

## THE FINANCIAL LITERACY OF YOUNG PEOPLE: SOCIO-ECONOMIC STATUS, LANGUAGE BACKGROUND, AND THE RURAL-URBAN CHASM

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### ABSTRACT

In this paper we report the results of a survey of financial literacy levels among Australian secondary school students. While key issues concerning financial literacy among adolescents are fairly well known, and governments see the urgency of addressing low levels of such literacy among a vulnerable cohort, less is understood about the variation of knowledge levels among young people. In this paper we identify the gap between urban and rural survey participants in respect of their financial literacy, and locate the contrasting knowledge levels in a setting that includes socio-economic status and language background.

**Keywords:** Adolescents; financial literacy; rurality

### INTRODUCTION

In Australia, the 2011 launch of a national Financial Literacy Strategy resulted in a series of new financial literacy and education policies, with particular emphasis on school education programs. For such a new policy intervention, measurements of current financial literacy levels were necessary, particularly for groups such as young people who are primary beneficiaries of these new policies (Australian Securities and Investments Commission [ASIC], 2011; Xu & Zia, 2012). Data on the financial literacy of young Australians assists in establishing appropriate, targeted and responsive education programs that are relevant to young people.

Measuring the level of financial literacy is a developing research issue worldwide: with the level and range of financial transactions on electronic media changing so rapidly, so too is our understanding of competency in financial literacy. However, the first steps are to measure financial literacy knowledge and skills – what people know about finance, financial language and how they apply this knowledge in practice (OECD, 2013). It is also necessary to investigate those behavioural and attitudinal traits regarded as essential to implement knowledge and skills in daily life (Capuano & Ramsay, 2011; ASIC, 2011; OECD, 2013; Huston, 2010). For example, studies have found that confidence is instrumental in successfully applying financial knowledge in decision-making contexts (Capuano & Ramsay, 2011).

In Australia, national surveys of adult financial literacy reveal that certain socio-demographic factors common to groups considered to be disadvantaged or associated with lower socio-economic status, are more prevalent for those with lower levels of financial literacy (ANZ, 2011). At present, very little research internationally as well as in Australia has investigated young people's financial literacy in context by investigating those demographic factors that can impact financial literacy (Sohn, Joo, Grable, Lee, & Kim, 2012). The Australian Securities and Investments Commission (ASIC) stewards the national Financial Literacy Strategy. ASIC has emphasised the importance of research in the foundation years of financial literacy policy.

Our study has responded to these research needs by investigating a group particularly targeted by the national Financial Literacy Strategy: young people in their later school years. The research team conducted a survey of Victorian high school students in 2012, from a range of urban, regional and rural government schools. In this paper, we use the terminology urban, regional and rural in the manner used by the Victorian Department of Education to classify state schools (Victorian Department of Education, 2015). In addition to testing for financial literacy skills, the survey instrument collected demographic information about both individual participants, and their schools.

The purpose of this paper is to explore a general hypothesis that student test scores on a financial literacy survey are related to socio-economic status (SES), as well as being impacted by the regional or rural location of a school and English-speaking background (LOTE). Other selected personal characteristics were also investigated. It is well established in Australia in the context of educational outcomes generally, that factors specific to non-urban (rural and regional) areas are related to disadvantage for young people (Muir et al., 2013; COAG, 2013; Circelli & Oliver, 2012; McMillan & Marks, 2003; Curtis & McMillan, 2008). Individual financial literacy is influenced by a degree of social capital: that is, the knowledge that young people absorb and hold about money, financial matters, their consumer rights, and their awareness of hazards about the financial world (OECD, 2013). Further, financial literacy is impacted by individual demographics (OECD, 2013). Regional and rural students may have a different social capital, or what Thomson (2002) calls a virtual school bag, than their urban counterparts (Bartholomaeus, 2013). This is not to suggest that rural or regional students are all alike (Pini & Mills, 2015). However, because of the link between financial literacy and social capital and financial literacy and individual demographics, it is suggested that where a young person attends school and lives is likely to be a relevant factor in individual financial literacy.

In this paper we briefly outline certain terms and theory relevant to financial literacy; the relevant demographics, including rural and regional location of schools, and the financial literacy items that we included on the survey instrument. We then discuss our results.

