

Housing and Services - Overcrowding

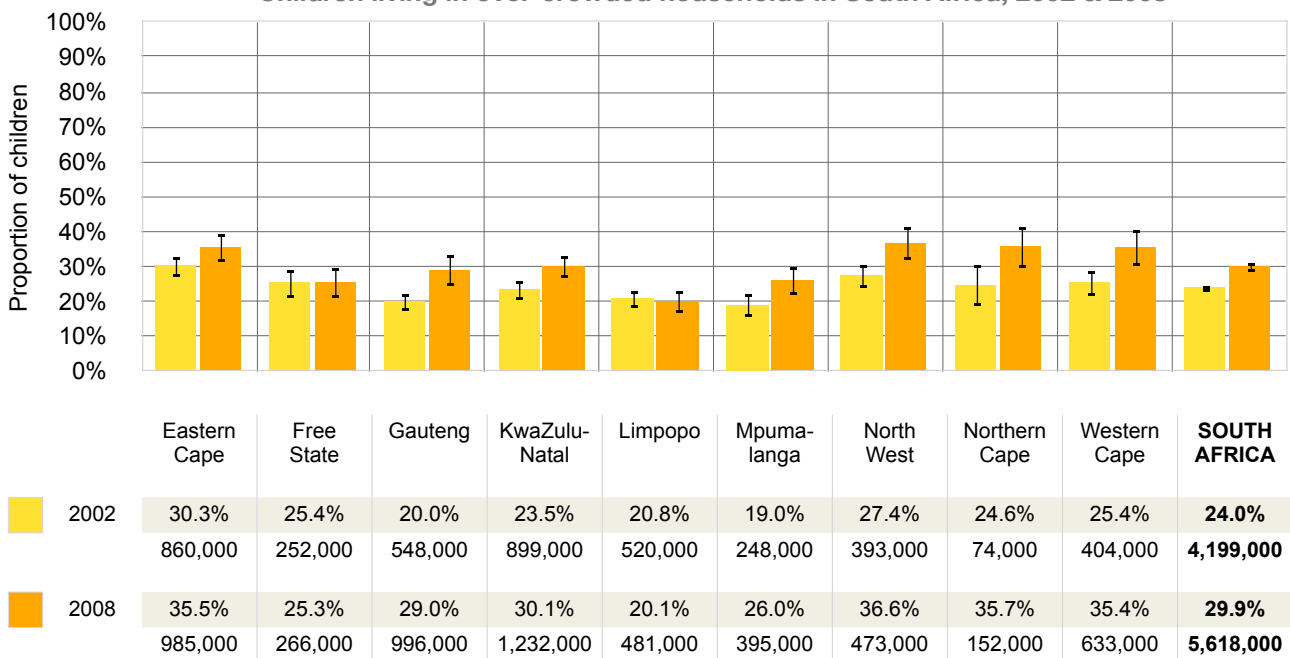
Author/s: Katharine Hall

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Definition

Children are defined as living in over-crowded dwellings when there is a ratio of more than two people per room (excluding bathrooms but including kitchen and living room). The over-crowding ratio is obtained by dividing the total number of household members by the total number of rooms occupied by the household. Thus, a dwelling with two bedrooms, a kitchen and sitting-room would be defined as over-crowded if there were more than eight people living in it.

Children living in over-crowded households in South Africa, 2002 & 2008



Source

- Statistics South Africa (2003 - 2009) General Household Survey 2002 - 2008. Pretoria, Cape Town: Statistics South Africa.
- Analysis by Katharine Hall & Double-Hugh Marera, Children's Institute, University of Cape Town.

Notes

1. Children are defined as persons aged 0 – 17 years.
2. Population numbers have been rounded off to the nearest thousand.
3. Sample surveys are always subject to error, and the proportions simply reflect the mid-point of a possible range. The confidence intervals (CIs) indicate the reliability of the estimate at the 95% level. This means that, if independent samples were repeatedly taken from the same population, we would expect the proportion to lie between upper and lower bounds of the CI 95% of the time. The wider the CI, the more uncertain the proportion. Where CIs overlap for different sub-populations or time periods we cannot be sure that there is a real difference in the proportion, even if the mid-points differ. CIs are represented in the bar graphs by vertical lines at the top of each bar.

What do the numbers tell us?

