

LONGITUDINAL SURVEYS OF AUSTRALIAN YOUTH BRIEFING PAPER 29

The role of aspirations in the educational and occupational choices of young people

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OVERVIEW

Research consistently finds that having aspirations to complete Year 12 and post-school study plans formed during high school are strong predictors of Year 12 completion and participation in further education and training. The Longitudinal Surveys of Australian Youth (LSAY) provide a rich source of information for exploring the impact of aspirations, including parent and peer aspirations, on actual destinations. This briefing paper analyses LSAY data and synthesises the research to examine the impact of aspirations on the educational and occupational choices of young people.

HIGHLIGHTS

- Research based on LSAY data indicates that students' educational intentions are one of the strongest predictors of Year 12 completion. Educational aspirations also impact strongly on participation in tertiary education and training, although the impact is not as great as that on Year 12 completion.
- Multiple factors interact to drive young people's educational aspirations. These factors include attitudes towards school, academic performance, parental expectations, peer plans and student background.
- Parental expectations and peer plans appear to be particularly influential factors in young people's educational choices.
- For a significant proportion of young people, there is a mismatch between their occupational aspiration formed at 15 years of age and the actual job obtained ten years later. Even if occupational aspirations are not realised, career planning can help to provide a positive employment outcome.
- The interactions between educational outcomes, aspirations and other influencing factors are complex. Strategies to raise educational aspirations might focus on influencing students' and parents' attitudes towards school and study, and promoting the importance of a career plan. Career planning is particularly important for low academic achievers and those at risk of a poor transition from school.
- If it is possible to raise aspirations through policy or programs, then these heightened aspirations should exert a similar impact on all young people, regardless of social background.

INTRODUCTION

Raising the educational aspirations of young people is a key component of current educational reforms supporting the achievement of targets for higher education participation. This is because a 'lack of aspiration' has been identified as one of the barriers to participation in further study for rural and remote students and those from Indigenous and lower socioeconomic backgrounds (Bradley et al. 2008; James et al. 2008).

Post-school plans and intentions to complete Year 12 are captured in the first years of the Longitudinal Surveys of Australian Youth, providing a measure of the educational aspirations of young people. These are distinct from occupational aspirations, which may also play a role in educational outcomes and which are similarly captured at age 15 years in LSAY.¹

Responses to these questions have been examined in previous LSAY work, primarily as an independent factor affecting Year 12 completion, with more recent studies exploring the relationship between aspirations and post-school study and later labour market outcomes. Educational aspirations have consistently been shown to be strong indicators of young people's subsequent educational activities and a strong influence on outcomes by age 25 years.

The precise role that educational aspirations play in the educational choices of young people is not straightforward. The development of strategies aimed at 'raising' aspirations necessitates a better understanding of how aspirations interact with other factors to influence educational decision-making and the subsequent activities of young people.

This briefing paper synthesises previous research and analyses primary LSAY data from participants first interviewed in 2003 and 2006 to explore the role of educational aspirations in young people's decisions to complete Year 12 and participate in further education and training. Recent findings on the relationship between occupational aspirations and later occupational outcomes are also examined. The paper ends with an investigation of the factors that influence aspirations, providing an insight into the strategies that could be used to improve participation in education and training and labour market outcomes.

EDUCATIONAL ASPIRATIONS AND YEAR 12 RETENTION AND COMPLETION

LSAY provides measures of the educational aspirations of participants, specifically:

- intentions to undertake Year 12
- post-school plans.

Respondents are asked about their intentions during their school-age years, from the beginning of the survey (at age 15 years) until the majority of the cohort has reached Year 12 (second survey year for intention to undertake Year 12) or has completed high school (fourth survey year for post-school plans).