## THE IDEA OF FINANCIAL LITERACY

Financial literacy is *the knowledge and understanding of financial concepts, and the skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts* (OECD, 2013). In Australia, financial literacy is recognised by the national school curriculum body to be a vital life skill for all young Australians (MCEEDYA, 2011). It is comprised of knowledge and complementary attitudes and behaviours that support the implementation of this knowledge in daily financial decision-making, and is strongly linked with improved financial wellbeing and greater participation in economic life throughout the life cycle (Capuano & Ramsay, 2011). Since the global financial crisis of 2008 there is an increased focus on financial literacy, largely because it is presumed that a lack of understanding about financial risk and debt played a significant role in the crisis (OECD, 2009).

## FINANCIAL LITERACY, SOCIO-ECONOMIC FACTORS AND DEMOGRAPHICS

Surveys of Australian adults find that certain socio-demographic factors are associated with lower financial literacy. In particular, surveys conducted in 2008 and 2011 find that five demographic groups are identified as more likely to have lower financial literacy than the rest of the adult population. These groups are: people under 25 years of age; people with no formal post-secondary education; people with relatively low levels of income and assets;<sup>1</sup> people working in non-professional or 'blue collar' occupations; and women. The finding suggests that low financial literacy is more common amongst groups where disadvantage and financial exclusion is prevalent (ANZ, 2011; ASIC, 2011). Financial exclusion exists where a person *lacks access to appropriate and affordable financial services and products* (Centre for Social Impact for NAB, 2013, p. 6). In the Australian context, this typically includes: lack of a bank transaction account, no general insurance (such as car or home contents) and limited access to a moderate, affordable amount of credit (Centre for Social Impact for NAB, 2013).<sup>2</sup>

## SOCIO-ECONOMIC BACKGROUND, GEOGRAPHY, AND EDUCATIONAL OUTCOMES

Studies find that student outcomes, such as academic achievement and successful transition from secondary school, are related to demographics: in particular, the geographic location of the school and socio-economic status. Although individual student characteristics, including a student's background, have a large impact on the probability of a student transitioning to university, schools also play a significant part in this equation. *Organisational and demographic factors such as school sector, size, geographic location and the socio-economic profile of the student body further affect key education and transition outcomes* (Gemici, Lim, & Karmel, 2013, p. 11). Australian studies have found that school characteristics do impact on a number of measurable student outcomes (e.g. Fullarton, 2002).

However, as Gemici, Lim and Kamel (2013) find in a review of research studies of school effects in Australia, there are 'somewhat inconsistent' findings about the relationship between schools and student performance and outcomes. These inconsistencies may be explained by differences in participant cohorts and particularly due to the fact that different measures of SES are used.

As might be expected, there is widespread concern about the educational outcomes for young Australians from low socio-economic backgrounds (Boese & Scutella, 2006). But studies also find that these students are more likely to perform poorly in literacy and numeracy tests, and are prone to early school leaving (Boese & Scutella, 2006). The Year 12 completion rates of high and low SES students is instructive: in 2004, for example, the year 12 completion rate was 59 per cent for students in low SES areas, compared with 79 per cent for students in the top SES areas (AIHW, 2007).

Rural or regional location can also have an impact on the success of young people's transition from school. Studies find that young people in metropolitan areas are more likely to complete Year 12 than those in non-metropolitan areas (Circelli & Oliver, 2012; McMillan & Marks, 2003; Curtis & McMillan, 2008). The 2013 *State of Australia's Young People Report* is a study of education in Australia and how young people are faring (Muir et al., 2013). The report uses a diverse data set to explore how SES factors impact on education. The Report draws on data from a number of ABS datasets (including Census of Population and Housing; National Health Survey; General Social Survey; and National Survey of Mental Health and Wellbeing), a literature review of Australian scholarship on young people and qualitative data from focus group interviews with 158 young

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<sup>1</sup> Where the main source of income is government benefits, households where income is below \$25,000 per annum and persons with savings of \$2,000 or less.

<sup>2</sup> In addition to this, Australian studies find that the exclusion from mainstream financial products and services negatively impacts a person's financial security and emotional and physical health (Burkett & Sheehan, 2009).

