How do critical life events affect the likelihood of entering housing stress?



Based on AHURI Final Report No. 393: Predicting risk to inform housing policy and practice

What this research is about

This research explores how critical life events can be used to predict the likelihood of entering housing stress for individuals and households, which might, in turn, lead to further housing and related forms of disadvantage and support needs. It considers how the identification of 'risk pathways' support an early intervention model of housing assistance for different population groups.

The research draws heavily on existing conceptualisation of the interaction of critical life events, housing shocks, household resources and resilience, and their direct and indirect effects to develop a policy-oriented 'proof of concept' model. It draws on the concepts of 'resilience' and risk pathways to explore 'undesirable housing outcomes' associated with critical life events experienced at household levels which, in turn, affect housing outcomes.

The context of this research

Understanding more about critical life events as contributors to housing stress can support policy development options that go beyond the usual administrative boundaries and support intersectional approaches to reducing housing stress.

The key findings

Critical life events experienced by individual household members—or households as a unit—as 'upstream events' can result in housing shocks. These critical life events include positive events—for example, partnership formation, birth of a child, promotion at work—as well as negative events. Negative events typically have a negative effect on household income—for example, separation or divorce, unexpected job loss, and acute health conditions. They can be short-term or long-term in duration; can be planned or unanticipated; and can have acute or chronic impacts on housing and living arrangements and other spheres of life. The resulting 'housing shocks' can include inability to afford rent or mortgage payments; eviction; overcrowding; or housing precarity. Many such shocks are underpinned by housing stress, in which household resources are inadequate to manage affordability pressures when combined with a critical life event.

Risk pathways

This project introduces the concept of 'risk pathways' to quantitatively model the likelihood of undesirable outcomes in housing pathways. Risk pathways model the dynamics of housing shocks and household resilience to serve as an early diagnostic tool to support early intervention policy.

The risk-pathway-profile typology, based on complexity of critical life events—for example, change of jobs, pregnancy, illness, death of family member or friend—in interaction with household resources, can lead to a methodological tool that can be developed in future work to support timely policy intervention in response to housing shocks.

Households vulnerable to housing stress

The socio-demographic attributes of household members most vulnerable to entering into housing stress (i.e. being in the bottom 40 per cent (regarding equivalised income) of income distribution and who spend more than 30 per cent of their gross income on housing) are:

- young to early middle-aged adults (18-44 years)
- · looking for work
- living in rental housing (including both private and social rental).

Predictor of housing stress risk

The biggest predictor of risk of entering housing stress is age, with 18–24-year-olds being 214 per cent more likely to enter housing stress than a person in the most resilient cohort (those aged 65+). This means that for every one person from the resilient cohort transitioning into housing stress, there will be 3.14 individuals aged between 18–24 (who otherwise have all the same characteristics as those in the resilient cohort) transitioning into housing stress.¹

The additional risk of entering housing stress is only slightly lower for those aged 25-34 (154%) and 35-44 (156%) respectively.

Employment status is the next largest predictor, with unemployed people being 144 per cent more likely to enter housing stress than fully employed people, and retired people being 78 per cent more likely.

Not having a college or university education is associated with a 78 per cent higher chance of entering housing stress. Renters (in private and social housing) are 125 per cent more likely to enter housing stress than owners (outright and with a mortgage).

Critical life events

The critical life events that increase the likelihood of entering housing stress the most compared to the base person are:

- birth/adoption of a child (34%)
- providing care to a family member (15%)
- getting separated (30%) or married (15%)
- having employment terminated or made redundant (14%).

The incidence likelihood of critical life events varies over individuals' lifetime and the type of critical life event. Some critical life events are more likely during early adulthood, and some are more probable at older ages. Understanding the rate of critical life event occurrence over a lifespan—along with investigating the contribution of critical life events on entering housing stress—can inform more targeted assistance.

¹ This ratio indicates that the Hazard Ratio for 18–24-year-olds entering housing stress is 3.14, which then equates to the probability of a 18–24 year old transiting into housing stress as being (100*(3.14-1)) per cent or 214 per cent more likely.

The housing critical life event of changing residence has the highest incidence probability (13.7%); the health critical life event with the highest incidence probability is serious injury or illness to family member (11.5%); and the finance critical life event with the highest probability is changing jobs (10.9%). Family-related critical life events have a lower incidence probability, the most likely being pregnancy (4.6%). Among justice-related critical life events, being a victim of property crime has the highest incidence probability (2.8%).

The incidence of many critical life events is associated with age. Marriage, pregnancy and birth or adoption of a new child are more probable between 25 and 35 years of age. The likelihood of separation before age 25 is between 5 per cent to 6 per cent, which is followed by a decreasing trend after age 25. The likelihood of changing job shows a monotonically decreasing trend from nearly 25 per cent for ages below age 25, to zero after age 70 years. Promotion at work has its peak (at around 12%) between ages 25 and 28. The likelihood of justice-related critical life events remains below 5 per cent at all age groups.

