Living Standards, Poverty, Wellbeing and Health

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NZLSA Waves 1 & 2, 2010, 2012

- Sample: National random sample of 3,317 New Zealanders aged between 50 and 84 years in 2010
- 3,015 retained in 2012
- Funded by the Foundation for Research, Science and Technology now Ministry of Science and Innovation

Three Poverty Thresholds

1. 50% of median, equivalent, disposable, household income as applied by OECD and Australia. (Median, equivalent, disposable, household income for NZ in 2010 was $48,615.38)

2. 60% of median, equivalent, disposable, household income as applied in the European Union as the income indicator of social exclusion and in the UK. (Median, equivalent, disposable, household income for NZ in 2010 was $48,615.38)

3. A constant value threshold benchmarked to the 2007 median, but adding the cost of living for each year thereafter. 60% of constant value threshold, equivalent, disposable, household income after housing costs estimated at 25%. This type of constant value measure is applied in both the UK and NZ. It is the measure used in both the Social Reports and the Household Incomes in New Zealand Reports published regularly by the Ministry of Social Development. (Constant value threshold, equivalent, disposable, household income for NZ in 2010 was $44,307.69)

Percentage Below Each Poverty Threshold

	50-86 yrs	65-86 yrs
50% of median, equivalent, disposable, household income		
2010	**12.5%**	**14.5%**
2012	**11.2%**	**11.8%**
60% of median, equivalent, disposable, household income		
2010	**22.6%**	**36.7%**
2012	**26.2%**	**30.1%**
60% of constant value threshold, equivalent, disposable, household income after housing costs estimated at 25% of income		
2010	**10.1%**	**10.2%**
2012	**11.6%**	**12.6%**

WHOQoL-8 (a 5 point scale) and CASP-12 (a 4 point scale) Sample Questions

WHOQoL questions

How satisfied are you with your health?
How satisfied are you with your ability to perform your daily living activities?
How satisfied are you with yourself?
How satisfied are you with your personal relationships?

CASP questions

My age prevents me from doing the things I would like to.
I feel that what happens to me is out of my control.
I feel left out of things.
I can do the things that I want to do.

Poverty and Wellbeing

We tested the relationship of those above an below all three poverty thresholds in waves 1 & 2 with two scales of wellbeing WHOQoL-8 and CASP-12

We found highly significant relationships in both waves 2010 and 2012 between the poverty thresholds and the wellbeing scales, with substantially lower wellbeing scores for those below the poverty threshold.

1. 50% of median, equivalent, disposable, household income - T-test statistic had a p-value of <0.001.

2. 60% of median, equivalent, disposable, household income - T-test statistic had a p-value of <0.001.

3. 60% of constant value threshold, equivalent, disposable, household income after housing costs estimated at 25% of income - T-test statistic had a p-value of <0.001.

Poverty and Wellbeing for Māori and Non-Māori

We tested the relationship for Māori and Non-Māori above an below all three poverty thresholds in waves 1 & 2 with two scales of wellbeing WHOQoL-8 and CASP-12

50% of median, equivalent, disposable, household income

T-test statistic had a p-value of <0.001 for Māori and Non-Māori applying WHOQoL-8 and CASP-12

60% of median, equivalent, disposable, household income

T-test statistic had a p-value of <0.001 for Māori and Non-Māori applying WHOQoL-8 and CASP-12

60% of constant value threshold, equivalent, disposable, household income after housing costs estimated at 25% of income

T-test statistic had a p-value of <0.001 for Māori and Non-Māori applying WHOQoL-8 and CASP-12

Poverty, Health and Depression

We tested the relationship of those above an below the 60% CV poverty threshold applying the SF-12 Physical and Mental Health Scales and the CES-D-10 Depression Scale for both waves 1 & 2.

We found significant relationships between the poverty threshold and both the Health and Depression Scales with substantially lower health and higher depression scores for those below the poverty threshold.

1. SF-12 Physical Health - T-test statistic had a p-value of <0.001.

2. SF-12 Mental Health - T-test statistic had a p-value of <0.001.

3. CES-D-10 Depression - T-test statistic had a p-value of <0.001.

Assets and Wellbeing

We tested the relationship between asset accumulation and wellbeing applying WHOQoL-8 and CASP-12 scales for both waves 1 & 2.

We found significant relationships between asset accumulation and the wellbeing scales with substantially higher wellbeing scores for those with more assets.

The correlation between asset accumulation and wellbeing, using Pearson's r, was significant (2-tailed) at the <0.01 level:

- WHOQoL-8 <0.01 (correlation coefficient .319) 2010
  <0.01 (correlation coefficient .238) 2012

- CASP-12 <0.01 (correlation coefficient .274) 2010
  <0.01 (correlation coefficient .253) 2012

Assets, Health and Depression

We tested the relationship between asset accumulation and health and depression applying the SF-12 and CES-D-10 scales for waves 1 & 2.

We found significant relationships between asset accumulation and the health and depression scales with substantially higher health scores and lower depression levels for those with more assets.

