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How many in a crowd? Assessing overcrowding measures in Australian housing



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How many in a crowd? Assessing overcrowding measures in Australian housing—Executive Summary

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Executive summary

Key points

- Given the importance of housing in shaping life's outcomes and the significant public investment in housing assistance, it is critical that policy is guided by measures of overcrowding that meaningfully reflect housing adequacy.
- Very few Australians live in housing that could be considered overcrowded. The norm is for households to have spare bedrooms. Over 90 per cent of the population live in homes with at least one bedroom per couple or unpartnered occupant.
- Despite this, there are groups within our society prone to experiencing overcrowding, leading to a range of substantial adverse consequences. These include Aboriginal and Torres Strait Islander people, people from CALD (culturally and linguistically diverse) backgrounds, of lower socio-economic backgrounds and women escaping domestic violence situations, among others.
- The relationship between household occupant density and occupant wellbeing is highly nuanced. There is both a conceptual and empirical disconnect between current measures of overcrowding and actual experiences of excessive density.
- For many purposes of policy and practice, measures of overcrowding based on simple metrics of household composition and number of bedrooms cannot adequately discriminate between crowded and uncrowded households. This includes the commonly used Canadian National Occupancy Standard (CNOS). Qualitative and quantitative evidence reject the validity of the assumptions underlying the CNOS.

- **Measurement challenges include the conflation of the effects of occupancy and density; differential effects within and between households; and opposing positive and negative effects of higher density. Positive impacts of living in a large, well-functioning household include caring for family members, strengthened family ties, promotion of cultural identity, and financial benefits. Negative impacts include lack of privacy, noise, antisocial behaviour, health and wellbeing concerns, and family strain.**
- **For targeted groups, overcrowding needs to be reframed away from a density measure to instead capture the subjective reaction to living in a crowded environment, as well as indicators of household functioning as a key moderator.**
- **In large scale surveys, measurement of crowding may be improved by incorporating wider measures of available space and facilities in the household, rather than focussing on the number of bedrooms; and accounting for the adverse effects of multiple family units.**

Key findings

Key channels through which higher household density impacts upon occupants' psychological wellbeing are through over-stimulation, loss of a sense of a locus of control and of lack of privacy. Interviews with stakeholders and householders highlighted shortcomings of the CNOS as an indicator of overcrowding due to its inability to account for cultural differences in norms around shared living and sleeping arrangements, notably for people from Indigenous backgrounds, the failure to account for the capacity of different households to manage higher occupant numbers, and whether living in a large household is an active choice.

The relationships between household density and selected measures of wellbeing were explored through extensive quantitative modelling using 19 annual waves of data from the *Household, Income and Labour Dynamics in Australia* (HILDA) survey. It also included an additional analysis of data for humanitarian migrants from five waves of the *Building a New Life in Australia* (BNLA) survey. The objective of the modelling was to provide a better understanding of the levels and circumstances at which household density levels are associated with adverse impacts on wellbeing as a guide to validating and improving measures of overcrowding.

We find the relationship between household density and occupant wellbeing to be highly nuanced. Often, negative associations between occupant density and wellbeing are observed at very low levels of density (that is, in uncrowded households), but this gradient flattens and even becomes positive at higher levels of density. This is contrary to theoretical expectations. Key findings contributing to the complexity of these relationships include:

- For the general adult population, on average there is a decline in wellbeing as the number of occupants in a household increases above two, leading to conflation of the effects of occupancy and density.
- The simple count of household occupants or density ratios to bedrooms generally perform better than the CNOS in explaining variation in mental health, psychological distress, physical health and people's satisfaction with their home. This implies the assumptions embodied in the CNOS on appropriate sharing of bedrooms, conditional on age and gender, have limited validity when it comes to distinguishing between crowded and uncrowded households.

- Adverse associations between higher household density and wellbeing apply primarily to parents, with small and even positive associations for other adult occupants.
- Multiple families living in the same home has a substantial negative impact on occupants' wellbeing in addition to any effect on household density.
- Following insights from the qualitative interviews, we tested for differential effects of crowding by household functioning. Even using a rudimentary proxy of family functioning, based on satisfaction with intra-family relationships, we confirm this to be a significant moderator. Well-functioning households have a greater capacity to manage higher occupant density.
- The strongest evidence of occupant density translating to overcrowding is obtained from estimating the effect of a higher number of occupants for homes with a fixed number of bedrooms, and vice versa. Adverse associations between occupancy and mental wellbeing are strongest in smaller (2-bedroom) homes. For the application of the CNOS as an indicator of overcrowding, this suggests extra bedrooms required should be given greater weight for smaller homes.
- Australians have strong preferences for more bedrooms. Models of people's satisfaction with their home imply four or five-bedroom homes are preferred, even for households with just two or three people.
- Australians of Asian background live in higher density households but little support is found for the hypothesis that cultural norms leave them less sensitive to impacts of higher density. Evidence from the BNLA suggests that recent humanitarian migrants are significantly more likely to live in crowded housing, and wellbeing increases with household density beyond levels that would normally be considered as overcrowding.

The experiences of people from CALD (culturally and linguistically diverse) and Indigenous backgrounds living in overcrowded households were further explored in the qualitative interviews. Three primary living arrangements identified as common among overcrowded houses were large nuclear families or extended family groupings, having visitors come to stay (particularly for Indigenous households), and house share arrangements (particularly for CALD households).

Key reasons for those families and people living in overcrowded housing included lack of availability of appropriate housing, compounded by difficulties accessing public housing, and discrimination in the private rental market. Cultural norms and obligations contribute to overcrowding for some people from CALD and Indigenous backgrounds. For the latter, visitors were often related to Indigenous mobility between remote communities and regional and urban centres for the purposes of accessing services.

