2.10 Index of disadvantage

An analysis of the relative disadvantage within the Aboriginal and Torres Strait Islander population compared with the non-Indigenous population

Data sources

Data for this measure come from the 2001 Census of Population and Housing and the 2006 Census of Population and Housing.

Census of Population and Housing

The Australian Bureau of Statistics (ABS) conducts the Census of Population and Housing at five-yearly intervals, with 2006 being the most recent, and it is designed to include all Australian households. The Census uses the ABS standard Indigenous status question for each household member.

Although the Census data are adjusted for under-count at the person level to arrive at the estimated resident population, no such adjustment is done at the household level. This affects the accuracy of the person counts at the household level to provide adjusted household estimates.

The 1996 and 2001 Census used the Australian Standard Classification of Occupations, but the Australian and New Zealand Standard Classification of Occupations replaced this for the 2006 Census.

Socioeconomic Indexes for Areas (SEIFA)

The ABS has developed four indexes to allow measurement of relative socioeconomic status at a small area level. These indexes summarise a range of socioeconomic variables associated with disadvantage. Each index summarises a different aspect of the socioeconomic conditions of people living in an area. They each summarise a different set of social and economic information. The indexes take into account a range of factors in determining socioeconomic conditions.

Index of Relative Socioeconomic Advantage and Disadvantage

This Index of Relative Socioeconomic Advantage and Disadvantage (IRSAD) is a continuum of most disadvantaged through to most advantaged and is available for both urban and rural areas. Low values indicate areas of disadvantage, and high values indicate areas of advantage. It takes into account variables such as the proportion of families with high incomes, people with a tertiary education, and employment in skilled occupations (ABS 2003).

Data analyses

Following the concepts and methodology of the IRSAD, persons surveyed were ranked according to their IRSAD and then split into deciles or quintiles based on total population.

Analysis of the SEIFA results at small area levels has found that within any area there will be individuals and subpopulations with very different characteristics to the overall population

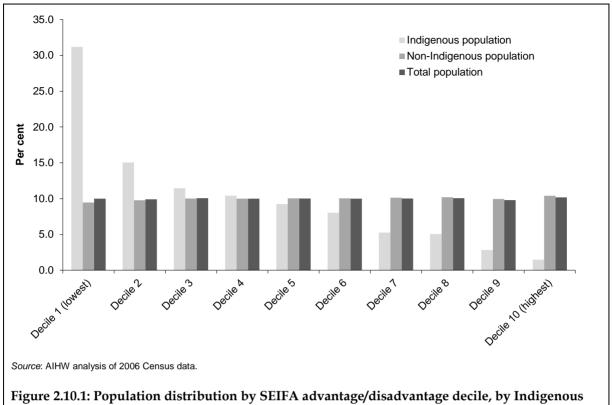
of the area. When judgments are made about the individual or subpopulation based on the characteristics of the area, there is considerable potential for error. This issue is particularly relevant for the Indigenous population, because they make up a small proportion of the population in most areas in Australia. Kennedy and Firman (2004) found that Indigenous Australians suffer a high level of social and economic disadvantage, regardless of whether they live in high or low socioeconomic status areas. They found that 93.3% of Indigenous people in Queensland are in the lowest decile for disadvantage. Of the approximately 126,000 Indigenous people living in Queensland, less than 2,000 have SEIFA scores in the top five deciles, even though 35,000 live in areas coded to SEIFA scores in the top five deciles. Therefore, the traditional approach to analysing SEIFA at an area level masks the socioeconomic status of Indigenous Australians, due to their small numbers in most areas. Kennedy and Firman also call into question the view that Aboriginal and Torres Strait Islander people living in urban areas are generally better off than those in remote areas.

SEIFA

- Indigenous Australians are over-represented in the three most disadvantaged deciles; for example, 31% of the Indigenous population are in the most disadvantaged decile compared with 10% of the non-Indigenous population (Table 2.10.1; Figure 2.10.1).
- Only 2% of the Indigenous population are in the most advantaged decile compared with 10% of the non-Indigenous population (Table 2.10.1; Figure 2.10.1).

