the early 1990s than did Māori. The overall gap between men and women narrowed (but less so for Māori) as men's employment fell and women's rose. In this age group, the widest disparity is now that between Māori women and men: about 20 percentage points in June 2000, compared with about 14 points between non-Māori women and men.

Māori women and non-Māori women have both greatly increased their employment rate since 1986, although the increase has been much more uneven for Māori women. For Māori men in this age group, the employment rate declined sharply from the mid 1980s to a low point of around 60% in the early 1990s. Recently it has risen again, to 83% in June 2000. Meanwhile the rate for non-Māori men has fallen from over 94% in June 1986 to 89% in June 2000, so that the disparity between Māori and non-Māori men has narrowed.

Under-employment

The HLFS asks all employed people whether they would prefer to work more hours (in paid employment) than they usually do each week. This is not an official measure of under-employment, but does give some indication of trends over time.⁶ It is clear that since the early 1990s, the percentage of each group wanting more hours has risen steeply, particularly for women, and most noticeably for Māori women (see Figure B6). Again, these trends indicate that the growth in part-time jobs has not made up for the loss of full-time work and more substantial part-time hours of paid work since 1986, particularly in areas of employment where hourly earnings are low. The HLFS does not ask employed people whether they would like fewer paid work hours, or whether additional hours worked would result in additional earnings.

Figure B6. Under-employment as a proportion of the employed, 1985-2000



Note these graph lines have been smoothed to improve clarity.

Source: Statistics NZ, HLFS, age standardised to the total employed population.

2. Unemployment

2.1 Unemployment rate

Position of Māori women: In the year to June 2000, the average unemployment rate for Māori women was 12.8% of all Māori women in the labour force.

Table B2. Unemployment rates,* year to June 2000

Māori		Non-Māori	
Women	Men	Women	Men
12.8%	12.4%	5.4%	5.8%

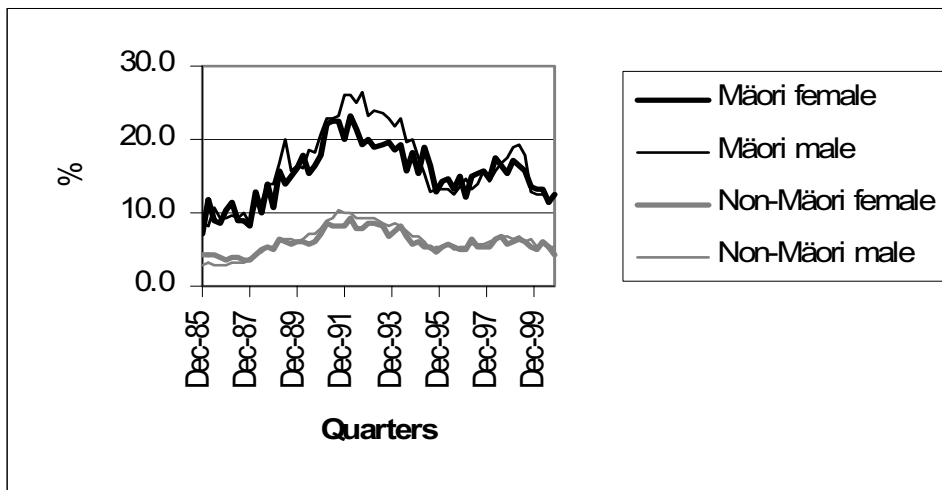
* The number of unemployed expressed as a percentage of the labour force.

Source: Statistics NZ, HLFS, age standardised to the total labour force.

As Table B2 shows, there is a large gap between Māori and non-Māori unemployment rates. The disparities between Māori and non-Māori unemployment rates are much larger than the disparities between male and female rates within each ethnic group.

The unemployment rates for Māori women and men have tracked each other very closely over the last 15 years (Figure B7), as have the non-Māori rates. There was a sharp surge in rates for Māori women and men in the early 1990s, and another, smaller surge in the late 1990s, followed by a recent decline.

Figure B7. Unemployment rates, 1985-2000



Source: Statistics NZ, HLFS, age standardised to the total labour force.

2.2 Jobless rate

Position of Māori women: In the year to June 2000, the average jobless rate for Māori women was 20.5% of all Māori women who were either employed or jobless.

Table B3. Jobless rates,* Year to June 2000

Māori		Non-Māori	
Women	Men	Women	Men
20.5%	17.4%	9.5%	8.6%

* The number of jobless expressed as a percentage of the employed plus the jobless.

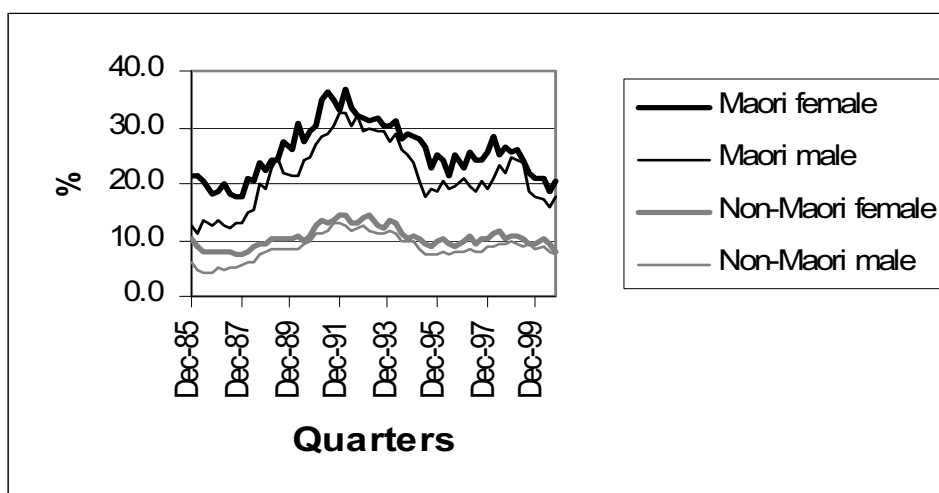
Source: Statistics NZ, HLFS, age standardised to the total employed plus the jobless.

As Table B3 shows, the main disparity in joblessness is between Māori and non-Māori. The rates for Māori women and men are very close, as are the rates for non-Māori women and men. Not surprisingly, jobless rates are higher overall than unemployment rates.

The patterns for joblessness over the last 15 years (Figure B8) are similar to those for unemployment. However, for both Māori and non-Māori, women tend to have higher jobless rates than men, whereas there is almost no gender disparity in unemployment rates. One reason for this difference is that the criteria for unemployment tend to exclude women with childcare responsibilities.

Both unemployment and joblessness are highest among those aged 15-24, and the Māori/non-Māori disparity is highest for this age group. However, in 2000, Māori unemployment and jobless rates through the prime employment years of 25-54 remained around twice as high as non-Māori rates.⁷

Figure B8. Jobless rates, 1985-2000



Source: Statistics NZ, HLFS, age standardised to the total employed plus the jobless.

2.3 Long-term unemployment rate

Position of Māori women: In the year to June 2000, an average of 4.6% of Māori women in the labour force had been unemployed for more than 26 weeks.

Table B4. Long-term unemployment rates,* year to June 2000

Māori		Non-Māori	
Women	Men	Women	Men
4.6%	5.8%	1.6%	2.1%

* The number unemployed for more than 26 weeks, expressed as a percentage of the labour force.

Source: Statistics NZ, HLFS.

Table B4 shows long-term unemployment rates for June 2000. While the data for Māori long-term unemployment is subject to a high degree of sample error, the pattern of rates shown by the HLFS over the last 15 years indicates that Māori women and men are well over twice as likely as non-Māori women and men to be unemployed long-term. (Note that this data has not been age standardised because of the high degree of volatility.)

3. Labour force participation

3.1 Labour force participation rate

Position of Māori women: In the year to June 2000, an average of 50.7% of all Māori women aged 15 and over were defined as participating in the labour force, that is, as either employed or unemployed.

Table B5. Labour force participation rates,* year to June 2000

Māori		Non-Māori	
Women	Men	Women	Men
50.7%	68.5%	58.1%	74.1%

* The number of employed plus unemployed, expressed as a percentage of the population aged 15 and over.

Source: Statistics NZ, HLFS, age standardised to the total working-age population.

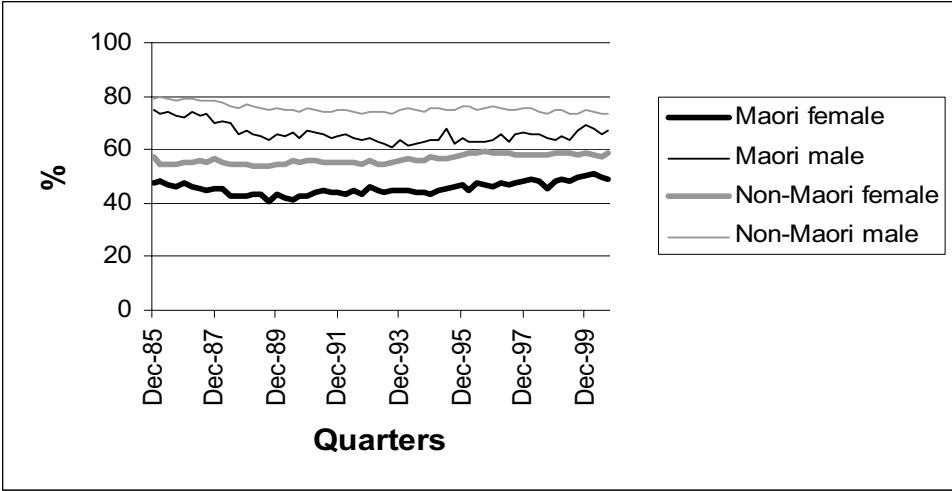
As Table B5 shows, in the year to June 2000 the gender disparities in labour force participation between Māori women and men and between non-Māori women and men were almost the same, around 16 percentage points. These disparities were twice as wide as those between Māori and non-Māori women and between Māori and non-Māori men.

Data on labour force participation give a good indication of the long-term trends in women's and men's involvement in paid work. Over the last 40 years, "the longest established trends have been the

steadily increasing involvement of women...and the gradual decline in male labour force participation".⁸ For Māori, the decline in men's participation has played a larger role than growth in women's participation in reducing gender disparity. For non-Māori, the growth in women's participation has been the major factor.

Figure B9 shows the pattern for the last 15 years. Participation for women has been steady over this period although non-Māori women have higher participation rates than Māori women. Men's participation rates have declined for both groups of men; but the decline has generally been steeper for Māori men, and recovery from the slump which began in the late 1980s has been slower. By 2000 the rates for Māori and non-Māori men were still about 3 percentage points further apart than they had been in 1986.

Figure B9. Labour force participation rates, 1985-2000



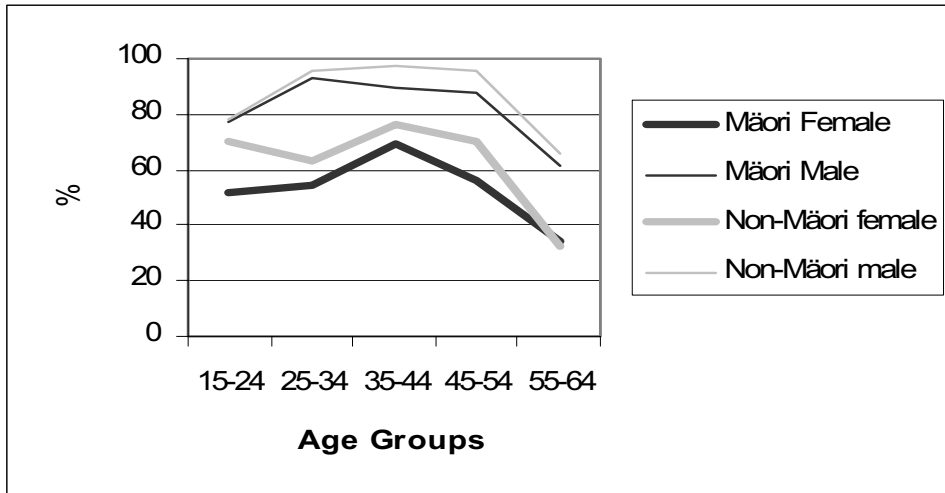
Source: Statistics NZ, HLFS, age standardised to the total working-age population.

Labour force participation by age

Figures B10 and B11 compare labour force participation rates (LFPR) by age group for average years to June in 1987 and in 2000 to give an indication of participation at different stages of life for each of the four groups at the beginning and end of the last 13 years. Looking at the various age groups also takes account of the fact that Māori and non-Māori populations have different age profiles.⁹

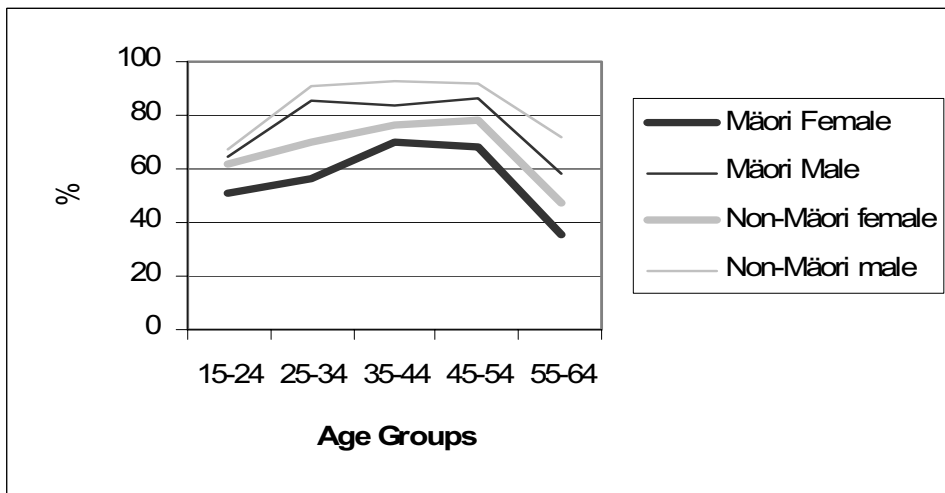
Māori and non-Māori participation rates in Figure B11 show that gender disparities are greater than Māori/non-Māori disparities at every working age.

Figure B10. LFPR by age group: average for year to June 1987



Source: Statistics NZ, HLFS

Figure B11. LFPR by age group: average for year to June 2000



Source: Statistics NZ, HLFS

Age 15-24

Participation has fallen for Māori and non-Māori men and non-Māori women in this age group between 1987 and 2000, although participation for Māori women has changed little. The rapid growth in school retention and participation in post-compulsory education has been the main factor pushing down overall youth participation rates, but rising rates of youth unemployment have also been involved.

Around 50% of young Māori women are now likely to be in the labour force, compared with around 60% of non-Māori women. Young Māori and non-Māori men are almost equally likely to be in the labour force. For non-Māori women and men aged 15-24, the gender disparity in participation has shrunk to around 5 percentage points and for Māori women and men it has shrunk to around 13 percentage points.

Age 25-34

Māori women and men in this age group are less likely to be in the labour force than non-Māori women and men. The difference is greater between the two groups of women (around 13 percentage points) than between the two groups of men (around 6 percentage points).

All women aged 25-34 have increased their participation since 1985, but non-Māori women have done so to a greater extent.

Age 35-44

For Maori women, participation now peaks at 35-44, whereas for non-Māori women it peaks at 45-54, and for men it peaks between 25 and 54. The disparity between Māori and non-Māori is a little narrower for women than for men.

The gender disparity continues to be wider than the Māori/non-Māori disparity, but it is narrower for age 35-44 than for ages 25-34. This gender disparity is now wider for non-Māori than for Māori, due mainly to a dip in participation for Māori men aged 35-44, compared with non-Māori men of this age.

Age 45-54

Over the last 13 years, Māori women aged 45-54 have shown the biggest growth in participation of any group, from around 55% to almost 70%. For men aged 45-54, participation continues to be around 85% for Māori men, and over 90% for non-Māori men.

The gender gap at this age is wider for Māori than for non-Māori, because despite their greatly increased participation, Māori women in this age group are still less likely to be in the labour force than non-Māori women.

Age 55-64

This age group shows large Māori/non-Māori disparities in labour force participation, around 12 percentage points between Māori and non-Māori women and 14 percentage points between Māori and non-Māori men. This is of concern, in view of the fact that National Superannuation is not available until age 65. Comparing 1987 with 2000, for Māori, there has been a decline for men and a small increase for women. For non-Māori, there has been an increase for men and a larger increase for women.

For those aged 55-64, unemployment is likely to last longer than for younger workers. Women in this age group may find it harder to return to the workforce after a long absence from it. Knowledge about trends in the labour force participation of this age group is scarce, particularly for women.

4. Participation in unpaid work

4.1 Rate of participation in unpaid work

Position of Māori women: The 1998/99 New Zealand Time Use survey shows participation rates of 98% for Māori women and girls aged 12 and over in unpaid work inside the home, and 71% in unpaid work outside the home.

Table B6. Percent participating in unpaid work within and outside the household, age 12+ (in the 4 weeks prior to the survey), 1998/99

Location of unpaid work	Māori		Non-Māori	
	Women	Men	Women	Men
Inside the household	98%	95%	97%	95%
Outside the household	71%	56%	62%	55%

Source: NZ Time Use Survey data.

The New Zealand Time Use Survey¹¹ has provided the first comprehensive set of data on unpaid work. Table B6 sums up participation inside and outside the household. More detailed Time Use

Survey data shows that in every category of unpaid work outside the home, women were more likely to take part than men, and Māori were more likely to take part than non-Māori (except for men doing committee work). Nearly 50% of Māori women spent time looking after children who were not household members, compared with 34% of non-Māori women. The Time Use Survey also showed high involvement by Māori, particularly women, in cultural maintenance activities, such as learning and teaching the Māori language. The 1996 Census question on unpaid work participation showed a similar pattern.

Time spent on unpaid work

Table B7 shows average hours spent in five types of productive work,¹² inside and outside the household, by Māori and non-Māori women and men aged 15 and over. For women, unpaid work commitments take up much more time than they do for men. Māori spend more time on unpaid work outside their own households than non-Māori, and also more time on self-education (the latter is likely to be related to their younger age structure).

It is clear that when both paid and unpaid work is considered, all four groups are spending a similar amount of time on productive activities. For women, unlike men, these activities are predominantly unpaid. Māori women and men have fewer hours of paid market work than their non-Māori counterparts.

Table B7. Average hours per week spent on productive activities

Activity	Māori		non-Māori	
	Women	Men	Women	Men
Unpaid work inside the household	30.9	16.3	30.6	17.4
Unpaid work outside the household	4.7	4.1	3.9	2.9
Self education	5.2	5.0	3.4	3.8
Market work [i.e. paid employment]	14.0	27.2	16.9	31.6
Total productive	54.7	52.6	54.7	55.7

Source: NZ Time Use Survey data

5. Discussion

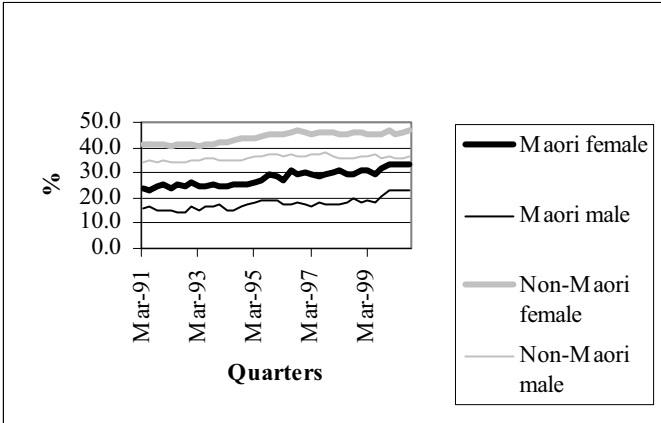
5.1 Changing demand for labour

Changes in employment and unemployment rates for Māori and non-Māori women and men over the last 15 years appear to be related mainly to changing demand in different segments of the labour market. While men dominated the majority of job losses across all ethnic groups, Māori, both men and women, were concentrated in those segments where the loss was heaviest. Employment in manufacturing, in particular, underwent changes resulting in job losses which “were unevenly spread, with much of the decreases experienced falling largely upon the Māori and Pacific Islands populations”.¹³

At the same time, there was a “shift in the share of industries towards the tertiary sector, along with a movement in occupational structures towards the more skilled occupations”.¹⁴ The Finance, Insurance and Property industries, the Professional and Technical occupations, and the Administrative and Managerial occupations, have all increased their share of full-time employment significantly.

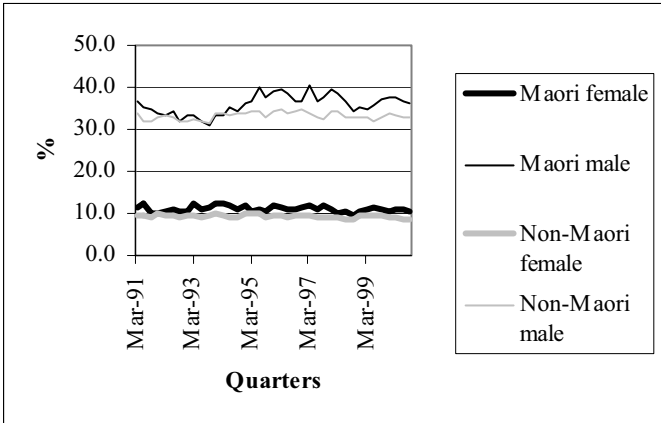
Since the March quarter of 1991, Māori women have significantly increased their rate of employment in white collar occupations, though they are less likely than non-Māori women or non-Māori men to be employed in these. Māori men are much less likely than any other group to be employed in white collar occupations, and the most likely to be in blue collar occupations.¹⁵ These relationships can be seen in Figures B12 and B13.

Figure B12. Employment rate in white collar occupations



Source: Statistics NZ, HLFS, age standardised to the total working-age population

Figure B13. Employment rate in blue collar occupations



Source: Statistics NZ, HLFS, age standardised to the total working-age population

5.2 Differences in individual characteristics

There is widespread debate over the extent to which differences in individual characteristics, such as levels of education – that is, “supply-side” factors – explain differences in employment and participation. These factors are strongly affected by social structures, such as the gendered division of labour. They do not explain the full extent of the labour force differences between Māori and non-Māori, or between women and men.¹⁶

In recent qualitative research with low income Māori,¹⁷ participants perceived that their own lack of education had prevented them from getting work. Other commonly perceived barriers to employment ranged from the immediate and personal (such as level of motivation) to the deep and structural (such as discrimination affecting access to education and employment).

The research also showed that where people had undertaken part-time or short-term work, it tended to be voluntary or “under the table”. The system of benefit abatement rates and the extra costs incurred in work were important factors in this pattern. Lack of access to quality childcare which was affordable and in which they felt confident was identified by sole parents and couples as another barrier to employment. Others felt that looking after children was important full-time work in itself.

5.3 Education

For both men and women, labour participation and employment are lowest among those with no qualifications, and highest among those with post-school qualifications. The gender gap is smallest where men and women both hold post-school qualifications.

Māori are much more likely than non-Māori to have low or no qualifications (see Education and Income). This reduces their employment and earnings prospects. But the consequences of lack of qualifications differ for Māori and non-Māori, so that having no qualifications imposes “an exceptionally high penalty on Māori”¹⁸ in higher rates of unemployment and low-paid employment.

Gender differences related to education also play a major role. Until recently, women in the labour force had generally lower levels of qualification than men.¹⁹ This difference is now being reversed among younger people, particularly younger Māori women compared with younger Māori men (see Education). However, when people with the same level of higher qualifications are compared, having higher qualifications does not generally advantage women as much as men, in terms of earnings (see Income).

5.4 Other work-related skills and experience

In New Zealand there appear to be large gender differences in accumulated years of work experience, though this difference has reduced since 1986.²⁰ Among sole parents, work experience and training before becoming a sole parent appears to be a key factor in patterns of workforce participation. Those with less accumulated work experience and less experience of skilled employment are likely to spend the longest time out of the workforce. The pattern for partnered mothers is likely to be similar.

5.5 Earnings

Māori women’s earnings are consistently lower than those of any other group, but the major disparity is the gender gap between women’s and men’s earnings (see Income). The effects of this gap on the supply of and demand for labour are not clear. Over the last 15 years, the increase in labour market involvement among both Māori and non-Māori women has been much more marked than the reduction in the gender pay gap.²¹ However, lower earnings among women, particularly Māori women, are likely to impede obtaining further education and/or training, thus constraining low-paid women’s ability to improve their labour market position.

5.6 Unpaid work

Both Māori and non-Māori women spend, on average, over 30 hours a week in unpaid work inside the household. Taking on paid work does not significantly decrease hours of unpaid work for women, or increase them for male partners.²²

Heavier unpaid work commitments, particularly caring for dependents, continue to be a major factor in New Zealand women’s lower labour market involvement²³. Māori and Pacific women are more likely than European women to have children at all ages up to 50²⁴. Although labour force participation has increased for mothers of dependent children, these women, particularly mothers of children under 5,

are likely to have lower labour force participation rates than other women, whether they are partnered or not. By contrast, partnered fathers are likely to have higher rates than other men²⁵.

5.7 Childcare

The growth of early childhood education and care services has enabled women to increase their labour force participation. It also provided just over 4% of the total jobs created in the economy between 1991 and 1996. But problems in accessing suitable, quality education and care for young children continue to affect women's ability to take on paid work, study/training, and other kinds of unpaid work.

The 1998 national childcare survey²⁶ reported that childcare access problems were most likely to be a barrier to paid work participation for Māori mothers, sole mothers and mothers with low incomes. Among sole mothers, 30% reported this barrier, as did 25% of those mothers currently working part-time. The same survey showed that among the 22% of mothers²⁷ who said that problems accessing childcare were a barrier to employment, cost was the main problem, mentioned by 47%. Among parents using early childhood education and care, 62% paid less than \$10 a week per child. Problems of access to childcare were also a barrier to study/training for 12% of partnered mothers and 21% of sole mothers.