The Committee on Economic Social and Cultural Rights defines 'habitability' as one of the criteria for adequate housing. ¹ Over-crowding is a problem because it can undermine children's needs and rights. For instance, it is difficult for school children to do homework if other household members want to sleep or watch television. Children's right to privacy can be infringed if they do not have space to wash or change in private. The right to health can be infringed as communicable diseases spread more easily in over-crowded conditions. Over-crowding also places children at greater risk of sexual abuse, especially where boys and girls have to share beds, or children have to sleep with adults. Analyses of the General Household Survey (2002 – 2008) show that children under the age of six years are more likely than older children to live in over-crowded households.

Over-crowding makes it difficult to target services and programmes to households effectively – for instance, urban households are entitled to six kilolitres of free water, but this household-level allocation discriminates against over-crowded households because it does not take account of household.

In 2008, 5.6 million children lived in over-crowded households. This represents 30% of the child population – much higher than the proportion of adults living in crowded conditions (20%). Over-crowding is associated with housing type: 63% of children who stay in informal dwellings also live in over-crowded conditions, compared with 23% of children in traditional dwellings and 4% of children in formal housing.

In Gauteng there has been a significant increase in the proportion of children living in over-crowded households between 2002 (20%) and 2008 (29%) – despite the massive roll-out of subsidy housing in the province. Significant increases in over-crowding are also found in the Western Cape (from 25% to 30% of children) and the North West province (from 27% to 37%). Over the same period, there have been slow but steady increases in over-crowding in the Northern Cape and KwaZulu-Natal.

There is a strong racial bias in children's housing conditions. Coloured children (29%) and African children (32%) are significantly more likely to live in crowded conditions than Indian and White children (3% and 4% respectively).

The average household size has gradually decreased from 4.5 in 1996 to around 4 in 2008, indicating a trend towards smaller households, which may in turn be linked to the provision of small subsidy houses. Households in which children live are much larger than the national average. The median household size for adult-only households is 2.7, while the median for households with children is 6.5 members. ²

Technical notes

There is no standard measure of overcrowding in South Africa, but there are many international definitions. The definition used here is derived from the UN-HABITAT definition, which is a maximum of two people per habitable room. 'Habitable' rooms exclude bathrooms and toilets. The data are taken from the General Household Survey, which records the total number of people in a household as well as the total number of rooms occupied (excluding bathrooms and toilets).

For purposes of measuring and monitoring persistent racial inequality, population groups are defined as 'African', 'Coloured', 'Indian', and 'White'.

Strengths and limitations of the data

The data are derived from the General Household Survey ³, a multi-purpose annual survey conducted by the national statistical agency, Statistics South Africa, to collect information on a range of topics from households in the country's nine provinces. The survey uses a sample of 30,000 households. These are drawn from

Census enumeration areas using multi-stage stratified sampling and probability proportional to size principles. The resulting estimates should be representative of all households in South Africa.

The GHS sample consists of households and does not cover other collective institutionalised living-quarters such as boarding schools, orphanages, students' hostels, old age homes, hospitals, prisons, military barracks and workers' hostels. These exclusions should not have a noticeable impact on the findings in respect of children.

Changes in sample frame and stratification

The current master sample was used for the first time in 2004, meaning that, for longitudinal analysis, 2002 and 2003 may not be easily comparable with later years as they are based on a different sampling frame. From 2006, the sample was stratified first by province and then by district council. Prior to 2006, the sample was stratified by province and then by urban and rural area. The change in stratification could affect the interpretation of results generated by these surveys when they are compared over time.

Provincial boundary changes

Provincial boundary changes occurred between 2002 and 2007, and slightly affect the provincial populations. Comparisons on provincial level should therefore be treated with some caution. The sample and reporting are based on the old provincial boundaries as defined in 2001 and do not represent the new boundaries as defined in December 2005.

Weights

Person and household weights are provided by Statistics South Africa and are applied in Children Count – Abantwana Babalulekile analyses to give estimates at the provincial and national levels. Survey data are prone to sampling and reporting error. Some of the errors are difficult to estimate, while others can be identified. One way of checking for errors is by comparing the survey results with trusted estimates from elsewhere. Such a comparison can give an estimate of the robustness of the survey estimates. For this project, GHS data were compared with estimates from the Statistics South Africa's mid-year estimates, as well as the Actuarial Society of South Africa's ASSA2003 AIDS and Demographic model.