Table 2.10.1: Population distribution by SEIFA advantage/disadvantage decile, by Indigenous status, 2006

	Indigenous population	Non-Indigenous population	Total population
		Per cent	
Decile 1 (most disadvantaged)	31.2	9.5	10.0
Decile 2	15.1	9.8	9.9
Decile 3	11.5	10.0	10.1
Decile 4	10.4	10.0	10.0
Decile 5	9.2	10.0	10.0
Decile 6	8.0	10.0	10.0
Decile 7	5.3	10.1	10.0
Decile 8	5.1	10.2	10.1
Decile 9	2.8	10.0	9.8
Decile 10 (most advantaged)	1.5	10.4	10.2



status, 2006

SEIFA by state/territory

- In 2006, in all states and territories a greater proportion of the Indigenous population were in the most disadvantaged quintile compared with the non-Indigenous population. The Northern Territory had the highest proportion (58%) (Table 2.10.2c; Figure 2.10.2c) and the Australian Capital Territory had the lowest proportion (27%) of the Indigenous population in the most disadvantaged quintile (Table 2.10.2b; Figure 2.10.2b).
- New South Wales had the lowest proportion (3%) and the Australian Capital Territory had the highest proportion (10%) of the Indigenous population in the most advantaged quintile (tables 2.10.2a to 2.10.2c; figures 2.10.2a and 2.10.2b).

Table 2.10.2a: Population distribution by SEIFA advantage/disadvantage quintiles, by Indigenous status, NSW, Vic & Qld, 2006

	Indigenous population	Non-Indigenous population	Total population
		New South Wales	
Quintile 1 (most disadvantaged)	42.9	19.5	20.1
Quintile 2	24.8	20.0	20.2
Quintile 3	18.9	19.7	19.7
Quintile 4	9.7	20.4	20.2
Quintile 5 (most advantaged)	3.4	19.7	19.3
		Victoria	
Quintile 1 (most disadvantaged)	40.1	19.7	19.9
Quintile 2	25.9	19.5	19.6
Quintile 3	16.7	20.2	20.2
Quintile 4	10.7	19.8	19.8
Quintile 5 (most advantaged)	6.7	20.7	20.6
		Queensland	
Quintile 1 (most disadvantaged)	45.9	19.0	19.9
Quintile 2	25.6	20.0	20.2
Quintile 3	14.0	20.4	20.2
Quintile 4	9.4	20.4	20.1
Quintile 5 (most advantaged)	5.3	20.3	19.8

Note: The population of some states/territories was unable to be split into exact quintiles based on the SEIFA index of advantage/disadvantage. In all except one of these cases, the best approximate quintiles were calculated. Approximate population quintiles based on the SEIFA index of advantage/disadvantage were unable to be calculated for Tasmania because of the population spread.

