

NZiDep

An index of socioeconomic deprivation for individuals

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Aim: To identify a small set of indicators of an individual's deprivation that is appropriate for all ethnic groups and can be combined into a single and simple index of individual socioeconomic deprivation.

Methods: The NZiDep index was derived using the same theoretical basis as the national census-based small-area indices of relative socioeconomic deprivation: NZDep91, NZDep96, NZDep2001 and NZDep2006. The index has been created and validated from analysis of representative sample survey data obtained from approximately 300 Maori, 300 Pacific, and 300 non-Maori, non-Pacific adults. Twenty-eight deprivation-related questions, derived from New Zealand and overseas surveys, were analysed by standard statistical techniques (factor analysis, Cronbach's coefficient alpha, item-total correlations, principal component analysis). The index was validated using information on tobacco smoking, which is known to be strongly related to deprivation.

Result: The NZiDep index is based on eight simple questions which take about two minutes to administer. The index is a significant new (non-occupational) tool for measuring socioeconomic position for individuals. **The questions and scoring system are shown overleaf.**

Conclusions: The NZiDep index has advantages over existing measures, including a specific focus on deficits, applicability to all adults (not just the economically active), and usefulness for all ethnic groups. Its strengths include simplicity, utility, acceptability across ethnic groups, criterion validity, statistical validity, external validity (measured with reference to tobacco smoking), and relevance to the current New Zealand context. The index is indicative of deprivation, in general, and is designed for use as a variable in research, and for elucidating the relationships between socioeconomic position and health/social outcomes.

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Questionnaire items for NZiDep

The eight questions for the five-point individual-level index of socioeconomic deprivation are shown below. The order of the eight questions is not important, although they are listed here in decreasing order of occurrence. The simple scoring system is described after the questions. A suggested lead-in to these questions is: “The following few questions are designed to identify people who have had special financial needs in the last 12 months. Although these questions may not apply directly to you, for completeness we need to ask them of everyone.”

- 1 [Buying cheap food]
In the last 12 months have you personally been forced to buy cheaper food so that you could pay for other things you needed? (yes/no)
- 2 [Unemployment] **NOTE: defined as no for those 65 and over, and for full-time care-givers/home-makers; otherwise:**
In the last 12 months, have you been out of paid work at any time for more than one month? (yes/no)
- 3 [Being on a means-tested benefit, amended 2014: see NOTES below.]
In the 12 months ending today did you yourself receive payments from any of these three benefits: Jobseeker Support, Sole Parent Support or Supported Living Payment? (yes/no)
- 4 [Feeling cold to save on heating costs]
In the last 12 months have you personally put up with feeling cold to save heating costs? (yes/no)
- 5 [Help obtaining food]
In the last 12 months have you personally made use of special food grants or food banks because you did not have enough money for food? (yes/no)
- 6 [Wearing worn-out shoes]
In the last 12 months have you personally continued wearing shoes with holes because you could not afford replacement? (yes/no)
- 7 [Going without fresh fruit and vegetables]
In the last 12 months have you personally gone without fresh fruit and vegetables, often, so that you could pay for other things you needed? (yes/no)
- 8 [Help from community organisations]
In the last 12 months have you personally received help in the form of clothes or money from a community organisation (like the Salvation Army)? (yes/no)

Creating the NZiDep index

- (1) Add the ‘yes’ responses (any missing data are counted as ‘no’).
- (2) Re-code the count of deprivation characteristics into the following five ordinal categories (relatively few people will have the largest number of deprivation characteristics):
 - 1 no deprivation characteristics
 - 2 one deprivation characteristic
 - 3 two deprivation characteristics
 - 4 three or four deprivation characteristics
 - 5 five or more deprivation characteristics

Notes

Previous means-tested benefits were the Unemployment Benefit, Domestic Purposes Benefit, Independent Youth Benefit, Sickness Benefit, and Invalids Benefit. From 15 July 2013, these benefits became obsolete and were replaced by the three benefits now listed in question 3. Note that it is not possible to have perfect consistency with the previous list of means-tested benefits.

The unemployment cut off has been set at age 65 since 2007 in accordance with GRI entitlements, and as used in the national small-area indexes of deprivation NZDep2006 (created in 2007) and NZDep2013.