

RURAL AND REGIONAL STUDENTS' PERCEPTIONS OF SCHOOLING AND FACTORS THAT INFLUENCE THEIR ASPIRATIONS

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ABSTRACT

Based on a sample of over 3000 primary and secondary school students located in regional and rural schools in Tasmania (Australia) this research had three aims: (1) to identify students' self-perceptions of schooling with a focus on high school completion (referred to as school retention); (2) to determine if gender, socio-economic factors, level of school absenteeism, and school setting (primary or secondary) influenced the students' responses; and (3) to identify which factors had the greatest influence on the students' aspirations to continue their schooling. A 42-item survey produced eight factors: (1) Teacher Support, (2) Aspirations, (3) School Organisation, (4) English Ability, (5) Maths Ability, (6) Friends, (7) Other Activities, and (8) Career Goals. Higher levels of absenteeism, lower socio-economic status, and transitioning to secondary school reduced scores on the factors. Girls had higher scores for three factors: (1) Teacher Support, (2) English Ability, and (3) Aspirations. Regression analysis identified Friends, English and Mathematics Ability, Other Activities, and Teacher Support as the 'best predictors' of students' aspiration to continue schooling. The implications of the significant findings for school practice are discussed with recommendations for interventions.

Keywords: aspiration, attendance, friends, rural, school completion, teacher support

LITERATURE REVIEW

In Australia, high levels of educational attainment by individuals contribute to improving Australia's economic standing and are associated with increased employment opportunities and higher wages for the individual. Furthermore, educational attainment fosters individuals' wellbeing and a more positive and cohesive social environment (Australian Bureau of Statistics, 2013a). The current research interest in young people's aspirations is based on the evidence that there is a predictive link between high school students' educational goals and ambitions and individuals' eventual longer-term educational attainment and employment outcomes (Beal & Crockett, 2010; Sikora & Saha, 2011).

The claim is that Australian students from rural and regional locations and from low socio-economic status (SES) families have lower levels of educational attainment, lower educational aspirations and lower post-school participation in higher education (Australian Bureau of Statistics, 2013a; Bradley, Noonan, Nugent, & Scales, 2008) and that, over time, community,

school and home factors shape students' educational aspirations (Gemici, Bednarz, Karmel, & Lim, 2014; Khoo & Ainley, 2005). These findings are not unique to Australia with rural disadvantage and lower educational attainment, lower high school completion rates, and lower rates of transitioning on to further education after high school noted by Brown and Schafft (2011) for the United States and Baeck and Paulsgaard (2012) in Scandinavia. Rural schools and rural communities are, however, important to a country's prosperity and social cohesion, and hence it is critical that efforts are made to ensure that the educational experiences of all students in rural and regional locations facilitate the development of these students' potential (Brown & Schafft, 2011; Tieken, 2014).

Tasmania, the smallest Australian state, is characterised as regional and rural with pockets of disadvantage (Norrie, Englund, Stoklosa, & Wells, 2014), with student retention rates to the end of Year 12 identified as a concern (Regional Development Australia, Tasmania, 2012; Tasmanian Council of Social Services, 2007). Other researchers investigating this situation (Stewart & Abbott-Chapman, 2011; Watson et al., 2013) have confirmed Bradley's et al. (2008) findings that low retention rates and educational aspirations are associated with rurality and low SES, as well as with the emotional issues of separation for rural students having to board in regional towns at a young age, the complexity of post-school pathways, and family and community post-school expectations (Kilpatrick & Abbott-Chapman, 2002).

Typically, government schools in Tasmania have a separate senior college for Years 11 and 12 students after finishing high school (Years 7 to 10). The reason for this senior college model was to consolidate teacher expertise and resources and provide a greater choice of senior school subjects to students in a central location, typically the larger towns across the State. The student retention rates for Tasmania have been below the Australian national average for some time. For example, the Australian Bureau of Statistics (2014) reported a national student retention rate in 2013 of 81.6 per cent from Years 7/8 to Year 12. In comparison, Tasmania's retention rate from Years 7/8 to Year 12 for the same period was 68.7 per cent.

