Are neighbourhood characteristics important in predicting the post-school destinations of young Australians?

David Johnston, Wang-Sheng Lee, Chandra Shah, Michael Shields & Jean Spinks

Realising our potential: widening participation through education and training
NCVER Research Forum,
3 April 2014, Melbourne
Background

Overall evidence suggests children brought up in more economically disadvantaged areas have poorer schooling and post-school outcomes.

Initial educational and training differentials are key factors in understanding lifetime income inequalities and the extent of intergenerational socioeconomic mobility.

When social disadvantage becomes entrenched in a neighbourhood, the restorative potential of services such as health and education can diminish and costs escalate.
Pathways

Key pathways through which neighbourhood factors might impact outcomes:

- More affluent neighbourhoods typically have ‘better’ schools, which aid in the achievement of better educational outcomes for students living in these neighbourhoods.

- Not only can children be directly influenced by their peers, but also by the attitudes of adults, other than their parents, in their neighbourhood.

- Through the presence or absence of education-related amenities, such as libraries, and the general culture of learning in the neighbourhood.
Self-selection

Because of self-selection by parents into neighbourhoods and the subsequent non-random allocation of young people into neighbourhoods, empirically distinguishing between alternative explanations of student outcomes can be difficult.

In some instances self-selection has the potential to overestimate the importance of neighbourhood characteristics in predicting student outcomes.
Data

- 2003 cohort of the LSAY data (first 5 waves).
- Linked to PISA data collected in 2003.
- Augmented by postcode level data on neighbourhoods from the 2006 Census.
Neighbourhood factors from the 2006 Census

- *Socio-economic status* (correlated with income, weekly rent, education, occupation)

- *Residential stability* (correlated with residential mobility and home ownership)

- *Household type* (old established neighbourhoods versus new neighbourhoods)

- *Ethnic diversity* (multicultural nature of the neighbourhood)
Outcome measures

1. Outcome at age 15
   • achievement
   • attitudes (towards schooling)
   • aspiration (expectation to complete VET or university)
   • application for school (time spent on homework)

2. Outcome at age 17
   • Engaged in education and training or not

3. Outcome at age 19
   • not studying and have not completed any qualification
   • completing or have completed a VET qualification
   • completing or have completed a university qualification
# Outcomes at age 15

**Model with neighbourhood, individual and family effects**

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Neighbourhood factors</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SES</td>
<td>Stability</td>
<td>Household type</td>
<td>Ethnic diversity</td>
</tr>
<tr>
<td>Achievement</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>VET aspiration</td>
<td>- - -</td>
<td></td>
<td>+++</td>
<td></td>
</tr>
<tr>
<td>University aspiration</td>
<td>+++</td>
<td></td>
<td>++</td>
<td>+++</td>
</tr>
</tbody>
</table>

When **school fixed effects** are included in the model all neighbourhood effects are insignificant, except **neighbourhood stability** and that only for explaining **achievement**.
## Outcomes at age 15

Full model with neighbourhood, school, individual & family effects

<table>
<thead>
<tr>
<th>Individual/family characteristic</th>
<th>Achievement</th>
<th>Attitude</th>
<th>Application</th>
<th>VET aspiration</th>
<th>University aspiration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>++</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>++</td>
</tr>
<tr>
<td>Australian born</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>++</td>
</tr>
<tr>
<td>Indigenous</td>
<td>++</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>++</td>
</tr>
<tr>
<td>Youngest child</td>
<td>++</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>++</td>
</tr>
<tr>
<td>Only child</td>
<td>++</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>++</td>
</tr>
<tr>
<td>Two-parent family</td>
<td>++</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>++</td>
</tr>
<tr>
<td>Speak another language than English at home</td>
<td>++</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>++</td>
</tr>
<tr>
<td>Asian descent</td>
<td>++</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>++</td>
</tr>
<tr>
<td>High SES parents</td>
<td>++</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>++</td>
</tr>
<tr>
<td>Parents work</td>
<td>++</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>++</td>
</tr>
<tr>
<td>Place to study</td>
<td>++</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>++</td>
</tr>
<tr>
<td>Computer</td>
<td>++</td>
<td>++</td>
<td>- -</td>
<td>- -</td>
<td>++</td>
</tr>
<tr>
<td>Books in the home</td>
<td>++</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>++</td>
</tr>
</tbody>
</table>
## University outcome at 19

