Positioning Paper

Housing assistance and non-shelter outcomes

authored by
Peter Phibbs with assistance from Peter Young

**Australian Housing
and Urban Research Institute**
Sydney Research Centre

July 2002

AHURI Positioning Paper No. 37

AHURi

Australian Housing
and Urban Research Institute

AHURI POSITIONING PAPER SERIES

AHURI Positioning Papers is a refereed series presenting the preliminary findings of original research to a diverse readership of policy makers, researchers and practitioners.

TABLE OF CONTENTS

LIST OF FIGURES

EXECUTIVE SUMMARY

Commonwealth and State Governments spend very large amounts of money on housing assistance. They provide housing of particular types in particular locations, with specific affordability outcomes. The housing or shelter impacts of these interventions are reasonably well understood. However, given the capacity of housing to affect many other elements of people's lives, an important question is the extent to which housing assistance impacts on a range of what could be called non-shelter or non housing outcomes including the impact of housing on one's health, employment prospects and the educational outcomes of children.

An understanding of non-shelter impacts is important for a variety of reasons. Firstly, if it can be shown that spending on housing has a variety of non-shelter benefits that may reduce the call on government funds in the short, medium and long term, this is an important argument to make when negotiating with Treasuries and others for housing assistance funds. Secondly, the type or "design" of housing assistance might have significant impacts on the non-shelter benefits – this would have implications for SHAs and others in the delivery of housing assistance. Thirdly, non-shelter benefits might vary between different target groups (e.g. aged persons, singles, single parents etc). This outcome might affect the allocation process within SHAs.

Whilst the issue of non-shelter outcomes has been part of the academic debate for a number of years, the research with a clear housing policy focus has been much more limited. Much of the research has been undertaken overseas, particularly in the United Kingdom and the USA. The different housing and welfare framework in other countries means that the findings of international studies may not be directly comparable. Some recent quantitative work has been done in Australia - mainly sponsored by AHURI. However, the work was limited to examining cross sectional data that was generated by previous studies.

In examining the non shelter impacts of housing it is considered that non-shelter impacts could be classified functionally into impacts related to tenure, dwelling, area, neighbours, community and after housing income levels. This framework will be used in the longitudinal study that will form the basis of this research project. It is proposed that a study of about 350 households recently allocated public housing in Sydney and Brisbane using a face to face survey approach, combined with a smaller survey of community housing and a qualitative study will be used to examine non-shelter impacts.

1. INTRODUCTION

Commonwealth and State Governments spend very large amounts of money on housing assistance. They provide housing of particular types in particular locations, with specific affordability outcomes. The housing or shelter impacts of these interventions are reasonably well understood. However, given the capacity of housing to affect many other elements of people's lives, an important question is the extent to which housing assistance impacts on a range of what could be called non-shelter or non housing outcomes including the impact of housing on one's health, employment prospects and the educational outcomes of children.

An understanding of non-shelter impacts is important for a variety of reasons. Firstly, if it can be shown that spending on housing has a variety of non-shelter benefits that may reduce the call on government funds in the short, medium and long term, this is an important argument to make when negotiating with Treasuries and others for housing assistance funds. Secondly, the type or "design" of housing assistance might have significant impacts on the non-shelter benefits – this would have implications for SHAs and others in the delivery of housing assistance. Thirdly, non-shelter benefits might vary between different target groups (e.g. aged persons, singles, single parents etc). This outcome might affect the allocation process within SHAs.

Whilst the issue of non-shelter outcomes has been part of the academic debate for a number of years[1], the research with a clear housing policy focus has been much more limited. This project attempts to fill this housing research gap. In order to investigate the extent and nature of non-shelter outcomes, AHURI has sponsored a research project being undertaken by the University of Sydney. This paper reviews the literature in this area and outlines the method that the project will use to assess the non-shelter impacts of housing assistance.

---

[1] For example, geographers have been writing about the impact of location on the access to a wide range of goods and services for over thirty years (see, for example, Harvey (1973)).

2. POLICY RELEVANCE

2.1 Context

Government's role in housing assistance is at a cross-roads in Australia. Funding levels through the Commonwealth State Housing Agreement have been steadily reducing since the mid-1990's. At the same time, expenditure on rent assistance has increased[2].

Changed taxation arrangements with the introduction of the Goods and Services Tax will alter the relative revenue raising capacities of the Commonwealth, and States and Territories. The questionable commitment of some States in the past to government's role in housing assistance throws further doubt over the future financial commitment of governments to housing assistance.

2.2 Research policy objectives

In this context understanding the role that housing plays becomes central to resolving issues of future funding of housing assistance programs. Housing practitioners have long argued that housing assistance is a social program with considerable leverage – that is, expenditure on housing results in savings that exceed that expenditure through other Government programs, such as health care, family support, education and the criminal justice system. Testing this hypothesis is the central rationale for this research project.

As Government revenue continues to decline, and demand for social services grows with our ageing population, choosing between very worthwhile social programs will increasingly become the unenviable task of central agencies and Government budget committees. Understanding the causes of core social problems, such as inherited disadvantage and the accompanying growth in a semi-permanent under-class in this country, becomes crucial to this decision making process. This research is intended to help to build an evidence base that sheds light on the assertion that housing assistance is a very effective and efficient method of tackling the causes of social problems such as these.

While helping to inform Government's macro-funding decision making processes, this research is also intended to help resolve strategic policy challenges facing State and Territory Housing Authorities. As funding has declined in recent years, most housing authorities have been forced to re-examine underlying policy assumptions regarding targeting, eligibility and entitlements. Who gets assisted, and how much assistance is provided, become more critical questions as capacity relative to demand declines.

More specifically the aims of this research project include:

1. To describe the key non-shelter impacts of different modes of housing provision;

2. To examine how non-shelter impacts change as a result of different types of shelter provision i.e. to examine the interaction between these two groups of variables;

3. To understand how critical shelter and non-shelter aspects interact and to theorise about the causal connections between government housing assistance and a range of non-shelter outcomes including employment outcomes and receipt of government support;

---

[2] A good summary of housing assistance trends has been published by AHURI in their Fact Sheet 3 for the Australian Housing Policy Project (http://www.ahuri.edu.au/research/policyproject/pdf/fact3_housingfunding.pdf)

4. To use the outputs from the first three aims to describe the changed social and economic well-being of individuals and families before and after receipt of housing assistance and other housing changes which include tenure, location and type;

5. To assess the benefits/disadvantages/outcomes of different tenures and forms of housing assistance for different socio-demographic groups and locations; and

6. To examine the relative importance of price and non-price characteristics of public rental housing for different socio-demographic groups of public housing tenants.

3. LITERATURE REVIEW

3.1 A framework for analysis

Before beginning the literature review on non shelter outcomes it is useful to explore the development of a framework that can help categorise the variety of non-shelter outcomes.

This framework recognises the relatively unique nature of a good – not only does housing provide the benefits of shelter but it also provides, through its location, access to a further bundle of goods and services. The fact that housing is provided in a fixed location means that it can also generate a number of positive or negative local impacts. Moreover, since housing is usually the single most expensive outlay for low to middle income families, housing costs can affect a household's ability to purchase other goods and services.

In developing a framework it is useful to start with the characteristics of **the dwelling**. For example, a house that is cold and damp can have a direct impact on the health of its residents. A house that is not matched to the needs of the household occupying it (e.g. it is too small) can have dramatic impacts on things like educational outcomes for children living in the house.

The next step in the hierarchy relates to the nature of **the area** that the house is located in. Some of these are local effects (e.g. the impact of traffic noise on sleep) whilst others are more regionally based (e.g. access to tertiary education or major hospitals). These outcomes are locational in nature – they relate to the physical and infrastructural characteristics of the area.

The next part of the framework highlights the impacts of **neighbours** on non-shelter outcomes. In extreme cases it is clear that neighbours can have dramatic impacts on the health and well being of residents. Given the magnitude of these impacts it is considered worthwhile to identify them as a separate component of the framework.

Going beyond the neighbour effect, it is also clear from the literature that the local **community**[3] can have an impact on non-shelter outcomes for households. For example, the nature of the local community can have major impacts on the expectations of young people. Note there is a major distinction between area and community effects- the community refers to the impact of **people** whilst area effects refer to the influence of goods/services/facilities. Note however that in some studies, particularly in the US, these two concepts are combined and referred to as neighbourhood effects.

Next, it is clear that characteristics of **the tenure** can have a significant impact on non-shelter impacts. For example, a major non-shelter impact relates to the instability of households operating in the private rental market. Whilst many households consider the nature of the dwellings available in the private rental market to be adequate, they are concerned by the impact of frequent moves on educational and social outcomes of their children (Phibbs, 2001).

A summary of this framework is shown in Figure 1.

---

[3] The local community can be defined as the social group who reside in a particular locality

Figure 1. A framework for examining non-shelter impacts

```
┌─────────────────────────────────────────────────────────────┐
│              Nature and level of housing assistance          │
│                                                              │
│              ┌────────────────────────────────┐              │
│              │            Tenure              │              │
│              └────────────────────────────────┘              │
│                 ┊        ┊        ┊        ┊                  │
│                 ▼        ▼        ▼        ▼                  │
│            ┌────────┐ ┌────────┐ ┌──────┐ ┌──────────┐        │
│            │Neighbours│ │Dwelling│ │ Area │ │Community │      │
│            └────────┘ └────────┘ └──────┘ └──────────┘        │
│                                                              │
│              Disposable income after housing costs           │
└─────────────────────────────────────────────────────────────┘
```
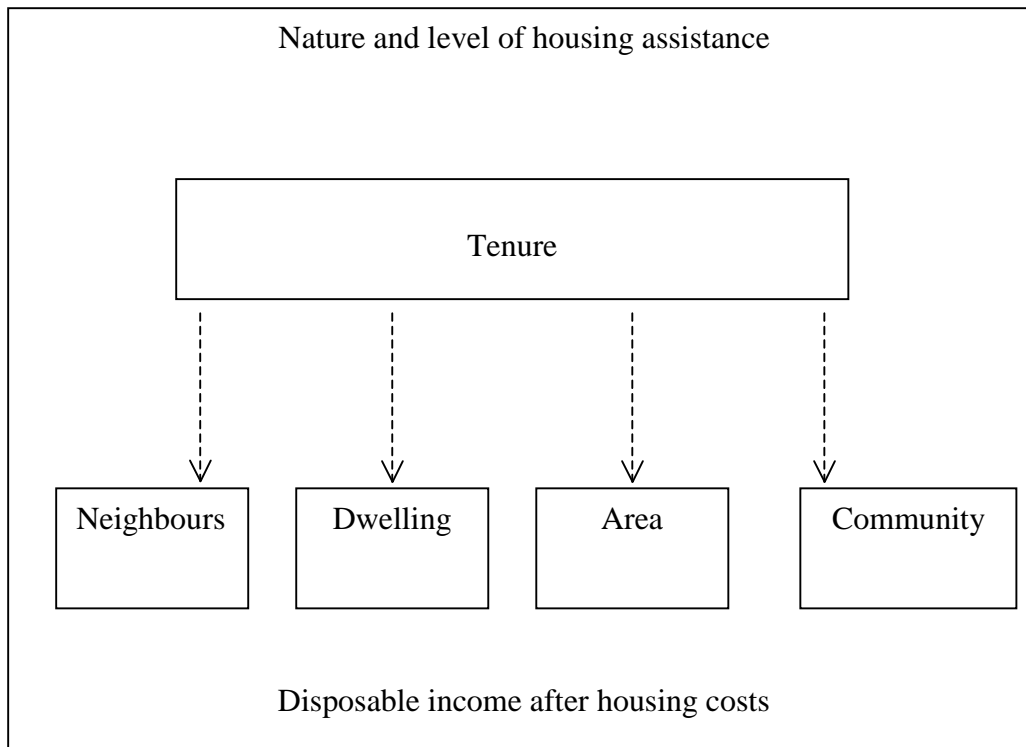
3.2   Introducing the Review

Until recently little had been written in this country on the relationship between housing and non-shelter outcomes. There are some exceptions, however, such as the landmark study by Paul Pholeros of the housing conditions and health status of indigenous Australians (Pholeros, 1993). This study compared the rates of infection for particular diseases before and after essential health hardware maintenance and improvements (health hardware is the term used to describe basic sanitation requirements such as clean running water, waste drainage and removal, etc.) The study indicated that improvements to basic health hardware drastically reduced the rates of eye and skin infection.

Thanks in part to the funding of the Australian Housing Research Fund, and the Australian Housing and Urban Research Institute, research in this field is now growing. Of particular interest are:

> Phibbs, P; Kennedy R and Tippet V (1999) "A Scoping Study to Identify and Design a Methodology to Measure the Social and Economic Impacts of Unmet Housing Need," unpublished report funded by the Australian Housing Research Fund[4].

> Mullins P, Western J and Broadbent B (2001) "The links between housing and nine key socio cultural factors: A review of the evidence" AHURI Positioning Paper, Melbourne
> (http://www.ahuri.edu.au/pubs/positioning/pp_housingnon.pdf)

> Waters, Anne-Marie (NATSEM) (2001), "Do Housing Conditions Impact on Health Inequalities Between Australia's Rich and Poor?" AHURI Positioning Paper, Melbourne.
> (http://www.ahuri.edu.au/pubs/finalreports/final_healthinequal.pdf).

---

[4] A briefer version of this report is available in Phibbs P (2000)

These three works have provided insight into some relationships between housing and non-shelter outcomes. In particular, the links between housing and health are explored in some depth in the recent AHURI Positioning Paper by Waters. Housing and health appears to be the relationship that has also received the most research attention internationally (see, for example, Thompson et al, 2001).

Other relationships between housing and non-shelter outcomes have received less attention. This literature review briefly examines some of these other relationships, and then focuses on one particular link – that between housing and schooling. This emphasis has been adopted in part because of the importance of the issue of early child development in the national policy agenda, and secondly because this topic was not adequately addressed in the earlier literature reviews cited above.

The review will examine the existing literature and then provide some example of linkages between housing and the particular non-shelter outcomes using the framework shown in Figure 1.

The review will examine in detail the following areas:

- Housing and health;
- Housing and crime;
- Housing and employment; and
- Housing and education

3.3   Housing and Health

As mentioned, the relationship between housing and health has received some recent attention in Australia, and it is not the intention of this paper to duplicate this recent work.

In particular, the recently released AHURI report, "Do Housing Conditions Impact on Health Inequalities Between Australia's Rich and Poor?" prepared by the Australian National University Research Centre examined the body of research that exists regarding the link between housing and health, and concluded that:

> *"Numerous reviews and studies in the academic literature point to an association between various aspects of housing and health. However, despite the evidence linking housing to health, the direction of causality between housing and health is often unclear." (Waters,2001,piii)*

The study also suggested that (piii):

- Evidence suggests that overcrowded dwellings are associated with greater risk of infectious disease and poor mental health;
- People that are living in dwellings that are damp,cold or mouldy are at greater risk of respiratory conditions, meningococcal infection and asthm.
- There appears to be little quantitative work on this subject in Australia

Another AHURI study (Mullins et al, 2001) also examined the literature on the relationship between housing and health. This study made the following conclusions (p24):

- Poor housing has a clear negative impact on residents' health, although the illnesses tend not to be among the most serious.
- The most significant impacts result from cold, dampness, and mould.
- Overcrowding can cause mental illness
- Homelessness can be caused by poor health, it causes ill health, and it aggravates poor health

- Poorly designed housing predisposes accidents with children and the elderly being particularly affected. Accidents took the form, for example, of falls and burns.
- There is an urgent need for far more research focusing on the causal link between housing quality and health.