5.8 Parental leave

Parental leave provisions play a vital role in women's ability to maintain labour force involvement after childbearing, and in particular to return to their previous level of employment and earnings. Women who are able to use leave provisions are much more likely to return to paid employment and overwhelmingly return to their previous employer.²⁸

For the majority of New Zealand women, leave is unpaid and restricted to those who have worked more than ten hours a week over the last year for their current employer. This means that genuine access to leave is likely to be limited for women on low incomes and/or in casual or seasonal work. Māori and Pacific women are more likely to be in these categories.²⁹

Sole parenthood intensifies the problems of combining paid and unpaid work, and the majority of sole mothers are in the prime working age group. In 1996, 17% of women aged 25-39 were sole mothers and 56.8% of all sole mothers were aged 25-39. Māori women are more likely to be sole parents in a one-parent family than women in any other ethnic group.

5.9 Domestic violence

Domestic violence is another significant factor affecting women's employment, particularly for Māori women and for sole parents.³⁰ Though New Zealand data is limited, it is estimated that one in seven New Zealand women have been assaulted by partners, and Māori women appear to be more likely to suffer partner violence (see Justice). Domestic violence prevents or inhibits women from obtaining paid employment or advancing their careers, makes retaining employment difficult, and negatively affects their work performance.³¹

5.10 "Work-rich" and "work-poor" households

The employment disparities among individuals are heightened in households. Paul Callister³² points out that in the prime working age years, both men and women are more likely to be in paid work if they are in couples, but this is less so for Māori couples. Employment also appears to be concentrating in families which are already "work-rich" (at least one partner in full-time paid work and the other in part-time work) while others have become even more "work-poor" (neither partner in full-time paid work). Education affects the growth of "work-rich" and "work-poor" households, since partners tend to have similar levels of education.

The loss of jobs for many prime-age men, particularly Māori men, “appears to be a major factor behind the increase in work-poor families”.³³ It has also helped keep the proportion of these families at a high level. Women’s employment has not made up for this loss, because:

“[W]omen who have increased their participation in paid work have primarily been in couples with a partner already in paid work. Conversely, when men [in a couple] have moved out of paid work, generally their partners have also moved out of paid work or were not already in paid work.”³⁴

Census data for 1996 shows that among couples of “prime working age” (which Callister defines as 25-59), 79% of “work-rich” couples both classified themselves as European, compared with 42% of “work-poor” couples. Among couples aged 25-59 with a child under 5, where both adults were Māori, 23% had no paid work.

Apart from changing labour demand, differences in individual characteristics, and factors related to gender, other significant factors in the growth of “work-poor” households are the increasing insecurity of employment, combined with extremely high marginal tax rates on earnings by beneficiaries or their spouses, and the operation of the stand-down period.³⁵ More women than men are adversely affected by these factors, as parents and as spouses. Māori are more likely to live in rural areas, where paid work opportunities are more likely to be limited or seasonal, so that these factors have more impact.

There has been a general trend for the proportion of families with one parent or partner in full-time employment to decrease, and for the proportion with no parent or partner in full-time employment to increase. It is families already on low incomes who have suffered most from the loss of full-time employment. These families are disproportionately Māori and/or headed by women.³⁶

Data sources

The labour market information comes from the Household Labour Force Survey (HLFS) which is conducted by Statistics New Zealand. This is a sample survey of 30,000 individuals aged 15+, and has been conducted on a quarterly basis since December 1985. Unpaid work information came from the Time Use Survey, which was conducted by Statistics New Zealand over the 1998/99 year.

Both surveys are subject to sample and non-sample error. High volatility in the long-term unemployment rate and in the “prefer to work more hours” time series, by ethnicity and sex, indicates high sample error. Caution should be exercised when considering point-in-time estimates for these indicators in particular, as the data is highly volatile.

Rates such as the labour force participation rate are calculated using population figures available from the HLFS. It should be noted that HLFS results are post-stratified – that is, the survey population is forced to equal the estimated actual population - by age and sex, but not by ethnicity. The reasons for this, concerning the lack of information on the ethnicity of migrants, are noted in “About the Data”.

The age standardised rates for unemployment, joblessness and labour force participation were calculated by using data by age group provided by Statistics New Zealand. They are approximate for two reasons: where the data was suppressed (due to cells being less than 1,000), the value was assumed to be 0; and the data was presented in thousands and rounded to one decimal place before calculating the rate, rather than after.

Notes (contd.)

- ¹ In the HLFS, ethnicity is self-identified, and not attributed by the head of the household. Anyone aged over 15 years within the scope of the survey may be asked to complete the household questionnaire, which includes the ethnicity section. Individuals are shown a list of 10 ethnic groups, from which they can choose up to three. (In June 1990, the category “Other Pacific” was added to the list that respondents could choose from.) See “About the Data” in the Introduction for detailed discussion on classifications of ethnicity.
- ² For full definitions of the categories used in the HLFS, see *Labour Market Annual Volume*, Wellington, Statistics NZ.
- ³ Both the HLFS and the Census are subject to non-sample error.
- ⁴ Note that the employment rate expressed here is lower than would be the case if the denominator was restricted to those aged 15-64 (i.e. this more likely to be employed). In addition, the inclusion of those aged 65+ may distort the standardisation of the employment rate due to low numbers employed in this age group. This is particularly true for Māori.
- ⁵ Some commentators (e.g. Callister, 1998) extend the “prime working age years” to 59.
- ⁶ The HLFS data on under-employment should be regarded as indicative only. Because of its volatility, it should be viewed in terms of trends in time, rather than focusing on point-in-time estimates.
- ⁷ High sample errors are likely when unemployment and joblessness data are broken down by age as well as by ethnicity and sex.
- ⁸ Krishnan (1994), p.130.
- ⁹ These graphs are indicative only, as Māori sample sizes at each age are small, and rates can vary by several percentage points between quarters, but they do show the similarities in the patterns for each sex. The data give snapshots of the various age groups at one point in time. To gain a clearer picture of life cycle changes, participation would need to be tracked over time for different age cohorts, disaggregated by sex and ethnicity.
- ¹⁰ Statistics NZ (1998), p.42.
- ¹¹ The first major report on the Time Use Survey was published in May 2001. Data for this report was supplied by Statistics New Zealand, which conducted the survey, in conjunction with the Ministry of Women’s Affairs.
- ¹² The activity categories used in this table are the same as those used to value unpaid work with the exception of education, which has been included here as a productive activity.
- ¹³ Honey & Lindop (1997), pp.15-16. Census data was used in this analysis.
- ¹⁴ Honey & Lindop (1997), p.49.
- ¹⁵ White Collar Occupations: Legislators, administrators, and managers; Professionals; Technicians and associate professionals; Clerks; and Service and Sales workers.
Blue Collar Occupations: Agriculture and fishery workers; Trades workers; Plant and machine operators and assemblers; and Elementary occupations.
- ¹⁶ For example, Alexander et al. (2000) find that Māori, Pacific Island and other non-European ethnic groups suffer labour market discrimination which is not explainable by otherwise observable characteristics, such as qualifications.

Notes (contd.)

- ¹⁷ Family Centre (1998).
- ¹⁸ Winkelmann & Winkelmann (1997) p.57.
- ¹⁹ Dixon (1999), p.4.
- ²⁰ Dixon (1999) has tracked the average employment rates of birth cohorts across censuses to build up “quasi-cohort” estimates of the average number of years of full-time work experience.
- ²¹ Dixon (1999, pp.5-6), cites US evidence that “the actual increases in women’s employment rates and annual hours of work were much larger than those that would be predicted solely on the basis of the changes in women’s real hourly earnings” between 1975 and 1994, indicating that the gender pay gap does not have straightforward influences on women’s labour force participation.
- ²² See, for example, Patricia Hewitt, *About Time: The Revolution in Work and Family Life*, IPPR/Rivers Oram Press, 1993.
- ²³ Else (1996), Statistics New Zealand and Ministry of Women’s Affairs (2001).
- ²⁴ Statistics New Zealand (1998), p.42
- ²⁵ Callister (1999)
- ²⁶ Department of Labour & NACEW (1998). This survey was conducted as a supplement to the HLFS.
- ²⁷ Only 5% of fathers from two-parent families reported such problems, though 27% of the small number of sole parent fathers did so.
- ²⁸ MWA (1995).
- ²⁹ MWA (1995).
- ³⁰ Levine et al (1993).
- ³¹ Pouwhare (1999).
- ³² Callister (1998).
- ³³ Callister (1998), p.118.
- ³⁴ Callister (1998), p. 111.
- ³⁵ See, for example, St John & Heynes (1994); Levine et al. (1993); Child Poverty Action Group (2001).
- ³⁶ Johnstone & Pool (1996). They note that “This result is not a function of movement between family type”.

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C. INCOME

Indicators

PARAMETER	INDICATOR MEASURE
Personal income	<ul style="list-style-type: none">• Proportion of Māori women receiving less than the national median weekly personal income• Proportion of Māori women earning less than the national median hourly earnings
Income distribution	<ul style="list-style-type: none">• Proportion of Māori women in the lowest income quintile• Proportion of Māori women in the highest income quintile
Income source	<ul style="list-style-type: none">• Proportion of Māori women receiving income from wages and salaries/self-employment• Proportion of Māori women receiving income from DPB
Household income	<ul style="list-style-type: none">• Proportion of Māori women having a household income less than \$20,000

Introduction

Income is by no means a perfect indicator of living standards, especially when people face different housing costs and have different calls on that income. In this report we assume that there is a direct relationship with individual, family, whānau and community well-being and standards of living. However, the lack of detailed data is a barrier to examining income disparities between Māori and non-Māori women and men. Analysis of Māori women's income has not been a focus of research until now, so this chapter also draws on related research to complement the indicator data and discussion.

Income sharing

Most of the information in this chapter assumes that income is individual although some information on household income is also presented. Indicators attributing amounts of income to individuals should be interpreted with caution, as in reality income is often shared or used to support others. The extent to which income is shared with others within households is unknown, and is likely to vary widely between households. We also do not know who controls household expenditure. In addition, the relative prevalence of extended families in the Māori population, and the increasing incidence of split and blended families in all sectors of the population, introduce biases into any analyses of individual or household income where household composition is not known.

A 1994 study¹ of the degree to which income is shared in New Zealand families showed that this happens in a variety of ways, including pooling of incomes, an allowance system, one partner managing all the income, earners managing their own finances independently, and mixtures of these. Māori, Pacific and Pakeha families use these systems to differing degrees. The wide variations illustrate how little can be assumed about intra-family income sharing.

Household and family/whānau

Māori are more likely than non-Māori to live in large families and in shared households. While there are economies of scale in larger households, any given income must be spread more thinly the larger the number of members of the household. This effect is separate from issues of who controls the household income.

Moreover, many non-Māori first consider themselves as individuals, whereas many Māori first consider themselves in the context of the whānau³, a broader grouping than the “family”. Participation in a whānau brings privileges and responsibilities that may impact on how an individual’s income is used.⁴

The data

For individual income, data from the New Zealand Income Survey for the June quarter 2000 was analysed (the survey is only conducted in June quarters). The New Zealand Income Survey was used as it enables analysis by sex and ethnicity. Unless otherwise stated, “income” is gross and includes earnings from wages and salaries, self-employment, social welfare benefits, and any other sources of income individuals may have, excluding income from investments. This survey samples the population aged 15 and over. It was first carried out in 1997, but Statistics New Zealand advise that 1997 data may not be exactly comparable to other periods due to minor changes in methodology that took place as part of the initial development process. Relative to other periods, income has changed little in the 1997-2000 period however, data for other periods has been included in tables in order to provide an indication of how representative the data for 2000 is.

The New Zealand Income Survey does not collect information on interest and investment income. The Household Economic Survey (HES) provides an indication of the size and distribution of interest and investment income. In the 1997/98 HES year investment income derived in New Zealand made up 5.0% of total regular and recurring income, with 42.0% of people receiving some income from this source. This investment income was not spread evenly through the age groups. Those in the 15-29 year age group received less than 1% of their total income from investment income in the 1997/98 HES year. This compares with 16.0% of total income for those aged 60 and over, with 61.0% of people in this age group receiving some income from this source. Consequently, care should be taken when interpreting the statistics from this survey, especially for those aged 60 and over.

Ideally, data would include the extent to which household income is shared among household members, and it would include lifetime earnings. The latter would reveal a more complete picture of those who have been on low incomes for extended periods, as opposed to those, such as students, who have comparatively short periods on low incomes.

1. Personal income

1.1 National median weekly personal income

Position of Māori women: In the June quarter 2000, 60% of Māori women aged 15 and over received less than the national median weekly personal income of \$340.

Table C1. Proportions receiving less than the national median⁵ weekly personal income (\$340), June quarter 1997 – June quarter 2000

Year	Māori		Non-Māori	
	Women	Men	Women	Men
1997	59%	47%	61%	38%
1998	61%	47%	60%	39%
1999	62%	49%	60%	40%
2000	60%	46%	61%	40%

Source: New Zealand Income Survey June 2000, age standardised.

Table C1 shows that the position of each group in relation to the national median weekly personal income is linked more strongly with gender than with ethnicity. Majorities of both groups of women are below the median, whereas majorities of both groups of men are above it. The difference between the two groups of men is wider than that between the two groups of women, who have similar proportions below the median.

The median dollar value of weekly personal income for each of the four groups is shown in Table C2. It takes into account income from all sources, including social welfare benefits.

Levels of median weekly personal income for each of the four groups considered indicate, among other things, ability to provide for children, repay student loans and save for retirement. Māori and Pacific women and men are more likely to take up a student loan and to borrow a higher proportion of their entitlement than European/Pakeha students are.⁶

Table C2. Median weekly personal income, June quarter 1997 – June quarter 2000

Year	Māori		Non-Māori	
	Women	Men	Women	Men
1997	\$249	\$330	\$242	\$442
1998	\$262	\$357	\$255	\$460
1999	\$267	\$351	\$265	\$460
2000	\$278	\$396	\$274	\$479

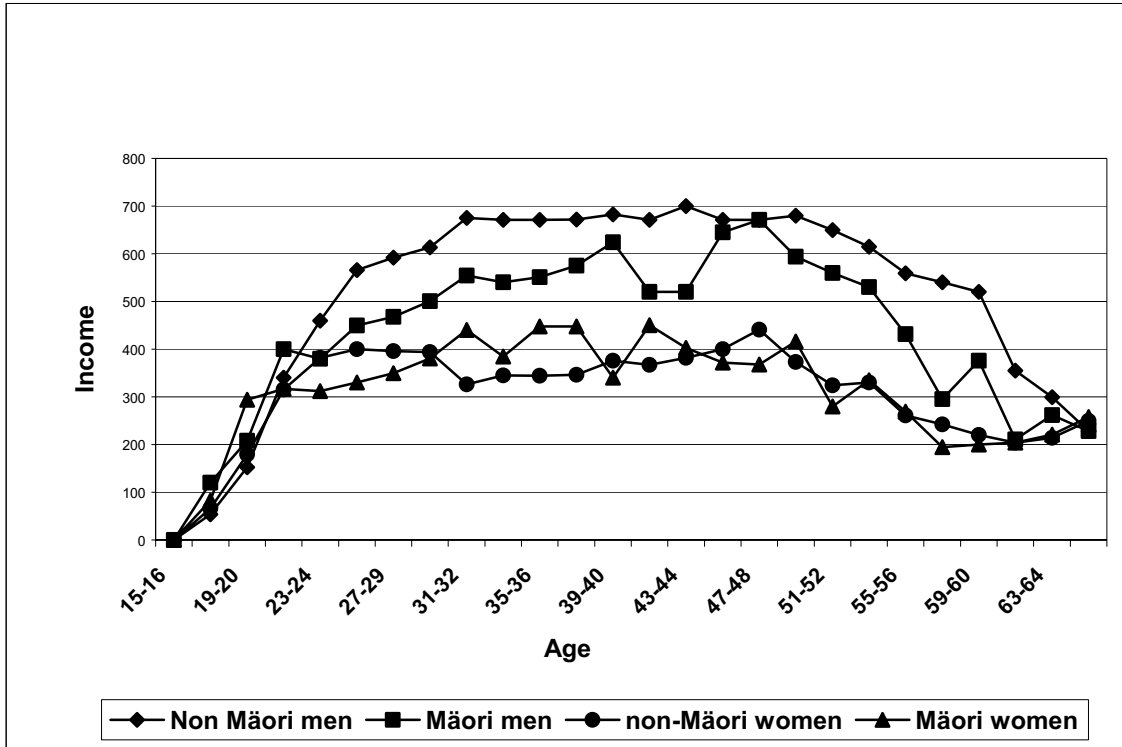
Source: New Zealand Income Survey June 2000, age standardised.

Māori women have a similar median weekly personal income to non-Māori women. However, the median income for both groups of women is well below the national overall median of \$340 per week. Although Māori men have a lower median weekly personal income than non-Māori men, the major gap is a gender gap.

Weekly income according to age

Median income generally varies according to age. Figure C1 shows the median weekly gross personal income for each of the four groups according to their age group in 2000.⁷

Figure C1. Median weekly personal income by age group, 2000



Source: New Zealand Income Survey June 2000.

Although the pattern will be different for each birth cohort, this gives some indication of income patterns across the life cycle. The median incomes of Māori women and non-Māori women are similar throughout their lifetimes. Between the ages of 25 and 60, median incomes for both groups of men, especially non-Māori men, are considerably higher than for both groups of women.

1.2 National median hourly earnings

As the data for this indicator includes only income from wages and salaries, it can provide a measure of differences in earnings from paid employment among different groups.

Position of Māori women: In the June quarter 2000, 66% of Māori women aged 15 and over earned less than the national median of \$13.55 per hour.

Table C3. Proportions receiving less than median hourly earnings, June quarter 1997 – June quarter 2000

Year	Māori		Non-Māori	
	Women	Men	Women	Men
1997	74%	59%	61%	47%
1998	69%	50%	58%	43%
1999	69%	55%	56%	43%
2000	66%	52%	56%	43%

Source: New Zealand Income Survey, June 2000, age standardised.

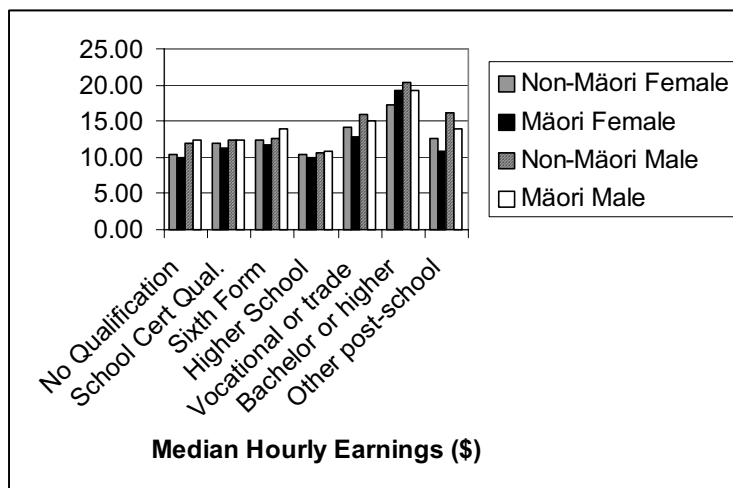
Māori women as a group have by far the highest proportion earning less than the national median per hour. Māori men are slightly more likely than non-Māori women to earn less than the national hourly median. The disparities between women and men of the same ethnicity are similar to the disparities between the two groups of women and the two groups of men, indicating that the hourly earnings gaps are related to both gender and ethnicity.

The age standardised median hourly earnings rate from wages and salaries for Māori women in the June quarter 2000 was \$11.00, the lowest for all groups. The median hourly earnings rate from wages and salaries for non-Māori women was \$12.80, for Māori men \$13.25, and for non-Māori men \$14.91. When these findings are compared with those for median weekly personal income in Table C2 which include income from all sources except investments, it can be seen that while weekly earnings are similar for Māori and non-Māori women, Māori women do not receive comparable returns from the labour market.

Hourly earnings according to education

Annual income cannot take account of women's reduced labour force participation when they look after children. Hourly earnings enable analysis that bypasses these issues. An individual's hourly earnings may be affected by their level of education, amongst other factors such as occupation and years of experience. Figure C2 shows the relationship between hourly earnings and highest qualification.

Figure C2. Median hourly earnings for highest qualification, June quarter 2000



Source: New Zealand Income Survey, age standardised.

Data on the highest qualifications of wage and salary earners shows that, after taking the different age structures of the Māori and non-Māori populations into account through age standardisation of the data, Māori men and Māori women have the highest proportions with no qualifications. Of Māori women, 31% have no qualification, compared with 17% of non-Māori women, 35% of Māori men and 19% of non-Māori men. This means that Māori are more likely to have lower hourly earnings and lower income.

While income levels are related to levels of education, the effects are not straightforward. Higher qualifications do not generally bring the same levels of reward for women as they do for men. Māori women have similar hourly earnings to non-Māori women, with the exception of bachelor's degree or higher. For these qualifications, their hourly earnings rise above the earnings of non-Māori women.⁸

2. Income distribution

2.1 Income quintiles

Position of Māori women: In the June quarter 2000, 18% of Māori women were in the lowest income quintile, and 7% were in the highest income quintile.

Table C4. Proportions in lowest income quintile, June quarter 1997 – June quarter 2000

Year	Māori		Non-Māori	
	Women	Men	Women	Men
1997	20%	13%	25%	15%
1998	20%	14%	26%	15%
1999	17%	15%	25%	15%
2000	18%	12%	25%	15%

Source: New Zealand Income Survey, age standardised.

Table C5. Proportions in highest income quintile, June quarter 1997 – June quarter 2000

Year	Māori		Non-Māori	
	Women	Men	Women	Men
1997	5%	19%	11%	32%
1998	6%	20%	10%	31%
1999	5%	19%	11%	30%
2000	7%	20%	11%	30%

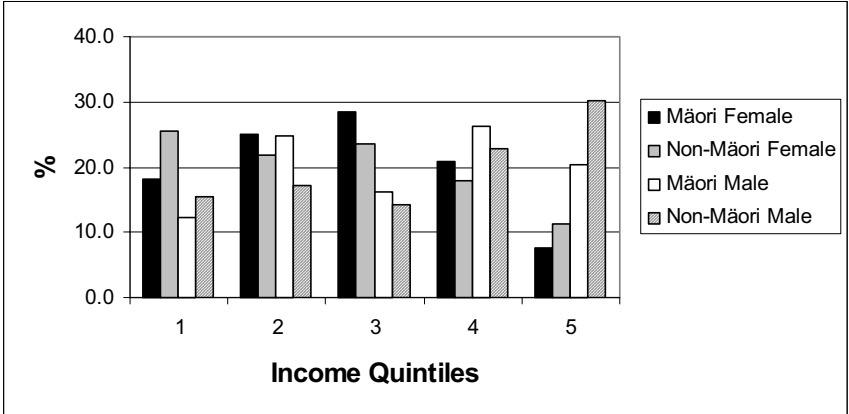
Source: New Zealand Income Survey, age standardised.

Each quintile contains a fifth of the population, when the entire population is ranked in terms of income. Table C4 shows that only non-Māori women are over-represented in the lowest income quintile, while both groups of men are under-represented. The finding that only 18% of Māori women are in the lowest income quintile is unexpected but appears to be consistent across the available time series. If investment income was included the income distribution would be widened in the direction of greater Māori/non-Māori disparities. The most likely explanation for this finding is that, as shown in Table C8 below, Māori women are much more likely than other groups to receive income from the Domestic Purposes Benefit (DPB). The age standardised upper income limit of the lowest quintile was only \$130 per week gross in 2000. This is well below the average DPB payment (discussed below), and below the minimum levels of the unemployment and sickness benefits. It is also likely that a higher proportion of non-Māori women than Māori women are supported by partners with high incomes, and have no personal income. This finding includes such women.

Table C5 shows that only non-Māori men are over-represented in the highest income quintile. Women, particularly Māori women, are under-represented in the highest income quintile. The predominant gap is a gender gap.

Figure C3 provides an overall picture of how income in each group is distributed across the quintiles. It shows a similar pattern for women, both Māori and non-Māori, of over-representation in the bottom three quintiles. Non-Māori men's incomes are over-represented in the upper two quintiles. Māori men's incomes are more likely to be in the middle three quintiles than those of non-Māori men.

Figure C3. Population distribution across income quintiles (1 = lowest quintile) June quarter, 2000



Source: New Zealand Income Survey, age standardised.

Income distribution and the poverty line

Another way to look at income distribution is to consider the proportion of the population who are below a set poverty line. In the absence of an official poverty line, Stephens (1999) and Waldegrave (2000) used focus group methodology to establish a poverty line related to current economic conditions and social policies. The poverty line was estimated at 60% of national median household disposable income. As poverty lines are established by household income, it is not relevant to look at poverty by sex. However, Stephens et al (2000) have looked at poverty by ethnicity (see Table C6). At the 60% threshold, they found that “Māori children account for 26% of poor children and Pacific Islanders 12%. But at the 50% threshold, Māori children make up 40% of poor children, indicating a far greater severity of poverty for Māori families with dependent children”.⁹

Table C6. The incidence of poverty: ethnic status, age and poverty threshold, 1998

Ethnic Group	50% Threshold		60% Threshold		66% Threshold	
	Adults	Children	Adults	Children	Adults	Children
European	2.4	3.8	11.0	15.5	17.9	24.7
Māori	7.3	13.9	17.9	26.3	26.3	38.4
Pacific Island	9.0	14.2	18.3	35.1	32.7	49.2
Other	14.2	17.1	27.1	40.6	31.1	50.5
Total	3.6	7.4	12.6	20.2	19.8	31.0

Source: Derived from the Poverty Management project data base, reproduced from Stephens et al (2000) p.18.