<table>
<thead>
<tr>
<th>Neighbourhood factors</th>
<th>Model 1 Neighbourhood</th>
<th>Model 2 Model 1 plus individual &amp; family effects</th>
<th>Model 3 Model 2 plus school fixed effects</th>
<th>Full model Model 3 plus age 15 measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES</td>
<td>+++</td>
<td>+++</td>
<td></td>
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</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household type</td>
<td>+++</td>
<td>+++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic diversity</td>
<td>+++</td>
<td>+++</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
University outcome at 19

Results from full model

<table>
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<tr>
<th>Individual &amp; family characteristics</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>+++</td>
</tr>
<tr>
<td>Born in Australia</td>
<td>+++</td>
</tr>
<tr>
<td>Speak another language than English at home</td>
<td>+++</td>
</tr>
<tr>
<td>Live with both parents</td>
<td>+++</td>
</tr>
<tr>
<td>Asian descent</td>
<td>+++</td>
</tr>
<tr>
<td>Father’s education</td>
<td>+++</td>
</tr>
</tbody>
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### University outcome at 19

**Results from full model**

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Concluding remarks

Individual and family characteristics are important determinants of educational outcomes for young people.

But living in low SES neighbourhoods has a negative impact on outcomes which disappears when we control for the school that the child attends.

Two similar students, attending the same school, but living in neighbourhoods with different SES, are likely to have similar outcomes.

Disparities in outcomes may be reduced by different allocation of teachers, students and resources across schools.

Attitudes towards schooling, application to school work and aspiration to pursue further studies, measured at age 15 years, have an impact on later school outcomes.
Geographical and place dimensions of post-school educational participation

Sue Webb, Ros Black, Ruth Morton, Sue Plowright, John Pardy and Reshmi Roy
Faculty of Education, Monash University

Presentation to NCVER Research Forum – Thursday 3 April 2014, Melbourne
Issues arising from quantitative research

- School effects’ not easily measurable or separable from the characteristics of neighbourhoods;

- Quantitative data gives information on average case;

- Some people in low SES neighbourhoods participate above average in education post-school;

- Qualitative research can explore the ‘sources of effects heterogeneity’.
Why is this research important?

The research problem:

*Geographical and social imbalances in higher education participation*

- 28% of 15-64 age pop. live in regional areas
- Less than 20% participate in higher education
- Lower SES groups over-represented in regions
- Low SES associates with low HE participation
Urban fringe, regional & rural life

- Distance affects participation – communities can be remote
- Regional TAFEs and universities have limited provision
- High costs for travel and accommodation away from home
- Young people tend to enter work or VET/TAFE pathway
- Female, more likely to study, but part-time, in VET
- Study in VET in human services work, aged and child care.
Why ‘sources of effects heterogeneity’?

Research questions:

- What are the specific mechanisms through which the characteristics of neighbourhood might affect an individual?

- How do individuals live their lives in neighbourhoods of disadvantage, make decisions about where, how and with whom they spend their time and imagine their education and work futures?
Theoretical frame

Avoid deficit thinking:

*the effect of neighbourhoods and places on the lives, educational opportunities and life chances of young people from contexts of socio-economic disadvantage […] is not well understood, and invariably reinforces deficit stereotypes.* (Smyth & McInerney 2013, p. 2)

Use socio-cultural thinking:

Qualitative *research that understands people’s ‘everyday life worlds’* (Meegan and Mitchell, 2001)
Methods

- Qualitative study of four sites in two states in Australia
  - areas of social disadvantage based on SES indices
  - two urban fringe and two regional/rural
  - Norhtown and Southland in South Australia
  - Westvale and Eastshire in Victoria.