Earlier work funded by the Australian Housing Research Fund concluded that:

> *"…the literature review uncovered a great deal of information on the association between housing and health however there is very little quantitative information about the direct health costs of inadequate housing.*
>
> *Typically, a direct link between housing and health has been assumed. There are, however, a number of studies that have attempted to demonstrate a clear causal relationship between housing conditions and health outcomes. Most of these studies conclude that housing plays an integral role in the maintenance of health. However, it is widely acknowledged that a range of interacting socio-economic factors also significantly influence health status. These socio-economic factors are difficult to control in a research setting and it is therefore difficult to isolate the specific health costs (or benefits) attributable to housing and it is to housing. Generally, "the effects of poor housing are difficult to quantify. Often, they are indirect. For example, crowding or room density may not be as important as social relationships within the home or community". (Gesler, et. al 1980)* quoted in Phibbs (2000, pp13-14)

A very similar view has been put in a recent review of housing and health studies quoted in the British Medical Journal (Thompson et al, 2001). The study examined a range of studies where housing conditions had been improved and examined the impact on health outcomes. The authors conclude that:

> *" Many studies showed health gains after the intervention, but the small study populations and lack of controlling for confounders limit the generalisability of these findings."…. "The lack of evidence linking housing and health may be attributable to pragmatic difficulties with housing studies as well as the political climate in the United Kingdom. A holistic approach is needed that recognizes the multifactorial and complex nature of poor housing and deprivation. Large scale studies that investigate the wider social context of housing interventions are required."*

(Thompson et al, 2001, p187)

The two AHURI projects, referred to above, did undertake some empirical analysis on the linkage between housing and health. However, since they used two snapshot surveys (a previous telephone survey in one case and the 1995 National Health Survey in another) it was difficult to make strong conclusions from the analysis.

The longitudinal nature of the current study has the potential to uncover some richer relationships. However, it is unlikely that this study will be able to go beyond establishing *associations* between housing and health. Limitations of the current study in generating causal links include:

- Complex level of interactions between housing and health mentioned in other studies
- No medical experts on the research team;
- Lack of a control group;

However this study may reveal some additional material on the relationship between housing and wellbeing, since this is a particular focus of the current study.

The linkages between housing and health are summarised in Figure 2.

```
+--------------------------------------------------------------+
|           Figure 2 Housing and health outcomes               |
|                   Possible linkages (a)                      |
|                                                              |
|         +------------------------------------------+         |
|         |               Tenure                     |         |
|         | (stable tenures may lead to better       |         |
|         |   relationships with GP etc, carers)     |         |
|         +------------------------------------------+         |
|            |        |          |          |                  |
|            v        v          v          v                  |
|    +----------+----------+----------+----------------+       |
|    |Neighbours|Dwelling  |Area      |Community       |       |
|    |Relation- |Impact of |Physical  |Links between   |       |
|    |ship      |Cold/damp/|access to |inequality and  |       |
|    |between   |dusty/    |medical   |health          |       |
|    |neighbours|unsafe    |services  |Availability of |       |
|    |and       |dwellings |          |support network |       |
|    |wellbeing |          |          |                |       |
|    +----------+----------+----------+----------------+       |
|                                                              |
|      (a) Stronger linkages are shown in bold                 |
+--------------------------------------------------------------+
```

3.4   Housing and Crime

Introduction

There is often considered to be a relationship between housing and crime. For example, it is often considered that concentrations of public housing are associated with crime[5]. But to what extent are the two related and how could changed housing circumstances lead to changes in the non-shelter outcomes associated with changed crime?

Before examining the issue of housing and crime in more detail, it is worthwhile to first examine the issue of what are the causes of crime. A review of the causes of crime can help suggest the ways in which housing and crime may interact and to identify in more detail the linkages between housing and crime.

The causes of crime[6]

Another way to examine the causes of crime is to examine what factors increase the *risk* of criminal behaviour. When examining these risk factors it is useful to make a distinction between proximate and distal causes of crime. Proximate causes are those which immediately precede criminal behaviour (e.g. association with delinquent peers), whilst distal causes are those which are more remote.

The risk factors can be examined in relation to both individuals and places. Each of these will be examined in turn.

---

[5] Following a particular concentration of media attention on issues relating to public housing and crime in Sydney in 1997, the Department of Housing funded the NSW Bureau of Crime Statistics and Research to conduct research on the relationship between the two.
[6] This section is based on Weatherburn (2001)

Crime prone individuals

Family factors:

A number of family factors appear to be related to increased risks of criminal behavior including:

- Parental neglect (e.g. poor parental supervision, inadequate child-parent interaction);
- Parental conflict (e.g. harsh or erratic discipline)
- Deviant parent behaviours;
- Family disruption (e.g. chronic spousal conflict)

School performance and intelligence

Offenders are nearly always found to be less intelligent on average than offenders and to do more poorly at school

The influence of delinquent peers

It has been known for a long time that young people who associate with delinquent peers are much more likely to get involved in crime.

Poverty and unemployment

Individuals at the lower end of the socio-economic status scale are more likely to participate in crime

Substance abuse

A number of studies have highlighted the relationship between alcohol consumption and crime, especially criminal violence. By way of contrast, the use of illicit drugs does not seem to exert any direct pharmacological effect on an individual's propensity to engage in crime. However, the need of drug addicts to fund their habit leads to increased levels of crime.

Crime Prone Places

Weatherburn (2001, p6) makes the point that "it is much harder to measure and monitor the factors which lead to crime prone communities than it is to measure the factors which lead to crime prone individuals".

Clearly, partly the reason why some places are crime prone is because they are places where large numbers of crime prone people live. However, it is also true that neighbourhoods are crime prone because they contain "attractive commercial or residential targets or criminal opportunities which attract both resident and non-resident offenders" (Weatherburn, 2001,p6).

Poverty, Unemployment and Inequality

Poverty, unemployment and income inequality have all consistently been found to render areas crime prone.

Criminal opportunity

In addition to economic and social disadvantage, offenders commit more crime when there are more opportunities for committing it. The opportunities include:

- Lax physical security;
- Lax personal security;
- Lax law enforcement
- High levels of alcohol consumption
- Attractive commercial or residential targets
- Easy opportunities for selling stolen goods.

Weak informal social controls

Weatherburn (2001,p6) suggests:

> *"closely related to the issue of criminal opportunity is what some have called "informal social control" … this term refers to the capacity of a community or neighbourhood to police itself. Informal social control occurs, for example, when residents of a neighbourhood are willing to confront juveniles engaging in vandalism"*

Areas of reduced levels of informal social control tend to have higher levels of crime and violence[7]. One of the factors that seems to lead to reduced levels of informal social controls is high levels of population turnover.

Gangs and organised crime

The crime problems of an area can be magnified by the emergence of gangs or other kinds of criminal groupings/organisation.

The relationship between Housing and Crime

This review of the causes of crime would suggest that housing could have a role to play in making places more susceptible to crime. This could be considered under the heading of criminal opportunity discussed above.

However, it is probably fair to say that the relationship between housing and crime is not well understood. While there is a great deal of theory suggesting that poor quality design and housing layout can facilitate crime, there is no conclusive evidence to prove such claims.

This notion that poor quality design and housing layout can affect crime levels was forcibly made by Oscar Newman (1972) in his work 'Defensible Space'. However, it is worth noting that criminal opportunity was one of only a number of factors leading to increased risks of crime discussed above. Hence, other commentators have argued that design may control the types and locations of crime, but will not attack the principle causes of crime which are widely thought to be socio-economic in origin. (see, for example, Gold, 1970)

Studies of housing and crime

In one study, data from a Sheffield survey was used to test whether crime patterns varied with design features, with particular attention on the problem of high rise developments. While some small variations in crime rates were found, the results did not show high rise flats to be at a distinct disadvantage (Mawby, 1977).

One of the more comprehensive studies of housing and crime investigated the relationship between public housing and crime levels across the Sydney metropolitan area for the NSW Department of Housing (Matka, 1997). The study investigated the extent to which the design of public housing estates and the concentration of public tenants influences crime levels. While the study did not disprove the hypothesis that design influences crime, it recognised the importance of the socio-economic profile of persons residing in public housing estates. The report concluded that neither the percentage of public renters nor the level of dispersal of public housing or the type of housing found in a postcode exerts much effect on it's crime rate when social and economic factors are taken into account. It went on to indicate that the statistical association between public housing and recorded crime is largely, if not entirely, a consequence of the fact that public renters are more likely to be crime victims or offenders rather than a consequence of the physical design or planning of public housing.

---

[7] See, for example, Sampson et al (1997)

The cost benefit analysis of social problems in Airds, Campbelltown compared data on the incidence and type of crimes in Airds with crime rates in other areas. The report noted that high crime rates in Airds contributed to much higher administrative costs due to high levels of resident turnover. It was found that Airds had a significantly higher crime rate than the other areas surveyed and that significant cost savings would result from the 'normalisation' of crime in this area. The report also reviewed a number of studies on the relationship between housing and crime and concluded that "strategies where physical redesign was the major or only strategy employed, have shown to have little or no impact on actual crime rates in these areas." (Stubbs, 1996;p28) The report also pointed out that any strategy based on the relocation of 'problem' individuals would simply transfer the costs of crime elsewhere resulting in no net benefit to society.

The report indicated that the major determinants of crime are:

- the demographic mix of the population;
- the length of tenure of the residents;
- the presence and concentration of "problem" individuals;
- a lack of entry level jobs;
- lack of community participation; and,
- multi-factor variables of disadvantage such as poverty, unemployment, intergenerational dependence on welfare, and physically and emotionally deprived backgrounds generally[8].
  (Stubbs, 1996; p29)

To conclude, poor housing design is not a significant determinant of high crime rates in areas of high concentrations of socio-economic disadvantage (Stubbs, 1996). However, the fact that large housing estates and high rates of socio-economic deprivation are inextricably linked means that housing issues cannot be taken out of the equation altogether. (Matka, 1997). The situation is well summarized by Ambrose (1996,p27):

> "The connection between housing and crime is much less straight forward than that between housing and health. Although there are clear spatial concentrations of crime and associations between patterns of victimisation and particular types of housing, the mechanisms are complex
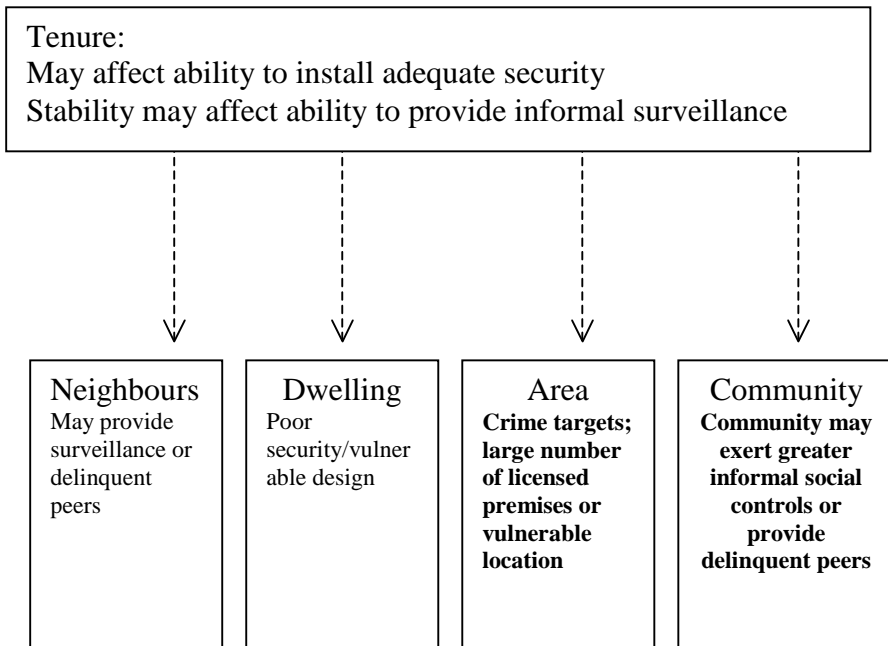
The conclusions in this section mirror the conclusions of Mullins et al (2001).

- Housing per se does not cause crime.
- Low income housing areas, and public housing estates in particular, tend to have a higher incidence of crime and a disproportionate concentration of those with criminal records.
- While architecture and urban design may have some influence on preventing and reducing crime, their influence is limited because the causes of crime are rooted in a complex interplay of socio cultural, socioeconomic, and socio political forces.
- Community mobilisation, and thus the use of local social networks, may contribute to the prevention and reduction of some crimes in residential areas.

The possible linkages between housing and crime are summarised in Figure 3.

---

[8] Note that these findings are quite consistent with the Weatherburn review at the start of the section

Figure 3 Housing and crime outcomes Possible linkages (a)

Tenure:
May affect ability to install adequate security
Stability may affect ability to provide informal surveillance

Neighbours	Dwelling	Area	Community
May provide surveillance or delinquent peers	Poor security/vulnerable design	**Crime targets; large number of licensed premises or vulnerable location**	**Community may exert greater informal social controls or provide delinquent peers**

Disposable income after housing costs

(a) Stronger linkages are shown in bold

3.5 Housing and employment[9]

3.5.1 Introduction

Many factors may impact on an individual's ability and desire to seek, find and retain employment. A tenant's age, work experience, level of education and training, health and wellbeing, and responsibilities to care for dependants or others, for example, have obvious effects.[10] So also may a person's self-confidence and perception of self – this may affect someone's desire to seek work. Beyond education and job skills, other factors:

> "that impede a person's chances for financial self-sufficiency …[include] domestic violence, alcohol or drug addiction, mental, physical and emotional health problems, children with severe behavioural problems or disabilities, inadequate parenting skills, and criminal records." (Bryson, 2000;p21)

The availability of work in a region due to prevailing economic conditions will play a significant role. Structural and environmental factors affect the labour market. The success of the economy, the availability of jobs, the unemployment rate and the existence of welfare programs which help people address problems that may lead to a loss of a job will have an influence on employment.

However, housing itself may also bear an important influence on the labour force participation of tenants.   Previous research has indicated that the range of factors identified in the framework in Section 3.1 are significant in relation to housing and employment. Each of these will now be considered in turn.

3.5.2 Reviewing the relationship between housing and employment

Tenure

The stability provided by secure tenure is important.

As Bryson (2000;p22-23) has concluded:-

> "having a secure place to live makes it easier to cope with other parts of life that may make one lose a job. By contrast, having to move, especially often, simply makes it harder to keep a job."