The impact of aspirations on Year 12 retention and completion

Previous research comparing these responses with a young person's actual educational activities shows that a young person's stated intention to go on to Year 12 provides a strong indicator of actual Year 12 retention and completion. The clear majority (87%) of LSAY participants first interviewed in 1995 who reported an intention to continue on to Year 12 actually did so. Furthermore, 79% of participants intending to leave secondary school before Year 12 did leave before the final year of school (Khoo & Ainley 2005).

Table 1 provides the same analysis for LSAY participants first interviewed in 2003 and those first interviewed in 2006 and shows that most LSAY respondents aspire to go on to Year 12. The proportion is slightly higher for the 2003 cohort (92% compared with 88% for the Y06 cohort). This may be because the question differs slightly between the two cohorts: planning to go on to Year 12 (Y03) compared with planning to complete Year 12 (Y06). In the Y06 cohort, a larger proportion of students are unsure of whether they will complete Year 12 (8%).

¹ The sample of LSAY cohorts from 2003 onwards is based on 15-year-olds. Previous cohorts (Y95 and Y98) are based on Year 9 students, who are, on average, slightly younger.

Table 1 Summary of stated intentions at age 15 years and actual educational activity at age 18 years, all Y03 and Y06 participants (%)¹

Intentions at age 15 years		Actual outcome at age 18 years		
		Completed or undertaking Year 12	Not completed or undertaking Year 12	Total
<i>Y03 participants</i>				
1 Plan on undertaking Year 12	92.5	88.8	11.2	100.0
2 Do not plan on undertaking Year 12	5.1	12.7	87.3	100.0
3 Don't know	2.5	38.7	61.3	100.0
Total	100.0	82.7	17.3	100.0
<i>Y06 participants</i>				
1 Plan on completing Year 12	88.1	91.3	8.7	100.0
2 Do not plan on undertaking Year 12	4.1	19.0	81.0	100.0
3 Don't know	7.9	49.5	50.5	100.0
Total	100.0	83.4	16.6	100.0

Note: 1 Excludes those who did not respond to the question about their intentions to go on to Year 12.

Source: Derived from LSAY Y03 cohort, who participated in the survey at wave 4 (2006) and Y06 cohort, who participated in the survey at wave 4 (2009), weighted estimates.

Homel and Ryan (2014) suggest that the size of the aspirations impact on Year 12 completion is substantial. Their findings were also based on data from the Y03 and Y06 cohorts. They used multiple methods to assess potential biases which result from the unobserved characteristics of individuals being highly correlated with both aspirations and educational outcomes. Analyses ignoring these potential biases can overestimate the size of the aspirations effect. The results suggest that those who plan to complete Year 12 are 20–25% more likely to do so, compared with those who do not intend to complete Year 12.

Ainley et al. (2011) note a significant impact of educational intentions on Year 12 attainment, based on an analysis of LSAY participants first interviewed in 2006. Table 2 provides the results, which suggest that young people who plan to complete Year 12 are six times more likely to do so. Further mediation analysis indicated that educational intentions to complete Year 12 influenced the relationships between Year 12 completion and background factors (including gender, location, language spoken at home and socioeconomic status).

Table 2 Multivariate logistic modelling of the two attainment measures for all LSAY Y06 participants

	Yr 12 attainment ¹		Yr 12 or certificate II (and above) attainment ¹	
	β (std error)	Odds ratio	β (std error)	Odds ratio
<i>Background factors</i>				
Indigenous status	0.39 (0.35)	1.47	0.08 (0.28)	1.08
Gender	0.29 (0.09)	1.33	0.82 (0.12)	2.15
Index of Economic, Social and Cultural Status (ESCS) ²	0.13 (0.08)	1.14	-0.22 (0.10)	0.80
Parental education	-0.00 (0.04)	1.00	0.04 (0.05)	1.04
Location	0.34 (0.12)	1.41	-0.02 (0.16)	0.98
Language at home	-0.38 (0.15)	0.68	0.38 (0.22)	1.46
<i>Other factors</i>				
Achievement	0.61 (0.05)	1.83	-0.26 (0.07)	0.77
Plan to complete Year 12	1.83 (0.10)	6.23	-0.89 (0.15)	0.41

Notes: 1 Bold font indicates the results are statistically significant.