- Qualitative study – three levels of data collection
  - regional state level (policies and interviews 53 key stakeholders);
  - focus groups with 51 young people;
  - individual interviews with 16 young people.
Places of contrast - Northtown and Southland, urban fringe
Places of contrast - Eastshire and Westvale, regional and rural areas
The capacity to aspire is [...] a navigational capacity. The more privileged in any society simply have used the map of its norms to explore the future more frequently and more realistically, and to share this knowledge with one another more routinely than their poorer and weaker neighbours. The poorer members, precisely because of their lack of opportunities to practice the use of this navigational capacity [...] have a more brittle horizon of aspirations. (Appadurai, 2004, p.69).
Findings: Post-school pathways are local

- VET study is the predominant post school pathway;
- VET to community services, trades, office work and health;
- VET a location for re-engagement of young adults;
- VET to dual sector study or university partnerships (often more costly and protracted than direct entry to university);
- Higher education was local (outside metropolitan centres);
- Lower ATAR score is pathway to lower professions (teaching, health, the arts, some engineering in Northtown).
Local imaginaries: ‘networks to rely on’

A lot of the people see Westvale at the moment as a hole and literally if you look at the landscape it’s like right at the bottom and there are mountains around us, but it’s a great place to live. …I see them basically every week, the regulars that come through and you make friends almost, like they see me down the street, we greet each other. It’s a close network and you find that wherever you are you’re going to know somebody. You can go anywhere and you’ll probably know someone. That sort of thing is encouraging, that’s why I reckon a few people do stay here and don’t move away because they have a family here, they have their friends and they have that network of people that they know they can rely on or see or communicate with and it’s a great thing about living in such a rural area. (Simone, 17, Westvale)

The Good, the Bad and the Ugly?
Local imaginaries: ‘the place to be’

I suppose you’re not really that far from anything when you think about it. There’s the beach, rivers, you can do – depends on what your hobbies are really. Shooting, fishing, four wheel driving, camping, there’s pretty much whatever you want. If you were in the city you wouldn’t really be doing that much. (JD, 17, Eastshire)

They [business people] grew up here and they want their kids to grow up here, they like the lifestyle, they like to be able to shut the door and go surfing at 3 o’clock in the afternoon. So it’s very hard when you’re doing an investment attraction plan cause they’re not actually making decisions to expand their factory on any business case. (Southland Local Council Officer)

The Good, the Bad and the Ugly?
Local imaginaries: ‘barriers’

I’d travel probably up to an hour maximum. I don’t think I’d travel any further than that. It wouldn’t be worth it…. you’re spending $100 a week in petrol and then after tax as well when you’re being paid, it’s not a lot of money [left] (Max 18, Southland, apprentice builder)

Those that have got the […]‘I’m going to university’, they’re striving for that, that’s where they want to go. Those that haven’t the self-confidence for that sort of stuff are majorly inhibited and that’s a big barrier for them. It’s like, it means: ‘I’ve got to live away from home, I’ve got to go there, no, too much, too scary, I’ll stay here and do a traineeship or an apprenticeship or work in the supermarket’. Their aspirations are cut short because of that. (Staff, Regional university, Westvale)

The Good, the Bad and the Ugly?
Local imaginaries: ‘stigma’

There’s like some horrible people around here. But because it is like a lower, like type of community. [...] The more north you get in Northtown basically is a lower, lower class it gets. (Teresa, Northtown)

[employers think] ‘you are where you live’ (Jenny, Northtown)

‘They’re sort of categorised as being feralist of the feral’ (Michael aiming to live and teach Physical Education in his Northtown home)

It’s like a slow socioeconomic area and anyone else that works in say retail you’re not going to get anywhere in life or some people have to work in retail, that’s what they do to support themselves where there’s a stigma against us. (Drew, 22, Westvale)