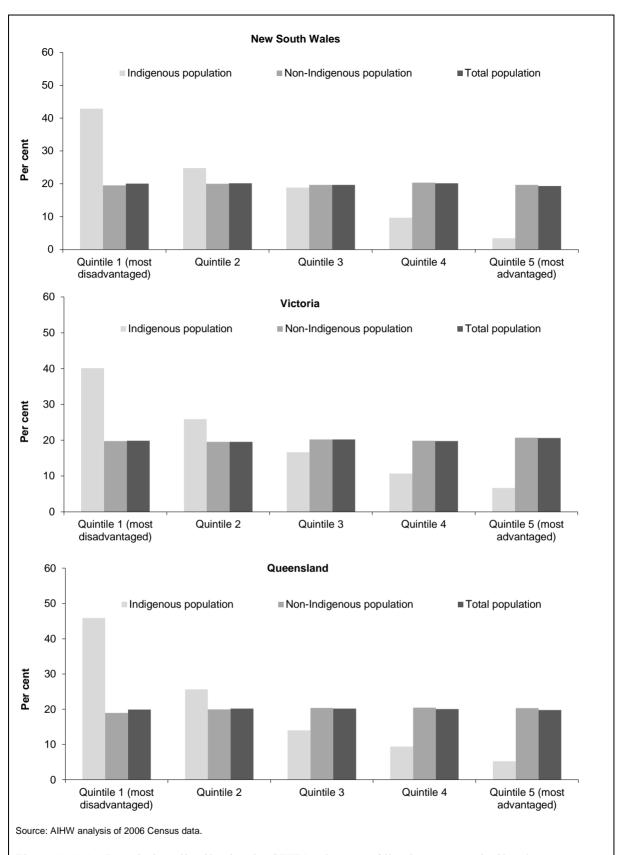


Figure 2.10.2a: Population distribution by SEIFA advantage/disadvantage quintiles, by Indigenous status, NSW, Vic & Qld, 2006

 $Table \ 2.10.2b: Population \ distribution \ by \ SEIFA \ advantage/disadvantage \ quintiles, \ by \ Indigenous \ status, WA, SA \& ACT, 2006$

	Indigenous population	Non-Indigenous population	Total population
		Western Australia	
Quintile 1 (most disadvantaged)	46.7	17.8	18.9
Quintile 2	18.7	19.7	19.7
Quintile 3	18.1	19.6	19.6
Quintile 4	12.5	20.5	20.2
Quintile 5 (most advantaged)	4.0	22.3	21.6
		South Australia	
Quintile 1 (most disadvantaged)	48.1	19.5	19.9
Quintile 2	24.6	20.0	20.1
Quintile 3	14.8	20.9	20.8
Quintile 4	7.1	19.7	19.4
Quintile 5 (most advantaged)	5.4	19.9	19.7
		ACT	
Quintile 1 (most disadvantaged)	27.2	20.0	20.1
Quintile 2	25.3	19.8	19.9
Quintile 3	21.1	20.4	20.4
Quintile 4	16.0	19.7	19.7
Quintile 5 (most advantaged)	10.4	20.0	19.9

Note: The population of some states/territories was unable to be split into exact quintiles based on the SEIFA index of advantage/disadvantage. In all except one of these cases, the best approximate quintiles were calculated. Approximate population quintiles based on the SEIFA Index of Advantage/Disadvantage were unable to be calculated for Tasmania because of the population spread.

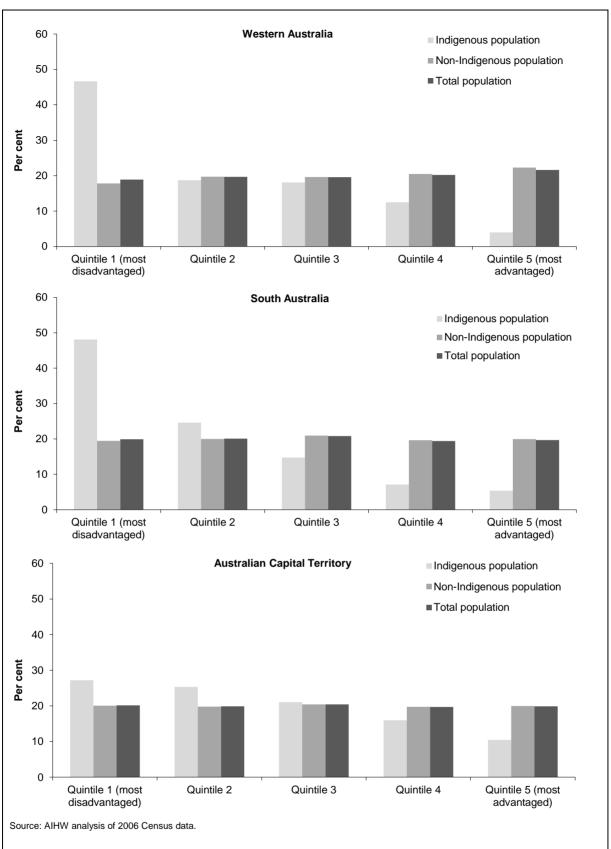


Figure 2.10.2b: Population distribution by SEIFA advantage/disadvantage quintiles, by Indigenous status, WA, SA & ACT, 2006