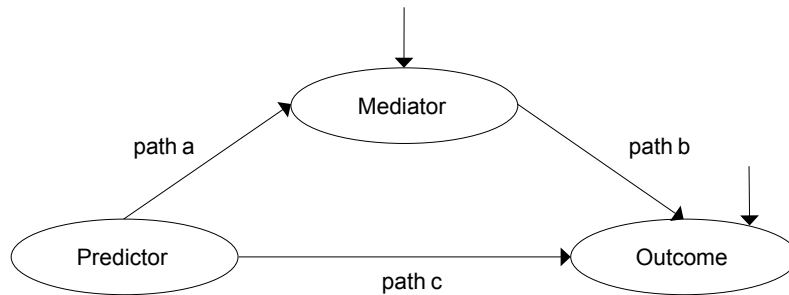
2 The Index of Economic, Social and Cultural Status is used as an indicator of socioeconomic status for the national and international Programme for International Student Assessment (PISA) reports.

Source: Ainley et al. (2011).

The factors driving aspirations to complete Year 12

The recent body of LSAY research on aspirations finds that aspirations are influenced by several interacting variables. Figure 1 provides a simple illustration of direct and indirect effects, as described by Khoo and Ainley (2005). In the figure, the direct relationship between the predictor and the outcome is noted as path c, while the indirect effect, which most accurately describes the relationship, is noted as paths ab.

Figure 1 A simple mediation model

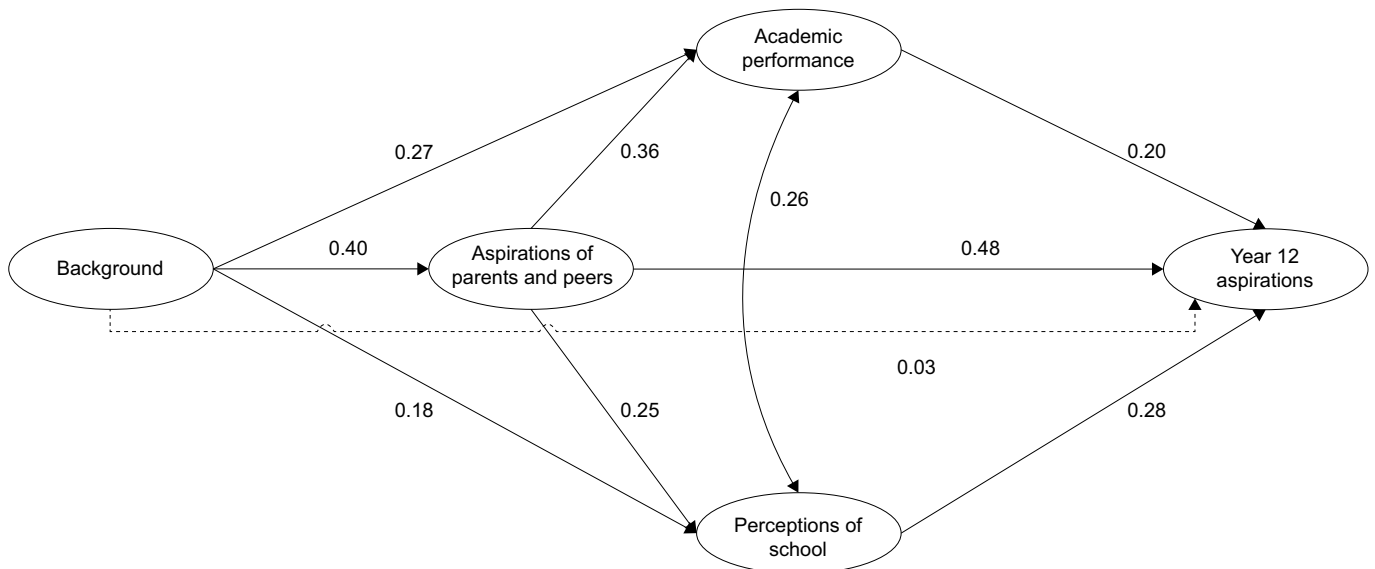


Source: Based on Khoo & Ainley (2005).