The Good, the Bad and the Ugly
Gendered imaginaries & family traditions

The young boys are sort of pressured into lots of storylines around trades and good, well-paid jobs straight up, fast up, you know what I mean? Why wait and do four or five years or however long and so there's a lot of that pressure around for young men as well. ...a lot of the boys will go into very masculine [jobs]; the trades, the roles, those sort of jobs. (Staff, Regional University, Westvale)

My brother is a qualified builder and it just seems like a good lifestyle and that, being outside and everything, and it seems good. It’s just something I’ve always wanted to do and it’s what my dad does, so... [decided on this pathway] through work experience, and I’ve loved it ever since. (BC, Westvale)
Gendered imaginaries & family traditions

There’s apprenticeships and things available through the high school system for males and yes there’s hairdressing but it’s very limited for girls and it’s very male bias still. I loved tech in high school [but tech] was just a bludge class for the girls. Like the guys could go somewhere in his mind. (Emily, 22, Southland)

They could be finished their apprenticeship and they’d be earning something of a University level whereas I find, as a female, not that I couldn’t do the apprenticeships they were doing, but they were a lot more physical, physical apprenticeships. Whereas I found as a female if I wanted to earn, have a good earning, I would have to go to University because if you went to TAFE and just did beauty, the income wasn’t as high. (Jessica, 23, Southland)
Networks to new imaginaries

School and influential adults or teachers

The teachers know who want to do well, it was evident in my English class. [...] A group of us were dying to get to uni and wanted to push ourselves up [but] there were four guys - the rowdy sporty ones - who didn’t give a crap about school, there was students who rarely turned up, students that did turn up and just wouldn’t listen and I suppose the teacher focused on the group that I put myself in the most, like he still interacted with everyone, he got along with the guys a lot, but he was welcome to help us and he was more supportive of us. (Simone, 17, Westvale will be first in family to go to university)
Networks to new imaginaries

Sports clubs and influential peers

Probably [got the idea that I could go to university] from my friends or people at soccer, because they’re always saying that, "Oh, yeah, if you go here, these courses are good, these people can help you" or, "This is where you can get help" stuff like that. …I think one is doing…one's going to be a doctor, another one is in like, health, or something like that, and one's in business management or something like that. (Jimmy, Northtown, will be first in family to go to university)
Networks to new imaginaries

Developing new learning capabilities through work

The reason why I decided to go to university is because I got to the point where I’d kind of learnt everything I had learnt in my position. [...] I kind of started to see a bit more of my potential I think through managing. Like I started to realise that I think I was a bit better than just managing a store. Because I think a lot in my younger years I didn’t see myself as a very smart person. Like I was a bit like, you know, just wasn’t going to do anything like university. I hated to read. I’d probably say I put myself down in that sense. Like I didn’t really give myself credit for what I could do and so I think by managing it gave me that confidence that I think I can do more than this sort of thing. (Jessica, 24, Southland, first in family to go to university)
Conclusions (1)...the hold of the local

- Geography and place affects social imaginaries ‘holding’ people from low SES areas in the locality – for good, bad and ugly reasons;
- Parents, families and peers are major influences;
- Gendered roles and opportunities leads boys following traditions of fathers (to local opportunities), while girls, with aspirations for change, leave the area;
- But poor transport links, distance from large centres, high costs of travel and poor internet limit people to the locality;
Conclusions (2)...new imaginaries

- Schools and the support offered by teachers or those with ties to different networks are crucial for new imaginaries;
- But schools can restrict opportunities dependent on high ATAR scores and wide subject range;
- Local study pathways reinforce the role of local HEIs and VET to solve problems of disadvantage (not the Go8);
- Aspirations and new imaginaries arise from multi-factors – location, family traditions, support, expectations, school provision, opportunities to experience something different.
Policy implications:

Policy solutions need to join up and work on several fronts to increase and widen opportunities to new experiences by

- joining up the formal - schooling, transport, VET/university, VET fee structures, advice & guidance;
- joining with informal agencies – sports and hobby clubs, parents groups, other NGO activities and groups.