Analyses of the seven surveys from 2002 to 2008 suggest that over- and under-estimation may have occurred in the weighting process:

- When comparing the weighted 2002 data with the ASSA2003 AIDS and Demographic model estimates, it seems that the number of children aged 0 – 9 years was under-estimated in the GHS, while the number of children aged 10 – 19 was over-estimated. The pattern is consistent for both sexes. The number of very young males aged 0 – 4 years appears to be under-estimated by 15%. Girls in this age group have been under-estimated by 15.8%. Males in the 10 – 14-year age group appear to be over-estimated by 5.7%.
- Similarly in 2003, there was considerable under-estimation of the youngest age group (0 – 9 years) and over-estimation of the older age group (10 – 19 years). The pattern is consistent for both sexes. The results also show that the over-estimation of males (9%) in the 10 – 19-year age group is more than double the over-estimation for females in this age range (3.8%).
- In the 2004 results, it seems that the number of children aged 7 – 12 years was over-estimated by 6%, as well as the number of persons aged 13 – 22 years. The number of very young children appeared to have been under-estimated. The patterns of over- and under-estimation appear to differ across population groups. For example, the number of White children appears to be over-estimated by 14%, while the number of Coloured persons within the 13 – 22-year age group appears to be 9% too low.
- In 2005, the GHS weights seem to have produced an over-estimate of the number of males within each five-year age group. The extent of the overestimation is particularly severe for the 10 – 14-year age group. In contrast, the weights produce an under-estimate of the number of girls – the error seems greatest in respect of the younger age groups. These patterns result in male-to-female ratios of 1.06,

1.13, 1.10 and 1.09 respectively for the four age groups covering children (ie 0 – 4, 5 – 9, 10 – 14 and 15 – 19 years).

- The 2006 weighting process yielded the same results as in 2005. The one exception is that the under-estimation of females is greatest in the 5 – 9 and 15 – 19-year age groups. This results in male-to-female ratios of 1.03, 1.10, 1.11 and 1.12 respectively for the four age groups covering children.
- The 2007 weighting process produced an over-estimation for boys and an under-estimation for girls. The under-estimation of females is in the range of 3 – 5% while the over-estimation is in the range of 1 – 7%. This results in male-to-female ratios of 1.07, 1.06, 1.08 and 1.08 respectively for the four age groups covering children.
- Overall, assuming the ASSA2003 Aids and Demographic model to be the ‘gold standard’, it appears that the GHS2008 over-estimates both male and female populations under the age of 19 years, except for 0 – 4- year-old females. The extent of over-estimation for boys is in the range 0 – 7%. It is particularly severe for boys aged 10 – 14 years. Over-estimation is in the range of 2 – 5% for girls aged five years and above. For girls aged 0 – 4 years, the ASSA2003 model suggests that these may have been under-estimated by about 1%. The GHS2008 suggests a sex ratio of 1.03 for children aged 0 – 4 years, which is higher than that of the ASSA model and Statistics South Africa’s mid-year estimates.

The apparent discrepancies in the seven years of data may slightly affect the accuracy of the Children Count – Abantwana Babalulekile estimates. Since 2005 the male and female patterns vary in respect of a particular characteristic, which means that the total estimate for this characteristic will be somewhat slanted toward the male pattern. A similar slanting will occur where the pattern for 10 – 14-year-olds, for example, differs from that of other age groups. Furthermore, there are likely to be different patterns across population groups.

Disaggregation

Statistics South Africa suggests caution when attempting to interpret data generated at low level disaggregation. The population estimates are benchmarked at the national level in terms of age, sex and population group while at provincial level, benchmarking is by population group only. This could mean that estimates derived from any further disaggregation of the provincial data below the population group may not be robust enough.

Reporting error

Error may be present due to the methodology used, ie the questionnaire is administered to only one respondent in the household who is expected to provide information about all other members of the household. Not all respondents will have accurate information about all children in the household. In instances where the respondent did not or could not provide an answer, this was recorded as “unspecified” (no response) or “don’t know” (the respondent stated that they didn’t know the answer).

References

¹ Office of the United Nations High Commissioner for Human Rights (1991) The right to adequate housing (art.11 (1)): 13/12/91. CESCR general comment 4. (general comments). Geneva: United Nations.

² Statistics South Africa (2009) General Household Survey 2008. Pretoria, Cape Town: StatsSA. [Calculations by K Hall, Children’s Institute, UCT]

³ Statistics South Africa (2003-2009). General Household Survey 2002-2008 Metadata. Cape Town, Pretoria: Statistics South Africa.



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