Australians aged 16-24. The authors find that two demographic characteristics impacting on educational outcomes are geographic location and SES. The report finds that while young Australians are in general well-educated, educational outcomes can impact some young people adversely and there are a number of demographic characteristics that are more commonly associated with adverse outcomes. The authors find that:

*Young people in rural and remote areas are at an educational disadvantage – in terms of attainment, performance and participation – in comparison with their counterparts in urban areas. In 2004, the Year 12 completion rate in metropolitan areas was 70 per cent and 63 per cent in regional areas, compared to 54 per cent in remote areas.<sup>3</sup> In 2008, students in remote areas were also less likely than those in metropolitan areas to meet the Year 7 MCEETYA benchmarks for reading (84% compared with 95%), writing (81% compared with 93%), and numeracy (88% compared with 96%) (Muir et. al., 2009, p. 36.)*

The impact of geography on student outcomes in Australia has been long recognised: in 2002, UNICEF reported that while Australian students in metropolitan areas were ranked in the top ten countries for educational advantage, our rural and regional students were ranked 25 out of 40 countries (Cashmore & Townsend, 2006). The disadvantage for rural and regional students is suggested to arise for a number of reasons. These include that rural and regional schools may not offer the same choice of subjects as urban schools and issues of access, including the need to travel long distances for schooling (Muir et al., 2013). Further, geographic isolation itself may hinder the opportunities for young people to progress to tertiary study and may impact on young people's choices about their futures after secondary school (Muir et al., 2013).

### **THE FINANCIAL LITERACY PROJECT STUDY**

SES is a problematic measure in itself. Typical components of SES indices, such as otherwise objective scales (as diverse as income and occupation levels, parental education, unemployment level, LOTE levels, crime rate, levels of recreational drug use, neighbourhood social interaction, community volunteerism) must still be averaged or combined according to some subjective weighting. Even then, there may be inconsistencies: for example, someone may live in a high-income suburb that has a high crime rate.

Consequently, there is an important methodological question about how to measure the SES of a young person. In the absence of exhaustive personal and financial characteristics, surveys typically employ proxy variables calculated from some combination of parental occupation, parental education levels, and where feasible, family income. Our study, consistent with large national youth studies such as the Longitudinal Survey of Youth Australia (LSAY) did not ask participants questions about household or family income, as this is considered to be highly intrusive (Lim & Gemici, 2009). And in some cases young people may not be privy to information in respect of parental income. Instead, our study recorded the occupation of a participant's mother and father, utilising the higher level of the two.

The next determinant concerned the student's geographic region and the socio-economic status (SES) of that area. To measure this, participants were asked to record their home postcode. Of course, students may attend a school in one postcode, but reside in another suburb or region. According to one research team, area profiles can be used to measure:

*... socio-economic disadvantage [that] can result from the relative distance to resources, such as education providers, libraries, museums, and other infrastructure of educational and cultural importance. Individuals residing in regional or remote areas may be*

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<sup>3</sup> Data from the Australian Bureau of Statistics for 2011 indicate that the Year 12 completion rate in metropolitan areas was 81 per cent, 67 per cent in regional areas and 64 per cent in remote areas (Australian Bureau of Statistics 2011).

*disadvantaged by the distance to such resources, regardless of their personal economic circumstances (Lim & Gemici, 2011, p. 10).*

In determining the SES of a particular area, the most commonly used measure is the ABS Socio-Economic Indexes for Areas (SEIFA): these are relative indices drawn from national census data (ABS, 2011). The SEIFA series comprise four separate indexes of socio-economic advantage and disadvantage. The Index of Relative Socio-economic Disadvantage (IRSD) measures 17 variables influencing disadvantage including income, education, rates of high unemployment and low skill trade occupations. The second measure is the Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) that measures 21 variables including income, education and the possession of internet connection. The third is the Index of Economic Resources (IER) that measures variables including education, income and household wealth. The fourth measure is the Index of Education and Occupation (IEO), which measures nine variables including education levels attained, levels of enrolment in higher education and occupation information including skill levels. Each region is given a SEIFA score, which is a relative measure of socio-economic advantage and disadvantage.

Combining the information of parental occupation with SEIFA data, though far from perfect, is still a useful way to measure a young person's SES. Lim and Gemici (2011, p. 24) warn that *SEIFA greatly misclassifies SES at the individual level*, noting also that *[s]upplementing SEIFA with information on parental occupation or education results in only marginal improvements of individual-level classification accuracy* (2011, p. 24). With this in mind, our study uses this model with caution and only to give an indication of the overall SES profile of the students who participate, noting also the issues with accuracy and the information provided by participants.

Since the number of demographic indicators that could be included in the survey was limited, we used measures of SES that could be imputed from the physical location of their school (or community). Since there were only nine schools included in the survey, this means there are only nine possible values for any SES measure across our data. This means we are looking at a very small number of observations, comparing SES measures with the average test score for each school. Again, the results should necessarily be treated with caution.