AIMS

The purpose of this study is to investigate rural and regional students in Tasmania and their educational aspirations using a specifically designed survey. This research aimed first, to identify the factors that influence regional and rural students to stay in schools beyond the compulsory years of schooling; second, to explore differences for gender, socio-economic status, absenteeism and school setting; and third, to identify which of these factors were the 'best predictors' of students staying on in schooling.

DESIGN OF THE SURVEY

The student survey items were devised from a review of nine research studies on students' educational aspirations: (1) Cavanagh (2009), (2) Cavanagh and Waugh (2004), (3) Centre for Adolescent Health (2006), (4) James (2002), (5) James et al. (1999), (6) Khoo and Ainley (2005), (7) Kilpatrick and Abbott-Chapman (2002), (8) Organisation for Economic Co-operation and Development Programme for International Student Assessment (2005), and (9) Stearns, Moller, Blau, and Potochnick (2007). Across these studies thirteen elements were identified that had an influence on student retention and educational aspirations, namely (1) engagement with schooling, (2) engagement with school, (3) connection with further education, (4) relationships with teachers, (5) teacher aspirations, (6) career aspirations, (7) parent aspirations, (8) academic self-concept, (9) school culture, (10) school organisation, (11) physical environment, (12) leaving home, and (13) influence of friends. At least two survey items were generated for each of these 13 elements and included in the survey. In part, the items used in this student survey mirrored items and elements piloted and developed by Watson et al. (2013).

GENDER, ABSENTEEISM, SES, SCHOOL SETTING

In addition to the survey questions, students were asked to identify their gender as the evidence is that in rural and regional locations girls are more likely to complete high school and continue on with their education than their male school peers (Gale et al., 2013; Lamb, Walsab, Teese, Vickers, & Rumberger, 2004). The students were also asked to rate their level of school attendance because attendance data are claimed to provide one measure of school engagement and students with higher rates of absenteeism are associated with higher rates of school failure and lower levels of school engagement (Lamb & Rice, 2008; McNeely, Nonnemaker, & Blum, 2002). In this study the students were asked if they had missed a few days or more of school in the past four weeks.

Information on the schools' socio-economic status (SES) was also collected because SES has been identified as influencing students' retention rates and aspirations (Abbott-Chapman, 2011; Lamb et al., 2004). In this study the information was collected using the schools' Index of Community Socio-Educational Advantage (ICSEA) developed by the Australian Curriculum, Assessment and Reporting Authority (2012). This index ranks schools based on the occupation of students' parents; the level of education completed and educational achievement of their parents; whether the school is metropolitan, regional, or remote; and the proportion of Indigenous students enrolled. Each school in Australia has an ICSEA value averaged for all students in the school with a range from 500 to 1300, a median of 1000 and a standard deviation of 100.

How students respond to schooling is influenced by the schools' setting, with students in primary school generally more positive about their schooling experience than students in secondary school (Kong, 2008; Hopwood, Hay, & Dymont, 2014). The evidence is that students' career and educational aspirations start to become formed in the primary school years (NSW Department of Education, 2014) and hence difference in primary and secondary school students' perceptions was of interest to the researchers.

METHODOLOGY

Sample

Rather than focus only on students at the end of high school, the evidence is that many students form their enduring attitudes about school completion and aspirations before they reach Year 10 (Behnke, Piercy, & Diversi, 2004). For this reason, a total of 3107 students were surveyed: 1130 from primary schools and 1977 from secondary schools. The target year levels for the survey were Years 5, 7, 9, and 10 but there were some responses from students in Years 4, 6, and 8 due to the classroom structure in some schools. In Tasmania, Years 4 to 6 are in primary and 7 to 10 are in secondary. The schools were outer regional or remote, or were inner regional schools for which the other schools were 'feeder' schools (Australian Bureau of Statistics, 2013b). A total of 62 schools are included in this study, consisting of 41 primary and 10 secondary schools, and 11 district schools catering for students from both the primary and secondary years. ICSEA values were available for all of these schools.

In relation to ICSEA, the range of values for the schools in this study was 821 to 1023, with only three schools having ICSEA values greater than the Australian median of 1000. The median ICSEA value for the Tasmanian sample of schools was 921. The mean was 921.9, with a standard deviation of 41.94. These data corroborate other information based on SES of the relatively low socio-economic position of rural and outer regional areas of Tasmania compared with Australian norms.