The research suggests that achievement is strongly associated with intentions. Khoo and Ainley (2005) analysed attitudes to school, intentions and participation in education and training, based on LSAY participants first interviewed in 1995. Their findings suggest that most of the background factors associated with participation in senior secondary schooling operate by influencing intentions (paths ab in figure 1).

Hillman (2010) suggests that educational intentions are influenced by attitudes to school and, to a smaller degree, achievement and various aspects of student background. The effect of positive attitudes to school on Year 12 participation is indirect, or is a mediated effect on later participation through intentions (paths ab in figure 1).

Figure 2 Structural equation modelling for Year 12 aspirations based on LSAY Y09 participants



Source: Gemici et al. (2014b).

For participants first interviewed in 2009, Gemici et al. (2014a) add parental expectations² and peer plans into their structural equation model for the factors influencing Year 12 aspirations. The direct effect of background variables such as geographic location and family structure on aspirations is strong. However, the direct effect of background variables on aspirations is minimal, once parental and peer influences are added to the model. The findings of Gemici et al. (2014a) suggest that parental and peer expectations, as well as academic performance, mediate the effect of background variables on aspirations.

2 This measure refers to whether parents expect their children to attend university. Both parental expectations and peer plans are based on LSAY participants' perceptions of their parents' expectations and their peers' plans.

The complexity of the relationships between the influencing factors and aspirations is illustrated in figure 2. The numbers in the diagram refer to standardised coefficients, which show the relative strength of all paths on a common scale. As can be seen, parental and peer influences have the strongest direct effect on Year 12 aspirations, followed by perceptions of school and academic performance. Parental and peer plans have a moderate impact on academic performance (0.36) and perceptions of school (0.25). Perceptions of school impact on academic performance and academic performance influences perceptions of school.

ASPIRATIONS AND POST-SCHOOL OUTCOMES

The plans young people have for education beyond Year 12 are consistently found to be an important factor influencing the type of tertiary education they choose (Carpenter & Western 1984; Khoo & Ainley 2005). This influence varies by gender, and the effect on student outcomes is moderate compared with the relationship between an intention to complete Year 12 and school retention (Marks & Fleming 1999).

The impact of aspirations on plans to attend university

Most LSAY participants have further study plans after completing school (see table 3). Young people indicate a preference for university participation over vocational education and training (VET) and other options.

Table 3 Post-school plans of all Y03 and Y06 participants at age 15 years (%)

	Post-school plans at age 15	
	Y03 (in 2003)	Y06 (in 2006)
1 Go to university	54.0	47.7
2 Undertake a VET qualification ¹	24.5	25.7
3 Do some other study or training	1.6	3.3
4 Look for work/get a job	8.8	7.2
5 Travel ²	1.7	5.6
6 Other ³	1.4	1.3
7 Don't know	8.0	9.1
Total	100.0	100.0

Notes: 1 Includes apprenticeships and traineeships.

2 Involves gap year/time off for the Y06 cohort.

3 Includes Defence Forces.

Source: Derived from LSAY Y03 and Y06 cohorts, weighted estimates.

Based on data from the Y95 cohort, Khoo and Ainley (2005) report that 52% of those who intended to enter university did in fact do so. The correlation between intention and entry into higher education is moderately strong ($r = 0.59$). This can be compared with the high correlation between intention to go on to Year 12 and actual Year 12 participation ($r = 0.80$).

Homel and Ryan (2014) investigate the impact of aspirations on university participation using data from the Y03 cohort. They estimate that individuals who intend to go on to university are 15–20% more likely to do so, compared with those who do not have university plans.