Who is likely to be in housing stress

People renting are more likely to enter housing stress than owner-occupiers, and less likely to recover from it. One form of measurement estimator (the non-parametric Kaplan Meier estimator) shows the risk of entering housing stress is three to five times higher for renter-occupiers. The probability of recovering from housing stress in the first year of entering housing stress is 39.4 per cent for renters and 48.9 per cent for owner-occupiers.

Another form of estimator (the Cox proportional hazard (PH) model) shows that tenants are 2.252 times more likely to enter housing stress compared to owner-occupiers, and, as noted earlier, those aged 18–25 years old are 3.146 times more likely than those above 65 years old to enter housing stress. Compared to individuals engaged in full-time employment, those who are looking for a job are 2.411 times more likely to enter housing stress. The ratio for those engaged in home duties is 2.226, and for part-time employees and retirees it is 1.671 and 1.785 respectively.

Marriage in the past year increases the risk of entering housing stress by 14.8 per cent, separation increases the risk by 30.1 per cent, pregnancy increases the risk by 12.8 per cent, and birth or adoption of a new child increases the risk by 34.1 per cent. Redundancy or dismissal increases the risk of entering housing stress by 14.2 per cent, and major worsening in finance increases the risk by 72.1 per cent. Promotion at work decreases the risk of entering housing stress by 39.4 per cent.

The results show that tenure status has a paramount role in housing support policy, as renters are more likely to enter housing stress and less likely to recover from it.

Where do the vulnerable and the resilient cohorts live

Approximately 70 per cent of people who were unemployed and living in rental housing were in the age group of 18–44 years in all capital cities and the balance of the state areas. The Northern Territory outside of Darwin has the highest proportion of people with all three characteristics: 5.8 per cent of the population. In all other areas, that proportion is below 4 per cent.

The resilient cohort—those least likely to enter housing stress—are owner-occupier older adults (65 years+) who have a postgraduate degree and are engaged in full-time work. Approximately 70 per cent of people aged 65+ were owner-occupiers, with the exception of the Northern Territory (NT): in Greater Darwin, 56.4 per cent of older adults were owner-occupiers and 42.1 per cent in the rest of NT. The proportion of homeowners aged 65+ among all homeowners was lower in capital cities, and especially in Greater Darwin (12.4%) and higher in rest of the state/territory areas, being highest in SA (23.7%) and NSW (23.2%).

The benefits of understanding Risk ratios

Risk ratios, obtained from the Cox proportional hazard model (discussed in the previous section), indicate how the risk increases or decreases compared to the based case—that is, the most resilient cohort. Looking at the risk ratios shows the need for an integrated support system, as both the level of education and employment status are found to have a significant effect on the risk of entering housing stress. This finding suggests that improving individuals' qualifications and skill sets, and supporting them to find appropriate occupations, can prevent undesirable housing outcomes.

The role of critical life events in a systems-approach integrated support system is vital. The findings suggest family formation and dissolution can significantly increase the likelihood of entering housing stress. Further research is needed to understand the effect of less-frequent critical life events.

Policy Evidence Summary

What this research means for policy makers

This research has developed a proof of concept and supports future policy development in two ways. First, housing assistance is typically linked to the income support system. However, household resilience does not only depend on income—it also relates to resources such as wealth, housing equity, formal insurance and various forms of social support. Risk-pathways models can enable early detection of households with low resilience that are in need of support but are not (yet) eligible for income support.

Second, housing assistance is typically provided when household resources are exhausted and the household is in urgent need for support. Risk-pathways models can capture the diversity of households in need of support to inform early intervention policies to prevent worsening of undesirable housing outcomes—for example, inability to sustain rental payments that could be supported with short-term loans rather than resulting in eviction or homelessness, or temporary financial support to bridge periods of income loss that could lead to mortgage arrears and loss of the home. In some cases, early intervention can potentially reduce long-term assistance need.

As such, the research recommends a targeted early intervention approach, and identifies critical life events that should be the focus of early intervention as well as demographic groups that are most likely to require support. For example, supports targeted at younger age groups that extend beyond current non-targeted youth allowance approaches. While existing approaches and evidence are geared to pre-earning, post-earning and earning years, more nuanced approaches can additionally take account of key life-stage housing-support needs. Many life-stage events require practical as well as financial supports—for example, leaving the family home to undertake education or training; partnership dissolution; birth or arrival of children or other family dependants.

The modelling framework of this research quantifies the impact of critical life events and socio-demographic attributes on the likelihood of entering housing stress. The analytical framework of this study can identify salient characteristics of vulnerability and resilience to housing stress in forming a 'risk pathway'. Aligning housing-assistance types and quantum for disability and health conditions and care at all life stages was identified as a major area for future policy investigation.

Further development of a systems approach to housing intervention will require scaling up of the methodology developed in the research to large-scale administrative linked data sources to further refine the method and enable investigation of housing responses to a wider range of critical life events including those associated with justice policy and practice.

Methodology

This research reviewed previous research; uses the Household Income and Labour Dynamics in Australia (HILDA) surveys to examine the impact of critical life events on risk pathways; and analyses data to identify significant relationships between critical life events and risk pathways

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