The Queensland Department of Housing's Bayside Public Housing Client Survey (Epic Pty Ltd et al, 2000), for instance, explored through focus groups involving applicants, tenants and ex-tenants whether public housing facilitates or constrains the participation of its clients in employment, education and other services. In the Bayside study, a number of participants felt their stable public housing address would help the process of applying for a job. However, in one case there was some concern that the stigma associated with being a public tenant in a particular area would

---

[9] The authors thanks Greg Hall from the Queensland Department of Housing for providing the material for this section

[10] Research undertaken by HUD in the United States has found that the public housing tenants it profiled would have more barriers to overcome than other job seekers. Welfare tenants were less likely to have a high school education than other welfare recipients seeking employment. A significant proportion of welfare tenants had not finished the eighth grade and some were short on work experience. For those "who have not completed high school and have not been part of the workforce for a long time or ever, there will be less success in moving to work….a disproportionate number of welfare tenants in public and assisted housing may be in this latter group." As well, jobs available in some areas may require that employees meet certain educational standards or have specialised training. Cited in Bryson (2000). Other US research found "that welfare recipients who receive housing assistance have less work experience than other welfare recipients, are somewhat older than the other welfare recipients, and are more likely to have health problems or children with disabilities within the home….[there are] large numbers … who are not fluent in English or whose literacy skills are low." General Accounting Office (1998) . Other research has indicated that welfare recipients who live in HUD assisted housing remain on welfare for longer periods of time than other welfare recipients (Bryson, 2000).

The dwelling

Whilst the nature of the dwelling may not be very significant, the quality of tenants' housing may impact on their self esteem, sense of worth, and hence indirectly affect preparedness or capacity to seek work. A comment made by renters in a qualitative study (EPIC Pty Ltd et al 2000) indicated that the quality of a dwelling was a particular issue for the unemployed since for financial reasons they often spent long periods in the dwelling.

The area

The location of housing and its access to public transport, for example, may affect a tenant's opportunities to work, opportunities to travel to work, and job seeking activities. Hence, the provision of public housing in areas that offer few work opportunities may have significantly different labour force outcomes than the provision of similar housing in other areas.

The proximity of housing to services such as job assistance programs and to affordable services such as child care may also influence tenants' prospects of seeking and finding work – proximity to child care may have a significant affect on the ability of sole parents to join or stay in the job market.

The community

Bryson also considered that a lack of information about job openings may be a significant barrier to employment, especially for those who live in communities that are isolated from jobs and employed people. News of jobs available may frequently be gained through "informal knowledge networks."

Reingold et al (2001) have concluded that public housing has a small negative effect on labor force activity and that the most robust determinants of social capital and labor force activity include measures of human capital, such as educational attainment and work history. (These findings have implications for the current emphasis in urban public housing policy in the US on moving residents into the private housing market and reducing poverty concentration.) Another US study reported that housing subsidies can help promote work among long-term welfare recipients when they are combined with a well-designed welfare reform program (Centre on Budget and Policy Priorities, 2000). However, this research has a US focus where the welfare rules etc are very different than in the Australian context. An important role of this current study will be to examine whether there is any marked changes in employment patterns as a result of changed housing circumstances.

This issue of locational choice has emerged as a major policy driver in the housing assistance strategies of the U.S. Broadly categorised as, "Vouchering Out," the Department of Housing and Urban Development (HUD) is exploring a range of methods to move households out of high poverty neighbourhoods (many of which are public housing estates) into more mixed neighbourhoods. Such an approach is being implemented through the use of Section 8 Housing Vouchers[11], and Scattered Site Public Housing developments in mixed communities.

While many authors suggest that households who live in more diverse communities have an increased likelihood of better health, finding employment, and of their children succeeding at school and moving on to college, some suggest that this major policy driver is not based on solid research. Galster and Zobel (1998) state that this policy is not grounded in a clear understanding of the mechanisms by which such benefits might flow to disadvantaged households who relocate. They cite a number of studies that seem to demonstrate that such benefits do flow to relocated households, but warns that such a policy should not be pursued without an understanding of why and how this benefit is passed on.

---

[11] Section 8 is part of the Housing Act that provides for housing assistance in the form of housing vouchers for tenants relocated from traditional public housing stock

Before exploring the research on community effects in more detail, it is worth considering further this question of mechanisms more closely. Mayer and Jencks (1989) suggest that there are four possible mechanisms that may be at work when disadvantaged households move into more mixed communities. These are:

1. "The contagion model," that is disadvantaged neighbours are a disadvantage. According to this model, if children grow up in an area where other children are committing crimes, for example, then ones own children are more likely to also commit crimes.

2. "The relative deprivation model," whereby rich neighbours engender a sense of deprivation and encourage socially deviant behaviour.

3. "No effect model," that is, disadvantaged neighbours are irrelevant, and people make their own choices irrespective of the influence of peers and neighbours.

4. Neighbours do not matter, but neighbourhoods do. This model suggests that neighbourhood resources such as the quality of local schools vary according to the nature and social mix of neighbourhoods. This may be particularly the case in countries such as the U.S. where schools are administered by local authorities.

Brooks-Gunn et al (1993) suggests a fifth model. They suggest that a neighbourhood effect is quite powerful – rivalling the influence of family – and that the absence of affluent neighbours may be much more significant than the presence of poor neighbours. This "collective socialisation model" rather than the contagion model, provides a more accurate explanation of the neighbourhood effects identified in this 1999 study, which draws on data from the Infant Health and Development Program, and the Panel Study of Income Dynamics.

This study identifies a number of possible mechanisms that may account for this neighbourhood influence, including:

- Economic resources,
- Parenting behaviour,
- School environment,
- Peer group influence, and
- Local economic opportunities for teenagers.

Two major programs in the United States do help to provide some insight into the impact that changed neighbourhoods may play in the lives of disadvantaged households. These are the Gautreaux Program, that commenced following a successful lawsuit in 1966 brought on behalf of public tenants against the Chicago Housing Authority and HUD; and the Moving to Opportunities (MTO) program that began in 1994.

Both of these programs provide a unique opportunity to learn about the importance of neighbourhood, as both are large scale projects using quasi-experimental design principles. MTO in particular provides a powerful learning opportunity in that 1,800 volunteering households were randomly assigned to three groups:

1. Those who received a housing voucher plus assistance to relocate to a low poverty neighbourhood (one with less than 10% of residents living below the poverty line);

2. Those who received a housing voucher but no other assistance and no requirement regarding where they could move to; and

3. A third group who acted as a control group – that is, they received nothing.

As with MTO, the Gautreaux Program provides a quasi-experimental approach. Households have effectively been randomly allocated to a variety of neighbourhoods, ranging from predominantly black, urban areas to outer suburbs housing traditionally

white, middle class families[12]. In an often-cited study of the Gautreaux Program, Rosenbaum (1991) surveyed 108 city moving households, and 224 suburb movers. As well, 43 city movers and 52 suburb movers were interviewed.

His research concluded that suburban movers were 25% more likely to get a job, even when controlling for human capital (work history, education, training, age and benefits history), family background, years in the Program, and post-move education. Interviews with participants suggest that this improvement can be attributed to greater availability of jobs, greater neighbourhood safety (not being afraid to walk home from work after dark), increased motivation, feeling better about ones self due to the better environment, and working role models.

In relation to schooling, Rosenbaum found a number of indications of educational benefits from the moves to white, middle class suburbs, including:

- Lower drop-out rates (5% compared with 20%),
- Slight improvement in grades,
- Higher proportion in college tracks (i.e. studying subjects that lead on to college rather than trades or employment – 40.3% compared with 23.5%),
- Higher rates of college enrolment, and
- Higher rates of employment, and better pay and conditions between employed youth.

Participants also felt that role models and social norms were also an important factor for both adults and kids – "Seeing neighbors work, Gautreaux adults reported that they felt they could have jobs, too, and they wanted to try." (Rosenbaum, 1991;p1205)

This study concluded that moving to the suburbs increased adults' employment and children's education and employment. As the author states (Rosenbaum, 1991;p1204)

> *"The Gautreaux Program had these effects without providing additional services. By doing no more than helping low-income people to move to suburbs, this program put children in better schools and put adults in better labor markets. Although preliminary concerns about discrimination and initial disadvantages were legitimate and sometimes presented serious problems, most low-income families were able to overcome difficulties and benefit from the new opportunities."*

In drawing lessons from this Program for an Australian context, it should be noted that schools in the United States come under the jurisdiction of local authorities, and as such neighbourhood differences between schools in poorer versus more affluent areas (such as funding levels) may be more pronounced. Also the extent of urban blight (in particular the level of street crime in urban areas) may be less in an Australian context. One suspects that not working through fear of returning home after dark may be a less common occurrence in Australia than in urban areas of Chicago.

Disposable income after housing costs

Employment can also be affected by the disposable income after housing costs since it will influence their need to supplement their income through work, and their ability to afford costs associated with working – such as travel to work, requisite clothing or child care.

---

[12] While the choice of neighbourhood is largely a random allocation process, there are some filtering mechanisms that do shape this to a small extent (such as the small rate of rejection of housing offers – 5% of households rejected an offer). However Rosenbaum concludes that these two populations (that is, those moving to middle-class suburbs, and those remaining in predominantly black urban areas) are effectively identical apart from their new neighbourhoods.

A tenant's understanding of the effects that increasing personal income through work may have on income maintenance entitlements, taxation and rent levels (where rent is income-based) may also influence their desire to work. It is possible that in some circumstances, rent policy may operate as a work disincentive. For example, it has been suggested that in Australia, SHA rents which are set as a fixed proportion of income can be an impediment to employment. The argument is that public housing tenants resist employment since they it immediately leads to an increase in their rent.
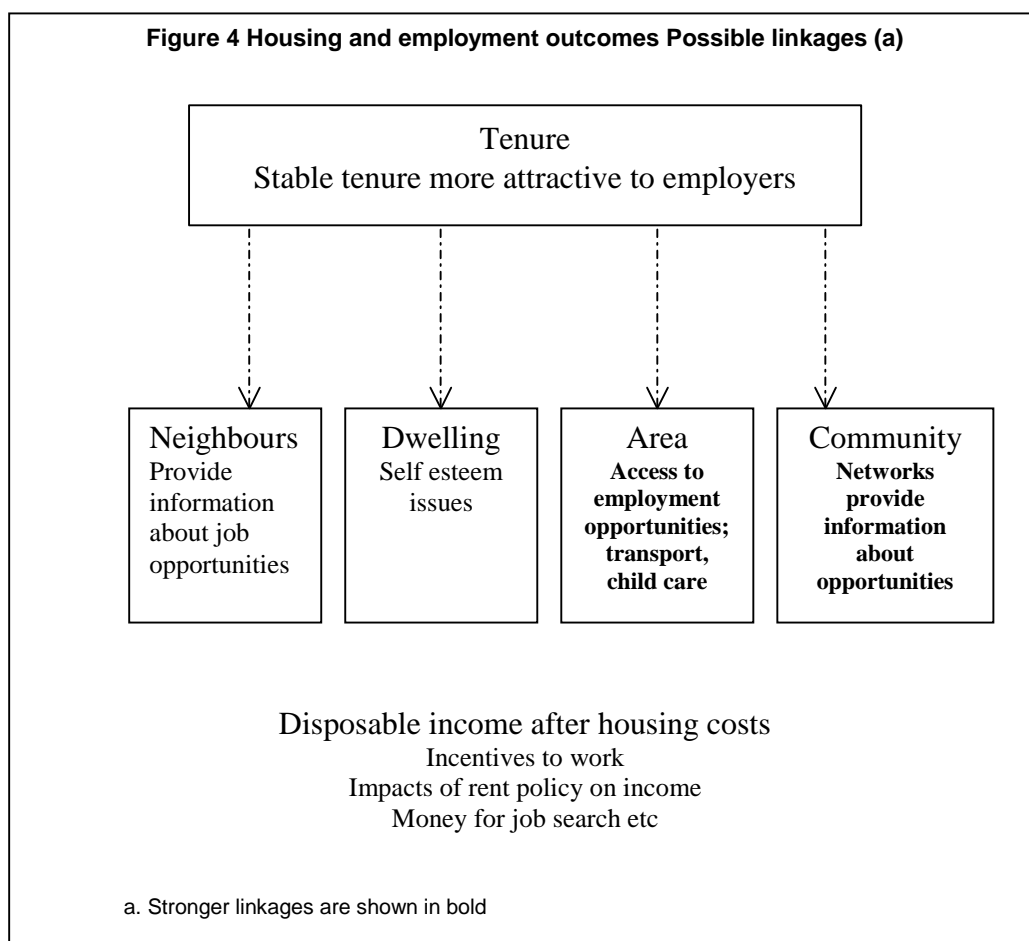
Recent studies have contributed to the understanding of the impacts of housing assistance, including its impact on employment choices. The Queensland Department of Housing's Bayside Public Housing Client Survey (Epic Pty Ltd et al, 2000) noted that one tenant reported giving up a part time job in order to reduce her public housing rent (out of about 50 participants).

The impact of housing subsidies and of public housing in particular on the employment of tenants has attracted some attention overseas, with studies reaching different conclusions. One recent United States study (Fischer, 2000;p 36) concluded that:-

> *"rental subsidies do in fact substantially reduce hours worked and labor force participation among recipients…A smaller, more broadly distributed subsidy would reduce the number of families exposed to the most extreme distortions of work incentives, and could also reduce the overall effect of subsidies on labor supply."*

Conclusion

This section has suggested that there are a range of factors that may effect the relationship between housing and employment. These factors are summarised in Figure 4.

Figure 4 Housing and employment outcomes Possible linkages (a)

Tenure
Stable tenure more attractive to employers

Neighbours
Provide information about job opportunities

Dwelling
Self esteem issues

Area
Access to employment opportunities; transport, child care

Community
Networks provide information about opportunities

Disposable income after housing costs
Incentives to work
Impacts of rent policy on income
Money for job search etc

a. Stronger linkages are shown in bold

3.6   Housing and Education

3.6.1 Introduction

Much like health, the benefits of a good education are realised over an extended period of time. Similarly, a poor educational foundation generates long term impacts that are difficult to quantify. As pointed out by Burkhardt (1989,p42),

> *"Education is a productive activity with a long gestation period. The goals are long term, [and] diverse and …the nature of the products of the education industry are difficult to measure. While the costs of inputs may be easily measured, the benefits are many, they are difficult to identify, and the most important social benefits of the education industry do not accrue until many years after students have graduated from their schools and universities."*

Unfortunately, there are few longitudinal studies to provide an indication of the full extent of the social and economic benefits of education[13]. However, compelling evidence of the benefits of education can be found in income studies. Such studies have consistently shown that persons who are educated are more likely to be earning higher wages and experience lower levels of unemployment. For example, a study that compared the occupational outcomes of two-year college students with the occupational outcomes of high school graduates who entered the employment market without post-secondary education found that the two-year college improved students' access to higher-paying/higher-status jobs (Lin,1996) .