The correlation between asset accumulation and health and wellbeing, using Pearson's r, was significant (2-tailed) at the <0.01 level:

- SF-12 Physical Component <0.01 (correlation coefficient .222) 2010
  <0.01 (correlation coefficient -.229) 2012

- SF-12 Mental Component <0.01 (correlation coefficient .125) 2010
  <0.01 (correlation coefficient .141) 2012

- CES-D-10 Depression <0.01 (correlation coefficient -.231) 2010
  <0.01 (correlation coefficient -.207) 2012

Multiple Regression of Wellbeing 1

- To further investigate the impact of poverty, asset accumulation and housing tenure on wellbeing, we estimated a multiple regression using wellbeing as the dependent variable, and the three factors as the independent variables for waves 1 & 2.
- The results applying the WHOQoL-8 scale showed:
  - F-test statistic had a p-value of <0.001 for both waves. This tested the whole model.
  - T-test of significance of the ***poverty, asset accumulation and housing tenure*** coefficients in front of each variable had a p-value of <0.001 in **2010.**
  - T-test of significance of the ***poverty*** and ***asset accumulation*** variables in **2012** also had coefficients in front of them with a p-value of <0.001, but the ***housing tenure*** variable coefficient was not significant with a p-value of 0.112.

Multiple Regression of Wellbeing 2

- To further investigate the impact of poverty, asset accumulation and housing tenure on wellbeing, we estimated a multiple regression using wellbeing as the dependent variable, and the three factors as the independent variables for waves 1 & 2.
- The results applying the CASP-12 scale showed:
  - F-test statistic had a p-value of <0.001 for both waves. This tested the whole model.
  - T-test of significance of the ***poverty*** and ***asset accumulation tenure*** coefficients in front of each variable had a p-value of <0.001 for both waves
  - However, the ***housing tenure*** coefficient showed no significant relationship in **2010** and **2012.**

Multiple Regression of Physical Health

- To further investigate the impact of poverty, asset accumulation and housing tenure on wellbeing, we estimated a multiple regression using physical health as the dependent variable, and the three factors as the independent variables for waves 1 & 2.
- The results applying the SF-12 Physical Component scale showed:
  - F-test statistic had a p-value of <0.001 for both waves. This tested the whole model.
  - T-test of significance of the ***poverty*** and ***asset accumulation*** coefficients in front of each variable had a p-value of <0.001 for both waves.
  - However, the ***housing tenure*** coefficient showed no significant relationship in **2010** and **2012.**

Multiple Regression of Mental Health

- To further investigate the impact of poverty, asset accumulation and housing tenure on wellbeing, we estimated a multiple regression using mental health as the dependent variable, and the three factors as the independent variables for waves 1 & 2.
- The results applying the SF-12 Mental Component scale showed:
  - F-test statistic had a p-value of <0.001 for both waves. This tested the whole model.
  - T-test of significance of the ***asset accumulation*** coefficient had a p-value of <0.001 for both waves.
  - However, the ***poverty*** coefficient had a p-value of 0.013 in **2010** and 0.051 in **2012.**
  - The ***housing tenure*** coefficient showed no significant relationship in **2010** but was just significant with a p-value of 0.033 in **2012.**

Multiple Regression of Depression

- To further investigate the impact of poverty, asset accumulation and housing tenure on wellbeing, we estimated a multiple regression using depression as the dependent variable, and the three factors as the independent variables for waves 1 & 2.
- The results applying the CES-D-10 scale showed:
  - F-test statistic had a p-value of <0.001 for both waves. This tested the whole model.
  - T-test of significance of the ***poverty*** and ***asset accumulation*** coefficients in front of each variable had a p-value of <0.001 for both waves.
  - However ***housing tenure*** coefficient showed a p-value of 0.001 in **2010** and 0.036 in **2012.**

Summary and Conclusions

- Wellbeing/Quality of life is the primary goal of social policy. Two quite different wellbeing/quality of life scales were applied and both demonstrated similar results
- Good health is another major goal of social policy and ill-health impacts severely on fiscal policy and government costs
- Depression is a state of mind that leaves people more susceptible to mental and physical ill-health and a negative view of their quality of life.
- The data here demonstrates consistent statistically significant relationships between income, asset accumulation and housing tenure on the one hand and wellbeing/quality of life, physical and mental health and depression on the other hand. Low incomes, low asset accumulation and renting are consistently associated with low levels of wellbeing, low levels of physical and mental health and higher levels of depression.
- Asset accumulation was the most consistent independent variable linked to the positive outcomes measured in this presentation suggesting that savings behaviour even within low income households is protective.

- Asset accumulation and income are more consistently associated with the good outcomes than homeownership, even though homeownership is significantly associated with them.
- If older people drop below the poverty threshold in larger numbers in the future, it can be expected that their quality of life will reduce and their health will deteriorate.
- Those with a capacity to plan beyond the present through saving can be expected to offset some of the negative outcomes identified in the presentation.
- Given the age associated demographic shift that is currently taking place, these results present serious policy challenges with regard to:

    1. ongoing income adequacy
    2. education about and opportunities for savings and asset accumulation
    3. adequate social housing provision.