Survey

The survey contained 42 items that required students to respond to the positively worded statements using a five-point Likert scale that ranged from strongly disagree, a score of one, to strongly agree, a score of five. Slightly different forms were created, appropriate for primary and secondary students (items had the same intent but were worded for the particular school level). Items presented in Table 1 are as worded for secondary students.

Procedure

The student survey was carried out in the middle of the second half of the school year. This timeframe was selected because the students were well settled into the school year and the administration of the survey did not interfere with any examinations being conducted within the school. Permission to conduct the survey was provided by the University of Tasmania's ethics committee (No. H0012167) and by the relevant authorities within the Department of Education Tasmania (No. H0019182). The survey could be downloaded and completed in an e-form, or if the school wished, paper based copies of the surveys were provided. The students took about 15 minutes to complete the survey items pertinent to the part of the survey being presented here.

Analysis

To identify the factors that influenced students staying in school beyond the compulsory years of schooling, a number of principal component factor analyses were performed using Varimax rotation to capture Eigenvalues greater than 1, eliminate factor scores less than 0.4, and remove items with non-simple factor structure. The final analysis (refer to Table 1) yielded a 34-item exploratory factor analysis (EFA) with eight factors that was consistent with items being factorable (KMO = 0.935) and adequately correlated (Bartlett's test: $p < .0001$). The EFA explained 62.5 per cent of the cumulative variance. Using the students' weighted factor scores, independent t-tests were used to explore each factor with respect to gender, high and low ICSEA groupings of the schools, attendance, and difference across the school-level cohorts. Given the number of t-tests carried out, the Bonferroni correction was made by dividing the α -level of 0.05 by 32, equalling 0.0016, producing a very conservative value. Effect sizes (Cohen- d , 1969) were calculated for all significant p -values. Regression analysis, using the eight factors, was carried out for the factors in relation to predicting student aspiration. Aspiration was chosen as it reflected most closely the expressed intention to continue with education beyond the compulsory years.

RESULTS

Factor Structure of Survey

Based on the sample of 3107 students, an eight-factor solution was identified and the following labels applied: (1) Teacher Support; (2) Aspirations; (3) School Organisation; (4) English Ability; (5) Maths Ability; (6) Friends; (7) Other Activities; and (8) Career Goals. In factor analysis, the labels, used as factor descriptors, are specific to that survey and comprehending those factors and making meaning of these labels has to be carried out in the context of the individual items used in that survey (Tabachnick & Fidell, 2013). Each of the items loading on each of these factor labels are reported in Table 1. The overall alpha coefficient (Cronbach's alpha) for the eight factors is 0.91, suggesting that the factors have high internal consistency. A Cronbach alpha greater than 0.7 was achieved for all factors except Career Goals. These eight factors are used in the following sections to investigate the influence of gender, SES, school absenteeism, and school setting on students' responses to the survey and to identify which factors had the greatest influence on students' educational aspirations.

Table 1: Item Loadings on the Eight Factors that Influenced Rural and Regional Students Staying on in School

| Survey Item Text | Component (Rotated Component Matrix) | | | | | | | |
|--|--------------------------------------|-------------|---------------------|-----------------|---------------|---------|------------------|-------------|
| | Teacher Support | Aspirations | School Organisation | English Ability | Maths Ability | Friends | Other Activities | Career Goal |
| I am given good advice on the next stage of my schooling or education. | .493 | | | | | | | |
| My teachers have high expectations of me. | .555 | | | | | | | |
| My teachers help me learn. | .695 | | | | | | | |
| My teachers are interested in me. | .697 | | | | | | | |
| I have good teachers. | .726 | | | | | | | |
| My teachers treat me with respect. | .772 | | | | | | | |
| My teachers listen to me. | .772 | | | | | | | |
| My teachers support me. | .776 | | | | | | | |
| My teachers encourage me to keep studying after Year 12. | | .504 | | | | | | |
| Continuing my education past Year 10 is important to me. | | .670 | | | | | | |
| I plan to go to University. | | .698 | | | | | | |
| My parents/guardians want me to stay at school after Year 10. | | .747 | | | | | | |
| My parents/guardians want me to keep studying after Year 12. | | .781 | | | | | | |
| I feel safe at school. | | | .445 | | | | | |
| Students are not bullied at this school. | | | .449 | | | | | |
| The school timetable works well for me. | | | .544 | | | | | |
| The start and finish times at school work well for me. | | | .562 | | | | | |
| When I am not in class there are good places at this school to spend time with my friends during breaks. | | | .564 | | | | | |
| My school offers a wide range of subjects. | | | .663 | | | | | |
| My school offers the subjects I am interested in. | | | .673 | | | | | |
| My education is important to me. | | | | .404 | | | | |