Table 2.10.2c: Population distribution by SEIFA advantage/disadvantage quintiles, by Indigenous status, NT, 2006

	Indigenous population	Non-Indigenous population	Total population
	Northern Territory		
Quintile 1 (most disadvantaged)	57.5	3.3	20.1
Quintile 2	15.6	19.2	18.1
Quintile 3	11.2	24.6	20.4
Quintile 4	9.4	23.2	18.9
Quintile 5 (most advantaged)	6.3	29.7	22.5

Note: The population of some states/territories was unable to be split into exact quintiles based on the SEIFA index of advantage/disadvantage. In all except one of these cases, the best approximate quintiles were calculated. Approximate population quintiles based on the SEIFA Index of Advantage/Disadvantage were unable to be calculated for Tasmania because of the population spread.

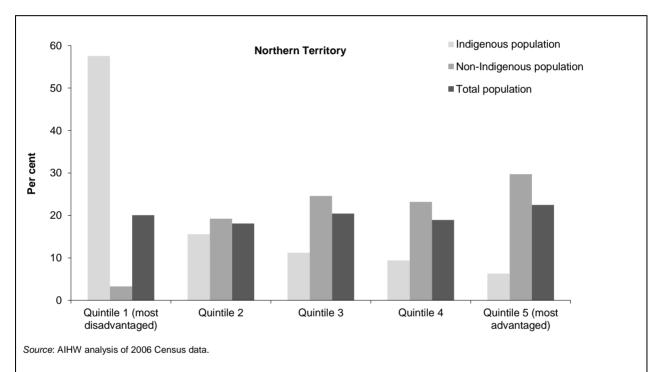


Figure 2.10.2c: Population distribution by SEIFA advantage/disadvantage quintiles, by Indigenous status, NT, 2006

Data quality issues

Census of Population and Housing

The Census uses the National health data dictionary standard Indigenous status question and it is asked for each household member. Measures that are drawn from Census data are subject to broad data concerns relating to the unexplainable growth in the Aboriginal and Torres Strait Islander population since the 1991 Census, and the limitations of self-identification. Other Census data issues relate to the accuracy of the Census count itself; for example, whether people are counted more than once, or are under-counted (ABS 1996). For the 2002 National Aboriginal and Torres Strait Islander Social Survey, it was estimated that there were 165,700 Indigenous households compared with 144,700 enumerated in the 2001 Census. Although the Census data are adjusted for under-counts at the person level to arrive at the estimated resident population, no such adjustment is done at the household level. This affects the accuracy of the person counts at the household level to provide

Socioeconomic Indexes for Areas (SEIFA)

adjusted household estimates.

There are a range of data items that can be included in an index on socioeconomic disadvantage and the Census does not collect all of the variables identified as being related to socioeconomic status. Some of the variables may be context-specific (e.g. a low mortgage in Sydney may be high in another city) and some are associated with age (e.g. income), yet the methodology does not allow for age-standardisation. This is particularly relevant in the context of this performance measure where we are comparing two populations that have different age structures.

Analysis of SEIFA results at small area levels has found that within any area there will be individuals and subpopulations with very different characteristics from the overall population of the area. When judgments are made about the individual or subpopulation based on the characteristics of the area, there is considerable potential for error (Baker & Adhikari 2007). This issue is particularly relevant for the Indigenous population, because they make up a small proportion of the population in most areas of Australia.

Kennedy and Firman (2004) found that the traditional approach to analysing SEIFA at an area level masks the socioeconomic status of Indigenous Australians who make up a small proportion of most areas. They found that stratifying SEIFA scores by Indigenous and non-Indigenous households in each area shows that Indigenous populations suffer a high level of social and economic disadvantage, regardless of whether they live in high or low socioeconomic areas.

List of symbols used in tables

- n.a. not available
- rounded to zero (including null cells)
- 0 zero
- .. not applicable
- n.e.c. not elsewhere classified
- n.f.d. not further defined
- n.p. not available for publication but included in totals where applicable, unless otherwise indicated

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