As a base, we have considered three different measures. The variable (we have termed) 'Community SES' is drawn from the school annual report. This measures the SES of the student cohort, by reference to parental occupation. We have chosen to use the 'Education and Occupation' SEIFA index, one of the four indices calculated by the ABS (from the 2011 Census). Finally, the 'ICSEA' (Index of Community Socio Educational Advantage) is provided from the 'MySchool' website: this indicator is calculated from the average educational and occupational characteristics, geographic remoteness, and proportion of indigeneity across the Census Statistical Area 1 (SA1) of the parental addresses provided to schools. As can be seen, these indices overlap to a certain extent in the manner they are composed and calculated.

Financial literacy skills and knowledge were measured with 32 multiple choice questions developed to assess the following areas: (a) financial decision making; (b) financial language comprehension; (c) formal financial literacy measuring the ability to conduct basic calculations and using practical skills to determine correct answers; (d) financial knowledge comprehension, measuring awareness of matters such as investing or the classification of job types; (e) consumer rights awareness; and (f) financial risk awareness. These answers were then scored by reference to a 100 point scale, whereby a percentage of correct answers ranged from 0 to 100 percent.

Participant attitudes to money were measured using 13 self-assessed five-option (agree-disagree) Likert scale items. Three questions measured the extent to which participants felt confident about managing their day-to-day spending and saving; their understanding of the language used by banks; and self-knowledge of consumer rights. The survey also asked which persons participants thought were trustworthy in financial matters and who participants currently discussed money matters with. Five survey questions probed for personal attitudes in respect of money and saving and thinking about the financial future. The combination of multiple choice questions and self-

assessed attitudes was designed to allow for comparisons between test scores and particular attitudes to money. A draft of the survey was tested prior to implementation with six young people aged 15-17 who provided feedback about survey readability, salience and relevance. In response to the feedback on the tests, a number of changes were made to the survey instrument to improve salience and relevance.

## THE SAMPLE

A database of over 100 Victorian secondary schools with information on each school's socio-economic profile, student cohort and learning outcomes from the Department of Education and Early Childhood Development annual school reports was used to select nine representative schools to participate in the study that was conducted in 2012. These schools were chosen because we believed them to be more-or-less typical of secondary schools in metropolitan, rural and regional city areas of Victoria. Discussions with the principals and teachers of these schools found considerable support for the study, and consensus that financial literacy education programs would benefit the students in their schools. Of the nine schools that participated in the study, three are located in metropolitan Melbourne, three are located in rural regions of Victoria and three are located in regional cities of Victoria. As stated above, these are the classifications given to schools by the Victorian Department of Education. In the interests of preserving the anonymity, we do not name the schools but for statistical tests we classify the schools into three regions (metropolitan, rural and regional cities). The sample of 207 participants consisted of 65 individuals from schools in regional cities, 83 from schools in rural Victoria and 59 from schools in metropolitan Melbourne. There were 115 female and 92 male participants; 21 spoke a language other than English at home and six identified as Aboriginal or Torres Strait Islander. Of the total, 121 participants had part-time jobs.

We also included measures of rurality – in the case of our survey, these are categorical variables taking one of three absence/presence variables (i.e. in regression terminology, 'dummy variables'): urban location of school; regional city location; and rural location. Finally, each school has also been allocated a LOTE figure (proportion of students in a school who come from a non-English speaking background). There is also an 'ESL' (English as a Second Language) category (a five-level variable from 'high' to 'low' that represents the proportion of ESL students in each school).

It is clear, by the very formulas used, that both rurality and LOTE may figure as inputs to the composition of the various SES measures. An appropriate way forward, given that the sample size of the school numbers used is so low, is to interpret both rurality and LOTE as a reflection of true SES, as well as to see them as measuring unique characteristics of their own. LOTE particularly, is problematic in this respect. To begin with, all of the high LOTE schools are located in urban – and therefore higher resourced – locations. And secondly, where high LOTE was once interpreted as 'disadvantage', this is no longer necessarily true. It should also be noted that at least one of schools included in the survey is both a high LOTE school and a high performance inner urban school. At the same time, LOTE does often capture a parental motivation factor ('hard-working upward-mobility immigrant effect'), and may therefore both relate to, and exist independently, of SES.<sup>4</sup>

## RESULTS

We first included six variables in a (varimax rotated) factor analysis (Table 1) to see how some of the main 'school' characteristics relate to one another. As expected, the three measures of SES lined up strongly on the one factor. In fact the minimum correlation (correlation  $r$ ) was 0.8896. Further, the measure of inter-correlation between the three variables was comfortably high at 0.9733 (Cronbach's Alpha measure).