| | | | | | | | | |
|---|--|--|--|------|------|------|------|------|
| I work hard in English/Literacy. | | | | .724 | | | | |
| I am capable of doing well in English/Literacy. | | | | .772 | | | | |
| I am good at English/Literacy. | | | | .818 | | | | |
| I work hard in Mathematics/Numeracy. | | | | | .754 | | | |
| I am capable of doing well in Mathematics/Numeracy. | | | | | .863 | | | |
| I am good at Mathematics/Numeracy. | | | | | .881 | | | |
| My friends are interested in school. | | | | | | .579 | | |
| My friends plan to go on past Year 10. | | | | | | .719 | | |
| My friends plan to go on past Year 12. | | | | | | .733 | | |
| I am encouraged to be involved in sports, clubs and other activities (e.g., music, drama, chess). | | | | | | | .757 | |
| If I want to be, I can be involved in sports, clubs and others activities (e.g., music, drama, chess). | | | | | | | .781 | |
| I plan to get an Apprenticeship (e.g., as a plumber, as a hairdresser, etc.) | | | | | | | | .640 |
| I know what sort of job I want to have when I finish my education. | | | | | | | | .759 |

Gender

Based on *t*-test comparisons (see Table 2), there were significant gender differences for three of the eight factors: Aspirations, English Ability, and Friends, with each being more positive for females. The Cohen-*d* effect sizes for the three factors were 0.30, 0.21, and 0.23 respectively.

Table 2: Response Differences by Gender across the Eight Factors of the Students' Survey (Male N = 1546; Female N = 1561)

| Factor | Males | | Females | | t-value | p-value |
|---------------------|-------|------|---------|------|---------|---------------------|
| | Mean | SD | Mean | SD | | |
| Teachers Support | 2.45 | 0.67 | 2.51 | 0.70 | -2.08 | .038 |
| Aspirations | 2.34 | 0.72 | 2.56 | 0.73 | -8.33 | <.0001 ^a |
| School Organisation | 1.91 | 0.52 | 1.93 | 0.56 | -1.36 | .174 |
| English Ability | 2.43 | 0.69 | 2.58 | 0.73 | -5.96 | <.0001 ^a |
| Maths Ability | 3.08 | 0.95 | 3.03 | 0.97 | 1.27 | .205 |
| Friends | 2.18 | 0.67 | 2.34 | 0.70 | -6.53 | <.0001 ^a |
| Other Activities | 2.87 | 0.93 | 2.88 | 0.92 | -0.26 | .797 |
| Career Goal | 2.39 | 0.76 | 2.36 | 0.78 | 0.78 | .435 |

^a *p*<.0016 (Bonferroni correction).

Socio-economic Status

Schools that had higher socio-economic status as measured by the schools' ICSEA scores had more positive student survey ratings across seven dimensions of the student survey with only Career Goals showing no significant difference by SES (see Table 3). The division between high and low SES was determined by using the median ICSEA value for the data set of 921. The Cohen-*d* effect sizes for the seven significant factors ranged from 0.18 to 0.28.