The extent to which a poor housing situation impacts upon educational outcomes is unclear. Housing is only one of a host of factors that can impact upon educational performance, and it is consequently difficult to isolate the costs associated with poor housing. This problem is highlighted by the findings of the following study that investigated the experiences and views of socially and educationally disadvantaged people in Canada (NAPO, 1994) The study found that:

1. the circumstances that created people's poverty were much the same as those preventing them from acquiring an education;
2. people growing up poor had to deal with poor nutrition, inadequate housing, health problems, stress, insecurity, subtle or overt discrimination, and difficulty in maintaining dignity and self-esteem;
3. children with disabilities, native children, and children of racial minorities confronted additional barriers;
4. school systems were not equipped to deal with these problems;
5. people with low literacy skills became trapped in insecure, low-wage work or income assistance; and,
6. enrolling in literacy programs usually did not mean an end to poverty.

(NAPO, 1994)

3.6.2 The Approach of this Review

A search for studies on the **direct** relationship between housing and schooling yields a very slim selection of writings, however there is a large body of research on this topic. The reason that this research is not immediately obvious when studying this issue is that much of the research relates to one of the many elements of this relationship, rather than the total relationship.

---

[13] Whilst not being a complete longitudinal study, the AHURI sponsored work by King (2001) provides a comprehensive framework for assessing the impact of improved education outcomes.

For example, as indicated above, there is a significant body of literature on the relationship between housing and health. Teachers consider that there is a relationship between an increase in days absent from school (from poor health) and reduced school attainment. Therefore there is research that, when considered together, links housing and schooling via the **intermediary** of health.

Similarly parents play a critical role in shaping children's attitudes to school. A parent's expectations and attitudes seem to be very influential in relation to how a child approaches school, and ultimately whether the child expects to succeed in this context (Patrikakou, 1997). Whether a parent exercises this significant influence positively is in part influenced by their environment – including their home. As (Bartlett 1997, p170) notes:

> "Both cross-cultural observations and experimental findings indicate that the physical world structures and mediates interactions between children and their caregivers; and that physical and social environment work both jointly and independently to influence behaviour."

Housing is a basic human need along side food and clothing. Bartlett (1997a) suggests that housing needs are sequential – that housing must first provide shelter from physical and emotional threats in the environment, before it can start to fulfil other functions such as self-expression. Bartlett (1997a, p190-191) goes on to summarise this role that housing plays in family life in the following way:

> "If housing is adequate for family needs and provides parents with a sense of control, choice, and identity (in other words, if it functions as a home), it can support the capacity of parents to function in goal-oriented ways, and to rear children in keeping with their socially constructed beliefs and values, as members of the larger society. If, on the other hand, housing fails to meet this ideal, and instead limits choice and control, it may contribute, along with other factors in life, to stress and to reactive parenting behaviour that is less likely to be responsive to children's needs."

The approach taken in this literature review is to attempt to map any direct and indirect relationships that may exist between aspects of housing, and schooling. The method used to summarise these relationships is an illustrative one, with relationships shown as either one way (single headed arrow), bi-directional (double headed arrow), and weak or assumed/untested (dotted line) or strong (unbroken line). The review will start off by examining the case of the homeless and then go on to examine the various elements described in the non-shelter outcomes framework, starting with tenure.

3.6.3 Reviewing the relationship between housing and educational outcomes

Homelessness and children in crisis

There are many possible links between housing and schooling. One approach to help make sense of this complex web of inter-relationships is to consider the impact of a complete lack of housing. While this understanding is important in order to inform government and community responses to the problem of homeless families, an examination of the impacts of homelessness on education may also help to illuminate the links between housing and education more generally.

A number of studies have confirmed that homelessness impacts on health and wellbeing, as well as on the schooling of the children of homeless families (Wright, 1990; Neil and Fopp, 1992; Clark, 1996; and Faulkner-Hill, 1997). That homelessness is bad for children's schooling seems clear, however understanding the particular links that mean that homeless children are less likely to succeed academically is more challenging.

In their formative Australian study of homelessness, (Neil and Fopp 1992) found that almost half the homeless preschoolers in their sample had serious emotional and developmental delays. They suggest that the poor academic performance of homeless children may be due in part to, "…the problem of concentrating on studies during the day while wondering where to sleep at night." (Neil and Fopp,1992; p18).

Other studies focus on the link between homelessness and health and education. As one author points out, poor physical and mental health is often caused by, and a cause of, homelessness (Wright, 1990). The simple act of living on the street without adequate protection from the elements would seem inevitably to increase ones risk of ill-health.

Faulkner-Hill (1997) suggests that this increased risk is exacerbated by the fact that homeless people are much less likely to take health measures beyond the relief of immediate symptoms. Also homelessness may not be conducive to reliably taking prescribed medications. This study concludes that sick, tired and stressed kids are less likely to go to school.

A 1990 examination of research into the impacts of homelessness found that homeless women are more likely to bear underweight children, receive less pre-natal care, and experience higher infant mortality rates (possibly double the rate for the rest of the population) (Molnar et al., 1990). This study also found that homeless children are less often immunised, suffer higher lead levels, poorer nutrition, and have higher rates of illness. The authors suggest that homeless children display significant developmental delays, significant psychological distress, and much lower rates of school attendance. This latter outcome is thought to contribute to much lower academic performance.

In a 1996 study of 110 mothers and 157 children living in homeless shelters in the USA, 38% of children were assessed as requiring psychiatric evaluation for clinical depression. 45% scored at or below the 10th percentile for receptive vocabulary, and 39% scored at or below the 10th percentile for age in reading (Zima et al. 1996).

Rubin et al. (1986) found that the homeless children were no less intelligent than the housed children, but that their academic performance in relation to reading, spelling and maths was significantly poorer. This study was less confident than some others in attributing causality. The homeless children in this study experienced higher rates of absenteeism and changed school more frequently than the housed children, and the author concluded that the latter was more of a contributor to poorer academic performance than the former. Also, maternal depression was found to be a mediating factor in academic performance.

In summary, homelessness may be a contributor to developmental delays in children – reducing their school readiness and ultimately their chances of success as they begin their schooling.

Homelessness seems also to contribute to poor health amongst adults and children. This increased incidence of illness, combined with disruption to domestic routines, seems inevitably to result in an increased school absentee rate amongst homeless children which in turn affects academic performance.

Similarly changing schools has been found to be a significant stressor for children (Johnson 1987). The impact of school moves has been found to be greater amongst those children who move mid-year, rather than a planned, end of year move (Alexander et al. 1996). Sustaining attendance at the same school must be an overwhelming challenge for some families who are forced to move neighbourhoods to access crisis housing in short supply. These two factors (increased absenteeism, and school changes) may well explain much of the lower academic performance observed amongst homeless children, although stress, anxiety, ill-health and maternal depression may well also be important factors.

Figure 5: Homelessness and school performance
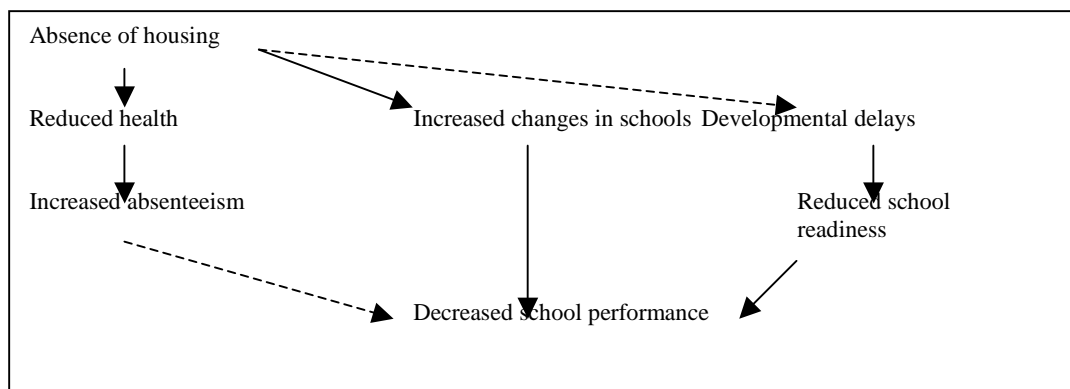
Source: Peter Young

Tenure

The stability provided by a stable address appears to be an influence on school performance. This section addresses the issue of moving and school performance.

School aged children move house for a variety of reasons. Employment today is less stable than in past times, and the likelihood of remaining with the same employer in the same location for long periods is greatly reduced. Private renters may be forced to move in order to accommodate the needs of landlords, because rent costs increase, or because of intolerable tenancy management practices. Property owners may sell and move due to financial hardship, or as part of the trading up process as their wealth increases (Maher and Whitelaw, 1995).

Research suggests that children do find moving schools stressful (Alexander, Entwisle et al. 1996), and that moving school mid-year is harder on children than end of year moves. A new school entails a new physical setting, new teachers, different academic expectations and emphasise, possible curriculum differences, and importantly, a new peer group. Johnson (1987) ranks changing school on a par with hospitalisation of a parent for serious illness, or having a parent incarcerated in prison for a month.

While Alexander et al expresses concern regarding the impacts of moves on children during the early settling in years at school, Brown and Orthner (1990) considers that moves are most difficult for adolescents, and for adolescent girls in particular. This is a difficult period of life for children, and changing peer groups and re-establishing a role and identity in that new group can be very difficult. Brown and Orthner found in their study of 720 adolescents that life-satisfaction for girls was significantly lower amongst those who had recently moved, than for those who had not. Also this group reported slightly higher rates of depression.

Other studies (for example, Sluzki, 1992) suggest that moves contribute to increased pressure on family relationships. When families relocate, each member leaves behind numerous social networks, and many interpersonal functions that were accomplished by these old networks are then unfulfilled. This can result in increased stress, and place strain on household relationships as members are forced to rely more on one another Sluzki (1992,p362) concludes that:

> "…this period of increased family stress frequently translates into multiple psychosomatic, interpersonal and other stress-related complaints in grown-ups and children alike."

21

An evaluation of a public housing tenancy management outsourcing pilot suggested that the stability provided by public housing was of significant benefit to children in the minds of some parents (Morrison, 2000). Security of tenure and the sense of physical and psychological security were the most common responses to a question to tenants in this study regarding the impacts of public housing in their lives.

Figure 6: Moving and Educational performance
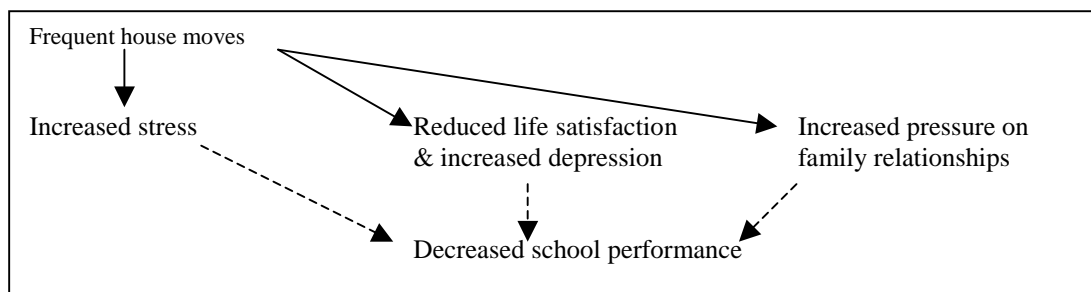
Source: Peter Young

Very few studies have, however, sought to measure changes in school progress and achievement as a result of changed housing. However, an early Australian study adopted a longitudinal approach (Wilner et al, 1962).

They selected two study groups – those who were about to move into public housing, and a matched control group from the bottom of the public housing waiting list (that is, a group who were not expected to experience a change in housing in the near future). In total 1,029 households were selected in 1955 (396 test families, and 633 control group families), and a further 891 in 1958 (352 test and 539 control). They anticipated an improvement in the school performance of children from the test group, due to an anticipated improvement in household morale, improved space to complete homework uninterrupted, and possibly greater participation by parents in their children's schooling.

They did however acknowledge at the outset that the likelihood of getting measurable improvements in educational performance were small, due to the indirect nature of the relationship and the significant effect of other confounding variables such as the school environment.

This study tested three aspects of school performance – intelligence, arithmetic, and reading. As well, progress through grades was also monitored. The result was that children did not demonstrate any improvement in the three tested areas as a result of the improved housing. However the control group was less likely to be promoted through year levels than the test group. They attributed this difference to the higher rate of absenteeism amongst the control group due to higher rates of illness. The study did however find that the housing change did result in the expected improvement in household optimism and life satisfaction.

In relation to the impact of improved housing on schooling, Wilner et al (1962,p226) concluded:

> *"…the hypothesis in connection with school performance of children was somewhat more tenuous than was the case with other substantive areas of study…(as)…a number of the hypotheses were of a secondary rather than a primary order, i.e. housing would need to have a discernable effect in a given area and this effect in turn might then influence school performance." (p. 226)*

The dwelling

If moving home can result in stress, then living in poor quality, overcrowded housing may also be a source of stress. Stress, including that generated by poor housing, may well reduce the capacity of adults to provide the active, positive encouragement needed by children in order to maintain a positive attitude to schooling. As one author states, "Parents who are exhausted, frustrated, depressed or disturbed are more likely to compromise in their desire to do the best for their children." (Bartlett 1997a; p 174).

A New Zealand study of 213 public housing applicants and 66 households drawn randomly from suburbs known to have a high proportion of poor housing, found that housing stressors – and in particular over-crowding – exert a significant influence on psychological distress, independent of economic, social, geographic and demographic characteristics (Smith, J et al. 1993). This study did not conclude that this psychological distress was caused by poor housing alone, but rather that substandard housing represented an independent, additive source of stress that added to other stresses of life.

As with the earlier discussion regarding moving home, the relationship between housing and stress is in part an issue of control. As (Bartlett 1997) notes, stress is more severe when the environmental factors contributing to this stress are beyond an individuals control, such as that experienced by low income households living in poor quality housing. This author further develops this theme by suggesting that a house becomes a home in part when choice is exercised, that is, when the house starts to reflect the identity of the occupants.

Overcrowding stands out in the study by (Smith, J et al. 1993) as the aspect of housing most predictive of psychological distress. Similarly in a significant longitudinal study of 16,000 children (Davie et al, 1972) suggests that crowding results in children having less space to play, work and read. He also states that children living in overcrowded housing may be more likely to experience broken sleep due to the conflicting sleep patterns of children of different ages with whom they shared bedrooms.

An analysis of the substantial data set from this study found that overcrowding and basic amenity impacted on reading levels – equivalent to 9 months retardation in reading and 1.5 months in arithmetic.

Parke (1978,p35) considers that, "The early social and physical environment that the home provides for the child has a marked impact on his later social and cognitive development". He goes on to discuss some possible links between the physical aspects of the home, and child development. Like Bartlett (1998), Parke suggests that a physically safe home rewards a child's curiosity and encourages exploration and therefore growth. He also emphasises the importance of a "stimulus shelter," such as a private bedroom, that a child can retreat to in order to escape constant noise and stimulation. Without such a refuge, children are at risk of delayed cognitive development. Studies are cited by Parke that indicate that children with private home space are more likely to perform better in relation to spelling and language development.