3. Source of income

3.1 Income from wages and salaries/self-employment

Position of Māori women: In the June quarter 2000, 45% of Māori women aged 15 and over were receiving income from wages and salaries or self-employment.

Table C7. Proportions receiving income from wages and salaries or self employment, June quarter 1997 – June quarter 2000

Year	Māori		Non-Māori	
	Women	Men	Women	Men
1997	39%	55%	55%	71%
1998	39%	55%	53%	68%
1999	40%	55%	55%	70%
2000	45%	59%	55%	70%

Source: New Zealand Income Survey, age standardised.

Table C7 shows that of all groups, Māori women are the least likely to receive income from wages, salaries or self-employment. The disparity between Māori women and men is almost the same as the disparity between non-Māori women and men: 14 percentage points and 15 percentage points respectively. The predominant gap is one of gender, although the disparities between the two groups of women (10 percentage points) and the two groups of men (11 percentage points) are also substantial.

The high percentage of non-Māori men receiving income from wages, salaries or self-employment is due mainly to the fact that 19% are receiving income from self-employment, compared with 7% of Māori men, 8% of non-Māori women and just 4% of Māori women.

The occupations with the highest age standardised proportions of wage and salary earners are:

- Among Māori women: 25% are service and sales workers, 17% are professionals, 17% are clerks
- Among non-Māori women: 23% are service and sales workers, 22% are clerks, 18% are professionals
- Among Māori men: 27% are plant and machine operators and assistants, 12% elementary occupations, 12% are agriculture and fisheries workers
- Among non-Māori men: 15% are trades workers, 14% are plant and machine operators and assemblers, 14% legislators, administrators and managers, (and 12% are professionals)

3.2 ***Income from the Domestic Purposes Benefit (DPB)***

Position of Māori women: In the June quarter 2000, 14% of Māori women aged 15 and over were receiving transfer income from the government in the form of the Domestic Purposes Benefit (DPB).

Table C8. Proportions receiving income from the DPB,¹⁰ June quarter 1997 – June quarter 2000

Year	Māori		Non-Māori	
	Women	Men	Women	Men
1997	17%	3%	4%	0%
1998	16%	3%	4%	1%
1999	15%	2%	4%	0%
2000	14%	2%	4%	1%

Source: New Zealand Income Survey, age standardised.

The DPB was established to enable sole parents to care for their children without having to take on long hours of paid work. Other forms of caregiving are now included, such as looking after a sick or disabled person.

The average weekly payment across all groups of DPB recipients, net of income tax and including accommodation supplement, disability benefit, special benefit and family support, was \$339.34. Those receiving the DPB are by definition not living with an earning partner and are supporting at least one other person with their income. In comparison, in 2000, the average weekly personal income is \$446.73 before income tax, or \$358.07 after tax (excluding investment income).

Over three-quarters (76%) of those receiving the DPB have no other reported income, 10% have reported income of between \$1 and \$80 per week, and the remaining 14% have other reported income of more than \$80 per week.¹¹

Of the four groups, Māori women as a group receive 38% of their income from all government transfers including superannuation, the highest proportion of any of the four groups. Non-Māori women receive 25% of their income from this source, while Māori men and non-Māori men receive 15% and 10% respectively.

4. Household income

4.1 *Equivalised Household income below \$20,000*¹²

Position of Māori women: In the June quarter 2000, 31% of Māori women living with children and 27% of Māori women living without children had equivalised household income below \$20,000.

Table C9. Proportions with and without children with equivalised¹³ Household income below \$20,000, June quarter 1997 – June quarter 2000

Year		Māori		Non-Māori	
		Women	Men	Women	Men
1997	With Children	39%	28%	21%	16%
	Without Children	36%	36%	29%	23%
1998	With Children	37%	25%	20%	16%
	Without Children	31%	25%	24%	20%
1999	With Children	35%	26%	20%	16%
	Without Children	32%	25%	21%	18%
2000	With Children	31%	21%	20%	15%
	Without Children	27%	21%	18%	16%

Source: *New Zealand Income Survey*.

Household income data presented in this section has been equivalised or adjusted to account for differences in household size and composition. This adjustment makes it easier to compare income across different types of households. The level of \$20,000 was chosen because 1996 Census data shows that 41% of all Māori children aged 0-14 were in families with an annual income of less than \$20,000. Among non-Māori children the proportion was about 20%.¹⁴

Māori women, whether living with children or not, are considerably more likely than any other group to have equivalised household income below \$20,000. When the presence of children in the household is considered, the percentage with household income below \$20,000 rises significantly for Māori women only. This means that children living with Māori women are more likely than children living with non-Māori to be in households with an equivalised household income below \$20,000. As a group, Māori women are also more likely to live in a large family household¹⁶.

5. Discussion

For five out of the seven income indicators, Māori women were found to be in the worst position: highest proportion receiving less than median hourly earnings, lowest proportion in the highest income quintile, lowest proportion of any group receiving income from wages, salaries or self employment, highest proportion of any group receiving the DPB, and highest proportion of any group to have equivalised household income below \$20,000.

Despite the overall income gap being gender related rather than ethnicity related, the finding that 31% of Māori women living with children have equivalised household income below \$20,000 is cause for concern, not only for the Māori women themselves, but also for the children living with them.

A recurring theme is that Māori women in particular have low earnings from paid employment compared with other groups, and also low levels of higher education. Identifying and removing barriers to higher education for Māori, particularly Māori women, is important.

The New Zealand Time Use Survey 1998-1999 identified that all Māori women aged 15 and above spend an average of 9.1 hours per week looking after children in their own household, while all non-Māori women spend an average of 6.1 hours¹⁸. Māori women may choose to work reduced hours or no hours for pay, in order to devote more time to childcare. On the other hand, this may be an enforced choice. Māori women appear to be more likely than non-Māori women to have difficulty accessing quality childcare that is culturally appropriate, is available at the time of day it is required, and is affordable. (See Education and Employment).

5.1 The gender pay gap

The gender pay gap is the most significant factor in the overall gender gap in incomes. In 2000, Sylvia Dixon analysed the New Zealand gender pay gap.¹⁹ She found that education, experience, occupation and industry together account for 40% to 80% of the gap, leaving 20% to 60% unexplained. Other findings showed that the gender pay gap is wider for Pakeha than for Māori. Income survey data for 1997-8 showed that Māori women's average hourly earnings were 86% of Māori men's, but Pakeha women's were 83% of Pakeha men's. This is likely to be due to the lower earnings of Māori men, rather than a better relative position for Māori women.

Over 1994-1998 the gender pay gap reduced, due both to improvements in women's real²⁰ earnings, and to reductions in men's real earnings. Women at all levels of the female hourly earnings distribution experienced some real earnings growth, while the hourly earnings of lower-paid men declined in real terms, and those of men in the middle ranges of male earnings did not rise much. Appreciable real earnings growth was recorded only at the upper end of the male pay distribution.

The New Zealand Institute of Economic Research (1997) studied the gender pay gap in 1996, and found that over 1987-1996, New Zealand women's wages were consistently between 78% and 81% of men's wages. They explored future changes in the ratio over the following five years, and concluded that the gender pay gap was unlikely to narrow significantly in future, and might instead widen slightly. Reasons for this included that women are concentrated in industries where the gender wage gap is widening, and that above average wage growth was anticipated in some sectors where women were under-represented, such as transport and communications. This research indicates that the gender pay gap is an enduring phenomenon in New Zealand.

5.2 Education and earnings

Sholeh Maani (2000) analysed how post compulsory and higher education (education beyond the age of 16) affects earnings for Māori and non-Māori, and how these have changed over the decade 1986 to 1996. She shows that in general, the higher the educational level attained, the higher the income earned. This is more so for Māori than non-Māori, partly because of the lower income levels for Māori without school qualifications.

This means that if Māori do not undertake post-compulsory education, they have "more to lose" than non-Māori. In 1996 the majority of the Māori population did not possess school qualifications, indicating that there are some barriers operating. Maani considers that such barriers may include financial, rural, socio-economic, language, culture and school quality factors. She concludes that the returns from investing in higher education for the Māori population are very significant both for the Māori population and for the economy.

5.3 Hardship

Qualitative research by the Family Centre in 1998 into the real-life experiences and choices faced by low income Māori found the over-riding factor to be the large extent and high degree of hardship faced by low income households. The picture was one of considerable hardship, insecurity and financial

vulnerability, with many people struggling to meet essential costs. These pressures placed heavy strains on family relationships, particularly the relationships between parents, and between parents and children.

Those living on low incomes may have greater incentives to take part in the hidden (also called the informal or black) economy.²¹ Research commissioned by the Inland Revenue Department found that the estimated long run average size of the hidden economy is 8.8% of GDP. The hidden economy fluctuates with the business cycle, so that when the business cycle is at its peak, the hidden economy is at its largest. This research also suggests that among other factors, the unemployment rate is significantly related to the size of the hidden economy. Working in the hidden economy excludes workers from protection offered by employment registration, and may be less secure.

5.4 Discrimination

Cloher et al (1999) report that a 1992 study using results from the Household Economic Survey concludes that being Māori has a significant negative effect on wages. Theories of discrimination are supported by some New Zealand authors and several international authors²². On the other hand, a 1997 study argues that while each of the studies uses different types of analysis and takes different factors into account, on the whole the weight of the evidence is against the hypothesis of earnings discrimination.²³

While no clear conclusion can be drawn, the possibility of wage or income discrimination should be kept in mind. Many of the participants in the Income and Māori Project described personally experiencing prejudice in their efforts to get work or assistance of some sort.²⁴

Participants in qualitative research by the Family Centre (1998) consistently identified areas where the regimes of Pakeha society created barriers to Māori achievement. A major theme to emerge was the importance given to, and recognition of, culture as an essential determinant of how people function in different systems and organisations, and differences between Māori culture and the dominant Pakeha culture.

5.5 Shifts in income distribution

In 1986 the average income for Māori women was 84.3% of the average for Pakeha women, but by 1996 this had dropped to 74.4%. The average income for Māori men in 1986 was 73.5% of the average for Pakeha men, but by 1996 this had dropped to 63.8%. This widening income disadvantage for Māori was partly associated with less employment, greater unemployment, and a lower probability of working full-time, (Manni 2000). Note that this analysis is based on census income which includes unearned income such as rents, interest and government assistance.

There has been a polarisation of incomes in New Zealand over the last 15 years, which is generally attributed to the wide ranging reforms of the period. More people have moved into the highest and lowest income brackets, rather than being concentrated in the centre of the distribution.

Statistics New Zealand has found that there has been a sharp increase in wage and salary inequality among men over the period 1982 to 1996, primarily in the 1986 to 1991 period. Inequality among women wage and salary earners increased only a little over the same period, although the degree of inequality among women is significantly higher than among men. This results partly from the higher proportion of women employed part-time.²⁵ Statistics New Zealand did not analyse inequality by ethnicity.

O'Dea (2000) describes how the income distribution has changed during the period 1981 to 1996. He finds that income inequality rose regardless of how income is measured, whether individual or household, before or after tax, from different data sources and after adjusting for changes in household size and composition. Income inequality did not fall during the economic expansion of the 1990s, which indicates that it was driven by "structural changes to the fabric of the economy or society"²⁶ and not only by the business cycle. The increase in inequality appears to have been proportionately larger than that seen in most other developed countries, so that New Zealand now appears to have one of the highest levels of inequality in the OECD. Given that Māori were

particularly affected by the structural changes in the economy it seems likely that they were also particularly affected by widening income inequality.

Economic trends elsewhere in the economy may influence income levels in ways that are not obvious and not easily quantified. Work by Podder and Chatterjee (1998) suggests that the business cycle brought about changes in the number and distribution of wage and salary jobs across the working age population. These changes were found to have had a much larger impact on total income inequality than changes in the concentration of earnings among the holders of wage and salary jobs. This means that changes in the number and types of jobs have more impact on the distribution of income than changes in wage rates for those with jobs.

5.6 Family income

Johnstone and Pool (1996) analysed census data to estimate median incomes separately for various family and ethnicity types in 1981, 1986 and 1991. They found that the income of Māori families²⁷ was generally less than that of Pakeha families, and in some cases Māori income as a percentage of Pakeha income declined between 1981 and 1991. This pattern was most noticeable for sole parents in full-time employment, and for older Māori couple families where at least one partner was in full-time employment. Māori couple families where both partners were employed showed an income decline which was between 2.4 and 9.0% greater than the decline experienced by Pakeha couple families.

These authors note that many commentators have attributed decreases in family well-being to the structural changes families experienced over the decade 1981 to 1991, notably apparent increases in “dysfunctionality”, such as the increase in the number of sole-parent families – a minority category which was always among the most vulnerable to low income. However, it is two parent-families, the type of family which many commentators view as the most ‘functional’, who have suffered the most significant declines in income. These declines cannot be attributed to a shift away from the two-parent family to the sole parent family.

Data sources

The New Zealand Income Survey (NZIS) provided most of the data. This sample survey is conducted as a supplement to the HLFS (see above) in the June quarter of each year. Annual income data is from the 1996 Population Census, conducted by Statistics New Zealand. NZIS data is subject to sample and non-sample error. Census data is not subject to sample error, but is subject to non-sample error. Statistics New Zealand advise that the NZIS does not include investment income.

Notes

¹ Kell Easting & Fleming (1994).

² Statistics New Zealand (1998a).

³ Taiapa (1994).

⁴ Kell Easting & Fleming (1994).

⁵ The median is the middle point in a population; 50% of individuals fall above the median and 50% below.

⁶ Ministry of Education (1999).

⁷ In Figure C1 the sharp rises and falls shown for Māori incomes across different ages result from the small samples used in the New Zealand Income Survey.

Notes (contd.)

- ⁸ These findings in Figure C2 are consistent with Sholeh Maani's results.
- ⁹ Stephens et al: (2000), p.18
- ¹⁰ Note that the findings for men particularly are likely to be associated with a high sample error. However, data on DPB recipients from the Department of Work and Income are roughly similar: Māori women 21%, non-Māori women 5%, Māori men 3%, non-Māori men 0.5%.
- ¹¹ Data source: Department of Work and Income, personal communication based on DWI statistics. Median values not readily available. Data as at June 2000.
- ¹² The NZ Income Survey does not collect annual income, so the boundary (\$20,000) has been divided by 52.14 to get a weekly equivalent.
- ¹³ Data has been equivalised using Luxembourg Income Study Scales. Household income is divided by factors which adjust household income for differences in household size and composition.
- ¹⁴ Te Puni Kōkiri and Ministry of Women's Affairs (1999).
- ¹⁵ Te Puni Kōkiri and Ministry of Women's Affairs (1999).
- ¹⁶ Statistics New Zealand (1998a).
- ¹⁷ Taiapa (1994).
- ¹⁸ These average hours include time spent in ancillary services to childcare as well as actual time spent in childcare.
- ¹⁹ Dixon (2000).
- ²⁰ Real earnings are earnings that have been adjusted for inflation.
- ²¹ <http://taxpolicy.ird.govt.nz/> [2001].
- ²² Dalziel P. (1991).
- ²³ Chapple, S. (2000).
- ²⁴ The Family Centre Social Policy Research Unit (1998).
- ²⁵ Statistics New Zealand (1998b).
- ²⁶ O'Dea (2000), p.9.
- ²⁷ Determining the ethnicity of a family is particularly problematic. For the purposes of this study family ethnicity was determined using the ethnicity of the male parent or partner, which is assumed to be the same for all other family members. It is recognised by the authors that this is not entirely satisfactory.

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D. HEALTH

Indicators

PARAMETER	MEASURE
Life expectancy	<ul style="list-style-type: none"> Life expectancy at birth for Māori women
Child morbidity	<ul style="list-style-type: none"> Hospitalisation rate for meningococcal disease for Māori female children Hospitalisation rate for Māori female children (under 15 years of age)
Child mortality	<ul style="list-style-type: none"> Meningococcal disease mortality rate for Māori female children Mortality rate for Māori female children
Child abuse	<ul style="list-style-type: none"> Hospitalisation and mortality for non-accidental injury by others to Māori female children
Young people	<ul style="list-style-type: none"> Hospitalisation rate for suicide and self-inflicted injury for young Māori women (15-19 years of age) Mortality from suicide and self-inflicted injury for young Māori women Road traffic mortality rate for young Māori women Fertility rate for young Māori women (11-17 years of age)
Adult morbidity	<ul style="list-style-type: none"> Hospitalisation rates for Māori women Cervical cancer registration rate for Māori women Breast cancer registration rate for Māori women Diabetes mellitus diagnosis rate for Māori women Coronary artery surgery (including bypass and angioplasty) rates for Māori women Smoking rate for Māori women
Adult mortality	<ul style="list-style-type: none"> Mortality rate for Māori women Mortality rate from ischemic heart disease for Māori women Mortality rate from cervical cancer for Māori women Mortality rate from lung cancer for Māori women

Introduction

“Health is one of the most extraordinarily sensitive indicators of the social costs of inequality.”¹ However, there is no one simple way to measure health status. A number of different approaches can be taken, limited by what information is available and useful. This part of the report looks at the health

of Māori women in New Zealand by analysing some of the major categories of information about deaths, use of hospital services, and smoking. Using the indicators listed above, the health situation of Māori females is compared to Māori males, non-Māori females and non-Māori males. For some indicators, the numbers of people involved was quite small. For example, the number of Māori girls who died from meningococcal disease, the number of deaths from suicide or the number of young Māori women who die in road traffic accidents. Where the numbers involved are less than 30, the data has not been converted to rates as rates will not be meaningful.² Indicators with small underlying numbers should be treated with caution.

Death rates, and in particular ages at death and causes of death, are key indicators of the health of the population. The number of hospital admissions and the reason for these contacts are used as a proxy measure of the health and ill health of a population. It is easier to count such health care 'events', rather than other measures such as self reported illness.³ Hospital admissions are influenced by factors such as availability of resources and admission and discharge policies.

There is a continuing need to monitor statistics concerned with mortality and morbidity among Māori women, in order to improve understanding of health priorities. Te Puni Kōkiri and the Ministry of Women's Affairs (1999) have examined the health and well-being of Māori women. The Ministry of Women's Affairs has considered the needs and aspirations of Māori women throughout its Women's Health Strategy (currently being developed). Several agencies have also been involved in examining the impact of social and economic determinants on health and have included Māori women in comparative analyses.

The disparities between the health status of Māori and non-Māori New Zealanders have been well documented by other analyses (e.g., Te Puni Kōkiri, 2000a; Howden-Chapman & Tobias, 2000). Some of these analyses contain data broken down by both ethnicity and sex. Analyses by ethnicity have to take into account both numerator and denominator issues within the classification of ethnicity, for example, the change of the definition of Māori in the 1996 census, the misclassification of Māori by coroners, and the undercounting of Māori in hospital data.⁴ A further complication relates to changes in the classification and coding of ethnicity in health data which took place around 1996.⁵ As a result it has generally only been possible to use one period of data in this chapter. Caution should be exercised when interpreting data from one period as results may reflect atypical situations.

Deprivation and health

Disparities in the health status of different groups are now often examined using NZDep96, an area-based index of deprivation which has been used to indicate socio-economic status.⁶ Use of this index has clearly shown that Māori are over-represented in the most deprived areas of the country and under-represented in the least deprived.⁷

Within this chapter the health status of Māori women is considered across different age groups for a variety of indicators of health status. Where possible, time series and NZDep96 results are included.

Māori views of health

It is acknowledged that the chapter focuses mainly on morbidity and mortality. There is also a need to talk about the health of Māori women more broadly and to focus on positive aspects. While knowledge about disparities may motivate the initiation and financial support of interventions, knowledge about how best to intervene is often held within communities and discussions at hui, as well as within research findings.

One Māori view of health encompasses tinana (the physical element), hinengaro (the mental state), wairua (the spirit) and whānau (the immediate and wider family) within the health pounamu.⁸ Also known as the Whare Tapa Wha,⁹ these aspects occur in the context of Te Whenua (land providing a sense of identity and belonging), Te Reo (the language of communication), Te Ao Turoa (environment) and Whanaungatanga (extended family).¹⁰

The 1984 Māori Women's Welfare League research report, *Rapuora: Health and Māori women* (Murchie, 1984), notes that:

...it is not possible to study either the physical health of the Rapuora women or their social and economic well-being in isolation from the whānau, the network of people who are linked by blood, and the wider community within which the family group functions.¹¹

Other models and discussions of Māori health have added other dimensions including, for example, economic security, educational achievement, a home free from violence, and political representation.¹² Māori women's health is therefore more than the absence of disease; there is a focus on well-being.

1. Life expectancy

1.1 Life expectancy at birth

Position of Māori girls: In 1995-97, life expectancy at birth for Māori girls was 71.6 years.

Table D1. Years of life expectancy at birth, 1960-1997

Period	Maori			Non-Māori		
	Women	Men	Difference	Women	Men	Difference
1960-62	61.4	59.0	2.4	74.5	69.2	5.3
1965-67	64.8	61.4	3.4	74.8	68.7	6.1
1970-72	65.0	61.0	4.0	75.2	69.1	6.1
1975-77	67.8	63.4	4.4	75.9	69.4	6.5
1980-82	69.5	65.1	4.4	76.7	70.8	5.9
1985-87	72.3	67.4	4.9	77.4	71.4	6.0
1990-92	73.0	68.0	5.0	79.2	73.4	5.8
1995-97	71.6	67.2	4.4	80.6	75.3	5.3

* Life expectancy at birth is derived from official life tables. These life tables are produced every 5 years and are based on a 3-year period centred around a Census year.

Source: Statistics New Zealand.

Table D1 shows the average length of life that Māori and non-Māori females and males can expect at birth. The relatively poor health of Māori women is summarised by the fact that while their life expectancy at birth has improved by 10 years since 1960-62, to 71.6 years, the largest increase for any group, it is still 9 years shorter than non-Māori women's life expectancy.

The years 1995-97 showed a decrease in life expectancy for both Māori women and Māori men, compared with 1990-92. Māori males born in 1995-97 could expect to live only 67.2 years. By contrast, the life expectancy of non-Māori women and men has continued to improve.

As Table D1 shows, Māori women have a longer life expectancy than Māori men. Part of women's advantage in relation to life expectancy is biological in origin. Endogenous hormones seem to protect women from ischemic heart disease, the major cause of mortality and morbidity in males and in postmenopausal females.

Death statistics chart the quantity of life that a population enjoys, but they say nothing about quality of life or experience of ill health. Many significant causes of disease and disability are rarely a direct cause of death. Māori women are more likely than Māori men or non-Māori women and men to suffer from osteoporosis, diabetes, hypertension, arthritis and most immune disorders. Biological factors are likely to play some part in this as well.¹³

Low birth weight

Low birth weight is known to be strongly associated with perinatal and infant mortality (MoH, 1998). Low birthweight infants are over 20 times more likely to die in the first year of life, and are more susceptible to serious illness in infancy and later life. Low birth weight is one of the major risk factors for Sudden Infant Death Syndrome (SIDS). Table D2 shows that in 1997, the rate of low birthweight births was higher for Māori than for Pacific or Other.

Table D2. Live births by birthweight, ethnicity* and year, 1997

Low birthweight births per 1,000	
Māori	74.4
Pacific	41.2
Other**	60.3
Total	62.4

* Data not available by sex.

** Including Pakeha/European.

Source: NZ Health Information Service

Survival by age

Ethnic differentials in survival chances can also be illustrated by comparing the probabilities of surviving from one age to another. Table D3 shows that at all age levels, except 85 years, the life expectancy of Māori women is less than the life expectancy of non-Māori women and men (Table D2). Only the life expectancy of Māori men and Pacific men is shorter. At age 1, a Māori female infant has a 98.7% chance of surviving to age 25, compared with 99.2% for a European/other infant. A Māori male infant has a 97.6% percent chance of reaching age 25, compared with 98.7% for a European/Other male infant.¹⁴

Table D3. Years of life expectancy at selected ages, 1995–97

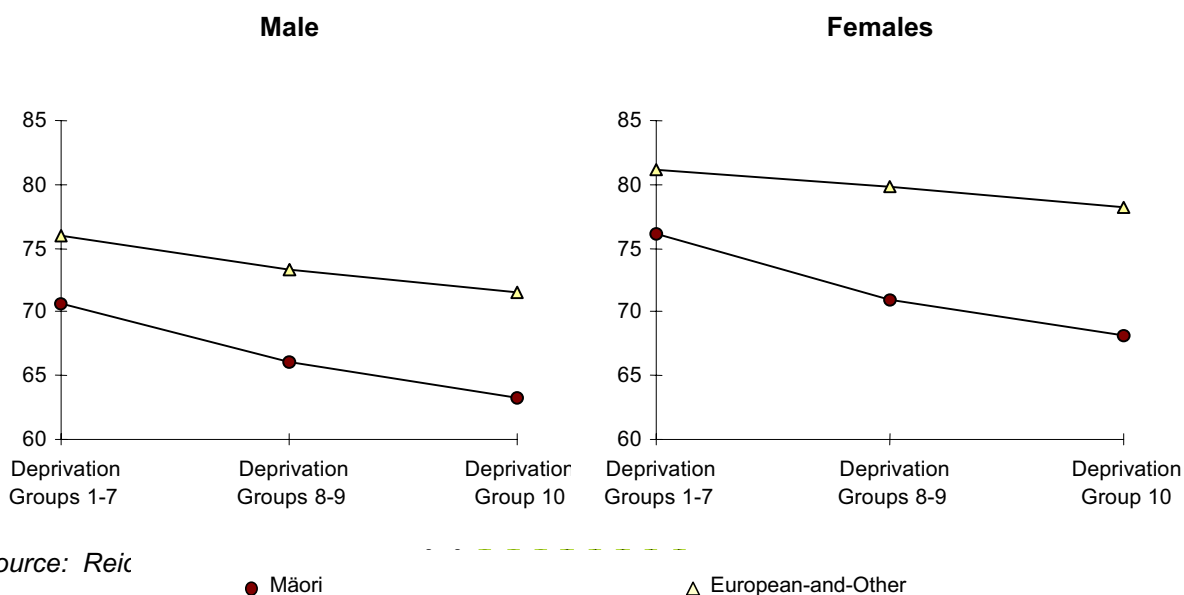
Age	Māori			Pacific			Non- Māori*			Māori/ Non-Māori difference	
	Women	Men	Diff	Women	Men	Diff	Women	Men	Diff	Women	Men
0	71.64	67.23	4.41	75.63	69.82	5.81	80.60	75.31	5.29	8.96	8.08
1	71.38	66.99	4.39	75.08	69.46	5.62	79.98	74.73	5.25	8.51	7.74
15	57.69	53.37	4.32	61.35	55.80	5.55	66.20	61.00	5.20	8.51	7.63
45	29.36	26.16	3.20	32.77	28.00	4.77	37.13	32.81	4.32	7.77	6.65
65	14.54	12.23	2.31	16.58	13.44	3.14	19.33	15.79	3.54	4.79	3.56
85	5.19	3.94	1.25	5.59	4.40	1.19	6.16	5.06	1.10	0.97	1.12

* Note that non-Maori in these columns includes Pacific.