Table 3: Response Differences by SES across the Eight Factors of the Students' Survey (Low ICSEA students N = 1856; High ICSEA students N = 1255)

| Factor | Low ICSEA ^b | | High ICSEA ^b | | t-value | p-value |
|---------------------|------------------------|------|-------------------------|------|---------|---------------------|
| | Mean | SD | Mean | SD | | |
| Teachers Support | 2.43 | 0.73 | 2.55 | 0.61 | -4.818 | <.0001 ^a |
| Aspirations | 2.38 | 0.77 | 2.56 | 0.66 | -7.001 | <.0001 ^a |
| School Organisation | 1.87 | 0.57 | 2.00 | 0.48 | -6.607 | <.0001 ^a |
| English Ability | 2.44 | 0.76 | 2.61 | 0.63 | -6.321 | <.0001 ^a |
| Maths Ability | 2.97 | 1.02 | 3.19 | 0.85 | -6.322 | <.0001 ^a |
| Friends | 2.19 | 0.72 | 2.37 | 0.63 | -7.200 | <.0001 ^a |
| Other Activities | 2.77 | 0.98 | 3.02 | 0.83 | -7.536 | <.0001 ^a |
| Career Goal | 2.35 | 0.81 | 2.41 | 0.70 | -1.895 | .058 |

^a *p*<.0016 (Bonferroni correction). ^b ICSEA rating Low <921; High ≥921.

Absenteeism

Students' levels of absenteeism were found to influence how they responded to the survey. The t-test comparison of means was between students who did not miss any school days in the past four weeks and students who had missed a few or more school days in the past four weeks (refer to Table 4). There were significant differences in seven of the eight factors, with no difference by absenteeism demonstrated for Career Goals. The Cohen-*d* effect sizes ranged from 0.17 for Friends to 0.30 for both English and Maths Ability.

Table 4: Response Differences by Absenteeism across the Eight Factors of the Students' Survey (Students with no absenteeism N = 1437; Students with some absenteeism N = 1563)

| Factor | None | | Some | | t-value | p-value |
|---------------------|------|------|------|------|---------|---------------------|
| | Mean | SD | Mean | SD | | |
| Teachers | 2.59 | 0.61 | 2.42 | 0.68 | 7.18 | <.0001 ^a |
| Aspirations | 2.56 | 0.65 | 2.40 | 0.73 | 6.36 | <.0001 ^a |
| School Organisation | 2.01 | 0.47 | 1.87 | 0.54 | 7.62 | <.0001 ^a |
| English Ability | 2.64 | 0.62 | 2.44 | 0.72 | 8.12 | <.0001 ^a |
| Maths Ability | 3.23 | 0.85 | 2.96 | 0.97 | 8.10 | <.0001 ^a |
| Friends | 2.34 | 0.63 | 2.23 | 0.67 | 4.48 | <.0001 ^a |
| Other activities | 3.01 | 0.83 | 2.80 | 0.92 | 6.70 | <.0001 ^a |
| Career Goal | 2.42 | 0.70 | 2.37 | 0.77 | 1.83 | .067 |

^a $p < .0016$ (Bonferroni correction).

School Setting

Comparing mean differences in student survey responses by school setting (being either a primary or a secondary school setting) using t-tests, there were significant differences for all of the factors. Primary school students were more positive in their responses than the high school students for all factors (see Table 5). The Cohen-*d* effect sizes ranged from 0.15 to 0.56.

Table 5: Response Differences by School Setting across the Eight Factors of the Students' Survey (Primary students N = 1130; Secondary students N = 1977)

| Factor | Primary | | Secondary | | t-value | p-value |
|---------------------|---------|------|-----------|------|---------|---------------------|
| | Mean | SD | Mean | SD | | |
| Teachers Support | 2.71 | 0.57 | 2.35 | 0.71 | 14.71 | <.0001 ^a |
| Aspirations | 2.52 | 0.65 | 2.41 | 0.77 | 4.11 | <.0001 ^a |
| School Organisation | 2.06 | 0.47 | 1.84 | 0.56 | 11.22 | <.0001 ^a |
| English Ability | 2.61 | 0.64 | 2.45 | 0.75 | 6.24 | <.0001 ^a |
| Maths Ability | 3.28 | 0.85 | 2.93 | 1.00 | 9.92 | <.0001 ^a |
| Friends | 2.33 | 0.65 | 2.22 | 0.71 | 4.37 | <.0001 ^a |
| Other activities | 3.08 | 0.83 | 2.75 | 0.96 | 9.44 | <.0001 ^a |
| Career Goal | 2.49 | 0.69 | 2.31 | 0.80 | 6.27 | <.0001 ^a |

^a $p < .0016$ (Bonferroni correction).