In other studies cited by Parke, children living in more crowded homes were rated by their peers as more aggressive than other children Parke speculates that such cramped living conditions might encourage more punitive parenting which may in turn be modelled by children in the playground – a conclusion also reached by Bartlett (1997).

Similarly, a study of families living in a high rise development near to a busy expressway found that children living in apartments that were higher and quieter displayed better auditory discrimination, suggesting that children exposed to constant noise learn to tune out (Cohen et al, 1973).

Other longitudinal studies have shed some light on this question of the importance of the home (see, for example, Bradley and Caldwell, 1984). Gottfried and Gottfried, (1984) found that some physical aspects of the home environment were positively correlated with cognitive development. In particular the level of crowding (the room to people ratio), the safety of the environment and the cleanliness of the home were all predictive of cognitive development. Of these, crowding had a very high correlation independent of other factors such as maternal intelligence . In a related study, (Gottfried 1984; p 1) concludes that: "It is an empirical fact that environmental variables within the home correlate significantly with cognitive development".

In a comprehensive review of research in the field of housing and children Bartlett (1997) argues that housing is a very significant factor in the early socialisation of children. Amongst a range of characteristics of housing studied, she cites the importance of outdoor play in childhood development. For example, a study in Japan of families living in high-rise housing found that five year olds living above the 14th floor were significantly less independent than those living below the fifth floor, due to their reduced access to outside play.

Bartlett also discusses the importance of crowding, and the impacts of inadequate indoor play space. Studies cited by Bartlett have found that children become more easily frustrated if they are unable to play outside and there is inadequate indoor play areas. She also considers that in crowded living conditions parents are more likely to engage in more punitive parenting practices, and abuse is more likely to occur as children are less able to get away from potentially explosive situations at home.

Studies have also found that interior housing design impacts on parenting practices. For example, housing designed to maximise direct line of site between parents and toddlers encourages less rules, as parents feel that toddlers are safer playing in adjoining rooms given this improved visibility (Bartlett, 1997a; p181).
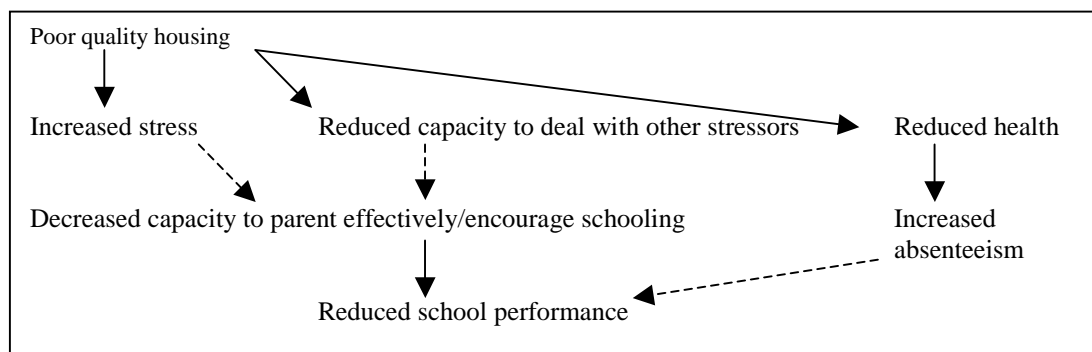
Bartlett (1997a,p183) concludes this examination of research on this topic as follows:

> "Limited outdoor access may encourage more anxious and protective behaviour; overcrowding has been observed to contribute to a lack of responsiveness and to more punitive parenting; and a closed layout may encourage greater dependence on rules and prohibitions. The effects of these constraints may be alleviated or accentuated by the quality of neighbourhood surroundings."

In a later article, Bartlett(1998) describes a study where she spent 18 months with three families observing the relationship between housing and the development of the children in those households. She noted that adequate play space in the home encourages the development of autonomy and reduces parental stress. Lack of play space can increase reliance on the use of television as a pacifier of restless children. Children living in families with a number of dangers associated with housing inadequacies (such as exposed hot water pipes) were much more likely to hear "no" as a default answer to many questions, and were observed to learn that their natural impulses to explore and learn were potentially quite dangerous, and therefore were to be curbed.

These relationship between the quality of the dwelling and educational outcomes is summarised in Figure 7.

Figure 7: The quality of the dwelling and educational performance

Poor quality housing

Increased stress → Reduced capacity to deal with other stressors → Reduced health

Decreased capacity to parent effectively/encourage schooling → Increased absenteeism

Reduced school performance

Source: Peter Young

The area and the community

The area can affect educational outcomes through the quality of local resources especially local schools. Whilst the variation in school quality in Australia is not as great as some other countries, this can still be a significant issue.

Other issues related to the area include noise levels. Traffic and other noises can contribute to language development delays and also lead to broken sleep which can effect concentration levels in class.

However, for the educational outcomes section, the analysis of area and community is combined, largely because a number of very important US studies combined the two concepts and enforcing the distinction between the two would make for too much repetition in the review. The American studies refer to the area/community using the term neighbourhood.

There are a large number of studies that suggest that area/community – the neighbourhood - may be a significant aspect of the housing – schooling relationship (Burns, Homel et al, 1984; Mayer and Jencks, 1989; Garner and Raudenbush, 1991; Kaufman and Rosenbaum, 1992; Brooks-Gunn et al, 1993; Ladd and Ludwig, 1997; Duncan and Raudenbush, 1999; Goering and Kraft, 1999; Varady and Walker, 1999; and Duncan and Ludwig 2000). Those households that trade off location for amenity may therefore be making a significant choice in relation to the schooling and future prospects of their children.

Studies have found an association between area/community characteristics and educational outcomes (see, for example, Burns et al, 1984; Varady and Walker, 1999; and Garner and Raudenbush, 1991), and some conclude that neighbourhood SES is a good predictor of the educational attainment of children (Galster and Zobel, 1998).   Such associations do not, however, necessarily assist in determining causality.

Two major programs in the United States do help to provide some insight into the impact that changed neighbourhoods may play in the lives of disadvantaged households. These were introduced in the previous section on employment and housing and are the Gautreaux Program and the Moving to Opportunities (MTO) program.

A preliminary examination of results from the MTO program also noted that crime had reduced for households who moved to lower poverty areas – both in terms of their involvement as offenders and victims of crime (Goering and Kraft 1999). Some of the benefits may be attributable to improved resources in these new communities, such as better resourced schools. As Goering and Kraft (1999,p45) concludes:

> *"Parents also report seeing positive changes for their children, including better and less crowded schools, teachers taking time with individual children, exposure to different cultures, and more role models of working people."*

In relation to the Gautreaux program, Rosenbaum (1991) found a number of indications of educational benefits from the moves to white, middle class suburbs, including:

- Lower drop-out rates (5% compared with 20%),
- Slight improvement in grades,
- Higher proportion in college tracks (i.e. studying subjects that lead on to college rather than trades or employment – 40.3% compared with 23.5%),
- Higher rates of college enrolment, and
- Higher rates of employment, and better pay and conditions between employed youth.

Educational benefits may in part be due to differences in schools. For example suburban movers were more satisfied with their teachers, and felt that class sizes were smaller. However, participants also felt that role models and social norms were also an important factor for both adults and kids.

This study concluded that moving to the suburbs increased adults' employment and children's education and employment. As the author states (Rosenbaum, 1991;p1204)

> *"The Gautreaux Program had these effects without providing additional services. By doing no more than helping low-income people to move to suburbs, this program put children in better schools and put adults in better labor markets. Although preliminary concerns about discrimination and initial disadvantages were legitimate and sometimes presented serious problems, most low-income families were able to overcome difficulties and benefit from the new opportunities."*

Similar conclusions were reached by Kaufman and Rosenbaum (1992), who attributed improved school performance to:

- Escaping the negative influence of peers,
- Increased motivation from the improved physical environment,
- Higher expectations from the schools,
- Better teachers, and greater availability of extra tutoring,
- Striving to match the better lifestyles of peers, and
- Positive role models.

In drawing lessons from this program for an Australian context, it should be noted that schools in the United States come under the jurisdiction of local authorities, and as such neighbourhood differences between schools in poorer versus more affluent areas (such as funding levels) may be more pronounced.

The role of peers

The research discussed in the previous section suggests that the community where one lives may be a powerful factor in relation to school success. The choice of where one lives is in part a choice regarding school and neighbourhood peers, although it is by no means a guarantee that one's children will seek out a typical cross-section of neighbourhood children as friends. That said, living in a neighbourhood with predominantly higher SES households must increase the likelihood of children getting to know if not befriending other children from such backgrounds.

Like Brooks-Gunn et al (1993), Gonzales et al (1986) also concludes that peer influence rivals family influence in relation to school achievement. Using interviews with 120 year seven and eight children, and follow up interviews 12 months later, they found that family status and parenting variables did not predict adolescent grade point averages, however peer support and neighbourhood risk did explain a significant proportion of the observed variance in school performance.

The relationship between community factors and educational performance is summarised in Figure 9.

Figure 8: The community and educational performance
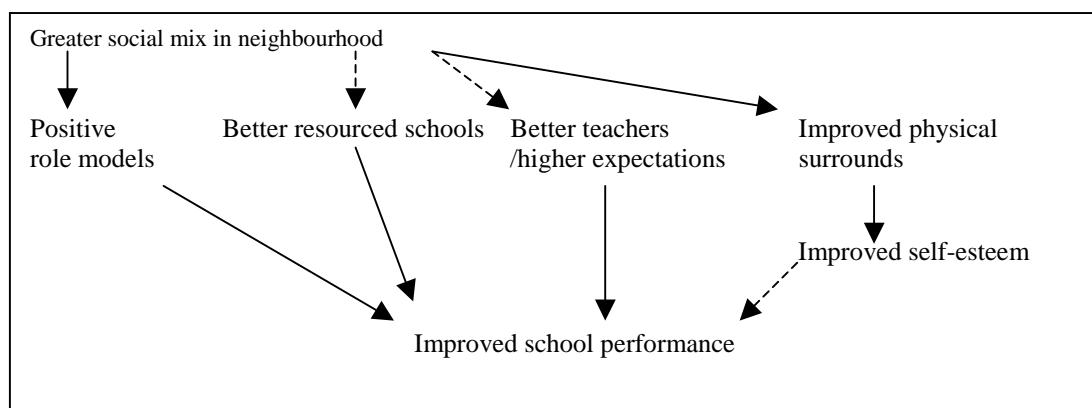
Source: Peter Young

Disposable income after housing costs

As in previous sections, given the potential of housing costs to influence poverty levels in the community, this section examines the relationship between poverty and educational outcomes.

There are a number of studies that suggest that poverty is an important predictor of school success. For example, Levy and Duncan (2000) studied 1,364 families with more than one child during the period 1968-76, using completed years of education at age 20 as the dependent variable. The use of siblings allowed the researcher to control for genetic inheritance of abilities. Their concern was that a correlation between income and school success may be due to genetics rather than environmental impacts (i.e. higher income parents have better jobs in large part due to their greater abilities, and these abilities are passed on genetically to their children).

They found that income during the first stage of childhood has a positive and significant effect on completed schooling. The study found that a 2.7 fold increase in parental income when the child was four years of age or younger is associated with an increase of 0.5 to one year increase in schooling completed.

They also indicated that the early life of a child is the period when family influence is greatest, and that increased income may reduce family stress and increase the chances of a family purchasing books, toys etc as part of creating a more stimulating home environment.

Recent reviews of welfare reform programs have reached similar conclusions. Morris et al (2001) considered, in their examination of research into the impacts of welfare reform policies, that those programs that resulted in increased employment and increased household income resulted in higher school achievement for children. In contrast, welfare reform programs that result in increased workforce participation but

no increase in household income did not have the same benefits for children. They concluded (Morris et al, 2001;p15) that:

"Welfare reforms and anti-poverty programs can have a positive impact on children's development if they increase employment and income, but increasing employment alone does not appear sufficient to foster the healthy development of children"

Schmitz (1992) similarly concludes that poverty is the major determinant of school failure, and he attributes this increased risk of school failure to a range of factors including neighbourhood effects, peer influence, nutrition, lack of recreational facilities, and adult role models. Bradley and Caldwell (1984) found a significant correlation between the availability of play materials when children are quite young, and subsequent school achievement. While availability of play materials may be a product more of parental priorities than poverty, the absence of discretionary household income makes the purchase of toys and craft materials harder.