Source: Ministry of Health 1999b, in Lewis, 2001.

Life expectancy is strongly related to socio-economic status. However, Ministry of Health research has also shown that ethnicity has an additional impact. As Figure D1 shows, for 1995-97, the difference in life expectancy between Māori women and European women (i.e. excluding Pacific women) was greatest among the most disadvantaged (i.e. those in Deprivation Group 10, the tenth and worst decile of deprivation, as measured by NZDep96). For these two groups the disparity lengthened to 10.1 years.¹⁵

Figure D1. Male and female life expectancy at birth, by level of deprivation, 1995-1997



Source: Reic

● Māori

△ European-and-Other

2. Child morbidity

The United Nations Convention on the Rights of the Child states that all children (up to the age of 18 years) have the right to survival, protection and development. Children and young people are largely dependent on others for care, protection and access to services. Their rapid development brings rapidly changing needs and health issues.¹⁶

2.1 Hospitalisation for meningococcal disease¹⁷

Position of Māori girls: In 1999, the hospitalisation rate for Māori girls aged under 15 for meningococcal disease was 65.1 per 100,000 population.

Table D4. Rates of hospitalisation per 100,000 for meningococcal disease, aged under 15, 1996-99

Year		Māori		Non-Māori	
		Girls	Boys	Girls	Boys
1996	Number	54	54	103	123
	Rate	54.8	52.0	32.4	36.5
1997	Number	63	111	125	176
	Rate	62.6	104.5	39.0	51.8
1998	Number	66	64	83	101
	Rate	64.2	59.0	25.8	29.7
1999	Number	68	94	87	120
	Rate	65.1	85.2	27.1	35.3

Source: Environmental Science and Research Ltd.

As Table D4 shows, from 1996 to 1999, admissions to hospital for meningococcal disease were between 22 and 38 percentage points higher for Māori girls than for non-Māori girls. The disparity between Māori and non-Māori boys was more variable – between 15 and 53 percentage points. The rate for Māori girls increased from 1996 to 1999, whereas the rate for non-Māori girls reduced, the rate for Māori boys fluctuated markedly, and the rate for non-Māori boys fluctuated less markedly.

Hospitalisation for acute respiratory infections and asthma

As Table D5 shows, rates of admission of Māori girls (under 15 years of age) to hospital were particularly high for acute respiratory infections and for asthma. These rates were higher than for non-Māori girls, but considerably lower than for Māori boys in the same age group.

Table D5. Numbers and rates per 100,000 of hospitalisation for acute respiratory infections/asthma, aged under 15, 1997/98

Cause		Māori		Non-Māori	
		Girls	Boys	Girls	Boys
Acute respiratory infections (incl. asthma)	Number	1,085	1,700	2,231	3,401
	Rate per 100,000	1,078.0	1,600.9	695.9	1,001.7
Asthma	Number	572	961	1,249	1,840
	Rate per 100,000	568.3	905.0	389.6	541.9

Source: NZ Health Information Service

Māori children are heavily over-represented in hospitalisation rates for preventable childhood conditions such as meningococcal disease, acute respiratory infections and asthma. These conditions have a direct link to causative factors of overcrowding and poor housing.

Some hospitalisations could be avoided with early intervention and improved access to primary care. Smoking is an important risk factor increasing Māori children's susceptibility to respiratory infections and asthma. The significance of respiratory disease differs across the life span. Poorly managed respiratory problems in childhood lead to a high incidence of chronic pulmonary disease and asthma in Māori women as adults.

2.2 Hospitalisation for all causes

Position of Māori girls: In 1997/98, the all-cause hospitalisation rate for Māori girls aged under 15 was 1,458 per 10,000 population.

Surprisingly, despite the hospitalisation rates given above, the 1997/98 rates of hospitalisation for all causes for Māori girls and boys under 15 years of age were lower than the comparable rates for non-Māori (Table D6).¹⁸ Provisional data for the 1998/99 year shows a similar pattern. The reasons for this counter-intuitive result are not clear but may be related to the method of classifying ethnicity used by hospitals which may have led to under-reporting of Māori hospitalisations. Further research would be required to determine the exact cause. Given the uncertainty attached to the accuracy of this data these hospitalisation rates should be treated with caution.

Table D6. Numbers and rates per 10,000 of hospitalisation for all causes, aged under 15, 1997/98

Cause	Māori		Non-Māori	
	Girls	Boys	Girls	Boys
Number	14,675	18,966	54,932	67,364
Rate	1,458.0	1,786.0	1,713.5	1,984.0

Source: NZ Health Information Service

3. Child mortality

3.1 Mortality from meningococcal infection

Position of Māori girls: In 1999, 4 Māori girls aged under 15 died from meningococcal infection.

As Table D7 shows, in 1999, 4 Māori girls, 4 Māori boys, 3 non-Māori girls and 2 non-Māori boys died from meningococcal infection. It should be noted that very small numbers of children under 15 die from meningococcal infection. Nevertheless, these figures indicate a serious health risk, particularly for Māori children.

Table D7. Numbers of deaths from meningococcal infection, aged under 15, 1996-1999

Number	Māori		Non-Māori	
	Girls	Boys	Girls	Boys
1996	3	2	3	2
1997	2	2	1	11
1998	1	4	2	7
1999	4	4	3	2

Source: *Environmental Science and Research Ltd*

3.2 Mortality from all causes

Position of Māori girls: In 1997, the death rate for Māori girls aged under 15 from all causes was 10.4 per 10,000.

As Table D8 shows, there were striking ethnic differences in death rates for children under 15 in 1997. The overall mortality rate for Māori girls (10.4 per 10,000) was lower than that for Māori boys (13.9 per 10,000), but over twice as high as the rate for non-Māori girls (4.9 per 10,000) in the same age group. The disparity between young Māori and non-Māori boys (13.9 per 10,000 compared with 5.8 per 10,000) was even larger.

Table D8. Number and rates of mortality per 10,000 all causes, under 15 years of age, 1997

Cause	Māori		Non-Māori	
	Girls	Boys	Girls	Boys
Number	105	148	156	196
Rate	10.4	13.9	4.9	5.8

Source: *NZ Health Information Service. This is the only year for which data was available from NZHIS.*

4. Child abuse

While abuse of children has assumed a new prominence in the public health arena, information about this area is limited. The shortage of good information means that little is known about risk factors. Injuries from abuse can have long term health consequences for children and significantly affect their emotional well-being. It is also possible that many of the physical injuries sustained as a result of childhood abuse may remain untreated.

There are various sources of data which provide information on child abuse. The rate of hospitalisation and of deaths from homicide and injury purposely inflicted by others have been used as the indicators here. The Ministry of Health regards these as useful sets of national statistics on child abuse.

4.1 Hospitalisation and mortality due to non-accidental injury by others

Position of Māori girls: In 1997, for Māori girls aged under 15, the hospitalisation rate for homicide and injury deliberately inflicted by others was 40.7 per 100,000 population.

Table D9. Numbers and rates per 100,000 of homicide and injury purposefully inflicted by other persons on children aged under 15, 1997

Homicide and injury purposefully inflicted by other persons		Māori		Non-Māori	
		Girls	Boys	Girls	Boys
Hospitalisations	Number	41	46	29	93
	Rate	40.7	43.3	9.0	27.4
Deaths	Number	1	4	6	1

Source: NZ Health Information Service

Table D9 shows that in 1997, Māori girls aged under 15 were more than four times as likely as non-Māori girls to be admitted to hospital for homicide and injury purposely inflicted by other persons. The rate for Māori boys (43.3 per 100,000) was a little higher than the rate for Māori girls (40.7), and one and a half times higher than the rate for non-Māori boys (27.4). Non-Māori boys were three times as likely as non-Māori girls (9.0) to be admitted to hospital for this cause.

In terms of deaths, in 1997, the numbers are too small to be able to make meaningful comparisons.

Statistics collected by the National Council of Independent Women's Refuges (NCIWR) point to the over-representation of Māori women and children among those using Women's Refuges. In 1999, 3,085 Māori women and 4,851 Māori children (compared with 3,899 non-Māori women and 4,636 non-Māori children) used NCIWR refuge services. (See Justice for more information on refuge use by Māori women and children.)

In 1998/99 year CYPF substantiated some form or multiple forms of abuse and neglect for 2,808 children aged 0-6 and 3,392 young people aged 7-16 years. Approximately 46% of children and young people with substantiated findings of abuse and neglect are Māori, 34% European, and 11% Pacific children.¹⁹ The rate for substantiated notifications to CYFS of abuse and neglect for 1998/99 was 1.2% of Māori children aged 16 and under. This was three times the non-Māori rate of 0.4% (Table D10).

Table D10. Numbers and rates per 100 of substantiated notifications to CYFS of abuse and neglect of those aged 16 and under, 1998/99

	Māori	Non-Māori
Number	2,852	3,348
Rate	1.2	0.4

Source: *Strengthening Families: Report on Cross Sectoral Outcome Measures and Targets 1999*, p.24. Data by sex is not readily available.

5. Young adults

5.1 Suicide and self-inflicted injury

Position of young Māori women: In 1997, among young Māori women aged 15-19, the rate of hospitalisation for suicide and self-inflicted injury was 218.0 per 100,000 population. Seven young Māori women aged 15-19 died as a result of suicide or self-inflicted injury.

Table D11. Numbers and rates per 100,000 of hospitalisation and number of deaths as a result of suicide and self-inflicted injury aged 15-19, 1997

Suicide and self-inflicted injury		Māori		Non-Māori	
		Women	Men	Women	Men
Hospitalisation	Number	60	51	290	146
	Rate	218.0	181.6	278.6	132.2
Deaths	Number	7	15	12	38

Source: NZ Health Information Service

New Zealand has among the highest rates in the OECD for suicide and attempted suicide, and it is the youth of the country who are over-represented in these statistics.²⁰ Suicide is a cause of premature mortality and significant years of life lost. It is also the cause of ongoing emotional and psychological distress for family and friends. Self-inflicted injuries can result in long term health problems and ongoing disability.

The rate of hospitalisation for suicide and self-inflicted injury during 1997/98 was highest for young non-Māori women, followed by young Māori women (Table D11). The mortality figures are too small to be able to make meaningful comparisons.

The female excess in hospitalisations for self-harm “reflects their much lower rate of completed suicide compared to males”.²¹ However, the data suggest that young Māori women’s mortality rate is rising as they increasingly choose more “successful” methods.²²

Statistics probably under-estimate the incidence of attempted suicide for women, as they may harm themselves without ever being admitted to hospital. Very few studies specifically focus on suicide risk factors for Māori women or explore whether the risk factors Māori women face differ from those facing

Māori men. This may be partly because investigators tend to view suicide as mainly a “male problem”. Not surprisingly, studies of risk factors for self-inflicted injury have found that being female itself constitutes a risk.²³

Studies from many parts of the world show that women are more likely than men to report symptoms of mental illness and are more likely to receive treatment for conditions such as the less severe forms of anxiety and depression. Though regarded as less severe, these conditions can be associated with significant morbidity.²⁴ The higher female rates for these mental illnesses are attributed to women's adverse social circumstances, including poverty, single parenthood, educational and work inequalities.²⁵ Women are more likely to hold jobs with low level of control over work, poor job security and low wages. These characteristics explain, at least in part, women's higher risk of psychological disorder, especially depression.²⁶

5.2 Mortality from motor vehicle traffic accidents

Position of young Māori women: In 1997, 7 Maori women aged 15-19 died in motor vehicle traffic accidents

Table D12. Numbers of motor vehicle traffic accident mortality, aged 15–19, 1997

	Māori		Non-Māori	
	Women	Men	Women	Men
Number	7	22	13	39

Source: NZ Health Information Service

Young non-Māori men accounted for 48.1% of all deaths from motor vehicle traffic accidents, but they comprised 40.9% of the 15-19 year population. In comparison, Māori men accounted for 27.2% of these deaths and 10.4% of the population, Māori women accounted for 8.6% of deaths from motor vehicle traffic accidents and 10.2% of the population, and non-Māori women accounted for 16.0% of these deaths and 38.5% of the population. Relative to their population proportions, young Māori men and women are more likely to die from road traffic accidents than their non-Māori counterparts. This disparity remains in spite of considerable decreases in road traffic mortality from 1981 to 1997.²⁷

Motor vehicle accidents are a major cause of premature death for young Māori. They also result in significant disabling injuries that can substantially affect quality of life and ability to participate fully in society.

5.3 Fertility rates

Position of young Māori women: In 2000, the fertility rate for young Māori women aged 11-17 was 1.56 per 100 population.

Table D13. Fertility rates* per 100 females aged 11-17, 1990, 1995, 2000

Year	Māori	Non-Māori
1990	2.02	0.68
1995	2.04	0.67
2000	1.56	0.34

* *The number of registered births divided by the estimated mean population*

Source: Statistics NZ

Fertility is one of the key influences on population growth, together with death and migration (Pömare et al., 1995). The fertility rate for all Māori women declined steeply between 1962 and 1983, from 6.2 to 2.2 births per woman, and is now close to the fertility rate of non-Māori women.²⁸

However, as Table D13 shows, in 2000 the fertility rate for young Māori women aged 11-17 (1.56) was over four times as high as the rate for young non-Māori women (0.34). Fertility rates for all those aged 11-17 fell considerably between 1990 and 2000. For both groups the rate stayed much the same between 1990 and 1995, but by 2000 it had decreased, halving for non-Māori and falling by about a quarter for Māori.

Young women who are at risk of emotional, psychological, social, economic, and physical stresses are at greater risk of having an unplanned pregnancy. Many young Māori women feel powerless and vulnerable, have low self-esteem, and experience feelings of alienation.²⁹

Māori teenagers who become pregnant are much less likely than other pregnant teenagers to have a termination.³⁰ Young Māori mothers can find it difficult to continue to participate in school or complete qualifications. This can limit their future opportunities to enter into further education or employment. Early sexual activity and multiple sexual partners can also affect sexual health, increasing the risk of contracting a sexually transmitted infection and of developing cervical cancer at later ages.

6. Adult morbidity

6.1 Hospitalisation

Position of Māori women: In 1997/8, Māori women aged 15 and over were hospitalised at a rate of 2,488.4 per 10,000 population.

Table D14. Numbers and rates per 10,000 of hospitalisation by selected cause, aged 15+, 1997/98

Cause of hospitalisation		Māori		Non-Māori	
		Women	Men	Women	Men
Chronic obstructive respiratory disease	Number	1,319	690	5,903	4,785
	Rate	94.6	60.9	38.4	31.3
Diabetes mellitus	Number	335	413	1,170	1,377
	Rate	27.3	35.7	7.3	9.8
All causes	Number	43,925	22,245	273,233	185,682
	Rate	2,488.4	1,684.8	1,889.9	1,308.0

Source: NZ Health Information Service, age standardised rates.

As Table D14 shows, the overall hospitalisation rate for Māori women is the highest of all four rates, followed by non-Māori women, Māori men and non-Māori men.

Women have higher all-cause hospitalisation rates than men, but the sex difference almost disappears when admissions for normal pregnancy are excluded. However, the causes differ by gender; for example, males have higher rates for injuries and heart disease, and females have higher rates for reproductive conditions.

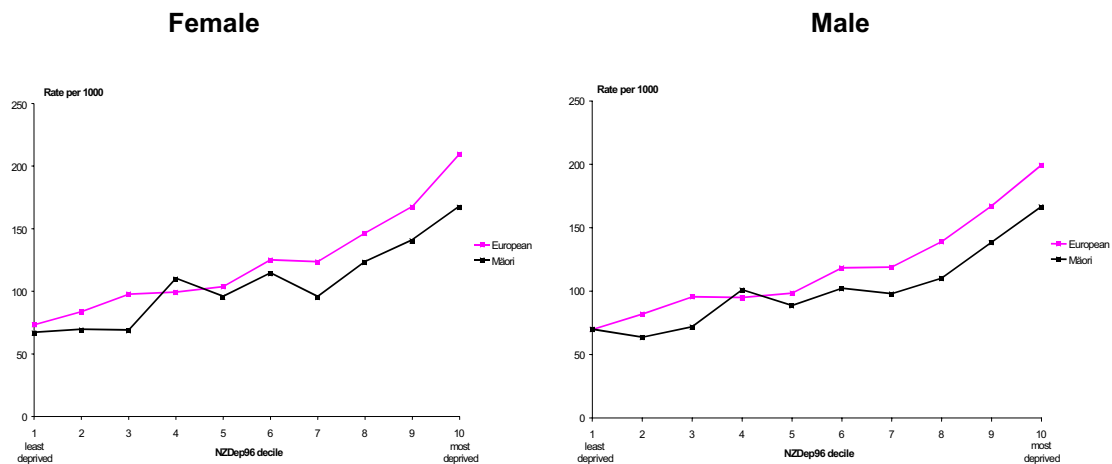
Pōmare et al. (1995) report that since 1970, hospital admission rates for Māori have been 1.4 to 2.3 times as high as non-Māori rates. Almost one-third of all hospitalisations (excluding maternity, mental illness and disability support) have been assessed as potentially avoidable. One-third of these avoidable hospitalisations could have been avoided through health promotion interventions. The other two-thirds could have been avoided through more effective primary health care.³¹

Chronic obstructive respiratory disease is the major cause of hospitalisation for Māori women. This condition dramatically affects the quality of life and causes premature death. The single most important risk factor is smoking. Other risk factors are lower socio-economic status and respiratory illness in childhood.

Deprivation and ethnicity

For both males and females, people from the most deprived levels of socio-economic status are approximately twice as likely to be admitted to hospital as their more advantaged counterparts. However, Figure D2 shows that Māori are in fact less likely to be hospitalised than their European counterparts when age and level of deprivation are taken into account. This is the case despite the higher need for hospital care implied by the fact that Māori have all-cause mortality rates almost twice those of non-Māori (at all ages and for both sex).

Figure D2. Hospitalisation by deprivation decile, ethnicity and sex, 1997



Source: Ministry of Health (1999b), in Lewis (2001)

Māori women's use of hospital services appears to be less than proportionate to their greater need for health care services. One reason may be that Māori women experience greater barriers to access to health services than non-Māori women. General Practitioners (GPs) usually refer patients for hospital treatment. Evidence suggests that Māori do not use GP services as often as their overall patterns of mortality and hospital use indicate is necessary³². Supporting this conclusion, the 1996-7 New Zealand Health Survey identified significant ethnic differences in the reporting of unmet health needs.

6.2 Cervical cancer registration

Position of Māori women: In 1996, the cervical cancer registration rate for Māori women was 28.8 per 100,000 population.

The 1996 cervical cancer registration rate for non-Māori women was 13.0 per 100,000, less than half the Māori rate of 28.8 per 100,000. This means that Māori women are more than twice as likely as non-Māori women to develop cervical cancer. Cervical cancer is largely a preventable disease, because screening can detect pre-invasive cancer before malignancies occur. (These rates are age standardised.)

6.3 Breast cancer registration

Position of Māori women: In 1996, the breast cancer registration rate for Māori women was 11.6 per 10,000 population.

This was the same as the rate for non-Māori women, 11.6 per 10,000. Breast cancer is an important issue for Māori and non-Māori women, because of its negative impact not only on survival, but on lifestyle, self-image and quality of life.

(These rates are age standardised.)

6.4 Diabetes diagnosis

Position of Māori women: In 1996, 9.4% of Māori women aged 15 and over had been diagnosed with diabetes mellitus.

Table D15. Diabetes diagnoses, aged 15+, 1996

	Māori		Non-Māori	
	Women	Men	Women	Men
% of population diagnosed with diabetes	9.4	7.2	2.4	3.9

Source: Ministry of Health

As Table D15 shows, Māori women are more likely than Māori men to be diagnosed with diabetes. This is the reverse of the situation for non-Māori women and men. In 1996 Māori women were almost four times as likely as non-Māori women to be diagnosed with diabetes. Hospitalisation per 10,000 for diabetes mellitus (see Table D14) is over three times as likely for Māori women (27.3) as for non-Māori women (7.3). However, Māori men have the highest hospitalisation rate for diabetes mellitus (35.7), over three times the rate for non-Māori men (9.8).

Diabetes is a risk factor for other diseases. Long-term diabetes leads to secondary problems such as kidney, eye, heart and peripheral vascular disease, and can result in long term disabilities such as loss of sight and mobility. In pregnancy, diabetes can affect both the child and the mother. It can result in the baby being larger than average, leading to birth complications, and has also been implicated in congenital malformations.

There are sex differences in managing diabetes due to hormonal factors. Women have to consider and manage the use of oral contraceptives and HRT carefully. Insulin can also affect fertility. In the long-term, diabetes may promote cardiovascular failure in women more than men. Studies increasingly show that diabetes is linked to obesity.

6.5 Coronary artery surgery (including bypass and angioplasty)

Position of Māori women: In 1997/98, Māori women aged 15 and over had a coronary artery surgery rate of 15.3 per 100,000 population.

Table D16. Numbers and rates per 100,000 of coronary artery surgery, aged 15+, 1997/98

	Māori		Non-Māori	
	Women	Men	Women	Men
Number	19	48	538	1,350
Rate	15.3	38.3	32.5	98.0

Source: NZ Health Information Service, age standardised rate

As Table D16 shows, Māori women had the lowest rate of coronary artery surgery in 1997-98, less than half the rate of their non-Māori counterparts. There was a similar but even larger difference between Māori and non-Māori men. Yet both Māori women and Māori men have a much higher rate of death from ischemic heart disease (see below) than their non-Māori counterparts.

6.6 Smoking

Position of Māori women: In the 1996 Census, 47.4% of Māori women said they were regular cigarette smokers.

Table D17. Prevalence of smoking, aged 15+, 1996

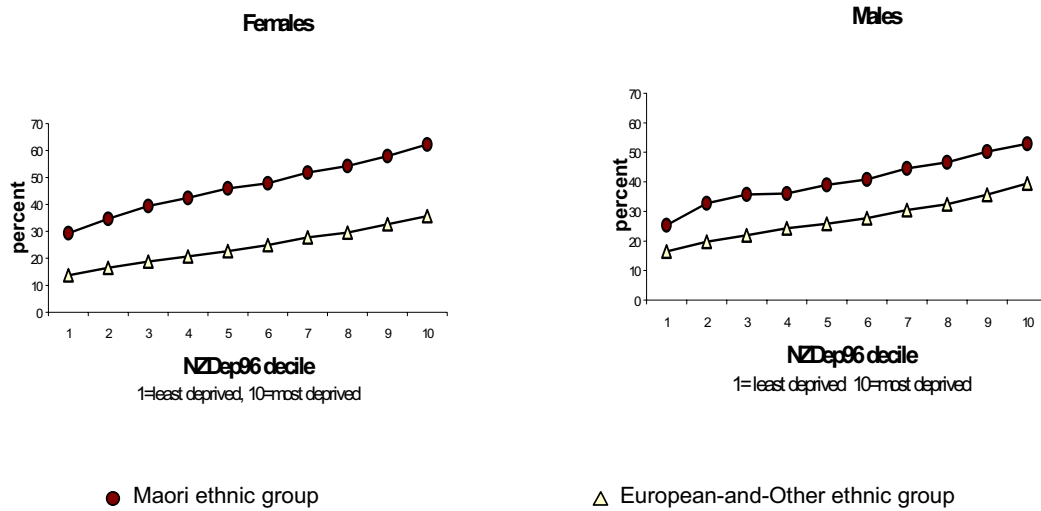
Sex	Prevalence of regular smoking (%)					Prevalence of regular/ever smoking (%)				
	Māori	Pacific	Asian	European/Other	Total	Māori	Pacific	Asian	European/Other	Total
Female	47.4	25.0	4.9	19.9	22.8	65.0	33.4	8.4	40.9	42.1
Male	39.7	34.7	18.8	22.3	24.8	57.4	45.0	29.4	49.8	49.7

Source: Statistics NZ, adapted from Table 16a in the 1996 Census reference report "Ethnic Groups"

As Table D17 shows, Māori women are two and a half times as likely to smoke as European/Other women, and more likely to smoke than Māori men. Overall, 31% of all Māori deaths between 1989 and 1993 have been attributed to cigarette smoking.³³ As well as active smoking, exposure to second hand smoke has major implications for the health of infants and children as well as adults. In relation to reproductive health, stillbirth, low birth weight, intrauterine growth retardation and premature rupture of membranes can all result from smoking during pregnancy. Smoking increases the risk of glue ear, asthma and SIDS for children. In recent years, 46% of deaths due to SIDS among Māori infants were attributable to smoking, compared with 24% of deaths due to SIDS among Pacific infants and among other Pakeha/European and other ethnic groups.³⁴

Data on smoking by age group shows that between ages 20 and 39, over half of all Māori women smoke, compared with 22-28% of European women. Among adults aged 25-44, there is a clear pattern of regular smoking increasing as level of deprivation increases (Figure D3). This pattern is similar for Māori and non-Māori women and men. However, there is a large disparity between Māori and non-Māori at all levels of deprivation, particularly for women, in the percentage smoking regularly. This data is from the 1996 census, so both ethnicity and tobacco use are self-reported.