Predicting Students' Aspirations

To investigate which factors had the greatest impact on the formation of students' aspirations a regression analysis was conducted. The dependent variable was students' Aspiration and the independent variables were: Teacher Support, School Organisation, English Ability, Maths Ability, Friends, Other Activities, and Career Goals. The fit of the independent variables to the dependent variable with the data set was significant, $F(7, 3099) = 807.14, p < .0001$, with 64.6% of the variance for student Aspiration accounted for in this model. Based on the strength of the Beta (β) values, as seen in Table 6, students' Aspirations are influenced most strongly by Friends, followed by English Ability, Maths Ability, Other Activities, and Teacher Support.

Table 6: The Relative Influence of Factors Active in the Formation of Students' Aspirations

| | Standardised | | |
|---------------------|------------------------|---------|---------|
| | Beta (β) Value | t-value | p-value |
| (Constant) | | 5.331 | <.0001 |
| Teacher Support | .100 | 4.750 | <.0001 |
| School Organisation | .022 | .989 | .323 |
| English Ability | .278 | 14.944 | <.0001 |
| Maths Ability | .109 | 6.693 | <.0001 |
| Friends | .347 | 21.897 | <.0001 |
| Other Activities | .085 | 5.367 | <.0001 |
| Career Goal | -.016 | -1.232 | .218 |

DISCUSSION

The finding that there were eight clear factors identified in the survey demonstrates that rural and regional students' thinking about their schooling, their aspirations, and completing high school is a more complex issue than just doing academically well in school and hence completing Year 12. The eight factors can be synthesised as: psycho-social factors (Teacher Support and Friends), future orientation factors (Aspiration and Career Goal), academic competency factors (English and Maths Ability), and other engagement factors (Other Activities and the School Organisation). The findings in this study link with other research studies that have identified the importance of the following factors in students' schooling and education: teacher support (Cavanagh & Waugh, 2004; Reddy, Rhodes, & Mulhall, 2003), English ability (Alloway, 2000; Hopwood et al., 2014), mathematics ability (Goetz, Bieg, Lüdtke, Pekrun, & Hall, 2013), friends (Simmons & Hay, 2010), and students' self-beliefs and self-efficacy (Hay, Callingham, & Carmichael, 2015).

In this study boys had lower perceptions of their English ability than girls and boys also had lower expectations in terms of their aspirations for continuing on in schooling. This gender finding is also reported in the research literature in terms of boys' literacy (Watson, Kehler, & Martino, 2010) and boys' aspirations (Gemici et al., 2014). School achievement in mathematics and English were both identified in this study as elements that had a predictive influence of students' level of aspirations, and hence keeping rural students engaged with these content subjects needs to be encouraged. Strategies to improve literacy outcomes for students in rural communities is still a challenge, but the evidence is that reading support programs, peer tutoring, the use of trained reading tutors, along with high-interest reading resources and digital resources can make a difference (Woolley, 2011).

Mathematics is a concern in rural and regional schools, in part because there are fewer qualified mathematics teachers in rural high schools and more teachers with fewer years of teaching experience appointed to rural primary schools (NSW Department of Education, 2015). This increases the likelihood that rural and regional schools are staffed by teachers with limited mathematics content knowledge. The claim is that teachers with limited mathematical content knowledge are more likely to be uncomfortable or anxious about mathematics, and so transmit this anxiety to the students they teach (Darling-Hammond, 2012). The evidence is that students' perceptions of their ability to succeed in mathematics are related to their mathematical achievement, and teachers influence how students see themselves as mathematics learners (Levpušček, Zupančič, & Sočan, 2012). Specifically, Levpušček et al. identified that students were more positive about their ability to learn mathematics and achieved better mathematics results when they believed their teachers gave them demanding work, expected them to understand it, and worked hard to help them to learn. The concern is, even when students have the ability to do higher level mathematics, but have lower self-concepts about their mathematical ability, they tend to select the lower strands of high school mathematics (Lazarides & Watt, 2015). This can have unexpected consequences as mathematics is considered a gatekeeper subject (Blömeke, Suhl, Kaiser, & Döhrmann, 2012) and those students who do more mathematics and higher levels of mathematics in high school are more likely to transition on to further study and have higher educational aspirations. Thus, keeping rural and regional students engaged with mathematics potentially has a positive impact on students.