The evidence shows that there is a gap between aspirations for tertiary study and subsequent participation for some groups of young people (for example, see James et al. 2008). Although students from disadvantaged groups indicate a preference for university study, a significant proportion of these students do not participate, instead enrolling in vocational education and training.

Occupational aspirations versus actual occupational attainment

LSAY follows young people over a ten-year period, allowing researchers to compare the occupations to which they aspire at age 15 years with the actual occupation they hold at age 25 years.

Using the Y03 cohort, Curtis and McMillan (2008) analysed the occupational aspirations of young people and found that approximately two-thirds of them aspired to be employed in professional or paraprofessional occupations. These jobs account for approximately one-third of the jobs available, pointing to a potential

mismatch for some. An examination of their educational plans suggests that most young people have plans in line with their occupational aspirations. On the other hand, around one-fifth of the cohort are unsure about what is required to realise their goals, or they plan to undertake post-school activities that are not consistent with their occupational intentions.

Gemici et al. (2014a) and Sikora and Saha (2011) compared occupational aspirations and actual occupations, based on data from the Y98 cohort. Gemici et al. describe the relationship between aspirations at age 15 years and occupational outcomes at 25 years of age as 'loose'. Aspirations at age 15 years are often unrealistic for those aiming for highly skilled jobs – around half of the young people who aspire to the most skilled jobs do not achieve a job at that level by age 25 years. It is noted that post-school transitions are taking longer than in the past, and an increasing number of young people may not have attained their highest-status job by the end of the survey (age 25 years). On the other hand, a substantial proportion of young people have obtained a job of higher status than their aspired occupation by age 25 years.

There are some differences in occupational aspirations between males and females. Sikora and Saha (2011) note that females are more likely to aspire to professional occupations than males. Females are also more likely to enter professional occupations. Gemici et al. (2014a) find that a slightly greater proportion of young women who aspired to the jobs of the highest status achieved such a job, compared with young men. That is, 52% of females who aimed for a high-status job achieved their aims by age 25 years, compared with 39% of males.

Having clear occupational plans during school-age years can assist young people to achieve positive employment outcomes by age 25 years, even if these specific occupational plans are not achieved. Sikora and Saha (2011) found a strong relationship between having ambitious occupational plans in high school and high-status employment by age 25 years. The absence of such plans was shown to be detrimental to later occupational attainment.

Having a plan helps the transitions of all young people, even those who do not perform well in the early years of secondary schooling. This was the conclusion reached in Thomson and Hillman's (2010) analysis of academic underachievers in the LSAY Y03 cohort. Having a career or strategic plan, such as aspiring to undertake an apprenticeship, is particularly important in determining success later in life. These occupational plans help all students but are particularly important for boys, if their goal is to enter the professions. For females performing below the proficiency standards for maths, there are no significant effects from expressing an ambition. The only significant effect was a strong negative influence for not expressing any aim whatsoever. Those who had no plans for what they might do after leaving school, particularly girls without firm career or study plans, were less likely to have a successful outcome.

INFLUENCING YOUNG PEOPLE'S EDUCATIONAL AND OCCUPATIONAL ASPIRATIONS

Through econometric analysis, Homel and Ryan (2014) find that aspirations have a similar impact on Year 12 completion and university participation for all young people, regardless of Indigenous status or socioeconomic status. These results suggest that, if it is possible through policy or the programs of schools or community organisations to change the aspirations of individuals, then increased aspirations should translate into increased educational outcomes across all categories of individuals.

This section provides a summary of the factors that influence aspirations, to gauge how educational aspirations could be influenced to improve the education and employment outcomes for young people.