Figure D3. Regular smokers, 1996 Census, aged 25-44 years, by ethnicity and deprivation



Source: Reid, Robson & Jones (in press).

7. Adult mortality

7.1 Mortality

Position of Māori women: In 1997, the age standardised mortality rate for Māori women aged 15 and over was 91.3 per 10,000 population.

Table D18. Numbers and rates per 10,000 of mortality aged 15+, 1997

	Māori		Non-Māori	
	Women	Men	Women	Men
Number	1,026	1,280	12,028	12,673
Rate	91.3	126.7	46.5	75.4

Source: Ministry of Health, age standardised rates

In 1997, as Table D18 shows, the age standardised mortality rate for Māori females was almost twice as high as the rate for non-Māori females. A Māori male who was 45 years old in 1996:

“...had a 69.1 percent chance of reaching 65 years compared with 86.8 percent for a European/other male. This compares with 76.4 percent and 91.7 percent for females respectively”³⁵.

7.2 Mortality from heart disease, cervical cancer and lung cancer

Position of Māori women: In 1997, mortality rates for Māori women aged 15 and over were 187.0 per 100,000 of population for ischemic heart disease, 11.6 per 100,000 of population for cervical cancer, and 80.0 per 100,000 of population for lung cancer.

Table D19. Numbers and rates per 100,000 by selected causes of death, aged 15+, 1997

Cause of death		Māori		Non-Māori	
		Women	Men	Women	Men
Ischemic heart disease	Number	190	288	2,565	3,326
	Rate	187.0	302.9	84.2	190.1
Cervical cancer	Number	19		54	
	Rate	11.6		3.1	
Lung cancer	Number	90	120	440	762
	Rate	80.0	134.7	23.7	46.0

Source: NZ Health Information Service, age standardised rates.

Ischemic heart disease

This is the leading cause of death for Māori and non-Māori women. Compared with non-Māori women, Māori women are at much higher risk of death from this cause (Table D19). Māori men have the highest rate of death from ischemic heart disease, but the disparity compared with non-Māori men, while high, is not as great as the disparity between the two groups of women. The mortality rate for Māori women almost equals the rate for non-Māori men.

The seriousness of ischemic heart disease as a cause of premature death among all women has until recently been overshadowed by the high incidence of the condition in men. The result has been that gender specific factors affecting prevalence, outcome and treatment have not been recognised. Gender specific risk factors for ischemic heart disease are: smoking, hypertension, high serum cholesterol, diet and weight, use of oral contraceptives, and diabetes.

Cervical cancer

Compared with non-Māori women, Māori women are at increased risk of death from cervical cancer (Table D19). Malignant neoplasms of the cervix have been a leading cause of death for Māori women for many years.³⁶

Lung cancer

The rate of deaths for Māori women from lung cancer is exceeded only by the rate for Māori men. The rate for Māori women is over three times the rate for non-Māori women (Table D19). Between 1988 and 1993, the incidence of lung cancer among Māori increased, whereas it decreased among non-Māori. Thus the disparity between Māori and non-Māori increased over this time.³⁷

The incidence of lung cancer is largely attributable to smoking. As with other smoking related diseases (such as chronic obstructive respiratory disease), differences between women's and men's smoking rates mean that Māori women's death rates from lung cancer will continue to rise.

8. Discussion

Māori women recognise the value of being healthy.³⁸ The premature deaths of Māori women, at whatever age, mean the loss of *kuia*. This has a detrimental effect upon Māori society. In addition, as Māori women are the cornerstones of *whānau*, their ill health impacts on a number of lives.

Māori women's and men's differing experiences of the determinants of health, and the effect on Māori women's access to health services, have not yet been systematically addressed by health policy. Where the determinants of health and health services benefit women, they benefit the health and well-being of all New Zealanders. Gender itself must therefore be seen as a determinant of health.

Current prevention strategies may not be working as well for Māori women as for men in some areas. For example, Māori women's current smoking rates are higher than those of Māori men. More carefully targeted prevention strategies, based on Māori women's unique risk profile, appear to be required.

8.1 Health, deprivation and ethnicity

It is now widely acknowledged that the wider social, economic and cultural determinants contribute to inequalities in health outcomes. Health inequalities do not just occur among individuals. People living in deprived areas are more likely to have poor health and shorter lives.³⁹ For Māori, deprivation prevents *whānau* from being able to function effectively, in terms of meeting cultural expectations, such as attending *tangi*. The obligations of *manaakitanga* (hospitality) are also difficult to fulfil. This continues to isolate *whānau* and weaken their esteem. Thus the health of Māori women as a group, and their socio-economic status, are interwoven.

Analyses using the New Zealand Deprivation Index (NZDep96) demonstrate that the poor health of Māori women is not explainable solely by the effects of socio-economic deprivation. Ethnicity itself has an additional impact on Māori women's health status. Following their examination of the impact of social and economic disparities on health, Howden-Chapman and Tobias (2000) conclude that:

Socioeconomic factors do not, however, explain all of the health disparity for Māori and Pacific peoples. Part of the explanation may lie instead in the way our societal arrangements tend to favour the majority population, thus perpetuating inequalities between ethnic groups.⁴⁰

8.2 Child morbidity and mortality

Māori children are over-represented in hospitalisation rates for preventable childhood conditions such as meningococcal disease, acute respiratory infections and asthma. These conditions have a direct link to poor and overcrowded housing. However, some hospitalisations could be avoided with early intervention and improved access to primary care via a general practitioner.

The connection between suicide or attempted suicide by young people and abuse needs to be investigated when reliable child abuse statistics become available. The links between child abuse, mental illness, socio-economic pressures and systemic racism also need to be investigated.⁴¹ Suicide prevention strategies and community interventions are also addressing this tragedy.

8.3 Adult morbidity and mortality

The morbidity issues raised in this chapter, and the causes of Māori women's premature death, are of particular interest in view of the potential preventability of deaths. The focus on major fatal diseases should be balanced by concern with the prevention of chronic disabling but non-fatal conditions.

Potentially avoidable mortality and potential avoidable hospitalisations are likely to have a complex web of causation, underpinned by economic and social factors.⁴² Most of the priority population health

objectives in the New Zealand Health Strategy⁴³ should contribute positively to Māori women's health and reduce their morbidity and mortality, in particular the objectives to reduce diabetes, cancer, cardiovascular disease impact, smoking and violence.

Cancer is the leading cause of Māori women's premature death. Cancers have a major impact on women's health, both as a cause of premature death and as a cause of suffering and long term health impairment. Public health programmes need to focus attention on those factors that may predispose Māori women to contracting cancer. Specific strategies should be developed to increase Māori women's participation rates in cancer screening programmes.

Heart disease

Public health programmes need to focus attention on those factors that predispose Māori women to develop ischemic heart disease. There are strong indications that women with ischemic heart disease experience different patterns of diagnosis, different treatments and hospital courses, and different long-term outcomes from men with this type of disease. Further investigation is necessary to better define the gender-related differences and possible gender specific therapies for ischemic heart disease in Māori women.

8.4 Smoking

Smoking has been identified as the single largest preventable factor in Māori women's premature death, disability and disease. The women who are most likely to start smoking are those in low-status jobs, on low incomes, single, separated or divorced, or victims of domestic violence. Once addicted, they are unlikely to stop using tobacco unless their circumstances change. As very few people begin to use tobacco after their teens, it is widely agreed that the greatest impact on smoking related mortality and morbidity would be achieved by preventing young people from beginning to smoke.

8.5 Use of health services

Older Māori women do not seem to be accessing health services to the extent that they should be, given the state of their health. For example, Māori women receive coronary artery surgery at half the rate of non-Māori women, despite being at much higher risk of coronary disease. The barriers to Māori women receiving health care in this area need to be investigated and addressed.

The data indicates that Māori women's use of hospital services is less than proportionate to their generally greater need for health care services. Māori women may experience greater barriers to access to health services than non-Māori women. Health services may be culturally inappropriate or difficult for women to reach.

According to results from the 1996/97 New Zealand Health Survey, 18.6% of Māori reported unmet health needs (i.e. they needed to see a GP but did not). This was one and a half times the unmet need rate for the European/Pakeha ethnic group. Amongst other things, respondents cited factors such as cost, accessibility and appropriateness as reasons for not seeing a GP⁴⁴.

Use of GP services also depends to some extent on whether a GP is available, the cost of consultation, cultural beliefs, and how the importance of illness is perceived. Shame and embarrassment prevent many women from seeking treatment for gynaecological conditions, including sexually transmitted infections, and also seeking help and protection against violence.

Māori women are subject to barriers put up against them not only as women, but also as Māori. While it is becoming more common for women to have access to female doctors, it is very rare that Māori women have the choice of Māori women health professionals. In addition there are very few Māori women in decision-making and policy-making positions at a national level.

Data sources

The New Zealand Health Information Service's database The National Minimum Dataset, (NMDS) was used for most data. 1997 was the only year made available. The Ministry of Health adopted the Standard Classification of Ethnicity in 1996/97. As a consequence, limited time series data is available using the standard classification.

Life expectancy and fertility rates were provided by Statistics New Zealand. As noted for Table D1, Life expectancy rates are derived from official life tables and are based on three-year periods centring on a census year, hence 1995-97 is the most recent period available. Environmental Science and Research Ltd provided meningococcal disease hospitalisation data covering 1996-1999.

Health data is classified according to International Classification of Diseases (ICD) coding system. . This is a World Health Organisation (WHO) classification system used internationally for coding health data.

Mortality data is coded from death registrations (and the appropriate death certificates) provided by Births Deaths and Marriages. Clinical coders use the information on the death certificates, from any other appropriate sources (hospital events, cancer registry, Water Safety Council, Land Transport Safety Authority, media search), and from the coroner's reports (where a coroner's verdict is required), in order to assign the most accurate code possible.

All malignant cancers are required to be registered under the Cancer Registry Act 1994, and reported to the Cancer Registry. The Cancer Registry employs clinical coders whose job it is to assign the correct cancer codes to each cancer registration. While a large number of cases are identified via the hospital discharge data initially, laboratories also report any cancers they diagnose.

Hospital data covers public hospitals only, and is coded by clinical coders staffed in each public hospital. These coders look at the patients' records and charts and record the appropriate ICD codes on their local Patient Management System (PMS). On a regular basis, all new/updated records are extracted from the PMS (by the hospital) and submitted electronically to the NMDS which houses the central database of hospital discharges. The New Zealand Health Information Service manages the database and extracts hospital information from that. In order to ensure the highest possible coding accuracy, clinical audit teams periodically audit coding in hospitals.

Notes

¹ Kawachi et al. (1999), p.1.

² The Ministry of Health advises that it is better to use actual numbers rather than rates where the underlying numbers are very small.

³ Ministry of Health (1999a).

⁴ Pömare et al. (1995).

⁵ Ministry of Health (1999a).

⁶ Salmond, Crampton & Sutton (1998), in Ministry of Health (1999a). Note that the validity of using a spatially based index of deprivation to indicate the socio-economic status of individuals is still under debate. However, Clare Salmond has compared the spatially based index with an individually based version as a predictor of smoking in the 1996 Census. There was a high level of correlation between the spatially based and individually based versions of the index.

⁷ Reid, Robson & Jones (in press).

Notes (contd.)

⁸ Murchie (1984).

⁹ Durie (1994).

¹⁰ Tamariki Ora (1993), p.24.

¹¹ Murchie (1984), p.67.

¹² Public Health Group (1997); Pömare et al. (1995); Walker and Mead (1992).

¹³ Ministry of Health (2000a); Lynch (1997).

¹⁴ Lewis (2001), p.8.

¹⁵ Howden-Chapman & Tobias (2000); Reid, Robson & Jones (in press).

¹⁶ Tamariki Ora (1993).

¹⁷ This indicator is used because almost all meningococcal disease cases are expected to be hospitalised, due to the seriousness of the infection. The majority of cases which are recorded as not having been hospitalised were cases where the patient died before being admitted. These cases are picked up in the data on mortality, but as Table D7 shows, the numbers are very small.

¹⁸ The hospitalisation rate is a measure of those who are admitted to hospital and what they are admitted for. It is not a measure of the prevalence of disease within the population (Pömare et al., 1995).

¹⁹ Ministry of Social Policy (1999), p.24.

²⁰ Lewis (2001).

²¹ Lewis (2001).

²² Pömare et al. (1995).

²³ Fanslow & Norton (1994).

²⁴ Noelen-Hoeskema (1987).

²⁵ For example, Lennon (1995); Romans-Clarkson (1991).

²⁶ Lennon (1995).

²⁷ Te Puni Kōkiri (2000a).

²⁸ A change in the method of recording ethnicity on birth registration forms from September 1995 is likely to have resulted in a more accurate recording of Māori births, but means that historical information on births is not comparable with current data.

²⁹ Kirby & Coyle (1997).

³⁰ Ministry of Health (2000b).

³¹ Ministry of Health (1999a).

³² Davis et al. (1997).

Notes (contd.)

- ³³ Laugesen & Clements (1998).
- ³⁴ Ministry of Health (1999a).
- ³⁵ Lewis (2001), p.8.
- ³⁶ Pömare et al. (1995).
- ³⁷ Te Puni Kōkiri (2000a).
- ³⁸ North Health (1996).
- ³⁹ National Health Committee (2000).
- ⁴⁰ Howden-Chapman & Tobias (2000), p.162.
- ⁴¹ Jones (1999).
- ⁴² Ministry of Health (2000a).
- ⁴³ Ministry of Health (2000b).
- ⁴⁴ Ministry of Health (1999b).

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E. HOUSING

Indicators

PARAMETER	MEASURE
Tenure	<ul style="list-style-type: none"> • Proportion of Māori women living in rental accommodation • Proportion of Māori women living in owner-occupied dwellings
Affordability	<ul style="list-style-type: none"> • Proportion of Māori women living in households paying 25% or more of net household income in rent
Temporary housing	<ul style="list-style-type: none"> • Proportion of Māori women living in temporary dwellings • Average duration of stay by women in Māori women's refuges
Crowding	<ul style="list-style-type: none"> • Proportion of Māori women living in dwellings defined as crowded on the Crowding Index (CI = 1.25)
Housing amenity	<ul style="list-style-type: none"> • Proportion of Māori women living in dwellings that use no heating • Proportion of Māori women living in dwellings that heat water by wood burning only

Introduction

Unmet housing needs and poor housing quality are two important issues in relation to housing. Unmet housing need arises from mismatches between the supply of affordable housing and the housing requirements of an increasingly diverse population. For some people, unmet housing need can mean unaffordable housing, because households pay so much of their incomes on housing that they cannot meet their other day-to-day expenses. For others, lack of access to affordable and appropriate housing means living in temporary dwellings that were never designed for permanent living. Others live in crowded dwellings or in dwellings that have few of the amenities normally available to the rest of the population. Some people have to confront all of these problems simultaneously.

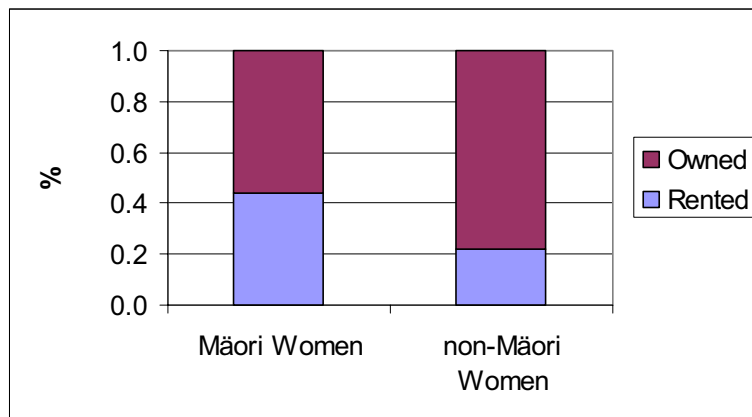
Establishing the nature and extent of unmet housing need among Māori, and Māori women and girls in particular, has been hampered by a lack of housing monitoring, research and analysis, particularly since 1991. Nevertheless, the Census of Population and Dwellings combined with the Household Economic Survey (HES) provide data sets that allow a baseline analysis of housing indicators for tenure, affordability, temporary housing, housing amenities and degree of crowding. The population for the data on tenure is all those aged 15 and over. The population for the data on other indicators is the total population.

1. Tenure

1.1 Rental accommodation or owner-occupied dwellings

Position of Māori women: In 1996, 43.8% of Māori women aged 15 years and over living in private dwellings were in rented accommodation, and 56.2% were in owned dwellings (with or without a mortgage).

Figure E1. Tenure of private dwellings, women aged 15+, 1996



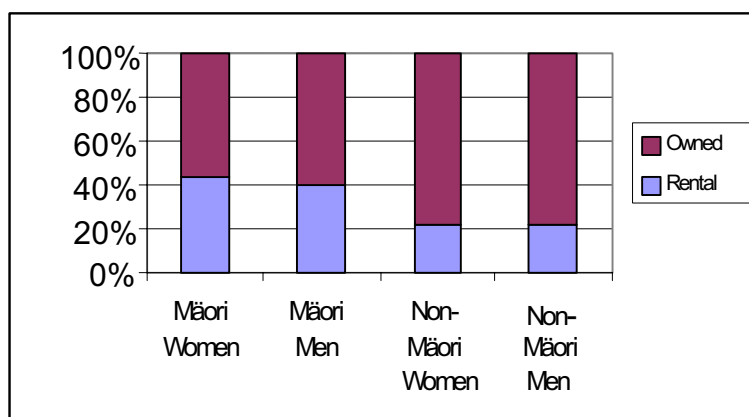
Source: 1996 Census of Population and Dwellings.

As Figure E1 shows, there are distinct differences in tenure between Māori women and non-Māori women. Only 56.2% of Māori women aged 15 years and over lived in owned dwellings in 1996, compared with 78.3% of non-Māori women. Māori women's dependence on the rental market increased between 1991 and 1996, a period in which public rental costs increased and the stock of public rentals diminished.¹

Home ownership is seen as a form of investment saving, an expression of independence and a mechanism for achieving security and self-determination. By international standards, New Zealanders have high levels of home ownership. However, between 1991 and 1996, the proportion of Māori households² living in owned dwellings fell from 59.0% to 51.6% - an absolute drop in the number of Maori living in owned dwellings of 5,799. Among Māori adults aged 15 years or more, only 58.1% lived in owned dwellings in 1996, compared with 78.3% of non-Māori adults. Proportionately more Māori men (60.2%) than Māori women (56.2%) lived in owned dwellings in 1996 (Figure E2).

Māori are less likely to live in owned dwellings than non-Māori partly because of the younger age structure of the Māori population. Another factor is that Māori women are more likely to live in households with household income below \$20,000 (see Income). This affects their ability to take on a mortgage.

Figure E2. Percentages in owned and rental dwellings, aged 15+, 1996



Source: 1996 Census of Population and Dwellings.

2. Affordability

Affordability measures indicate the stress placed on individuals through maintaining their housing consumption. These measures have traditionally been used as one of the indicators of housing need and as a trigger for the delivery of Government housing assistance.

The underlying principle of an affordability indicator is that expenditure on housing should leave enough residual income to cover other basic daily living costs, as well as allowing households to save for irregular but unavoidable costs such as medical and dental care.

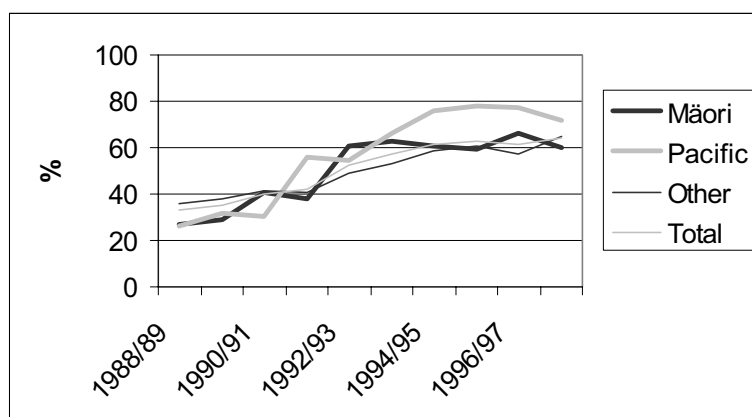
Affordability is usually measured as a ratio of housing outgoings to gross or net income. Some measures of affordability are constructed in highly complex ways that attempt to capture all aspects of housing, particularly home ownership expenses such as rates, insurance and house maintenance. Such complexity is not warranted here. Instead, the affordability indicator focuses on rent outgoings of 25% or more of net income. The affordability level of 25% or more of net income is used because it links with the current configuration of the Accommodation Supplement (AS) and Income Related Rent (IRR) around an affordability level of 25% for people paying rents.³ The data for this indicator is drawn from the HES.

2.1 *Paying more than 25% of net household income⁴ in rent*

Position of Māori women and girls: In 1997/98, 62% of all Māori females living in accommodation for which rent was paid were in households spending 25% or more of net household income on rent.

The New Zealand rental market is relatively lightly regulated compared to other developed countries. There have been significant changes in rental affordability over the last decade. In 1988/89, two-thirds (66.8%) of those paying rent paid *less* than 25% of net income. In 1997/8, a similar proportion (64.1%) of households paying rent paid *more* than 25% of net income. This reduction in rental affordability is apparent even in households paying 50% or more of income on rent. In 1990/91, only 10.2% of households paying rent paid 50% or more of their incomes in rent. By 1997/98, 20.8% of households paying rent were doing so.

Figure E3. Proportions of those living in rented households paying 25% or more of net income in rent, 1988-1998



Source: Household Economic Survey

As Figure E3 shows, in terms of ethnicity, Pacific people living in rented dwellings are most likely to live in households paying 25% or more of net household income on rent, with 72% doing so in 1997/98, followed by 64.5% of Others (i.e. non-Māori and non-Pacific). The Māori proportion in that situation is lower, but still high: in 1997/98, 60.1% of Māori people living in rented dwellings were in households paying 25% or more of net household income in rent. For Māori females, the proportion was 62%, and for Māori males the proportion was 58% living in households paying 25% or more of net household income⁵. In the period from 1988/89 to 1997/98 all groups experienced an increase in the proportion living in rental dwellings and paying 25% or more of net income in rent. However, for Māori and Pacific the increases were comparatively higher than for the “Other” group. For Māori the proportion increased by 33.0% over that time.

The impact of reduced affordability falls most heavily on the Māori and Pacific populations because a higher proportion are in rented accommodation and incomes are lower than those of the Other ethnic groups (see the Income Chapter for further detail on Māori women’s incomes in comparison to those of non-Māori).

The increasing cost of rentals at the lower end of the market is one of the major factors behind the increase in the proportion of households spending 25% or more of net income on rent. Between 1986 and 1996, the largest average rental expenditure increases were recorded in areas with a high state rental stock. For example, the largest percentage increase in median weekly rent levels in a main urban area was recorded in Porirua, where Housing New Zealand owned over two thirds of the rental stock in 1996.⁶ An increasing proportion of households spending 25% or more of net income on rent reflects the move to market rents and the use of the Accommodation Supplement as the major form of housing assistance. The impact of those state rental increases fell heavily on Māori, who were over-represented among state housing tenants before the reforms. In response to rental increases, Māori have progressively moved out of the state rental sector. The proportion of Māori living in rented dwellings with a state sector landlord fell by 16.3 percentage points between 1991 and 1996, compared to an average fall of 10 percentage points. Despite this fall, the proportion of Māori with a state sector landlord remained above average at 42.4% in 1996.⁷

The implications and impacts of a particular affordability ratio vary considerably according to household income. For a high-income household, 25% of income may purchase luxurious housing, while for a low-income household it may not purchase even adequate housing. Similarly, a high-income household may spend much more than 25% of income on housing without going short of income for other expenses. A low-income household spending a similar proportion of income on housing may find their residual income entirely inadequate.

Internationally, it has been found that low-income households attempt to reduce their housing consumption when housing costs become unaffordable, by:

- moving into lower quality housing, including dwellings not designed for permanent use
- sharing housing by cohabiting with other households.

An additional response for Māori seeking to reduce their housing costs has been to move to locations such as rural areas where the housing cost structure is lower. The last fifteen years has seen significant movement of the Māori population to rural areas.⁸

3. Temporary housing

3.1 Proportions living in temporary dwellings⁹

Position of Māori women and girls: In 1996, 3.9 Māori females per 1,000 were living in dwellings not intended for permanent residence.