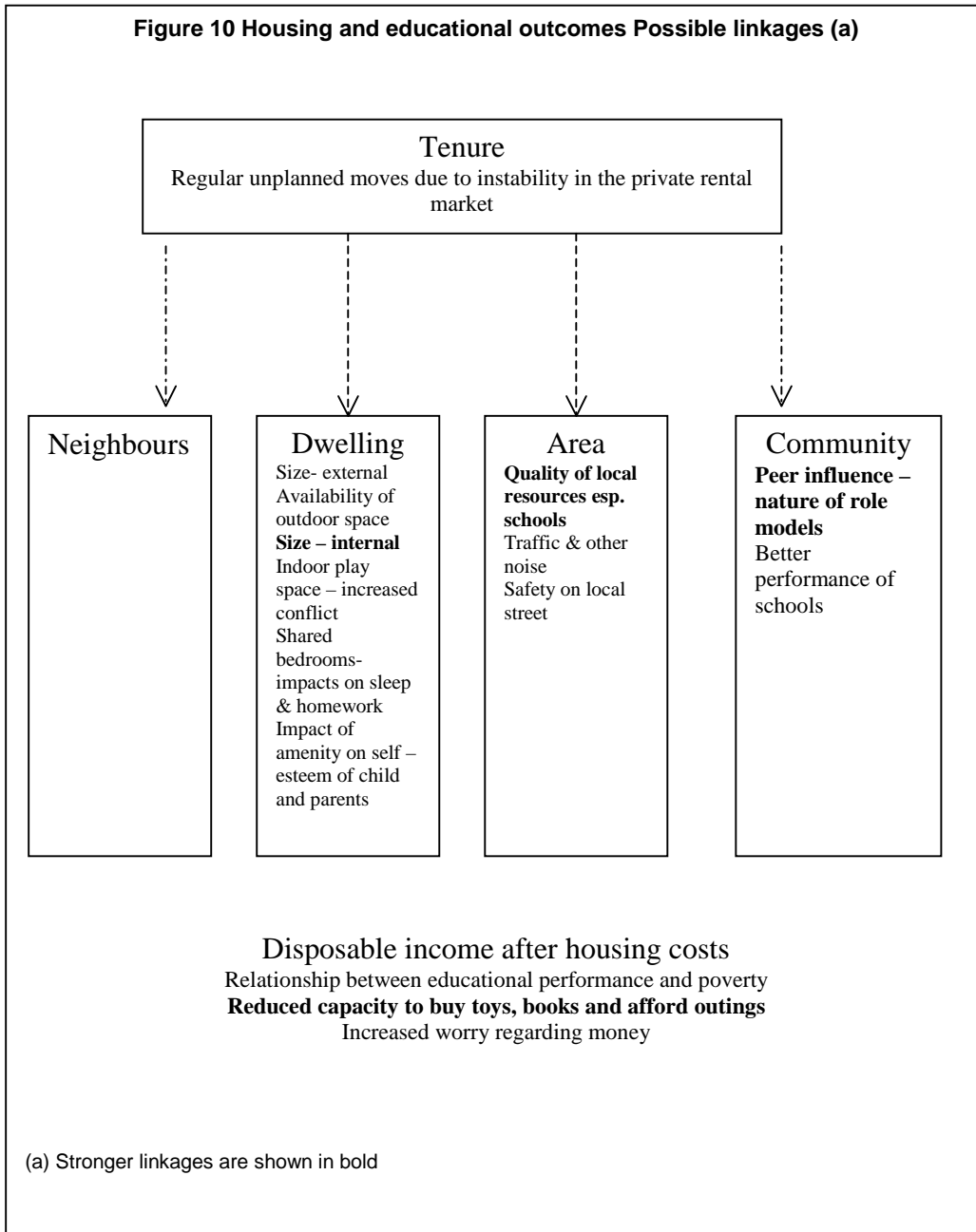**Figure 9: High housing costs and educational outcomes**
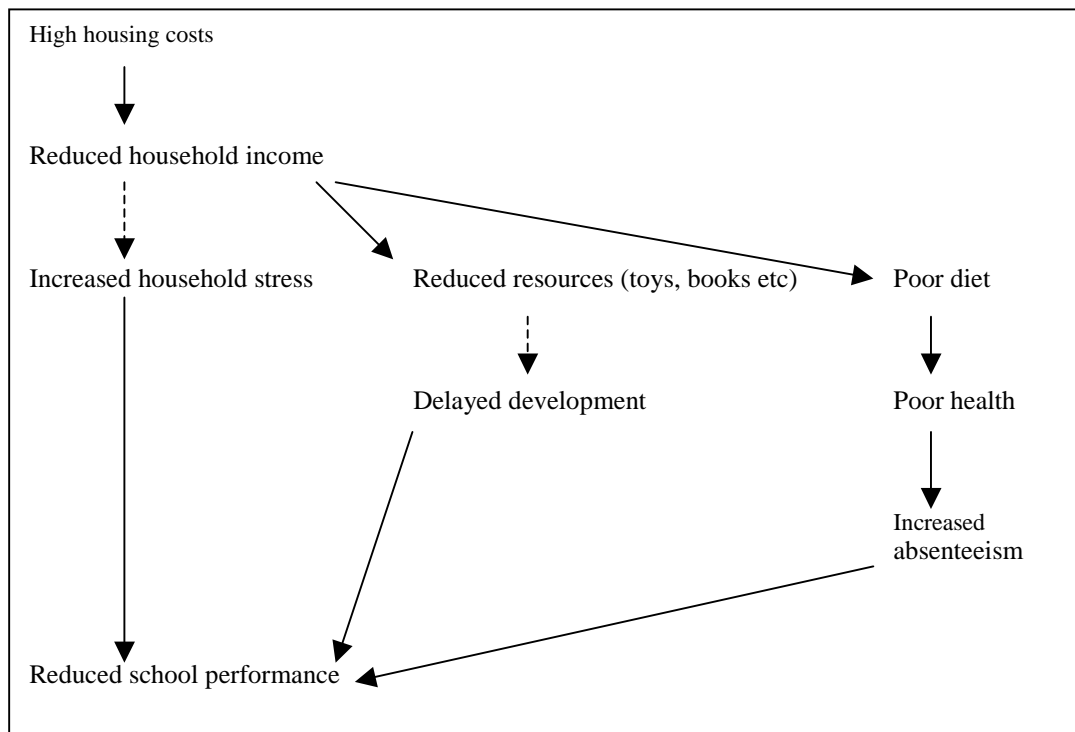
Source: Peter Young

Conclusion

This section has suggested that there are a range of factors that may effect the relationship between housing and education. These factors are summarised in Figure 10.

Figure 10 Housing and educational outcomes Possible linkages (a)

Tenure
Regular unplanned moves due to instability in the private rental market

Neighbours	Dwelling	Area	Community
	Size- external Availability of outdoor space **Size – internal** Indoor play space – increased conflict Shared bedrooms-impacts on sleep & homework Impact of amenity on self – esteem of child and parents	**Quality of local resources esp. schools** Traffic & other noise Safety on local street	**Peer influence – nature of role models** Better performance of schools

Disposable income after housing costs
Relationship between educational performance and poverty
Reduced capacity to buy toys, books and afford outings
Increased worry regarding money

(a) Stronger linkages are shown in bold

3.7 Conclusion from the literature review

The literature review revealed the following:

- The non-shelter impacts could be classified functionally into impacts related to tenure, dwelling, area, neighbours, community and after housing income levels;

- There was a widespread literature on the relationship between shelter and non-shelter outcomes but the literature was predominantly from overseas mainly the UK and the USA;

- The different housing and welfare framework in other countries means that the findings of international studies may not be directly comparable;

- Only a limited amount of the literature generated clear causal relationships between shelter and on-shelter impacts – in many cases this was because of the complexity of the relationships;

- The recent quantitative work that had been done in Australia was mainly sponsored by AHURI. However, the work was limited to examining cross sectional data that was generated by previous studies.

4.   STUDY METHODOLOGY

The literature review suggests that there is a lack of relevant recent empirical research on the relationship between housing and non-shelter outcomes. This seems suprising because of the importance of the research question(s) but is probably related to the complexity/expense of the research needed to reliably examine this issue. Part of the complexity of the research related to the range of possible study designs that can be used. These study designs were explored in the 1998-99 Australian Housing Research Fund project (Phibbs et al, 1999). The options included:

- A comparative study of different communities with different levels of housing assistance;
- A comparative study of different groups e.g. between housed and homeless populations;
- A comparative study of rehoused/non-rehoused groups;
- Case Studies/qualitative investigations; and
- A longitudinal study;

The advantages and disadvantages of each approach are summarised in Table 1.

It is considered that a longitudinal design is the preferred design for this study because the measurement of change is a concern, and causal relationships are not known. Under these circumstances, as Menard (1991;p43) says:

> *"it makes more sense to spend more money to get the right answer than to spend less money to get an inconclusive answer that may well be wrong"*

However, as the AHRF study suggested, this longitudinal approach should include a number of detailed case studies using a qualitative approach. Case studies can help identify trigger mechanisms that will assist with the framing of questions in the quantitative component of the study and to develop causal explanations.

Table 1: An Evaluation of Study Designs

Study Design/Example	Advantages	Disadvantages
1. Comparative study of different communities For example, Stubbs (1996)	Results are more immediate Relatively cheap	Difficult to match the socio-economic and demographic characteristics of the two groups Does not model the process of providing housing assistance
2. Comparative study of different groups e.g. between housed and homeless populations; For example, the non-shelter differences between two groups, for example the housed and the homeless	Sharp focus between non-shelter benefits of two groups Relatively short study	Matching the two groups may be difficult; Difficulty with isolating the impact of housing – e.g. with homeless persons it is often difficult to determine whether a specific problem is a cause or a consequence of homelessness.

3. *Comparative study of rehoused/non-rehoused groups* For example, Barrow and Bachan (1997) -one sample was drawn from residents residing in a badly deteriorated housing estate (Stepney) whilst the other sample was drawn from residents who had been re-housed in higher quality dwellings on another estate (Paddington)	The two resident samples are likely to be more socio-economically homogenous (although there might still be some bias issues) Relatively short study	Improvements in housing quality may be confounded by location effects Only examines one housing tenure (social housing) May be difficult to find a large sample in Australia
4. Case Studies For example, The AHRF study (Phibbs et al 1999). Measuring the costs of unmet needs by in-depth interviews with a small number of cases	Case studies provide excellent insight into the mechanisms that generate costs and the linkages between costs; Case studies can reveal the trigger mechanism for the additional costs of unmet housing needs and act as a powerful educative tool for the community and for decision makers.	Difficult to extrapolate community-wide or whole of governmental costs from individual case studies. Findings from such a study may be resisted by decision-makers looking for traditional survey-based evidence;
5. Longitudinal Study Example, study design proposed in AHRF study of examining the non-shelter benefits before and after the provision of housing assistance	Mirrors the activity of the provision of housing. This provides the most compelling evidence especially for those not familiar with social science research methods The sharp changes in housing circumstances provides the opportunity to generate measurable changes in non-shelter benefits Can examine the non-shelter benefits of a number of tenures (e.g. private rental, public housing, community housing)	Relatively expensive If a prospective method is used the study will need to be reasonably long Only examines non-shelter benefits of those who have been provided with housing assistance

Source: (Phibbs, Kennedy and Tippett, 1999)

Whilst the use of a longitudinal approach is reasonably rare in the Australian housing context, there is a rich tradition of longitudinal housing research in other countries, especially the United States. In the US, the specification of such studies are built into the project funding (see, for example, Kleit and Rohe, 1997).

A prospective or retrospective panel design.

In a prospective study design researchers start measurement at T_1 and follow the sample up to T_t. Whilst prospective studies have a number of strengths, they are relatively expensive and time consuming. Researchers often have to wait a considerable period for the results. Researchers have attempted to conduct panel studies without the costs and waiting times of a prospective design by conducting an "instant" version of the panel study using a retrospective design. One starts at the last measurement occasion (T_t) and conducts the study looking backwards.

Whilst the retrospective study saves time and resources compared to a prospective design, it has a number of problems. Firstly, the sample in a retrospective study is non-random. This is because attrition has taken place. For example, if housing assistance, through say public housing, had been able to support a household in temporary crisis, the household might be able to move out of public housing before time T_t. A retrospective study would not capture these households. Secondly, in a retrospective study, data tends to be more unreliable than in a prospective study largely because of recall problems. Four reasons are put forward for this (Bijleveld et al, 1998,p26):

1. Memory loss: the respondent just cannot remember;

2. Retrieval problems: even when the events are not completely forgotten subjects may have trouble recalling them. An additional validity problem is that subjects can easily accommodate questions they feel uncomfortable with by saying that they did not remember;

3. Telescoping: respondents tend to report events taking place more recently than they actually did; this would make it difficult to be certain about the impacts of increased housing assistance; and

4. Subjects tend to interpret and re-interpret events, opinions and feelings so that they fit in with their current perception of their lives and their past lives. This tendency is called the 'modification to fit a coherent scheme'.

Because of the problems with a retrospective design it is considered that a prospective design is desirable. However, when discussing this issue in detail with the SHAs in Queensland and NSW it became clear that there would be difficulties with a prospective design where households on the waiting list were interviewed. This is largely because of the nature of the allocation process. Allocation rates are difficult to forecast and hence it would be difficult to estimate how long people on the waiting list might wait before they are allocated housing. This may mean that people who were interviewed whilst they were on the waiting list may not be allocated public housing stock during the course of the study and hence would end up being out of scope, or even if they were allocated stock their tenure might be so short that were not in a position to identify some more medium term impacts (e.g. schooling). As a result of these issues it was decided that the most appropriate time to conduct the initial interview was just after tenants had been allocated public housing stock rather than whilst they were on the waiting list[14].

In the case of community housing, some additional issues are raised in connection with the conduct of a prospective study, largely as a result of the reasonably small size of the sector. Discussions with Community Housing Providers suggest that given the relatively small size of that sector, it would not be possible to guarantee even a small sample of community housing clients who had recently been allocated stock. Hence, for this sector, a retrospective method will be used.

---

[14] This means that the study could be described as a prospective study with a retrospective wave 1.

An outline of the methodology

The study is a panel study that will assess the non-shelter impacts of the provision of housing assistance. The housing assistance to be examined includes the provision of public housing and community housing. Households will be interviewed after they were allocated housing.

A number of research methods will be used in the study. In addition to the literature review, three focus groups will take place at the start of the project and findings of the literature will be tested with the groups as well as some questionnaire methods. The focus group members will be householders who have been recently allocated public housing (2 groups[15]) and community housing (1 group).

Once the preliminary work is undertaken (including a detailed pilot study which is described below) a sample of households who receive housing assistance will be interviewed.

Public housing:

The public housing sample will be stratified by a number of variables including:

- City (equal numbers from Sydney and Brisbane);
  The use of two cities will allow a range of affordability issues to be examined and also to examine any differences between tenants allocated from a wait list versus a crisis list;

- Household type (singles less than 40; older singles; single parents; two parent families)
  The differences here are largely to examine the range of possible impacts examined in the literature e.g. if only singles are examined, educational outcomes could not be examined

- Location: estate/other, tenure mix of neighbourhood (predominantly owned/ private rental/ public rental), level of disadvantage of suburb
  The differences here will enable a variety of dwelling, area and community variables to be examined

Community Housing:

- The community housing sample would be all based in the Sydney Region. The difficulties in recruiting these households and the small sample means that no stratification is possible.

It is considered that in order to provide minimum cell sizes in cross tabulated tables a sample of approximately 420 households who undergo a change in housing circumstances will be required- 350 in public housing and 70 in community housing.

In the AHRF study, an experimental design with a control group was suggested. However, after discussions with other researchers, it is considered that the costs associated with a large control group and the practical difficulties of successfully matching a control group with the households who have a change in housing circumstances means that this design should be modified. Instead of a control group, a smaller comparison group of 30 households will be used. This group will be a small scale replica of the sample. The aim of the comparison group is to monitor whether there are any significant changes in non-shelter outcomes for a group whose housing circumstances has not changed. This information will help assist the interpretation of the relationship between housing changes and non-shelter outcomes of the in-scope group.

---

[15] Focus groups being convened as part of a Queensland Department of Housing study on the Client Attitudes will be used in order to reduce field work costs. The study includes 3 focus groups with tenants who have been allocated housing in the last 12 months

Face to face interviews will be held with public housing respondents just after they have been allocated housing. The study proposal suggested that another face to face interview would occur two to three months after they had been allocated stock and then a phone mail survey would be subsequently undertaken. However, this method will be changed as a result of investigations with public housing tenants[16]. Firstly, it was clear that keeping a diary was unlikely to be a useful method for this group. Public housing tenants considered that the results would not be reliable and that it would significantly reduce the participation rates in the study. Some other strategies have been adopted to collect information, especially health information from tenants (see below). The other issue was that public housing tenants considered that two to three months was a bit early to identify the some of the non-shelter impacts the study wanted to investigate. Finally, the information that was being collected during some of the qualitative interviews suggested that some of the non shelter outcomes were best identified using a face to face survey. As a result, the primary data collection will occur via two face-to-face interviews – the first will occur just after the tenant has been allocated and the second will occur approximately six months after they have been allocated stock. It is considered that the increased use of face to face surveys, which will improve the data quality, will offset any loss of data from the increased intervals between the surveys.

Survey Analysis

It is difficult to be specific about the methods of analysis before the variables being examined are finalised. However, the families of methods that will be investigated include ANOVA, logistic regression and the use of latent variable models, most likely path analysis (see, for example, Loehlin,1998).