In considering differences in high and low ICSEA groupings, only three of the regional and rural schools in this study had ICSEA values greater than the median for Australia. This suggests that rural economic disadvantage is likely to be a characteristic of many rural schools in Australia, and without additional resources and investments in rural education that this disadvantage is not going to be easy to ameliorate (Bradley et al., 2008; Gonski, 2011).

Low attendance is a marker for students beginning to disengage from school and education. Schools therefore need to be monitoring student attendance records, not to 'punish' students for nonattendance, but to use attendance records to help identify students that need additional support, counselling and guidance. Once students start to absent themselves from school, it becomes harder to re-connect them to schooling and education (Sheldon, 2007).

The reduction in students' perception of teacher support from primary to secondary school is likely to relate to the teaching modes. Primary school students usually have one (or perhaps two) teachers in a single classroom, while secondary students have different teachers across different specific subjects. This difference in the students' perceptions of social and learning environments of primary and secondary schools was also noted by Lynch and Cicchetti (1997) and Hattie (2008). Furthermore, in high schools, the necessity for students typically to deal with more students, to move between rooms and teachers, to work with a denser curriculum with higher content demands, and to experience more testing and assessment, is perceived by the students to make high schools a less personal and more controlling setting than primary schools (Barber & Olsen, 2004). Even so, research has suggested that students in high schools who perceive high supportiveness from their teachers have better attendance, are more engaged with their schooling, and obtain better grades (Rosenfeld, Richman, & Bowen, 2000).

The regression analysis used in this study identified that the most meaningful factors predicting students' aspirations were their friends, teacher support, and the students' beliefs in their ability in English and mathematics. Teacher support and teachers' ability to construct positive learning experiences for students are identified as two of the most important influences on students' learning (Hattie, 2008). Having a peer network and school friends who share positive educational aspirations were identified as important in this research. This finding corroborates other research on the importance of friendships for school achievement (Goodenow & Grady, 1993; Simmons & Hay, 2010) and of the role of friends and peers in forming students' aspirations (Gemici et al., 2014; Semo & Karmel, 2011). Helping rural students to form and maintain friendships is related to

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teachers providing a safe, supportive learning environment that encourages co-operation, sharing, and respect for others within the classroom (Simmons & Hay, 2010). In addition to these factors, parents also influence students' level of aspirations (Gemici et al., 2014; Hay et al., 2016; Trusty, 2000) and this is noted in this study with the survey items related to parents having a high factor loading on the factor Aspirations (see Table 1). In addition to education programs, rural and regional schools can play an important role in extending the parents' aspirations for their children and the students' aspirations through guidance and counselling services, career and self-awareness programs, enrichment activities, visits to universities and colleges, as well as having visitors from the community into the school.

LIMITATIONS

In this study the students in the rural and regional schools were treated as one cohort. The data could be further analysed to investigate intra-group variables, for example, in relation to very small remote schools and regional town-based schools. The data reported in this research are quantitative, and qualitative interview data could provide additional insights into the factors investigated. This study was located in one Australian state and the representativeness of the Tasmanian sample compared to other rural and regional students across Australia or in other countries may be considered a limitation. Although self-identified indigenous students were in the sample, effect sizes for differences from non-indigenous students were so small across the factors that practical differences could not be discerned.

CONCLUSION

As noted by Tieken (2014), rural schools and rural communities are important to a country's prosperity and social cohesion, and hence it is critical that efforts are made to ensure that the students attending these schools develop to their potential. Understanding the factors that either enhance or mitigate against rural and regional students achieving positive educational attainment and aspirations is important for both policy makers and educators. Such information facilitates the formation of more targeted interventions and programs and helps in the formation of a whole of government response to support students with low educational aspirations.

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