Attitudes and engagement with school

Positive attitudes towards study are strong influencers on intentions to continue study. Positive attitudes include supportive relationships with teachers, interest in learning, and valuing the opportunities to apply learning outside school. Attitudes towards school and background characteristics are relatively independent, suggesting that focusing on attitudes early in secondary schooling may impact on educational intentions (Hillman 2010; Khoo & Ainley 2005).

Students' behavioural engagement with school, such as participation in extracurricular activities, is related to positive attitudes towards school and learning. Levels of engagement are higher in schools where students believe they have high-quality teachers, effective discipline, high levels of student learning and a positive school spirit (Hillman 2010).

Parental and peer aspirations play an important role in driving both educational and occupational aspirations. For example, Gemici et al. (2014a) note that students whose parents aspire for them to attend university are four times more likely to complete Year 12, and 11 times more likely to plan to attend university when compared with those whose parents expect them to choose a non-university pathway. These findings suggest that policies and interventions that focus on the attitudes and aspirations of parents may help to raise aspirations.

Student background

Homel and Ryan (2014) propose that the significant interactions between aspirations and real and relative academic performance indicate that high-achieving individuals are more likely to realise their aspirations. In turn, those who consider their performance to be average or below average are less likely to realise their aspirations than those who consider their performance to be well above average.

The literature also suggests that students from disadvantaged backgrounds are less likely to recognise the value of higher education, compared with other students. James (2002) argues that students from lower socioeconomic backgrounds set their sights lower than their peers. Therefore sustained efforts are needed to improve their awareness of what might be possible for them. This research was based on data from a survey of Years 10, 11 and 12 students in New South Wales, Western Australia and Victoria about their attitudes to university.³ The relationship between parental education levels and young people's educational aspirations and expectations was found to be quite strong, with more highly educated parents more likely to create an interest in educational achievement in their children.

Career advice

Young people who were initially unsure about their intentions to complete Year 12 had more positive comments about career advice when they were in Year 12, particularly when compared with those who did not complete Year 12. This indicates that career advice programs are valued by these young people and that career advisors should continue to provide support (Rothman & Hillman 2008).

Rothman and Hillman (2008) note that a positive school climate is related to positive perceptions of the usefulness of career advice. It was not possible, however, to determine whether a positive school climate is a consequence of the career advice program enhancing the general climate of the school or whether career advice itself was regarded as a desirable feature in addition to the positive school climate.

These findings highlight strategies that could be implemented to influence educational intentions, but the research indicates that caution is needed. The influences on participation in higher education are particularly complex, extending beyond aspirations and financial or academic barriers to access.

CONCLUSIONS

The focus on aspirations and their effects on young people's educational outcomes are not new, nor are the findings confined to LSAY research. But what we do find is fairly consistent across the research. A young person's intention to participate in post-school study is formed and articulated relatively early in the secondary school years, and intention is a strong predictor of subsequent participation in both university and vocational education and training. While having a career occupational plan is important, the research finds that occupational intentions and actual occupations do not always coincide.

It should also be noted that educational aspirations measured at age 15 years do not change markedly as students grow older, suggesting that these are formed early and that interventions later in the senior secondary school years may be too late to influence aspirations.

³ The student survey was collected in 1998 by the Centre for the Study of Higher Education and the Youth Research Centre of the University of Melbourne.

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This document should be attributed as Nguyen, N & Blomberg, D 2014, *The role of aspirations in the educational and occupational choices of young people*, NCVER, Adelaide.

This work has been produced by NCVER through the Longitudinal Surveys of Australian Youth (LSAY) Program, on behalf of the Australian Government and state and territory governments, with funding provided through the Australian Department of Education.

The views and opinions expressed in this document are those of the authors and do not necessarily reflect the views of the Australian Government or state and territory governments.

ISBN 978 1 922056 83 2 web edition 978 1 922056 91 7 print edition
TD/TNC 115.09

COVER IMAGE: GETTY IMAGES/THINKSTOCK

Published by NCVER ABN 87 007 967 311

<<http://www.lsay.edu.au/publications/2710.html>>