The Qualitative Component

In addition to the survey described here, a companion investigation of in-depth qualitative research would be undertaken. The qualitative component will yield different types of data related to the study aims. In particular the qualitative component will support the study aims no 2 and no 3[17]:

In-depth, semi-structured, tape-recorded interviews will be conducted with 30 persons, purposively sampled to reflect the range and variability of characteristics and circumstances of the study group. Data derived from this method will be analysed inductively, using well-established techniques of (i) indexical coding to identify patterns across the responses; and (ii) narrative analysis to yield contextualised case study materials (Coffey, A. and Atkinson P.,1996). The focus of analysis will be on understanding *process* and *connections,* i.e. two of the key information gaps in available evidence. Through accounts of what people actually do in practice and the processes by which they come to do it, it will be possible to tease out the complex links between housing circumstances and non-shelter outcomes and the ways in which specific housing features impact on non-shelter impacts.

Study Design Issues

A number of important research issues are associated with the nature of the study (a prospective panel) and the nature of the population being examined.

<u>Piloting</u>

This is obviously a challenging study. The study is intrusive, requires continued co-operation of a group who are often under considerable stress and is dealing with a number of fairly complicated measurement issues. It is also an important study. In order to maximise the potential for success it is important to pilot as much of the study as possible, including all instruments and processes. This will build the foundations for a successful study. The actual elements examined in the survey will be finalised after the pilot.

---

[16] Specifically two focus groups with public housing tenants in Brisbane
[17] These are listed on page 6.

<u>The Attrition Rate</u>

In a prospective panel, respondents drop out during the course of the study (the dropout rate is referred to as the attrition rate). This is a problem since the respondents who are lost to the study may differ from those who are retained introducing a bias. For example, respondents with the most serious health issues may drop out, limiting the usefulness of the analysis on the impact of housing on health. Attrition rates have been reported that range from 13% to over 50% (for an 8 year study) (Menard, 1991;p36). An attempt will be made to minimise the attrition rates in this study by designing an appropriate incentive package, possibly with a cash incentive to remain in the study.

<u>Bias Issues</u>

Given the dependency of the group on the housing provided by SHAs and community housing, care would need to be taken that respondents did not attempt to provide what they thought were "correct" answers in order to ensure that they were able to stay in SHA/community housing.   The main strategy here is to emphasize the University's involvement in the research project at every opportunity and not to indicate that we are looking for any specific answers.

<u>Health Data</u>

Agreement has been obtained from the Health Insurance Commission to obtain Medicare records on households in the survey. This requires households participating in the study to provide a separate consent form[18]. This replaces the need to ask households to keep a diary of medical visits.

In conclusion, whilst the study raises a number of methodological issues it is considered that careful study design and testing can provide reliable estimates of non-shelter outcomes.

---

[18] Pilot focus groups indicate that about 80 percent of households are likely to consent to providing access to these data.

5. CONCLUSION

An important research question is the extent to which housing assistance impacts on a range of what could be called non-shelter or non housing outcomes.

An understanding of non-shelter impacts is important for a variety of reasons. Firstly, if it can be shown that spending on housing has a variety of non-shelter benefits that may reduce the call on government funds in the short, medium and long term, this is an important argument to make when negotiating with Treasuries and others for housing assistance funds. Secondly, the type or "design" of housing assistance might have significant impacts on the multiplier between shelter and non-shelter benefits – this would have implications for SHAs and others in the delivery of housing assistance. Thirdly, the ratio between shelter and non-shelter benefits might vary between different housing need groups. This outcome might affect the allocation process within SHAs.

Despite a wide range of research in a number of individual areas (e.g. health), there has been little in the way of recent systematic attempts in Australia to explore the nature of the relationship between the shelter and non shelter impacts of housing. This positioning paper describes a research project that will measure non-shelter outcomes using a longitudinal approach. It is hoped that such a study will provide access to a wide range of data that will help address a wide range of housing assistance issues.

6. REFERENCES

Alexander, K. L., D. R. Entwisle, et al. (1996). "Children in Motion: School Transfers and Elementary School Performance." The Journal of Educational Research 90(1).

Ambrose, P (1996) Bad Housing: Counting the Cost Working Paper No. 90, Centre for Urban and Regional Research, University of Sussex

Barrow, M and Bachan, R (1997) The Real Cost of Poor Homes Research Findings No.10, Royal Institute of Chartered Surveyors (RICS), London.

Bartlett, S. (1997). "Housing as a Factor in the Socialization of Children: A Critical Review of the Literature." Merrill-Palmer Quarterly 43(2): 169-198.

Bartlett, S. (1997). "No Place to Play: Implications for the Interaction of Parents and Children." Journal of Children and Poverty 3(1): 37-48.

Bartlett, S. (1998). "Does Inadequate Housing Perpetuate Children's Poverty?" Childhood 5(4): 403-420.

Bassuk, E (1991) 'Homeless Families' in Scientific American, December,1991

Bijleveld C and Th.van der Kamp (1998) Longitudinal Data Analysis, Sage, London

Blackman, T et. al (1989) 'Housing and Health: A Case Study of Two Areas in West Belfast' in Journal of Social Policy, Vol. 18, No.1, 1989

Boardman, B (1991) Fuel Poverty, Belhaven Press, London

Boehm, T. P. and A. M. Schlottmann (1999). "Does Home Ownership by Parents Have an Economic Impact on Their Children?" Journal of Housing Economics 8: 217 - 232.

Bradley, R. H. and B. M. Caldwell (1984). "The Relation of Infants' Home Environments to Achievement Test Performance in First Grade: A Follow-up Study." Child Development 55(3): 803-809.

Bradley, R. H. and B. M. Caldwell (1984). 174 Children: A Study of the Relationship between Home Environment and Cognitive Development during the First 5 Years. Home Environment and Early Cognitive Development: Logitudinal Research. A. W. Gottfried. New York, Academic Press Inc: 5-55.

Brooks-Gunn, J., G. J. Duncan, et al. (1993). "Do Neighborhoods Influence Child and Adolescent Development." American Journal of Sociology 99(2): 353-395.

Brown, A. and D. K. Orthner (1990). "Relocation and Personal Well-Being Among Early Adolescents." Journal of Early Adolescence 10(3): 366-381.

Brown, H (1991) Housing and Adolescents with Drug Related Problems Melbourne: Taskforce Community Involvement Centre.

Brown, M et.al. (1972) 'Criminal Offences in an Urban Area and their Associated Variables' in British Journal of Criminology, Vol. 12, No. 3, 1972

Bryson D (2000) "Welfare and Housing. How can the Housing Programs help Welfare Recipients?", National Housing Law Project, Oakland, California.

Burke T, Hancock L & Newton P (1984) A roof over their heads - Housing issues and families in Australia Melbourne: Institute of Family Studies.

Burkhardt, G (1989) 'The productivity issue in educational organisations: some educational implications of efficiency campaigns' in Research and future development of education in Australia unpublished papers presented at the annual conference of the Australian Association for Research in Education held at the University of Adelaide 28 Nov - 2 Dec 1989.

Burns, A., R. Homel, et al. (1984). "Conditions of Life and Parental Values." Australian Journal of Psychology 36(2): 219-237.

Byrne, D et al (1986) Housing and Health: The Relationship Between Housing Conditions and the Health of Council Tenants Gower, Aldershot

Carr-Hill, R et al (1993) Poor Housing: Poor Health? Unpublished report funded by the Department of the Environment.

Cass, B (1991) The housing needs of women and children, Discussion Paper prepared for the National Housing Strategy, Canberra: AGPS, 1991.

Chazan, M (1973) 'Disadvantage and Nursery Schooling' in Special Education; Vol. 62, No. 3 p19-23, Sep 1973

Christie, Michael (1985) Aboriginal perspectives on experience and learning: the role of language in Aboriginal education, Deakin University Press.

Clark, A. (1996). "Policy and Provision for the Schooling of Children Living in Temporary Accommodation: Exploring the Difficulties." Children and Society 10: 293-304.

Cleveland, H. H., K. Jacobson, C, et al. (2000). "Genetic and Shared Environmental Contributions to the Relationship between the Home Environment and Child and Adolescent Achievement." Intelligence 28(1): 69-86.

Clough, H (1991) Somewhere That's Home Melbourne: COMPASS Accomodation Support Service, 1991.

Coffey, A. and P. Atkinson (1996). Making Sense of Qualitative Data: Complementary Research Strategies. Thousand Oaks, Sage Publications.

Cohen, S., D. C. Glass, et al. (1973). "Apartment Noise, Auditory Discrimination, and Reading Ability in Children." Journal of Experimental Social Psychology 9(5): 407-422.

Coll, C. G., J. C. Buckner, et al. (1998). "The Developmental Status and Adaptive Behavior of Homeless and Low-Income Housing Infants and Toddlers." American Journal of Public Health 88(9): 1371-1374.

Coopers and Lybrand W.D Scott (1985) Study into Homelessness and Inadequate Housing, Vol. 1, AGPS, Canberra.

Cowie, C et.al. (1998) 'Blood Lead Levels in Preschool Children in Eastern Sydney' in Australian and New Zealand Journal of Public Health, Vol. 21, No. 7, 1998, pp 755-761.

Crane, H (1990) Speaking from Experience. Working with Homeless Families, London, Shelter/LFMC/MA/SHAC.

Crane, J. (1996). "Effects of Home Environment, SES, and Maternal Test Scores on Mathematics Achievement." The Journal of Educational Research 89(5): 305-314.

Dales, R et al, (1991a) 'Respiratory health effects of home dampness and molds among Canadian children', American Journal of Epidemiology, 134, pp. 196-203.

Dales, R et al, (1991b) 'Adverse health effects among adults exposed to home dampness and molds', American Journal of Epidemiology, 134, pp. 505-510.

Danermark, B and Ekstrom, M (1988) 'Relocation and Health Effects on the Elderly' in Journal of Sociology and Social Welfare.

Daniels, C (1991) Aboriginal pedagogy: Aboriginal teachers speak out Geelong, Vic., Deakin University Press.

Davie, R., N. Butler, et al. (1972). National Child Development Study (1958 Cohort). London, Longman in association with The National Children's Bureau.

Dixon, D (1992) Effects of Homelessness on the Community Draft paper prepared for the Ministerial Advisory Committee on Homelessness and Housing.

Duncan, G. J. and J. Ludwig (2000). Can Housing Vouchers Help Poor Children? Washington DC, The Brookings Institute: 8.

Duncan, G. J. and S. W. Raudenbush (1999). "Assessing the Effects of Context in Studies of Child and Youth Development." Educational Psychologist 34(1): 29-41.

Education Digest 1996, v62, n3, Nov, p29(4)

Epic P/L, R. Kennedy and Company and V Tippett and Associates (2000). The Bayside Public Housing Client Survey, Report to the Queensland Department of Housing.

Everett, A. and R. Telfer (1983). Living and Learning - Rapid Community Growth and its Consequences in Newcastle, NSW. Australian Family Research Conference, ANU, Canberra, Institute of Family Studies.

Faulkner-Hill, D. (1996-97). "The Link Between Health, Education and Shelter." Welfare in Australia 25: 12-17.

Flood, J, Newton P W, & Wulff, M (1992) Spatial Equality, Internal Migration and Social Justice Canberra:AGPS.

Folds, R (1987) Whitefella school : education and Aboriginal resistance Sydney: Allen & Unwin.

Freeman, H (1984) Mental Health and the Environment, Churchill Livingston, London.

Gabe, J and Williams, P (1987) 'Women, housing and mental health', in R.Burridge and D. Ormandy (eds.) Unhealthy Housing. Research, Remedies and Reform.

Galster, G. and A. Zobel (1998). "Will Dispersed Housing Programmes Reduce Social Problems in the US?" Housing Studies 13(5): 605-622.

Garner, C. L. and S. W. Raudenbush (1991). "Neighborhood Effects on Educational Attainment: A Multilevel Analysis." Sociology of Education 64(October): 251-262.

Geddes, E (1993) The Impact of Socio-economic and Locational Disadvantage of Health Outcomes and Cost The Centre for South Australian Economic Studies.

General Accounting Office (1998), "Welfare reform changes will further shape the roles of housing agencies and HUD", June pp. 34-35

Gesler, W (1980) 'Spatial Variations in Morbidity and Their Relationship with Community Characteristics in Central Harlem Health District', in Social Science and Medicine, pp 387-396.

Giroult, (1986) Health Aspects of Housing and Town Planning, World Health Organisation.

Goering, J. and J. Kraft (1999). Moving to Opportunity for Fair Housing Demonstration Program: Current Status and Initial Findings September 1999. USA, HUD: 71.

Gold, R (1970) 'Urban Violence and Contemporary Defensive Cities', in AIP Journal. May 1970.

Gonzales, N. A., A. M. Cauce, et al. (1996). "Family, Peer and Neighborhood Influences on Academic Achievement among African-American Adolescents: One-Year Prospective Effects." American Journal of Community Psychology 24(3): 365-387.

Gottfried, A. E., J. S. Fleming, et al. (1998). "Role of Cognitively Stimulating Home Environment in Children's Academic Intrinsic Motivation: A Longitudinal Study." Child Development 69(5): 1448-1460.

Gottfried, A. W. and A. E. Gottfried (1984). Home Environment and Cognitive Development in Young Children of Middle-Socioeconomic-Status Families. Home Environment and Early Cognitive Development: Longitudinal Research. A. W. Gottfried. New York, Academic Press Inc: 57-115.

Gottfried, A. W., Ed. (1984). Home Environment and Early Cognitive Development: Longitudinal Research. Developmental Psychology Series. New York, Academic Press Inc.

Green, R and White, M (1994) Measuring the Benefits of Homeowning: Effects on Children, Working Paper No. 93, University of Chicago.

Harding, A. and A. Szukalska (2000). Social Policy Matters: The Changing Face of Child Poverty in Australia, 1982 to 1997/98. 7th Australian Institute of Family Studies Conference, Sydney, NATSEM.

Harris, S (1990) Two-way Aboriginal schooling: education and cultural survival Canberra: Aboriginal Studies Press, 1990

Harvey D (1973) Social justice and the city, Edward Arnold, London.

Haynes, R (1991) 'Inequalities in Health and Health Service Use: Evidence from the General Household Survey' in Social Science and Medicine, p. 361

Herman, H (1991) Homelessness and Severe Mental Disorders: Where to From Here? Presented to Working with the Homeless Mentally Ill: Seminar Brisbane, October 1991.

Hertzman, C. and M. Wiens (1996). "Child Development and Long-Term Outcomes: A Population Health Perspective and Summary of Successful Interventions." Social Science and Medicine 43(7): 1083-1095.

Hirst, C (1989) Forced Exit Melbourne: Salvation Army.

HMI, (1990) A Survey of the Education of Children Living in Temporary Accommodation. London, Her Majesty's Inspectorate, Department of Education and Science, London

Hopton, J and Hunt, S (1996) 'The Health Effects of Improvements to Housing: A Longitudinal Study', in Housing Studies, Vol. 11, No. 2, April 1996. p. 271-286

Hosen, H (1978) 'Mould in Allergy', in Journal of Asthma Research, 15, pp. 151-156

House of Representatives Standing Committee on Aboriginal Affairs (1979) Aboriginal Health, Canberra: AGPS.