Table E1. Proportions living in temporary dwellings, per 1,000 population, 1996

Māori		Non-Māori	
Females	Males	Females	Males
3.9	5.5	2.1	3.6

Source: 1996 Census of Population and Dwellings

Only 4 in every 1,000, of New Zealand's population live in dwellings not intended for permanent residence. Māori females made up 9.4% of all those living in temporary dwellings in 1996. Males rather than females tend to be over-represented among those living in this type of dwelling. Of the population in temporary dwellings, 73.8% were male in 1996. Māori males made up 12.7% of all those living in such dwellings, although they are only 7.1% of New Zealand's total population.

However, Māori females are more likely than non-Māori females to live in temporary dwellings. While non-Māori females made up 37.8% of the non-Māori population in temporary dwellings in 1996, Māori females made up 42.6% of the Māori population in temporary dwellings. Just under half (46.7%) of these Māori females were living in mobile or temporary dwellings not in motor camps, over a third (38.7%) were in motor camps, and the remainder were living in baches, cribs, or other holiday homes.

Some commentators regard the use of temporary forms of housing for long-term residence as a proxy for homelessness. New Zealand and international research suggest that long-term residence in temporary dwellings is associated with health and safety risks such as respiratory problems, infectious diseases, infestations of pests and physical hazards.¹⁰

3.2 Average length of stay¹¹ in refuges

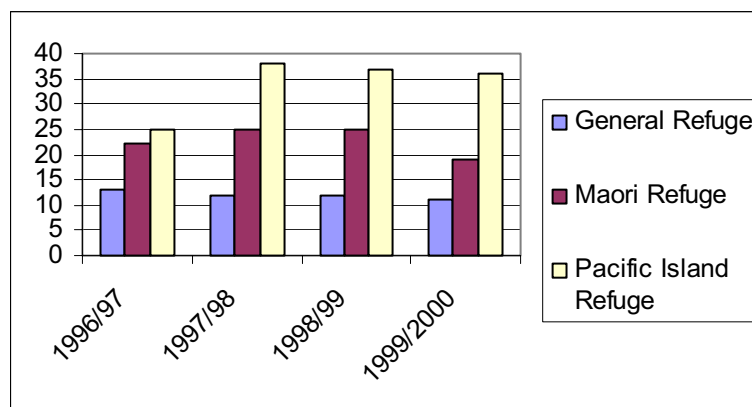
Position of Māori women: In 1999/2000, the average duration of stay by women in Māori women's refuges was 19 days.

Differences in length of stays between Māori and other women in refuge housing can indicate barriers to Māori women's access to stable and secure alternative housing that is safe from violence or intimidation. Māori women's difficulties in finding safe and stable housing are indicated by their comparatively long stays in safe houses provided by Māori women's refuges affiliated to the National Collective of Independent Women's Refuges (NCIWR).

NCIWR is able to produce data on average duration of stay in different refuge types by dividing number of clients by bed nights to produce a measure of average duration of stay. These averages can of course, be influenced by a few families staying for long periods. However, NCIWR does not currently collect information on individual clients and therefore does not have median data available.

In 1999/2000, Māori women made up 47% of all the women receiving NCIWR services. The average stay in Māori women's refuges in 1999/2000 was 19 days. This was almost twice as long as the average stay in general refuges of 11 days, but only half as long as the average stay of Pacific women in Pacific refuges. (Figure E4).¹² NCIWR believe that Māori women stay for longer periods because of problems affording accommodation and difficulties finding appropriately sized housing.

Figure E4. Average stay duration in women's refuges by refuge type,¹³ 1996/7-1999/00



Source: National Collective of Independent Women's Refuges administrative data

4. Crowding

Crowding has been selected as an indicator because both internationally and in New Zealand, crowding is associated with negative outcomes, particularly in relation to physical and mental health. There is an association between crowding and infectious diseases.¹⁴ Crowding also places stress on the physical performance of housing stock. Currently, New Zealand has no official measure of household crowding.

4.1 Living in dwellings defined as crowded

This indicator consists of the proportion of the Māori female population living in households with a high Crowding Index (CI).¹⁵ Unlike some other methods used to measure crowding, the CI has the ability to capture the situation of small families and households in crowded conditions, such as sole parents living with one or two children in a single bedroom.

The CI is calculated as follows:

$$CI = [1/2(\text{number of children under 10 years}) + (\text{number of couples}) + (\text{all other people aged 10 years and over}) / \text{number of bedrooms}]$$

In the 1996 Census, a bedroom was defined as any room furnished as a bedroom, or sleepout or caravan used as a bedroom. For this indicator, the point at which a dwelling is defined as crowded has been set at CI = 1.25 or more. This is almost twice the CI prevailing for New Zealand households. In 1996, the CI for New Zealand households was CI = 0.64.

Position of Māori women and girls: In 1996, almost a quarter (23.6%) of all Māori females were living in households with a CI = 1.25 or more. In 1996 Māori females made up 16.1% of all those living in households with a CI = 1.25 or more.

Table E2. Number and proportions of population living in crowded households (CI = 1.25 or more), 1996

Living in crowded households	Māori		Pacific		Other	
	Females	Males	Females	Males	Females	Males
Number	62,613	57,396	37,362	35,076	82,857	81,366
% of population	23.6	22.2	42.4	41.2	5.6	5.7

Source: 1996 Census of Population and Dwellings.

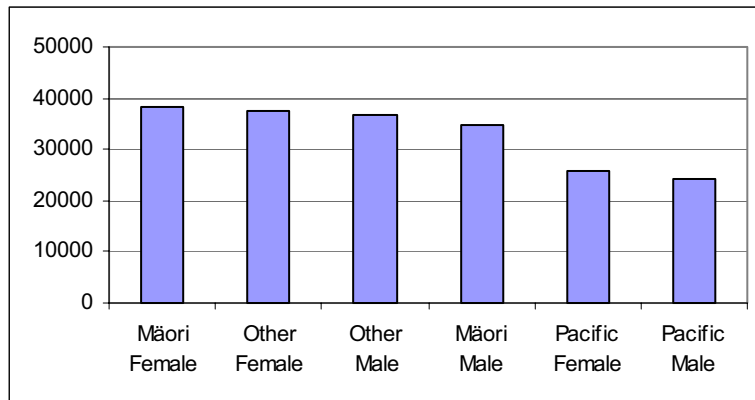
The percentage of Māori females living in CI = 1.25 or more households is lower than the percentage of Pacific people, both males and females, living in such households, but it is similar to the percentage of Māori males and higher than the percentage of Other ethnic groups (including European/Pakeha) (Table E3). Nevertheless, with 62,613 living in households with a CI of 1.25 or more, Māori women and girls constitute a large group of people living in crowded conditions.

The exposure of Māori women and girls to crowded households is even more apparent when looking at densely crowded households – those with a CI of 1.5 or more (Figure E5). Māori females are numerically the largest single group living in these densely crowded households, at 38,196.

Household crowding is a rural as well as an urban phenomenon, and extends well beyond the Auckland region (Figure E6). Larger households are clearly vulnerable to overcrowding partly because there is limited housing stock of the size they need, and more Māori and Pacific households come into this category. However, overcrowding can also affect smaller households, such as sole parent families with only one child where there is only one bedroom or no separate bedroom in a dwelling.¹⁶

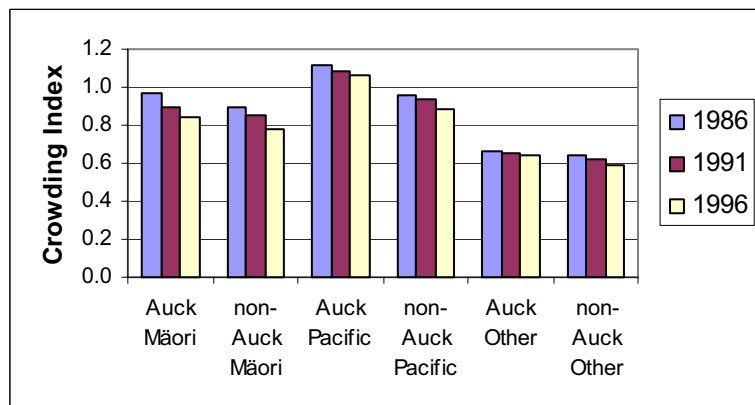
Both in Auckland and elsewhere, there was a decline in crowding for all ethnic groups between 1986 and 1996 (Figure E6). This was probably due to a decline in the average household size (occupancy rate) between 1986 and 1996, from 2.89 to 2.77 people per dwelling.¹⁷

Figure E5. Numbers living in densely crowded households (CI = 1.5 or more), 1996



Source: 1996 Census of Population and Dwellings

Figure E6. Auckland and non-Auckland Crowding Index for Māori, Pacific, and Other households, 1986, 1991, 1996



Source: 1986–1996 Census of Population and Dwellings.

5 Housing amenity

5.1 No heating and heating water by burning wood only

Housing amenity refers to the facilities contained in a dwelling such as cooking, ablutions, water supply, heating and lighting facilities. Housing amenity is distinguished from dwelling condition. Dwelling condition refers to the structural integrity and/or state of repair or dilapidation of a dwelling. Two indicators of housing amenity are presented here: no heating used in dwelling and heating water by wood burning only.

Position of Māori women and girls: In 1996, 30.9 in every 1,000 Māori females were living in dwellings where no heating was used, and 11.5 in every 1,000 Māori females were living in dwellings where burning wood was the only means of heating water.

Table E3. Numbers and proportions living in dwellings where no heating is used, per 1,000 population, 1996

	Māori		Non-Māori	
	Females	Males	Females	Male
Number	8,199	7,704	22,437	23,979
Rate	30.9	29.9	14.2	15.8

Source: 1996 Census of Population and Dwellings

Table E4. Numbers and proportions living in dwellings where water is heated by wood burning only, per 1,000 population, 1996

	Māori		Non-Māori	
	Females	Males	Females	Males
Number	3,060	3,165	9,939	10,986
Rate	11.5	12.3	6.3	7.2

Source: 1996 Census of Population and Dwellings

Only a small proportion of New Zealand's population lives in dwellings in which no heating is used (18 in every 1,000) or in which water can only be heated by burning wood (8 in every 1,000). These two indicators of housing amenity provide an insight into the extent to which Māori women and girls are exposed to housing with extremely marginal amenities. Lack of heating and limited access to hot water have also been selected because there is an association between poor health and cold, damp housing and lack of hot water for washing.

Māori females made up 12.4% (compared with Māori males at 11.7%) of all those living in dwellings that use no heating although 1996 Census figures indicate they made up 7.3% of the usually resident population. Māori females made up 10.7% (compared with Māori males at 11.1%) of all those living in dwellings reliant on wood burning to heat their water. The over-representation of Māori among those in these situations partly reflects the higher proportion of Māori, compared with non-Māori, in rural areas.¹⁸ Some research shows the limited amenities in rural dwellings experienced by Māori.¹⁹ The over-representation of Māori among those in dwellings with few amenities also reflects the higher proportions of Māori in temporary dwellings not intended for permanent residence, compared to non-Māori (see section 3 above).

6. Discussion

The indicators for tenure, affordability, crowding, temporary housing and housing amenity show that Māori women's housing status is frequently very different from that of non-Māori women and non-Māori men. Overall, Māori women have similar housing experiences to those of Māori men. However, they are less likely than Māori men to live in owned dwellings and are slightly more likely to live in crowded households.

While the Accommodation Supplement (AS) was meant to provide assistance with affordability, it appears to have reached predominantly those household types in which Māori

women are least likely to be found. In June 1998, 48% of AS recipients were living in one person households, yet the 1996 census found that only 4% of Māori live in such households. Only 23% of AS recipients at June 1998 were sole parents, despite the very low median incomes of this group. Māori are more likely than any other ethnic group to live in one-parent households.²⁰

Understanding the reasons for the differences in housing status between Māori and non-Māori that the indicators portray is limited, because of the limited research and analysis in the nature and extent of housing need over the last decade. But some general observations can be made:

- Qualitative analyses of Māori women's experiences in relation to housing issues suggest that their housing problems are long-standing, serious and persistent.²¹
- Māori women are strongly represented among the household types that have traditionally found accessing appropriate and affordable housing difficult – low income households, sole parent families, large households, multi-family households, and extended family households.
- Māori women appear to be reliant on rental accommodation. Scant research on discrimination in the rental market indicates that Māori women in rental housing feel vulnerable to discrimination as well as sexual harassment and intimidation by landlords.²²
- For Māori women who are actively involved in their whānau, the needs of the whānau can take priority over the financial needs of the household in certain situations. Available money can be used for koha at hui and tangihanga, financial assistance to relatives, and so on.²³ These financial responsibilities may affect the money available to spend on housing, and the consequent housing choices able to be made.
- The values of aroha and manaakitanga (hospitality) mean that whānau members may be accommodated for varying periods of time without question. While this practice can help to address some housing needs, it can create crowding, and generate a need for housing design to take account of larger families.
- Recent trends see some movement of Māori back to rural areas.²⁴ Rural housing can be of variable quality. Māori women may experience a number of problems in accessing adequate housing in rural areas including under-supply of housing stock, and an under-developed rental housing market with little or no public rental accommodation.²⁵ There are also higher costs associated with building in rural areas. Māori women and men wishing to build on multiple-owned Māori land face particular difficulties associated with securing finance on multiple-owned land. In addition those without access to freehold or collectively owned land via Papakainga Schemes may also face difficulties.
- Māori women have a higher likelihood of experiencing domestic violence than non-Māori women (see Justice Chapter). Domestic violence can impact on Māori women's housing situation, by making accommodation unsafe for a woman and her children, by precipitating a move to housing that is safe from violence, but may be unsatisfactory in other ways (such as being expensive or crowded), and by rendering a woman and her children homeless.

Data sources

The Household Expenditure Survey (HES) conducted by Statistics New Zealand provided the affordability data. This is a sample survey of approximately 3,000 households, which was conducted annually until 1997/98, and is now conducted every three years. Information on tenure, housing amenity, temporary housing and crowding data came from the 1996

Population Census. Refuge data came from the National Collective of Independent Women's Refuges.

Statistics New Zealand advise that while the HES collects information on both income and expenditure, there is no direct link between the two concepts within the survey, as respondents are asked to provide income information for the year, whereas expenditure information is provided for a two week period.

HES data is subject to both sample and non-sample error. Caution should be exercised when considering point-in-time estimates for the affordability indicators in particular, as the data is volatile. Census data is subject to non-sampling error and undercount.

It should be noted that there is no official classification for the ethnicity of households. In this section, household ethnicity is based on the ethnicity of the occupier and/or their spouse/partner.

Note that NCIWR only have data on average duration by refuge type. Currently they do not collect unit record data (i.e. data on individuals).

Notes

- ¹ Statistics New Zealand (1998a): 16, 70-71.
- ² A Māori household is defined in this chapter as a household where either the reference person or the reference person's spouse/partner is of Māori ethnicity. This is customised 1996 Census data from Statistics NZ.
- ³ There is little agreement internationally as to where the affordability ratio should lie, even for low income households. In Europe, North America and Australasia, it varies from less than 7% of income to around 30%. See McCrone and Stephens (1995) for commentary on affordability measures internationally, Landt and Bray (1997) for commentary on Australian measures, and Statistics NZ (1998a) for the use of several affordability measures.
- ⁴ Note that in relation to household income, the extent of income sharing among household members is not known (see Income chapter).
- ⁵ Sample Error = 8% (95% Confidence Interval). Large sample errors mean that apparent differences between the exposure of the Māori male and Māori female populations in relation to unaffordable rents may not exist.
- ⁶ Statistics NZ (1998a), p.78.
- ⁷ Statistics NZ (1998a), pp. 71-3.
- ⁸ Scott and Kearns (2000).
- ⁹ The temporary dwellings category consists of: (a) bach, crib or other holiday home; (b) caravan, cabin, or tent in a motor camp; (c) mobile or temporary dwelling (not in a motor camp). The data includes only that population that usually live at the address, to ensure the exclusion of holidaymakers.
- ¹⁰ National Health Committee (1998) pp.30-2; Public Health Commission (1993) pp.44-7.
- ¹¹ Calculated by dividing total 'bed nights' by number of clients.

Notes (contd.)

- ¹² General refuges provide safe houses for all women including Māori. Māori women's refuges provide for Māori women only.
- ¹³ NCIWR collect data on average duration of stay by refuge type. They do not currently collect this information by ethnicity of clients.
- ¹⁴ National Health Committee (1998); Gray (2001).
- ¹⁵ Morrison (1994).
- ¹⁶ Saville-Smith & Amey (1999).
- ¹⁷ Statistics NZ (1998a), p.64.
- ¹⁸ Statistics New Zealand (1998b), p.28.
- ¹⁹ Scott and Kearns (2000), p.35; Saville-Smith (1999), pp.5-6.
- ²⁰ Statistics NZ (1998a) pp.36-8.
- ²¹ Scott and Kearns (2000); Māori Women's Housing Research Project (1991); Watson (1988).
- ²² Watson (1988).
- ²³ Taiapa (1994).
- ²⁴ Scott and Kearns (2000); Statistics New Zealand (1998b) p.30.
- ²⁵ Māori Women's Research Housing Project (1991).

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F. CRIMINAL JUSTICE

Indicators

PARAMETER	MEASURE
Victimisation	<ul style="list-style-type: none">• Rate of application for protection orders where the applicants are Māori women
Youth Offending	<ul style="list-style-type: none">• Rate of police apprehension for offending by young Māori women aged 10-16 years• Rate of prosecution for young Māori women aged 10-16 years
Prosecutions	<ul style="list-style-type: none">• Prosecution rate for Māori women
Convictions	<ul style="list-style-type: none">• Conviction rate for Māori women
Sentencing	<ul style="list-style-type: none">• Custodial sentences as a proportion of Māori women convicted

Introduction

In general, women's offending has not been examined in New Zealand to the same degree as that of men. The considerably lower volume and lower profile of women's offending patterns go some way toward explaining the relative lack of attention in the literature. One result of this lack of focus is that the justice system has not yet developed a specialised response to female offending.¹

Official statistics on women as offenders are available, but there is less background information about the impact of the criminal justice system on women's lives as both victims and offenders, compared with information relating to men. There is also very little other information, apart from official statistics, on Māori women's offending and victimisation². Where published data on women's victimisation and offending does exist, often this is not disaggregated by ethnicity, with the result that there are some information gaps relating to Māori women in this section of the report.

This chapter discusses what the data reveals for each of the six indicators. Where possible, the information revealed by the indicators has been supplemented by research from other studies.

The indicator measures of adult prosecution rates, adult conviction rates and adult sentencing rates have been age standardised. According to Ministry of Justice data, in 1999, 47% of those convicted were between 15 and 24 years of age.

Most of the indicators presented in this chapter relate to cases rather than individuals. In order to calculate rates, it has been assumed that cases are a proxy for individuals. However, it is not possible to check the validity of this assumption. It may be for example, that a few individuals are responsible for the majority of crime. For these reasons, the indicator information presented in this chapter should be regarded as indicative only.

1. Victimisation

The Victims of Offences Act 1987 defines victims as people who have suffered physical or emotional harm as a result of a crime or who have lost or had damage done to their property. Women overall are more likely to suffer victimisation than to commit offences.

The Ministry of Justice collates comprehensive data collected by justice sector agencies relating to the prosecution, conviction and sentencing of offenders. However, New Zealand Police do not collect sex or ethnicity data relating to the victims of reported offences. This imbalance in the available data therefore severely limits our ability to understand and describe disparities in the justice system. For a range of reasons, not all incidences of victimisation are reported. The nature and extent of unreported cases is also unknown. There is very little information available around the issues relating to Māori women as victims of criminal offences.

The 1996 New Zealand National Survey of Crime Victims (the Victimisation Survey) measured the extent to which New Zealanders were affected by crime, regardless of whether the offence had been reported to Police. The survey provided information by ethnicity and by sex, but not both collated together. Because this survey had a low response rate, its findings need to be interpreted with caution.

The Ministry of Justice will carry out a second Victimisation Survey and report on this by the end of 2002. The Ministry anticipates that this follow-up survey will provide some comparative rates of victimisation in relation to Māori and non-Māori women and men.

1.1 Application for protection orders

The only indicator of victimisation for which official data is currently available by both ethnicity and sex is confined to the area of family violence. This data relates to applications for protection orders under the Domestic Violence Act 1995. The data in this section relate to cases rather than to individuals. Applicants may apply for more than one order in any year. Furthermore, willingness to apply may differ by ethnic group. For these reasons, the indicator information presented in this section should be regarded as indicative only. A protection order issued under the Domestic Violence Act 1995 is intended to provide protection for victims of family violence. Protection orders are civil orders, and are not part of the criminal justice system unless they are breached.

Position of Māori women: In 1999/2000 the rate of application for protection orders by Māori women was 7.1 per 1,000 population aged 15+. Māori women made up 25.9% of applicants for protection orders during this period.

Table F1. Numbers and rates per 1,000 of applications for protection orders under the Domestic Violence Act 1995, for the years 1999/00

	Māori		Non-Māori	
	Women	Men	Women	Men
Number of applications	1,364	83	3,484	331
Rate	7.1	0.5	2.6	0.3

Source: Department for Courts and Statistics New Zealand.

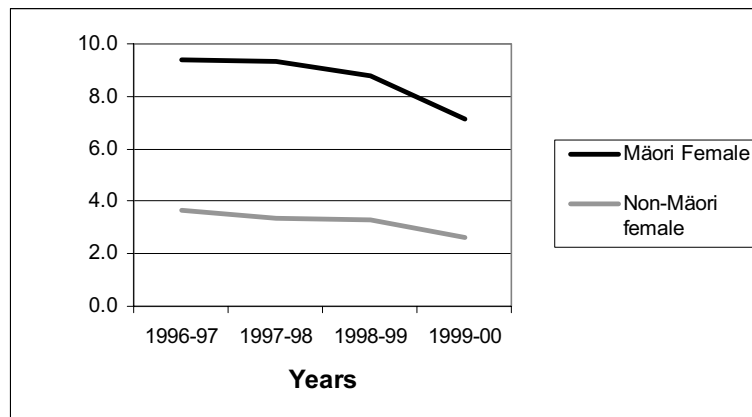
As Table F1 shows, applications for protection orders were nearly three times more likely to come from Maori women than non-Maori women in 1999/2000. Department for Courts data on applicants for and respondents to protection orders (the perpetrators of violence), in the year to June 2000, indicates that:

- The rate of application for protection orders was 7.1 per 1,000 for Maori women compared with 2.6 per 1,000 for non-Maori women.
- Māori women were applicants for 25.9% of the total protection orders issued, compared with 66.2% for non-Māori women. Men were applicants for 7.9% of the orders.
- 16.8% of all respondents were Māori men, and non-Māori men were 47.9%, 12.0% of all respondents were Māori women and 23.3% were non-Māori women, (Note that

respondents may have more than one protection order taken out against them in any one year.)

The rate of application for protection orders has changed slightly since 1996, as Figure F1 shows. In 1996 the Domestic Violence Act 1995 was introduced, and this was accompanied by a publicity campaign to encourage use. Bedding in of the Act is the likely explanation for the dip in 1999/2000.

Figure F1. Applications by women for protection orders under the Domestic Violence Act 1995, per 1,000 population, 1996-2000



Source: Department for Courts Family Court Database and Domestic Violence Database.

Use of the Domestic Violence Act 1995 was evaluated recently³. The evaluation found that even though a higher proportion of Māori than non-Māori women are applying for and being issued protection orders under the Act, there may be some under-use by Māori. Suggested reasons for this included:

- shame or reluctance
- lack of faith in the effectiveness of the process
- lack of confidence in using the process
- cultural pressure not to use the system
- family pressure to withdraw proceedings
- cultural acceptance of violence and male domination
- a tendency to wait until violence becomes more extreme before applying.⁴

Abuse by partners

The Victimization Survey found that within each ethnic group, the prevalence rates for partner abuse are higher for women than for men and are very much higher for Maori women than for NZ European/European and Pacific Island women.⁵

The Women's Safety Survey,⁶ which was derived from a pool of women who had already participated in the Victimization Survey, also provided some information about the victimisation of Māori women in terms of domestic violence. The sample of women was restricted to those who were currently living with a male partner or who had been living with a male partner within the last two years, but who were no longer doing so. These women were invited to become part of a pool from which the sample for the survey was then selected. To ensure sufficient participation of Māori women, all Māori women eligible for inclusion in the survey were invited to participate. Non-Māori women were selected at random from the sample pool. In all, 500 women were interviewed: 351 non-Māori and 149 Māori women.

Results from the Women's Safety Survey should be treated as indicative only due to a low response rate in the parent Victimization Survey, small numbers in the Safety Survey, the way in which the sample was drawn, and possible ethnic differences in willingness to disclose partner abuse. The survey found that Māori women were over-represented among victims of abuse by partners. Over a quarter (28%) of the 126 Māori women with current partners in the survey reported experiencing at least one act of physical or sexual abuse in the past 12 months, compared with 10% of the non-Māori women.

The Māori women in the survey were also more likely than the non-Māori women to report that they had experienced:

- incidents of controlling behaviour by their partners.
- a violent act in their relationship
- repeat victimisation, in the form of abuse, from a partner
- 10 or more types of violence
- the need to seek medical or hospital treatment as a result of partner violence.

The Māori women were also more likely than the non-Māori women to hold fears that their partner might attempt to kill them. More of the Māori than the non-Māori women had previously left and returned to a violent partner.

In addition to the well-documented effects of violence on women's well-being, family violence can also affect women's ability to find and retain paid employment.⁷ The Women's Safety Survey reported that over a third of the 25 Māori women with recent partners in the survey were prevented by partners from being employed outside the home, as were a quarter of the non-Māori women. Of the 126 Māori women with current partners, 11 reported that their partners prevented them from being employed outside the home.