The interviews revealed substantial negative effects associated with overcrowding, including lack of privacy, excessive noise, incidents of antisocial behaviour, child safety and wellbeing concerns, increased housework, food theft, and family and financial strain. Family strain heightened by overcrowding can lead to irrevocable relationship breakdowns and family violence. Service providers are also impacted by having to manage additional repairs and maintenance, provision of intensive tenancy support and the need to reallocate tenants. Some positive effects of larger households were noted, including caring for family members, strengthened family ties, promotion of cultural identity, companionship and financial benefits. The realisation of these benefits generally relies on the household being well-functioning.

Potential measures to address overcrowding are identified at a systems and service-level. Systems-level measures primarily need to address the supply of appropriate and affordable housing, and tenant-to-property allocation processes. These include increasing the level and diversity of the housing stock, more efficient repairs and maintenance, and addressing rental market failures. At the service-level, housing providers play a key role in maximising the use of existing housing capacity, sourcing alternative accommodation, and providing or linking tenants to needed services. Greater staffing and funding would enhance the capability of housing and service providers to manage and mitigate the incidence and adverse effects of overcrowding. A number of stakeholders advocated for community-controlled housing organisations, particularly servicing Aboriginal communities, as a model to provide more culturally appropriate management of overcrowding.

Policy and practice implications for measuring overcrowding

A key finding of this research is that, due to the complex and nuanced relationship between household density and overcrowding, current measures of overcrowding based on readily observable objective variables, such as household composition and the number of bedrooms, will have at best a tenuous link to actual experiences of crowding. This includes the CNOS, the most widely used indicator of overcrowding. Further, we find the assumptions embodied in the CNOS on who can reasonably share a bedroom conditional on their age, gender and relationships status, have little validity for identifying crowdedness. In fact, we are sceptical that any measure based on such readily observable metrics will accurately identify households suffering adverse impacts of crowding, except perhaps at the extremes of the distribution.

The implications of these assessments depend critically on what purpose measures of overcrowding are to be used for. Practitioners, policy makers, and the data providers that support them face a number of constraints and trade-offs in measuring crowding. These trade-offs can be considered with respect to a continuum ranging from, at one end, large-scale surveys collecting readily observable measures of density that can be generalised to the population and key demographic groups; through to detailed qualitative studies collecting subjective information on crowding from household occupants, at the other end; with targeted collections for vulnerable populations that might draw on some combination of the two somewhere in-between. The essence of the problem lies in the fact that ease of measurement makes household density a preferred proxy for crowding over resource-intensive qualitative studies; but density has a very tenuous link to crowding.

For descriptive statistics and analyses of general trends, it is not so critical that some overcrowded houses are misclassified as not crowded, and vice versa. Misclassification is a much greater concern, however, if the measure of overcrowding is to be used to assess the extent of housing need of vulnerable groups or for targeting funding and assistance to households.

Potential approaches to develop more effective indicators of overcrowding and unmet housing demand in large-scale surveys include:

- the incorporation of data that provide a more robust indicator of the adequacy of living space than just the number of bedrooms—this may include floor space, the number of rooms, the number of bathrooms and toilets and, for households with children, outdoor play spaces, and
- accounting for the presence of multiple families in the household.

For measures applied to targeted groups or for assessing the needs of individual households, such as for the purposes of allocating housing or other social assistance, the measurement of overcrowding needs to be reframed away from density measures to instead try and capture personal and subjective reactions to living in a crowded environment.

This calls for qualitative, rather than quantitative, approaches, or at least some combination of the two. This requires the development of instruments that capture key channels of adverse consequences of excessive density on wellbeing, including feelings of a lack of privacy, loss of a locus of control, symptoms of over-stimulation (such as sleeping difficulties, excessive noise) and risks to safety for children, women and other vulnerable household members. As a key moderator, assessing family or household functioning would also provide valuable information on overcrowding risks.

Recognising that there are both positive and negative effects of increasing household occupancy and density, there is also a need to ascertain whether living in a large household is an active choice that meets their needs or if this arrangement has been imposed upon them due a lack of alternatives.

It is critical that culturally-specific measures are developed for Indigenous households, which take into account cultural norms for sharing living and sleeping spaces, as well as the regularity of visitors and obligations to accommodate extended kinship networks. Obtaining an assessment of actual housing demand would also be useful for future policy and practice.

The study

This study uses mixed methods research to evaluate the appropriateness of existing approaches to measuring overcrowding and provides evidence to guide the development of improved measures. Conceptualising overcrowding as situations in which excessive occupant density within households adversely impacts upon occupants' psychological wellbeing, we extensively explore the relationships between density levels within Australian households and occupant wellbeing. This exploration required empirical analyses of existing datasets and in-depth interviews with key stakeholder organisations and a targeted sample of persons living in crowded housing.

The quantitative analyses drew on data from 19 waves of the annual HILDA panel survey. The HILDA data enabled the construction of a number of measures of occupant density, including replication of the most commonly used measure of overcrowding, the CNOS. The relationships between these household-level variables and a range of individual outcomes were estimated using a number of alternative specifications and for different groups within the population by relationship status, gender, and ethnic background. This was supplemented by analyses of panel data from the BNLA to provide a further focus on humanitarian migrants, a group known to face challenges in securing appropriate housing and who typically live in higher density households.

The qualitative research was based on 21 interviews with stakeholder organisations and 85 interviews with people living in crowded households: 43 with Indigenous householders from the APY Lands, Alice Springs Town Camps and metropolitan Adelaide; and 42 with people from CALD backgrounds from Alice Springs, Adelaide and the Western Sydney area. The interviews explored patterns of living arrangements, factors driving crowding, people's subjective experiences of crowding, the consequences of crowding (both negative and positive), and strategies to manage crowding.



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