Hout, M and Lucas, S (1996) 'Education's role in reducing income disparities' in

Hunt, S (1990) 'Emotional distress and bad housing design' in Health and Hygeine, 11, pp. 72-79.

Hunt, S and McKenna, S (1992) 'The impact of housing quality on mental and physical health', Housing Review, 41(3), pp. 47-49

Isaacs and Dunn (1993) 'Health and Housing – Seasonality in New Zealand Mortality', Australian Journal of Public Health, Mar 1993.

Izzo, C. V., R. P. Weissberg, et al. (1999). "A Longitudinal Assessment of Teacher Perceptions of Parent Involvement in Children's Education and School Performance." American Journal of Community Psychology 27(6): 817-839.

Johnson, J. (1987). Life Events as Stressors in Childhood and Adolescence. Newbury Park, Sage.

Jones R (1993) The Housing Need of Indigenous Australians, Report to ATSIC, ANU, Canberra.

Kamien M (1976) 'Housing and Health in an Aboriginal Community in Bourke, New South Wales' in Australian Journal of Social Issues Vol 11(3) pp187-200

Kaufman, J. E. and J. E. Rosenbaum (1992). "The Education and Employment of Low-Income Black Youth in White Suburbs." Educational Evaluation and Policy Analysis 14(3): 229-240.

Kearns R, Smith C & Abbott M (1990) 'The Stress of Incipient Homelessness' in Housing Studies Vol 7 No 4 pp 280 – 297.

Kearns, A et. al. (1990) 'Another Day in Paradise? Life on the Margins in Urban New Zealand' in Social Science and Medicine p 369.

Keeves, J. P. (1972). Educational Environment and School Achievement - A Multivariate Study of the Contributions of the Home, the School and the Peer Group to Change in Mathematics and Science Performance during the First Year at Secondary School. Melbourne, Australian Council for Educational Research.

Kellet, J (1989) 'Health and Housing', Journal of Psychosomatic Research, 33, pp. 255-268.

Kennedy R (1996) The Demand for Disability Support Services Ageing and Disability Department.

Kenway, J et al. (1997) Answering back : girls, boys and feminism in schools Allen & Unwin.

King A (2001) Housing Assistance: a Lifetime perspective, National Centre for Social and Economic Modelling, Report to AHURI.

Kleit R and Rohe W (1997) 'From Dependency to Self-Sufficiency: An Appraisal of the Gateway Transitional Families Program', Housing Policy Debate Vol8(1)pp75-108

Kutty, R et.al. (1993) 'How Socio-economic Status Affects Birth and Death Rates in Rural Kerala, India: Results of a Health Study' in International Journal of Health Services, Vol. 23, No. 2 pp 373-386.

Ladd, H. F. and J. Ludwig (1997). "Federal Housing Assistance, Residential Relocation, and Educational Opportunities: Evidence from Baltimore." State and Local Public Policy 87(2): 272-277.

Lay, E (1995) Investigation of Factors Affecting the Education of Young Children with Particular Emphasis on Socio-economic Disadvantage, University of Newcastle.

Lepore, S. J., G. W. Evans, et al. (1991). "Social Hassles and Psychological Health in the Context of Chronic Crowding." Journal of Health and Social Behaviour 32(December): 357-367.

Levy, D. and G. J. Duncan (2000). Using Sibling Samples to Assess the Effect of Childhood Family Income on Completed Schooling. Chicago, Joint Center for Poverty Research, Northwestern University/University of Chicago.

Lewis, A (1994) 'Education is the only way out of poverty' Phi Delta Kappan 1994, v76, n3, Nov, p180(2)

Light, A et al (1995) 'The effects of interrupted schooling on wages' Journal of Human Resources 1995, v30, n3, Summer, p472(31)

Lin, Yangjing (1996) 'Occupational outcomes for students earning two-year college degrees: income, status, and equity' in Journal of Higher Education, v67, n4, July-August, p446(30), 1996

Locke, M and Constable, M (1974) The Kids Don't Notice. Shelter, London

Loehlin JC(1998) Latent Variable Models:an introduction to factor, path and structural analysis, 3rd edition, Lawrence Erlbaum Associates, Mahwah.

Maher C and Whitelaw J (1995) Internal migration in Australia 1986-1991 : residential mobility and urban development, Australian Govt. Pub. Service, Canberra.

Malin, M (1990) 'Visibility and Invisibility of Aboriginal Students in an Urban Classroom' Australian Journal of Education, 34 (3), 1990, pp 312-329

Martin, C et al. (1987) 'Housing conditions and ill health' in British Medical Journal, 294, pp. 1125-1127.

Matka, E (1997) Public Housing and Crime in Sydney, NSW Bureau of Crime Statistics and Research.

Mawby, R (1977) 'Defensible Space: A Theoretical and Empirical Appraisal', in Urban Studies, Vol. 14 169-179

Mayer, S. E. and C. Jencks (1989). "Growing Up in Poor Neighborhoods: How Much Does it Matter?" Science 243(4897): 1441-1445.

McCaugghey, J (1992) Where Now. A Study of Homeless Families in the1990's Australian Institute of Family Studies Policy Background Paper No. 8, Melbourne: Australian Institute of Family Studies.

Menard S (1991) Longitudinal Research, Sage, Newbury Park

Molnar, J. M., W. R. Rath, et al. (1990). "Constantly Compromised: The Impact of Homelessness on Children." Journal of Social Issues 46(4): 109-124.

Morris, P. A., A. C. Huston, et al. (2001). How Welfare and Work Policies Affect Children: A Synthesis of Research. New York, Manpower Demonstration Research Corporation.

Morrison, J. (2000). More Than Just a Home...The Experience of Some Public Housing Tenants. Brisbane, Queensland Department of Housing.

Mullins P, Western J and Broadbent B (2001) "The links between housing and nine key socio cultural factors: a review of the evidence" AHURI Positioning Paper, Melbourne

Murray, L et. al Homelessness, Schooling and Attainment: A Preliminary Assessment of 'Disruption Indicators' on Children's Performance in the Early Years of Schooling.

Nash, Ian (1996) 'Youth exodus costs 350m pounds'. (United Kingdom drop-out rate) Times Educational Supplement, n4157, March 1, pA25(1) 1996.

National Health Strategy (1992) Enough to Make You Sick: How Income and Environment Affect Health, Research Paper No. 1, 1992.

National Housing Strategy (1991a) Framework for reform, Canberra:AGPS, 1991.

National Housing Strategy (1991b) Aboriginal and Torres Strait Islander Housing Discission Package, Canberra: AGPS, 1991.

National Housing Strategy (1991b), Issues Paper No 2 The affordability of Australian Housing, Canberra: AGPS, 1991.

National Housing Strategy (1992), National Housing Strategy: agenda for action Canberra: AGPS, 1992.

National Shelter Submission (1997) Senate Community Affairs References Committee Inquiry into Housing Assistance May 1997.

Neil, C and Fopp, R (1994) Homelessness in Australia: Causes and Consequences, CSIRO Division of Building, Construction and Engineering, Victorian Ministerial Advisory Committee on Homelessness and Housing.

Neil, C. and R. Fopp (1992). Homeless in Australia: Causes and Consequences, CSIRO Australia.

Nelson, P. S., J. M. Simoni, et al. (1996). "Mobility and School Functioning in the Early Grades." The Journal of Educational Research 89(6): 365-369.

Newman, O (1972) Defensible Space: Crime Prevention through Urban Design, MacMillan, New York.

North, C (1996) Go Home and Rest? The Use of an Accident and Emergency Department by Homeless People, Shelter UK.

Parke, R. D. (1978). Children's Home Environments: Social and Cognitive Effects. Children and the Environment. I. Altman and J. F. Wohlwill. New York, Plenum Press. 3: 33-81.

Patrikakou, E. 1997, 'A Model of Parental Attitudes and the Academic Achievement of Adolescents', Journal of Research & Development in Education, vol. 31, no. 1, pp. 7-26.

Phibbs P, Kennedy R and Tippett V (1999) "A Scoping Study to Identify and Design a Methodology to Measure the Social and Economic Impacts of Unmet Housing Need" Report to the Australian Housing Research Fund. -

Phibbs P (2000) The Social and Economic Impacts of Unmet Needs. Technical Paper Number 2. Research and Policy Unit, Queensland, Department of Housing.

Phibbs P (2001) Housing assistance and non-housing outcomes- Keynote address: National Housing Conference, Brisbane

Philip, G (1988) Social Class, Social Disadvantage and Child Health, in Children and Society, Vol 2. No. 1, 1988.

Phillips G (1998) The Housing Needs of Special Groups: A Case study of people with HIV/AIDS, unpublished PhD thesis, University of Sydney

Pholeros, P (1993) Housing for Health: Towards a Healthy Living Environment for Aboriginal Australia, Bridge Printery.

Pinkney, S and Ewing, S (1997) The economic costs and benefits of school-based early intervention: responding to youth homelessness, Centre for Youth Affairs Research and Development.

Platt et al (1989) 'Damp housing, mould growth and symptomatic health state', British Medical Journal, 298, pp. 1673-1678.

Power S, Whitty G and Youdell D (1995) No place to learn- Homelessness and education, Shelter UK, London.

Reingold DA, Van Ryzin G and Ronda M, "Does Urban Public Housing Diminish the Social capital and Labor Force Activity of its tenants?", Journal of Policy Analysis and Management, Vol. 20, No. 3, 2001

Roberts, E (1995) Neighborhood Social Environments and the Distribution of Low Birthweights Chicago, University of Illinois.

Ropers, R H (1981) The Invisible Homeless New York: Insight Books.

Rosenbaum, J. E. (1991). "Black Pioneers - Do Their Moves to the Suburbs Increase Economic Opportunity for Mothers and Children?" Housing Policy Debate 2(4): 1179-1213.

Rubin, D. H., C. J. Erickson, et al. (1996). "Cognitive and Academic Functioning of Homeless Children Compared with Housed Children." Pediatrics 97(3): 289-294.

Sampson RJ, Raudenbush SW and Earls F(1997) "Neighbourhoods and violent crime: A multilevel study of collective efficacy" Science Vol 277,pp918-924.

Saunders, P (1996) Poverty, Income Distribution and Health: An Australian Study, University of New South Wales. Sawhill, I. V. (1999). Investing in Children: Children's Roundtable Report #1 - April 1999. Washington DC, Brookings Institute.

Schmitz, S. (1992). "Three Strikes and You're Out: Academic Failure and the Children of Public Housing." Journal of Education 174(3): 41 - 54.

Sharfstein J and Sandel M (1998) ' Inadequate Housing' in Journal of Housing and Community Development 55(4) pp14-24

Sluzki, C. E. (1992). "Disruption and Reconstruction of Networks Following Migration/Relocation." Family Systems Medicine 10(4): 359-363.

Smith, C. A., S. C. J, et al. (1993). "Housing Stressors, Social Support and Psychological Distress." Social Science and Medicine 37(5): 603-612.

Smith, S and Mallinson, S (1997) 'Housing for Health in a Post-Welfare State' in Housing Studies, Vol.12, No. 2 pp173-200, April, 1997.

Spinalo, T (1976) The Social and Cost Implications of Design: Housing University of New South Wales, 1976.

Strachan, D (1993) 'Dampness, mould growth and respiratory morbidity in children and the home environment', Family Practice, 3, pp. 137-142.

Stubbs, J (1996) Social Cost Benefit Analysis of NSW Department of Housing's Neighbourhood Improvement Program – Case Study: Airds for NSW Department of Housing, March, 1996.

Susser, E (1988) 'Unravelling the Causes of Homelessness and of its Association with Mental Illness' in Cooper, B and Heigason T (eds) Prevention of Mental Disorders London: Routiedge.

Tewksbury, R (1996) 'Environmental and interactional barriers to job satisfaction for postsecondary correctional educators', in Prison Journal Vol.76, No.3, Sept, p275(18)

Thompson H, Petticrew M, and Morrison D (2001) "Health effects of housing improvement: systematic review of intervention studies"British Medical Journal Vol 323:187-190

Thornicroft, G (1991) 'Social deprivation and rates of treated mental disorder: Developing statistical models to predict psychiatric service utilization' in British Journal of Psychiarty, 158, pp. 475-84.

Thorns, D (1987) 'The Production of Homelessness: From Individual Failure to System Inadequacies' in Housing Studies Vol 4 No 4 pp253-266, 1987.

Tobin, R et al, (1987) 'Significance of fungi in indoor air: Report to a Working Party' in Canadian Journal of Public Health, 78, Suppl. Pp. 1-14.

Torzillo P and Kerr C 'Contemporary issues in Aboriginal public health' in Reid J, Trompf P(eds) The health of Aboriginal Australia Sydney: Harcourt Brace Jovanovich, 1991: pp326-380

Townsend, P and Davidson, N (1982) Inequalities in Health: The Black Report, Penguin.

Varady, D. P. and C. C. Walker (1999). "Vouchering Out Distressed Subsidized Developments: Does Moving Lead to Enhanced Feelings of Safety?" Environment and Behavior 31(1): 3-27.

Waters A (2001) "Do Housing Conditions Impact on Health Inequalities between Australia's Rich and Poor", AHURI Positioning Paper

Watson S with Austerberry, H (1986) Housing and Homelessness London: Routledge and Kegan Paul.

Weatherburn D (2001) What Causes Crime, Crime and Justice Bulletin, Number 54 pp1-10

Whitman, B et. al, (1990) 'Homelessness and Cognitive Performance in Children: A Possible Link' in Social-Work Volume 35, No. 6 p516-19, November 1990.

Wilner, D. M., R. P. Walkley, et al. (1962). The Housing Environment and Family Life. A Longitudinal Study of the Effects of Housing on Morbidity and Mental Health. Baltimore, The Johns Hopkins Press.

Wright, J. D. (1990). "Poor People, Poor Health: The Health Status of the Homeless." Journal of Social Issues 46(4): 49-64.

Young Womens Housing Collective, Do You Feel safe Here? Melbourne: Young Womens Housing Collective,1991

Young, P. 2001, Housing for Children: A Case for Non-Shelter Policy Drivers in Housing Assistance, paper presented to Housing Imaginations - the Housing Studies Association Autumn 2001 Conference, Cardiff, United Kingdom.

Zima, B. T., K. B. Wells, et al. (1996). "Mental Health Problems among Homeless Mothers: Relationship to Service Use and Child Mental Health Problems." General Psychiatry 53(4): 332-338.

AHURI Research Centres

Sydney Research Centre
UNSW-UWS Research Centre
RMIT Research Centre
Swinburne-Monash Research Centre
Queensland Research Centre
Western Australia Research Centre
Southern Research Centre

Affiliates

Northern Territory University
National Centre for Social and Economic Modelling

AHURi
Australian Housing
and Urban Research Institute