A study by the Public Health Commission⁸ found that Māori women aged 15-24 years were seven times more likely than non-Māori women to be hospitalised as the result of an assault. Police statistics on total recorded offender apprehensions for family violence for 1998 show that Māori men comprised 46% of apprehensions for assault by males on females; 37% of apprehensions under the Common Assault (Domestic) Crimes Act; 37% of those under the Common Assault (Domestic) Summary Offences Act; and 34% of those under the Domestic Violence Act 1995.⁹

Use of refuge services

Use of women's refuge services provides another indication of victimisation. Compared with non-Māori women, Māori women and their children are heavy users of women's refuge services. Statistics from the National Collective of Independent Women's Refuges (NCIWR)¹⁰ demonstrate that use by Māori women and their children of NCIWR services has remained relatively high over the last few years (Table F2).

Table F2. Use by Māori women and their children of NCIWR services, 1996-2000

Year	Māori women as % of total clients	Children of Maori women as % of total children of clients
1996/1997	45%	52%
1997/1998	46%	50%
1998/1999	44%	51%
1999/2000	47%	53%

Source: NCIWR data

Of the 51 safe houses affiliated to the collective and providing emergency shelter for women and their children, twelve cater specifically for Māori. In addition, NCIWR estimates that there are 20 other providers of refuge services not affiliated to the national collective. It is not known how many of these are general and how many are Māori refuges.

During the 1999/2000 year, the average length of stay for Māori women in one of the Māori safe houses was 19 days. In recent years this average length has varied between 19 and 25 days. The average length of stay in general safe houses (serving both Māori and non-Māori clients) in 1999/2000 was 11 days. This figure has remained relatively stable in recent years.

Although research has not been carried out as to the underlying reasons for the disparity between the average lengths of stay in Māori refuges and general refuges, NCIWR believe that Māori women tend to stay for longer periods for reasons such as poverty and lack of other options. Given that the Women's Safety Survey has indicated that Māori women tend to suffer more severe violence, there may be an increased need for Māori women to seek extended periods of respite for themselves and their children.

2. Youth offending

Police apprehension and prosecution data relate to numbers of offences rather than to number of individuals apprehended or prosecuted. It may be that a small number of people are responsible for a large number of offences. For this reason, the indicator information presented in this section should be regarded as indicative only.

2.1 Police apprehensions of those aged 10-16¹¹ years

Position of Māori women: In 1998 the rate of apprehension for young Māori women was 10.9 per 100 population aged 10-16 years.

Table F3. Numbers and rates of police apprehensions of those aged 10-16 years, 1998

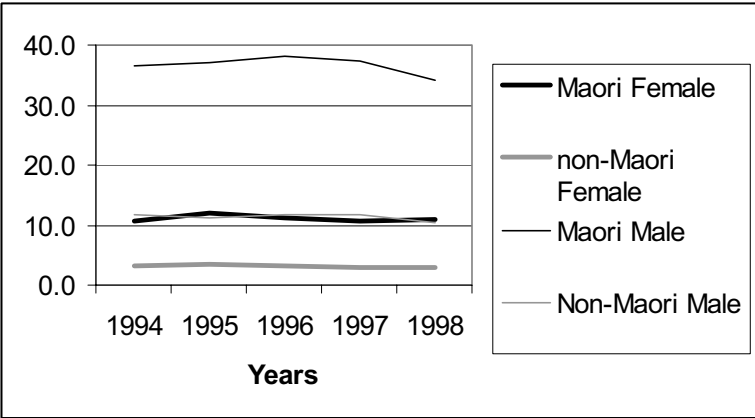
	Māori		Non-Māori	
	Women	Men	Women	Men
Number	4,545	14,827	4,235	16,189
Rate per 100	10.9	34.1	2.9	10.5

Source: NZ Police and Statistics NZ

As Table F3 shows, the rate of apprehension for young Māori women is well over three times the rate for non-Māori women, and is similar to the rate for young non-Māori men. In 1998, young Māori women accounted for 51.8% of female apprehensions. The rate of apprehension for young Māori men is around three times that for young Māori women.

Over the period 1994–1998, the rate of apprehension for all groups aged 16 or under remained reasonably stable (Figure F2).

Figure F2. Police apprehensions of those aged 10-16 years, per 100 population, 1994-1998



Source: NZ Police and Statistics New Zealand

2.2 Prosecutions of those aged 10-16 years

Prosecutions are criminal charges, processed by the courts. Prosecutions exclude infringements and matters dealt with outside formal court proceedings, for example, cautions or warnings by the Police, or Family Group Conferences.

Position of Māori women: In 1999, the rate of prosecution for young Māori women was 25.4 per 1,000 population aged 10-16 years.

Table F4. Numbers and rates of prosecutions for young people aged 10-16 (except traffic offences), 1995 and 1999

Period	Māori		Non-Māori	
	Women	Men	Women	Men
1995				
Number	819	5,056	517	3,308
Rate per 1,000 population	20.7	123.6	3.7	22.1
1999				
Number	1,092	5,694	620	4,635
Rate per 1,000 population	25.4	127.0	4.2	29.7

Source: Ministry of Justice and Statistics New Zealand

The large disparities in apprehension rates between young Māori and their non-Māori counterparts continue for prosecution rates (Table F4). In 1999, the rate for young Māori women (25.4 per 1,000) was six times the rate for young non-Māori women (4.2). The rate for young Māori men (127.0) was over four times the rate for young non-Māori men (29.7). Comparing women with men in each group, the Māori male rate was five times the Māori female rate, and the non-Māori male rate was seven times the non-Māori female rate.

In 1999, 63.8% of all females prosecuted in the 10-16 age group were Māori but Māori females make up 22.7% of the 10-16 age group. In this age group, 55.1% of all males prosecuted were Māori although Māori males make up 22.3% of this age group.

As Table F4 shows, between 1995 and 1999, young non-Māori men had the largest increase in prosecution rates, followed by young Māori women then young Māori men. There was little change for young non-Māori women.

3. Adult offending

Prosecution, conviction and sentencing indicators provide a proxy measure for the extent of crime and the involvement of Māori women in the criminal justice system. Prosecutions are criminal charges processed by the courts. A conviction is an outcome of a prosecution where the person was convicted of the offence. Finally, those who are convicted receive a sentence. A wide range of sentences are possible including custodial, community based sentences, and monetary penalties. Data for these indicators comes from the Ministry of Justice and the New Zealand Police. As with the previous section it should be noted that prosecution, conviction and sentencing information relates to cases not individuals. Therefore, the indicator information presented here should be treated as indicative only.

In the criminal justice system, the differentiation between young offenders and adult offenders is not entirely clear-cut. An offender aged 15 and over can be convicted in the Youth Court, then sent to the District Court for sentencing. This means that young offenders are included in the adult conviction and sentencing data. For this reason, the Ministry of Justice calculates rates for the population aged 15+. (For more information, see Lash (1998), *Census of Prison Inmates: 1997.*)

3.1 Prosecutions

Position of Māori women: In 1999, the rate of prosecution for Māori women was 6.2 per 100 population aged 15 and over, and 8.7% of all prosecutions were of Māori women.

Table F5. Numbers and rates of prosecutions (except for traffic offences), aged 15+, 1995 and 1999

Period	Māori		Non-Māori	
	Women	Men	Women	Men
1995				
Number	14,350	57,951	15,577	85,121
Rate per 100 population	6.5	27.2	1.3	7.4
1999				
Number	15,202	60,211	14,411	85,988
Rate per 100 population	6.2	25.7	1.1	7.2

Source: Ministry of Justice and Statistics NZ, non-age standardised numbers and age standardised rates.

In 1999, the highest rate of prosecution was for Māori men (25.7%). The rate of prosecution for Māori women, on the other hand, was similar to that for non-Māori men (6.2% and 7.2% respectively). The rate of prosecution for non-Māori women was lowest at 1.1%. For all four groups, the rate of prosecution has changed little between 1995 and 1999.

Both Māori women and Māori men are over-represented in prosecution statistics. In 1999, 51.4% of all women prosecuted were Māori although they comprised 12.7% of the female adult population, and 41.4% of all men prosecuted were Māori although they comprised 12.6% of the male adult population.

3.2 Convictions

Position of Māori women: In 1999, the rate of conviction for Māori women was 18.1 per 1,000 population aged 15 and over, and 8.4% of all convictions were of Māori women.

Table F6. Numbers and rates for convictions (except for traffic offences), aged 15+, 1995 and 1999

Period	Māori		Non-Māori	
	Women	Men	Women	Men
1995				
Number	3,746	17,857	3,419	25,488
Rate per 1,000 population	17.0	84.9	2.8	22.2
1999				
Number	4,371	18,323	3,670	25,460
Rate per 1,000 population	18.1	79.3	2.9	21.5

Source: Ministry of Justice and Statistics NZ, non-age standardised numbers and age standardised rates

In 1999, the highest rate of conviction was for Māori men – 79.3 per 1,000 population. The rate for Māori women (18.1) was similar to that for non-Māori men (21.5). Non-Māori women had the lowest rate, at 2.9 per 1,000. In the four years between 1995 and 1999 the rates have changed little. In 1999 54.4% of all women convicted were Māori (Māori women made up 12.7% of the female adult population in 1999), and 41.8% of all men convicted were Māori (Māori men made up 12.6% of the adult male population in 1999). Data suggest that property offences were the most common reason for Māori women being convicted, accounting for almost half (48.1%) of Māori women's offending. For Māori men, property offences accounted for 33.2% of all offending, with violent offending accounting for a further 22.3%.

3.3 Sentencing

Position of Māori women: In 1999, 6.2% of all Māori women convicted were given a custodial sentence. Māori women accounted for 4.3% of all those sentenced to imprisonment.

Table F7. Type of sentence as a proportion of those convicted, 1999

	Māori		Non-Māori	
	Women	Men	Women	Men
Custodial	6.2	16.7	4.3	11.0
Periodic Detention	23.3	29.8	16.1	23.9
Community Programme	0.9	0.7	0.3	0.2
Community Service	17.4	5.9	17.5	6.0
Supervision	8.8	6.7	10.0	6.8
Monetary	25.8	28.6	32.6	40.0
Other	0.0	0.0	0.0	0.0
Deferment	9.6	5.3	11.3	5.9
Conviction & Discharge	8.0	6.2	7.8	6.2
Total	100.0	100.0	100.0	100.0

Source: Ministry of Justice and Statistics NZ

Although the most common form of sentence is a monetary penalty, custodial sentences are used for more serious offences. As Table F7 shows, men are more likely to receive a custodial sentence than women, and Māori women are more likely to receive a custodial sentence than non-Māori women. In 1999, 6.2% of Māori women convicted received a custodial sentence, compared with 16.7% for Māori men, 11.0% for non-Māori men, and 4.3% for non-Māori women.

Since 1995, Māori have made up over half the prison population. In 1999, Māori women comprised 62.8% of the total numbers of sentenced women imprisoned. The comparable percentage for Māori men was 52.2%.

The 1999 Census of Prison Inmates¹² revealed that 75% of sentenced female inmates had sole care of at least one child before entering prison. This Census did not indicate the numbers of affected female inmates who were Māori. Given the high proportion of Māori woman inmates out of the total number of female inmates, it is likely that a high number of these parents and caregivers were Māori women.

4. Discussion

4.1 Victimisation

Because of the lack of reliable information on victimisation, it is difficult to assess the reasons for the disparity between Māori and non-Māori women and for the interrelationship between victimisation, offending, and repeat offending.

Māori women and men have also had to contend with a much higher and more protracted rate of socio-economic disadvantage than non-Māori have experienced. The impact of historical factors such as colonisation and the consequent loss of an economic base, urbanisation and its effect on Māori

social structures also need consideration. Further information is needed on how these factors affect the victimisation experienced by Māori women.

Despite indications of high levels of victimisation in relation to partner abuse, Māori women do not access services for victims at the rate that might be expected. The main reason for this appears to be lack of awareness of services and discomfort for Māori in dealing with mainstream victim service organisations.¹³

4.2 Offending

Prosecutions and convictions

Māori women are apprehended, prosecuted and convicted at much higher rates than non-Māori women. Similarly, Maori men are apprehended, prosecuted and convicted at much higher rates than non-Maori men. This disparity then appears to flow over into prosecution and conviction rates. The reasons for higher Māori rates may include:

- Differing use of police discretion as to whether to prosecute.
- The higher visibility of Maori, especially in areas of proportionately lower Maori population.
- Differing length and content of previous offending histories. Māori offenders tend to begin offending at a younger age than non-Māori. Their offending histories may be longer and more serious.
- Differing access to legal knowledge or assistance. Māori charged with an offence (or their lawyers) may be less successful, or less likely to try, influencing the police decision to prosecute. Māori tend to have less access to private lawyers and to depend more on Legal Aid and Duty Solicitors. However, an evaluation of criminal legal aid¹⁴ found that proportionately fewer Māori applied for Legal Aid at their own instigation. They were more likely than non-Māori to need to be advised to do so by duty solicitors and judges. The evaluation also found that more Māori offenders faced higher numbers of charges in relation to their application for legal aid. This had a flow-on effect in relation to the severity of the sentence imposed.

4.3 Sentencing

Overall, a higher proportion of cases involving Māori offenders, compared with non-Māori offenders, result in a prison sentence. However, a smaller proportion of proved cases with a female defendant (3%) than a male defendant (10%) result in a prison sentence.

The proportion of monetary penalties imposed on Maori in 1999 were lower than those imposed on European offenders (50% versus 34% respectively)¹⁵. Ministry of Justice data also highlights a lower use of monetary penalties for Maori offenders generally in comparison with European offenders. This may be due to socio-economic circumstances and a belief by the judiciary in the appropriateness of a community sentence.¹⁶

According to Spier,¹⁷ over three quarters (77%) of the cases resulting in a community programme in 1999 involved Māori offenders. For the other community based sentences, the proportions involving Māori offenders were periodic detention (49%), community service (45%) and supervision (44%). Although community programme sentences are not widely used, Māori and Pacific Island offenders were twice as likely to get this sentence as Pakeha once the effects of other factors were taken into account.¹⁸

Māori generally have higher rates of re-offending. A more lengthy previous record tends to influence the severity of future sentences. Because of the high volume of male offending, less attention has been devoted to developing a range of rehabilitative interventions for female offenders generally, and for Māori female offenders in particular.

Another reason for the high levels of imprisonment imposed on Māori is that they may be less able or less likely to plead personal mitigating factors which could lessen the severity of the sentence

imposed. Mitigating factors include such things as a previous good record, and possible consequences for the offender of the proposed sentence, i.e. in relation to employment.

Lawyers also may be less successful in pursuing exercise of discretionary police diversion for some Māori women offenders. A recent study of the use of Section 16 of the Criminal Justice Act 1985¹⁹ indicated that this section is underused by Māori in the sentencing process. Section 16 allows an offender to have cultural factors relevant to the offending presented to the presiding Judge. The study found that in some cases where these factors were presented to the Court, a lesser sentence was imposed where a custodial one may otherwise have been expected. There is potential here for Māori to make greater use of this provision. The study found, however, that lawyers, judges and probation officers needed to be more proactive in raising awareness of Section 16.

The Department of Corrections is beginning to address the needs of female inmates under its Integrated Offender Management system, by development of a gender appropriate assessment tool. At this time, however, the Department has no specific plans to develop a specific strategy to address the needs of the Māori women inmates it houses, although these women constitute a large proportion of female inmates.

Lashlie and Pivac²⁰ have noted that the majority of women sentenced to imprisonment arrive having already experienced multiple social problems, often with long histories of sexual and physical abuse, with associated mental and physical health issues, and with prolonged histories of drug and alcohol problems. A 1999 evaluation of the pilot alcohol and drug treatment unit at Arohata Women's Prison²¹ cites some research into the treatment needs of male and female inmates which found there was evidence that more Māori women inmates were likely to have substance abuse and alcohol problems than were the European women in the study.

4.4 Youth offending

Children and young people (aged 16 or under) who offend are dealt with under the Children, Young Persons and Their Families Act 1989. Many young offenders will have their offending dealt with at family group conferences rather than by a court appearance.

There is a lack of information on offending by young women generally and by young Māori women in particular. This may be because the relatively low volume of young women's offending means that it has been regarded as a lesser priority for research. There is a corresponding lack of suitable interventions specifically designed to respond to young Māori women's offending.

Youth offending is significant because for many, it is the formal entry point to the criminal justice system. If justice system responses are not effective and well targeted, youth offending and reoffending may impact negatively on other areas of a young person's life, such as education and employment.

A recent Te Puni Kōkiri report²² found that trends in offending patterns are similar for young Māori males and females, with both groups over-represented in offending statistics. The report also noted that there was a substantial increase in the numbers of Māori females aged 17-19 years sentenced to imprisonment between 1996 and 1998. The reasons for this are not clear, but there has been an increase in numbers of apprehensions of young Māori women for violent offences.

International and New Zealand literature on youth offending has demonstrated the link between experience of social and economic disadvantage, and prevalence of offending and anti-social behaviour. The risk factors²³ that contribute to youth offending include:

Child factors

- prematurity, low birth weight, disability, prenatal brain damage and birth injury, low intelligence, difficult temperament, chronic illness, insecure attachment and poor problem solving
- beliefs about aggression, poor social skills, low self esteem, lack of empathy and alienation, hyperactivity, impulsivity, disruptive behaviour

Family factors

- young and single parent families, family violence and discord, large family size and absence of father
- psychiatric problems and substance abuse, criminal and antisocial models
- disorganisation and isolation, long term unemployment
- poor parental supervision, harsh and inconsistent discipline, lack of warmth, affection and involvement by parents and abuse and neglect

School factors

- school failure and poor attachment to school, lack of education/skills and truancy, peer rejection, bullying and poor behaviour management

Life factors

- family instability due to separation, death, lack of job opportunities, and substance abuse

Social/cultural factors

- socio-economic disadvantage and poor housing conditions, neighbourhood crime and population density
- cultural norms favouring criminal behaviour, lack of support services, alienation from culture and institutionalised racism
- vulnerability to peer group pressure, lack of adequate physical and mental health care

The above factors are based on general populations, rather than indigenous and ethnic minority youth. Commentators disagree as to whether the risk factors associated with offending are the same for youth from indigenous/ethnic minorities and youth from other groups. Some writers argue that indigenous and ethnic minority youth have special characteristics which need to be considered when examining what influences youth offending.²⁴ There may also be different risk factors for males and females. A Ministry of Youth Affairs report found that the only risk factors specific to young women were abuse as a child, running away from home, and becoming a single mother.²⁵

Other factors²⁶ that Māori have identified which may contribute to high rates of youth offending by Māori relate to the criminal justice system itself. These factors are also applicable to adult offending. They include:

- Police concentration on particular types of offending or groups of offenders, making that offence or group more likely to be officially recorded.
- Historically poor relationships between Police and Māori. (It is acknowledged that the New Zealand Police now have a Responsiveness to Māori Strategy in place)
- High rates of re-offending, due to the lack of any effective response to first offending, including lack of culturally appropriate interventions.
- Failure of the family group conference system to address causes of offending and resource effective interventions in some cases.
- High visibility of Māori youth, their tendency to seek each other out and congregate in public places, and their propensity for attracting official attention.
- Lack of preventive services for young Māori at risk of offending
- Poor quality legal advice, lack of access to legal information and inability to meet the cost of legal advice. (Whilst those appearing in the Youth Court have access to specially trained youth advocates, young people appearing in the District or High Courts must access other legal representation.)

- The lack of meaning for Māori of the criminal justice system and the way in which it operates
- Failure to accommodate Māori customs and values in justice system interactions
- A lack of positive involvement by Māori in the criminal justice system as lawyers, court staff, etc.

Given the comparative youthfulness of the Māori population and the prevalence of disadvantage among Māori whānau, it is likely that unless appropriate interventions are available to young offenders, the significant over-representation of Māori among youth offenders will continue. This trend is likely to continue to affect rates of offending for young Māori women.

Justice sector agencies are taking steps to address the institutional and overt racism that has been acknowledged to exist within the justice system. However, Māori women who participated in the Women's Access to Justice project were strongly of the belief that such racism was still widespread and that it impacted negatively on the likelihood of Māori women receiving equal access to justice.²⁷

Data sources

The Ministry of Justice's case monitoring database and the Police database supplied all data except for protection orders, which were provided by the Department for Courts Family Court database. This data contained significant omissions for both ethnicity and sex. In addition, the Department for Courts had difficulty in extracting the information. Due to these difficulties, the data should be treated as indicative only.

Notes

¹ Lashlie and Pivac (2000).

² In relation to the term *victim*, some Māori women have expressed a dislike of this terminology. However, the term is accepted within the criminal justice system as describing those who have been harmed by the commission of crime.

³ Barwick et al (2000).

⁴ It should be noted that these conclusions were sourced from a small number of key informants, such as lawyers and court staff, who were asked to speculate about the reasons for Māori under-utilisation of protection orders under the Domestic Violence Act 1995.

⁵ Young et al (1997), p.45.

⁶ Morris (1997).

⁷ Pouwhare (1999). For more discussion on this point, see Employment .

⁸ Public Health Commission (1994).

⁹ It is acknowledged that not all of the victims of these offences would have been Māori women; but conversely, Māori women would have been among the victims of non-Māori men. (Te Puni Kōkiri June 2000). There is no comprehensive information available on these points.

¹⁰ NCIWR is the main provider of emergency safe house accommodation, support, advice, education and counselling services for women in abusive relationships and their children.

Notes (contd.)

- ¹¹ Ministry of Justice figures show that offending in the under 10 years age group accounts for around 3-4% of youth offending. Therefore, these youth rates have been deemed to apply to 10-16 year olds.
- ¹² Rich (2000).
- ¹³ See Cram et al. (1999).
- ¹⁴ Saville-Smith et al. (1995).
- ¹⁵ Spier (2000), p.69.
- ¹⁶ Spier (2000), p.150
- ¹⁷ Spier (2000)
- ¹⁸ Triggs (1997), p.124
- ¹⁹ Chetwin et al. (2000), p.68
- ²⁰ Lashlie and Pivac (2000)
- ²¹ Whitney (1992) as cited in Page (1999)
- ²² Te Puni Kōkiri (2000a).
- ²³ Singh and White (2000).
- ²⁴ Singh and White (2000).
- ²⁵ McLaren (2000).
- ²⁶ Ministry of Justice and Te Puni Kōkiri (1998).
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CONCLUSIONS

This chapter provides an overview of the position of Māori women, relative to Māori men, non-Māori women and non-Māori men, in each of the six sectors – education, employment, income, health, housing, and justice. When looking at the position of Māori women, disparities can be seen between them and Māori men and also between Māori women and non-Māori women. Gender and ethnicity interact in complex ways. For each sector, it is important to identify both gender disparities (differences between women and men) and ethnic disparities (differences between Māori and non-Māori) in order to understand the position of Māori women and girls.

In concluding, the main point highlighted is that Māori women's lives are not split into sectors. They simultaneously manage caring responsibilities, unpaid work, paid employment, study, and wider family, whānau and community responsibilities. In addressing Māori women's needs and circumstances, it is important not only to consider disparities within sectors, but also to identify where factors in one sector may affect, or be affected by, factors in others.

It is intended that the information from the indicators presented in this report will inform future sector-specific and cross-sectoral work aimed at improving outcomes for Māori women. Accordingly, the report highlights areas where government agencies can undertake work to develop policy options to improve outcomes for Māori women.

Disparities across Sectors

Improving the status of Māori women cannot be addressed by focussing on each of the six sectors in isolation. If there is to be progress towards achieving Government's outcomes for women, particularly for Māori women, then an approach that analyses impacts and links policy initiatives across sectors is required. Piecemeal responses restricted to single sectors are unlikely to address disparities in an enduring way, or to reflect the realities of Māori women's lives.

The links between sectors can be illustrated with various examples. There is increasing evidence that deprivation in one area flows on to deprivation in other areas:

- Education is an important component of capacity building for Māori social and economic development, but barriers in other areas, such as low income, unemployment, overcrowded and poor quality housing, and conflict with the criminal justice system, can affect educational participation and achievement. The Competent Children longitudinal research project identifies family socio-economic resources as one of the two major variables in performance on a range of competency measures by children aged 5-8.ⁱ
- Education is itself a key determinant of social and economic status, with intergenerational effects. The Competent Children project found parents' level of education to be the other major variable related to children's competency.ⁱⁱ
- The National Advisory Committee on Health and Disability (1998) has reported that income is the single most important determinant of health, with a persistent correlation internationally between low income and poor health.
- Employment contributes to health, not only through providing an income, but also through enhancing social status, and increasing participation in the community. There is evidence that unemployment is detrimental to both physical and mental health.ⁱⁱⁱ
- Income is affected by education opportunities in adult life, particularly for Māori women, and also by the interaction of welfare, tax, housing and childcare policies and provisions.

- Housing is also a key determinant of health. Unmet housing needs, expressed as overcrowded conditions, high housing costs and poor physical quality, have negative impacts on mental and physical health.^{iv} There is evidence that the relationship between poor housing conditions (including crowding) and mental health problems affects women especially. Women with young children living in crowded conditions are more likely to be dissatisfied with their health. They may also find it difficult to control interaction with other household members, and this has consequences for their wellbeing.^v
- International research suggests that the linked cluster of poor housing, high mobility and homelessness is associated with a syndrome of social exclusion, in which people become increasingly marginalised and isolated from their communities and from key aspects of social integration such as employment.^{vi}
- Women's health and wellbeing can be threatened if their accommodation becomes unsafe through violence. Violence in turn can reduce women's chances of getting and keeping a job.^{vii}
- International and New Zealand literature on youth offending has demonstrated the link between the experience of social and economic disadvantage and the prevalence of offending and anti-social behaviour.^{viii}

Intersectoral links and impacts such as these disproportionately affect Māori women and children. They strongly suggest that working intersectorally, rather than considering only the disparities within each sector, is an effective way of spotlighting the dynamics of socio-economic factors affecting Māori women and identifying ways to address persistent inequalities.

In particular, government policy processes need to:

- identify the determinants and drivers of inequalities, particularly where they operate across sectors
- develop intersectoral priority areas to improve the position of Māori women
- consider the compounding effects of policies on Māori women across sectors, including the unintended consequences of policies in one sector for Māori women's well-being and opportunities in another
- develop models and interventions that address problems in more than one sector
- undertake evaluations of policies and programmes that consider the costs and benefits of interventions for more than one sector
- promote data collection and research that contributes to greater understanding of intersectoral links and impacts.

Disparities Affecting Other Groups

Although this report focuses on disparities experienced by Māori women, analysis shows that in certain situations other groups also experience disparities. Sometimes differences in the experiences of Māori women and Māori men are obvious. For example, Māori girls and women tend to do better on all education indicators than Māori boys and men. The health status of Māori women and girls is better on many indicators than that of Māori men and boys.

But compared to Māori men, Māori women's incomes are generally lower. There is a strong gender gap in income. Māori women's labour force participation rate and employment rate are lower than Māori men's, and share some similarities with those of non-Māori women. In relation to employment and participation in the labour force, the strongest disparity is between men and women rather than between Māori and non-Māori. Non-Māori women face similar issues to Māori women in terms of balancing paid work with unpaid work, finding affordable/suitable and accessible childcare, and accessing parental leave.

In some cases disparities between Māori and non-Māori are clearly greater than the disparity between Māori women and Māori men. For instance, Māori do not enjoy the same levels of health as non-Māori. Māori experience shorter life expectancy and higher mortality rates than non-Māori. Health disparities for Māori women are exceeded only by those for Māori men. Of all four groups, Māori males are most likely to face exposure to child abuse, deaths from suicide, road traffic accidents, ischemic heart disease and lung disease.

In terms of educational achievement, non-Māori do better than Māori. Of the four groups, Māori boys show the greatest disparity starting at school entry level and continuing through the compulsory school years where they are more likely to leave school with no qualifications and less likely to go on to post-school education. They also have the highest rates of suspension. What information exists, implies a strong link between qualifications and income. This has implications for both Māori women and men.

For unemployment, the main disparities are between Māori and non-Māori, with differences between Māori women and men being small. Unemployment is higher for Māori than for non-Māori even after accounting for the different age structures of the two population groups.

Both Māori women and men are more likely to experience housing difficulties in regard to affordability, crowding and residence in temporary dwellings or dwellings with few basic amenities, compared to non-Māori. Māori men have the highest proportion of people living in temporary dwellings. Numerically, Māori men and women represent a large number of people living in crowded dwellings. Reliance on rental accommodation, experience of poor quality housing and insecure tenure are also problems for Māori.

In the criminal justice system, both Māori women and men are apprehended, prosecuted and convicted more than non-Māori. Māori women are also more likely to experience victimisation than non-Māori women. Māori males are over-represented in crime statistics; this starts from young age with Māori males over represented in youth apprehensions and prosecutions statistics, and continues into adulthood in terms of prosecution, conviction and sentencing statistics. While the data suggests a decline in recent years, Māori males are still over-represented in crime statistics.

The fact that there are important differences between the Māori and non-Māori populations should not obscure some critical differences between Māori women and Māori men. These differences are outlined for each of the sectors below.

Improving Data and Information about Māori Women

Across all six indicator areas, there is a pressing need for improvement in the collection and analysis of data disaggregated by sex and ethnicity. There are particular shortcomings, for example, time series data is not always available, so changes cannot be tracked over time. There is also a lack of longitudinal data, which means that experiences of cohorts of individuals or groups, such as families, cannot be understood over time. The Ministry of Women's Affairs encourages government agencies to consider ways of improving the collection and analysis of data by ethnicity and sex.

There are also research gaps, and while it is not the purpose of this report to identify those gaps, some obvious examples have emerged:

- There is a notable lack of research on income in relation to Māori generally, and Māori women in particular. Little is known about lifetime earnings (including duration of low income periods), levels of income poverty, or the extent of income sharing within and across households or whānau.
- There is a lack of information on non-standard forms of employment, particularly casual and temporary work, who is affected by this type of employment, and how they are affected. Issues affecting Māori women need to be investigated. Further research is also required on the gender pay gap, including factors that have a strong influence on Māori women.

- It is difficult to establish the nature and extent of housing need, because of the lack of consistent housing analysis, research and monitoring, particularly since 1991. Some key areas where more research and information is required to comprehensively establish the nature and extent of Māori women's housing needs include:
 - the extent of use of temporary dwellings for permanent residence
 - understanding the impacts and dynamics of rural and urban housing markets for Māori women
 - specific housing needs of large families
 - Māori women's whānau responsibilities
 - the nature and extent of discrimination experienced in the rental and lending markets by Māori women.
 - establishment of official measures of crowding.
- Women's offending has not been examined to the same degree as that of men. Furthermore, there is little information about the impact of the criminal justice system on women's lives, either as victims or as offenders, compared with information relating to men. Even less is known about the impact of the criminal justice system on Māori women's lives. Research is required on offending by young Māori women, including the factors that influence their offending.
- The Ministry of Women's Affairs will work with relevant government agencies on preparing a research strategy to identify the research required to investigate critical inequalities for Māori women which constitute barriers for their participation.

Education

Position of Māori women: At all levels of education except tertiary enrolment at age 30 and above, the disparities between Māori and non-Māori are greater than the disparities between Māori women/girls and Māori men/boys. In terms of participation, achievement and progress, non-Māori girls tend to do best, followed by non-Māori boys, Māori girls and Māori boys.

There are clear disparities between Māori and non-Māori:

- There is substantial disparity between Māori and non-Māori enrolments in early childhood services, especially for 4-year-olds.
- While Māori retention rates at senior school levels have improved since the 1980s, they are still lower than those of non-Māori.
- Māori are far more likely to be suspended from school than their non-Māori counterparts.
- Considerably higher proportions of non-Māori leave school with qualifications than do Māori.
- Higher proportions of non-Māori women and men gain awards at degree or post-graduate level than do Māori.

On all education indicators, Māori girls do better than Māori boys. While disparities between Māori girls and boys in early childhood education are negligible, by the time they reach the end of schooling, there are significant disparities in participation and achievement, with Māori girls doing better than Māori boys. However, participation and achievement need to be raised for all Māori students. In key areas, such as numeracy and literacy, retention at age 16, suspensions and school qualifications, Māori girls do not do as well as non-Māori girls or non-Māori boys.

In the 1990s, the greatest gains in tertiary enrolments, proportionate to population, were made by Māori women. Among all those aged 16 and over, Māori women had the highest percentage of their population enrolled in a tertiary education institution (TEI) in 1999. However, there are differences by age group. Just over one quarter of Māori women enrol in some form of tertiary education directly after leaving school, whereas over half of non-Māori women do. Older Māori women are doing particularly well, and almost 10% of Māori women aged 30-39 are enrolled in a TEI, whereas 8% of non-Māori women in this age group are enrolled. Polytechnic enrolments have replaced TOP courses as the largest proportion of enrolments for Māori women. More Māori women than Māori men are gaining degrees or post-graduate awards.

Key Issues in Education

Educational achievement is a critical factor in gaining paid employment, and affects income. Efforts to improve educational opportunities for Māori girls and women need to happen at all stages, from early childhood to tertiary education and training.

Increased participation of both Māori girls and Māori boys in early childhood education is desirable, as participation in early childhood education has been shown to benefit school achievement. Some research suggests that a key barrier to participation of Māori in early childhood education is cost. Participation is also lower in rural areas, which affects Māori more than non-Māori.

The responsiveness and quality of mainstream educational settings are critical factors for the success of Māori girls in education, as over 85% of Māori students are educated in the general schools system.^{ix} Māori make up significant proportions of the school population, and will continue to be an important component of the school population in the future, due to the younger age structure of the Māori population. This will have an impact on the direction and delivery of all education services.

The foundations of a successful transition to further education and employment are laid in schools. A range of areas affect future education, training, employment and earnings opportunities for Māori girls including:

- Numeracy and literacy problems experienced by some Māori girls make ongoing educational achievement difficult, and limit employment prospects.
- While Māori girls' secondary school retention has improved, there are still too many Māori girls who leave school as soon as they can. Suspensions of Māori girls have also increased to overtake the rate for non-Māori boys. Early school leaving can significantly limit educational achievement.
- Māori girls leaving school with few or no qualifications may become vulnerable to unemployment.
- The new National Certificate of Educational Achievement will need to be monitored to assess impacts on Māori girls.

Māori women do well at tertiary education, but tend to undertake study later, rather than directly from school. Gaining higher qualifications later may reduce employment and earning capacity over the lifespan. At the same time, policies need to ensure that students embarking on study at older ages are not disadvantaged in terms of access and support. In particular, the availability of affordable and appropriate childcare is a key factor in supporting Māori women in tertiary education.

The Ministry of Women's Affairs encourages the Ministry of Education to contribute to improving outcomes for Māori women by considering how gaps in current policies and programmes can address the following issues:

- Funding and access to affordable and quality childcare and early childhood education services, including Māori language immersion services.

- Increasing retention of Māori girls and boys in schools.
- Raising achievement for Māori girls and boys in schools.
- Enabling Māori women to raise their levels of post-compulsory education and training.

The Ministry of Education will be reporting on further work that is required to address gaps in current policies and programmes to address the issues highlighted in this report.

Employment

Position of Māori women: Māori women are less likely to be employed than Māori men, and slightly more likely to be unemployed than Māori men. However, when compared with their non-Māori counterparts, a more complex picture of labour force participation, employment and unemployment emerges.

The disparities between women's and men's labour force participation are larger than the disparities between Māori and non-Māori. Both Māori and non-Māori women have lower participation rates and employment rates than their male counterparts. Focusing on Māori women, the indicators show:

- Māori women's participation rates and employment rates have been considerably lower than Māori men's over the past 15 years, although their participation has steadily increased.
- Māori women have the lowest full-time employment rates of all groups (Māori women, Māori men, non-Māori women and non-Māori men).
- Māori women are considerably less likely than non-Māori women to participate in the labour force in the 15-34 age group.
- The percentage of those employed people wanting more hours of paid work has risen steeply, most noticeably for Māori women.

When unemployment rates and jobless rates are considered, the disparities between Māori and non-Māori are much larger than the disparities between male and female rates. Unemployment rates and jobless rates for Māori women and men have been consistently higher than non-Māori rates since the early 1990s. With regard to Māori women:

- Māori women have the highest unemployment rate of all groups (Māori women, Māori men, non-Māori women and non-Māori men).
- The unemployment rates for Māori women and Māori men have been similar from 1986 to 2000.
- Both Māori women and Māori men have been concentrated in segments of the labour market where job losses have been the heaviest.
- Māori women and men are well over twice as likely as non-Māori women and men to be unemployed long-term.
- Māori women have the highest jobless rate of all groups (Māori women, Māori men, non-Māori women and non-Māori men).

Unpaid work continues to play a much greater role for women, particularly Māori women, than for men. Women, especially Māori women, are more likely to take part in unpaid work outside the home, and spend roughly twice as many hours as men on unpaid work. Māori women have fewer hours of paid work per week, but do more hours of unpaid work inside and outside their households per week, than the other groups. There is high involvement of Māori women in cultural maintenance activities.

Key Issues in Employment

Increasing employment opportunities for Māori women is critical to their and their children's financial independence and security. Some key areas need to be considered in order to provide full opportunities and choice for Māori women in the labour market. These include:

- The availability of and access to suitable and affordable childcare.
- Access to a range of educational and training opportunities.
- Reducing the impacts of violence against Māori women as this affects their ability to enter and remain in paid employment.
- Disincentives and barriers facing sole parents in seeking and sustaining viable employment (see Income section below).
- The effects of Māori women's involvement in casual/temporary work, and the kinds of support required to make such employment a viable option.
- Contributions made and resource costs involved in undertaking unpaid work, including community-based work and caring for others.

The Ministry of Women's Affairs encourages the Department of Labour to contribute to improving outcomes for Māori women by:

- Developing options for improving analysis and reporting on closing the gender pay gap, with particular attention to factors that have strongest impact on Māori women, e.g. occupational segregation, educational and training qualifications.

Income

Position of Māori Women: Māori women are in the worst position for five out of the seven income indicators. Compared to Māori men, non-Māori women and non-Māori men, Māori women have:

- the highest proportion with hourly earnings below the national median
- the lowest proportion in the highest income quintile
- the lowest proportion receiving income from wages, salaries or self-employment
- the highest proportion receiving the DPB
- the highest proportion to have household income below \$20,000.

There is a significant gender gap in incomes. The median incomes of Māori women and non-Māori women are similar throughout their lifetimes. In particular, there is a considerable gap between the pay received by women and men in employment.

Overall the indicators show that income disparities are associated more with gender than with ethnicity, but Māori boys and girls alike are affected by Māori women's low incomes. Almost one-third of Māori women living with children live in households with equivalised household income below \$20,000.

Key Issues in Income

Māori women are the group most likely to experience low incomes and for this to continue over the life cycle. Consequently, they are likely to be exposed to financial hardship, insecurity and vulnerability. Lower earnings over a woman's lifetime have impacts on her ability to meet housing costs, to provide for children, to own her own home, to cope with illness and disability, and to save for retirement.

Key issues for Māori women are:

- The need for Māori women to raise their levels of education, training and work experience in ways that can lead to improved incomes.
- Barriers for sole parents in seeking and sustaining employment.

The Ministry of Women's Affairs encourages the Ministry of Social Policy to contribute to improving outcomes for Māori women by:

- Developing options for removing barriers and disincentives to sole parents seeking and sustaining employment.

Health

Position of Māori women: Māori health status is considerably lower than non-Māori health status across all the indicators. It starts with life expectancy at birth, and continues with morbidity and mortality. Since 1987, Māori mortality rates have fallen more slowly than non-Māori rates, so the ethnic disparities have widened. Within the Māori population, the health status of Māori males is lower than that of Māori females.

There are clear differences between the health status of Māori and non-Māori females:

- Māori girls are more likely than non-Māori girls to be admitted to hospital for meningococcal disease, acute respiratory infections and asthma, and homicide and injury deliberately inflicted by others.
- Young Māori women are more likely to die from suicide or self-inflicted injury than young non-Māori women, but the rate of hospitalisation for suicide or self-inflicted injury is highest for young non-Māori women.
- The fertility rate for young Māori women aged 11-17 is over four times the rate for young non-Māori women.
- Adult mortality rates are considerably higher for Māori women than non-Māori women. Specific mortality rates for lung cancer, heart disease and cervical cancer are higher for Māori women than for non-Māori women.

Generally, the health status for Māori males is lower than that of Māori females:

- Māori females have a better life expectancy than Māori males.
- Māori boys have the highest rate of deaths of all four groups from homicide and injury purposely inflicted by other persons, although the actual number of deaths per year is small.
- Among young Māori men there are considerably more suicide and self-injury deaths than for young Māori women. New Zealand has among the highest rates in the OECD for suicide and attempted suicide.
- Young Māori men have the highest number of motor vehicle traffic accident mortality of all groups (Māori women, Māori men, non-Māori women, non-Māori men). Such accidents are also a major cause of death for young Māori women.
- Māori men have considerably higher mortality rates than Māori women. Māori men have the highest rate of mortality from lung cancer and from ischemic heart disease of all four groups.

However, Māori women's smoking rates are higher than those of Māori men. Māori women are also more likely than Māori men or non-Māori women and men to suffer from osteoporosis, diabetes, hypertension, arthritis and most immune disorders.

Key Issues in Health

Health initiatives need to be developed and delivered in ways that are specifically focused on the health needs of Māori women. Māori women's health needs are not synonymous with Māori health needs, nor with women's health needs, although there are overlaps.

Improving Māori women's health status requires consideration of:

1. How policy interventions might address socio-economic disparities that negatively impact on health. Factors such as low incomes, unemployment, poor housing, living in unsafe neighbourhoods and low participation and achievement in education are being increasingly understood as important determinants of poor health and shorter lives.
2. Māori women's access to health services including
 - promoting a focus on the holistic Māori view of health
 - enhancing Māori women's choices about their health provider, including the opportunity to access programmes run by Māori women
 - effectively providing for the diverse needs of Māori women of different ages and life stages, with different levels of attachment to hapu and iwi structures
 - improving the capacity of mainstream health providers to deliver services to Māori
 - increasing the numbers and qualifications of the Māori health workforce, including greater recognition and training of Māori community health workers, and a process for involving traditional healers in health care provision.

The Ministry of Women's Affairs encourages the Ministry of Health to contribute to improving outcomes for Māori women by:

- Developing a plan of action, consistent with the NZ Health Strategy to reduce ethnic, socio-economic, and gender inequalities in health, and which also improves Māori women's access to health services, including Māori-based services. This plan will include an inter-sectoral approach and a population health approach.

Housing

Position of Māori women: The housing indicators show that the Māori experience is significantly different to that of non-Māori. Māori women and men are more likely than non-Māori women and men to live in:

- rental accommodation rather than owner-occupied housing
- temporary housing
- housing that uses no heating and housing that heats water only by burning wood
- crowded accommodation (except for Pacific men and women, who are the most likely to live in crowded accommodation).

The Māori proportion living in households paying 25% or more of net household income in rent is lower than non-Māori, but it is still high, at just over 60%. The impact of reduced rental affordability falls most heavily on the Māori (and Pacific) population because a higher proportion are renting and their household incomes are lower than those of other ethnic groups.

While both Māori women and Māori men experience housing difficulties, Māori women face particular problems. Māori women are less likely to live in owned dwellings than Māori men and are slightly more likely to live in crowded households. Māori women constitute the largest single group of people living in households that are the most densely crowded (i.e with a Crowding Index of 1.5 or more). They also have comparatively long stays in refuge accommodation (although the stays of Pacific women are longer), indicating that Māori women find it difficult to find safe permanent housing. Housing problems are sharpened for the 30% of Māori women living with children in households with a household income below \$20,000 per annum.

Key Issues in Housing

Housing costs place a major burden on household incomes for many Māori women. Lack of affordable, safe housing in good physical condition can result in negative impacts on health and wellbeing for them and their families. Factors expected to have a continuing effect on Māori women's housing choices and opportunities include:

- continuing growth in the size of the Māori population, at a faster rate than the total New Zealand population
- younger age structure of the Māori population
- trend to one-parent families
- increasing Māori movement back to rural turangawaewae
- rising housing costs in relation to income
- declining home ownership
- increasing dilapidation of housing stock, particularly in rural areas.

Māori women's housing situation will be helped by:

- supporting Māori women's access to home ownership as well as affordable, quality rental accommodation
- measures to ensure that the housing stock is appropriate in both quality and quantity
- catering for the specific housing needs of large families and diverse whānau responsibilities
- improving the alignment of housing and welfare policies in the operation of the Accommodation Supplement and Income Related Rents
- encouraging a wider mix of housing providers including iwi, Māori and community-based providers
- identifying and developing specific housing initiatives that are responsive to the particular needs of Māori women
- giving particular attention to the housing needs of Māori women in emergency housing, refuges, and in transition between accommodation.

Overall, appropriate and affordable solutions for Māori women's housing needs should be developed in partnership with them. In particular, public rental housing providers should work in partnership with Māori women on building design, siting and standards of rental accommodation.

The Ministry of Women's Affairs encourages Housing New Zealand Corporation to contribute to improving outcomes for Māori women by:

- Developing options for improving Māori women's access to affordable, quality and safe housing.

Criminal Justice

Position of Māori women: In the criminal justice sector, there are considerable disparities between men and women, and these tend to be more obvious than those between Māori and non-Māori. Offenders tend to be men, and women are over-represented as victims. Both Māori and non-Māori women are more likely to suffer victimisation than to commit offences. There are, however, considerable differences in their experiences, with Māori women both more likely to experience victimisation and to offend, than are non-Māori women. There are also differences in the experience of Māori and non-Māori in the criminal justice system, with both Māori women and Māori men being apprehended, prosecuted and convicted at much higher rates than are their non-Māori counterparts. As noted above, there is a lack of data and research on Māori women, victimisation and offending.

With regard to victimisation:

- Māori women are over-represented among victims of domestic violence and are more likely to experience repeat victimisation from a partner.
- A higher proportion of Māori women than non-Māori women apply for protection orders under the Domestic Violence Act 1995.
- Māori women and children are heavy users of women's refuge services
- There is some evidence that Māori women do not access other services for victims at the rate at which might be expected.

With regard to offending:

- Both female and male Māori youth are far more likely to be apprehended and prosecuted than their non-Māori counterparts.
- Māori women are five times more likely to be prosecuted for an offence than non-Māori women, and Māori men are over three times more likely to be prosecuted than are non-Māori men.
- Although far fewer Māori women than Māori men offend, there are some indications that Māori women are becoming increasingly involved in offending. The rate of prosecution for Māori women has increased between 1998 and 1999 while the rate for Māori men decreased over the same time.
- Māori women make up over 60% of total numbers of sentenced women imprisoned, a higher percentage than Māori men compared to non-Māori men (around 50%).

Key Issues in Criminal Justice

Establishing and maintaining sustainable families, whānau and communities is seriously threatened by:

- The high incidence of domestic violence experienced by Māori women.
- The disproportionately high representation of Māori women in offending.
- The significant and rising over-representation of young Māori women in the criminal justice system.
- Impacts of the offending of male partners on Māori women.
- Impacts of Māori offending on children.
- High rates of re-offending.

- Addressing socio-economic disparities in areas such as health, education and employment have the potential to impact on crime. For example, crime prevention approaches that include a wider focus on the social and economic development of Māori communities should be considered.
- In addition, specific interventions could be considered, such as:
 - Rehabilitative interventions for Māori women offenders.
 - Victims' services which are developed to be effective and responsive to Māori women's needs.
 - Suitable interventions specifically designed to respond to young Māori women's offending.
 - Greater provision of 'for Māori by Māori' interventions.
 - Support for Māori service providers to develop the necessary skills to work with Māori offenders.
- The Ministry of Women's Affairs encourages the Ministry of Justice to contribute to improving outcomes for Māori women by:
 - Develop a strategy to reduce crime that will include analysis of gender and ethnicity implications.
- The Ministry of Women's Affairs encourages the Department of Corrections to contribute to improving outcomes for Māori women by:
 - Developing options for the delivery of better rehabilitation programmes and reintegrative services for Māori women and their whānau, including the participation of Māori women and their whānau in the development and delivery of programmes and services.

What the Ministry of Women's Affairs Will Do

The Ministry works with others, including government agencies and key women's organisations to make progress on improving outcomes for women. The Ministry intends to take up the challenge presented by the findings in this report in several ways.

- Over 2001 – 2002, the Ministry will work with government agencies on the issues identified in the report, including encouraging them to incorporate gender analysis in all aspects of their analysis and advice. The Ministry will also work with key Māori women's organisations to develop effective solutions for Māori women. Particular initiatives are:
 - The development of a Women's Strategy for advancing Government's Goals for Women which addresses the diverse lives of women, including Māori women.
 - Establishing with Statistics New Zealand a framework and set of indicators that highlight the status of women, including Māori women, and is able to measure progress towards the Government Goals for Women.
 - Preparation of a research strategy with relevant government agencies, to investigate critical inequalities for Māori women, which constitute barriers to their participation in society.

Further Work

The agreed actions are only part of the Government's response to this report, and there are several critical issues for Māori women that require further action. It is important to note that Māori women have not yet been fully consulted on priorities for further work. Consultation

with Māori women will occur during the development of a Women's Strategy by the Ministry of Women's Affairs over the next year. It is envisaged that Māori women will define their own aspirations and the pathways to achieving them. All further work should be based on government agencies working towards fulfilling their Treaty of Waitangi obligations to Māori women by upholding the principles of partnership, participation and protection.

The work requiring further action and identified in the Report includes:

- improvements in the numeracy and literacy levels of Māori girls
- a reduction in the suspension rate of Māori girls
- monitoring of the new National Certificate of Educational Achievement to assess impacts on Māori girls
- measures to increase Māori women's employment opportunities and participation in employment, including full time employment. Māori women's contribution to unpaid work, community based work and carer roles needs to be taken into consideration.
- increasing Māori women's access to a range of educational and training opportunities
- reducing the impact of violence on Māori women as violence has an effect on Māori women's activity and outcomes in a range of sectors
- improvement in the health status of Māori women by:
 - provision of appropriate sexual and reproductive health services to young Māori women and girls
 - reduction in mortality rates for lung cancer, heart disease, and cervical cancer
 - reducing morbidity rates for asthma, meningococcal disease, immune disorders and acute respiratory infections
 - reduction in smoking by Māori women
- encouraging a range of housing providers to meet Māori women's housing needs
- meeting the housing needs of Māori women for emergency housing, refuge housing and transitional accommodation
- research into the patterns of victimisation and offending for Māori women
- ensuring victims services are appropriate for and responsive to Māori women
- measures to reduce offending amongst Māori women (particularly young Māori women)

The Ministry of Women's Affairs' contribution to this work will be through consultation with Māori women and other agencies during the development of a Women's Strategy, and its work with key agencies to ensure analysis and monitoring is carried out to improve outcomes for Māori women.

ⁱ Wylie et al (1996), Wylie and Thompson (1998). (See Education.)

ⁱⁱ Ibid.

ⁱⁱⁱ National Advisory Committee on Health and Disability (1998). (See Health.)

^{iv} Ibid.

^v Gray (2001). (See Housing.)

^{vi} Lee and Murie (1997). (See Housing.)

^{vii} Pouwhare (1999). (See Employment.)

^{viii} Singh and White (2000). (See Justice.)

^{ix} Ministry of Education (2001), p.26. (See Education.)