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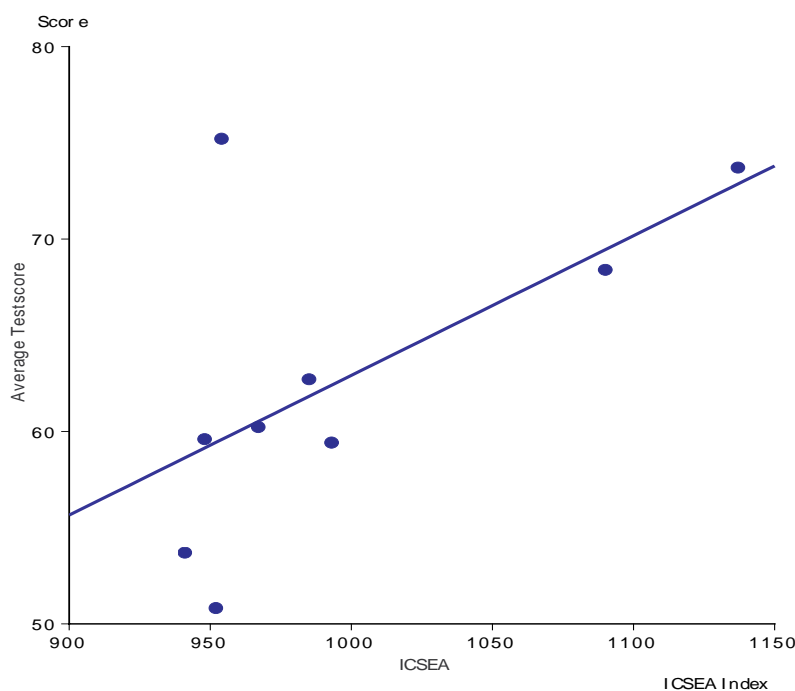
<sup>4</sup> The survey instrument did probe participants individually on their LOTE background: in the event just under ten percent of all participants revealed a non-English speaking background.

**Table 1: Factor Loadings (Varimax Rotated) for School Characteristics**

	Factor 1	Factor 2
Community SES	.98328	
SEIFA Educ and Occup	.97772	
ICSEA	.88349	.42075
LOTE		.98103
Average Test Score		.88691
ESL		.85639

This high inter-correlation meant that we could not use all (or any two) of the measures together in regression analysis. From time to time we tested all three items, rotating them in and out of regressions, but generally we have opted for the ICSEA measure on the basis that this measure more nearly corresponds to the true school SES characteristics.

Since LOTE – for the reasons just mentioned – may complicate the investigation, we first omitted this variable. Figure 1 indicates how the average test score for financial literacy of each school (vertical axis) relates to the ICSEA index (horizontal axis). A visual glance shows that, with the exception of one or two observations (in this case, all observations are individual schools), there is a good fit of the data. A simple OLS (ordinary least squares) regression of the nine observations (i.e. sample size=9) confirms a positive relationship with a high t-value (above 2.00), not statistically significant, but nevertheless highly indicative.<sup>5</sup>



**Figure 1: A plot of Average Test Scores (Financial Literacy Survey) with Index of Community Socio Educational Advantage (ICSEA)**

<sup>5</sup> The regression reports an r-square figure of 0.3652; the t-stat for the ICSEA explanatory (Test score being the dependent variable) reports at 2.007, with a p-value of 0.0848.

We then ran further regressions on the 207 observations including selected student background characteristics (sex, whether employed part-time, and whether at least one parent reported an occupation that was managerial, professional or 'financial services' related). We found that neither managerial nor professional parental occupation background had any effect on a participant's financial literacy.<sup>6</sup> But having a parent with a financial services background was important. In addition, the school-level variables of ICSEA and rurality were included. This regression is reported in Table 2.

**Table 2: OLS Regression Results for Overall Test Score and Selected Explanatory Variables**

Variable	B	SE B	Beta	T	Sig T
<b>ICSEA</b>	<b>.062311</b>	<b>.018954</b>	<b>.251414</b>	<b>3.288</b>	<b>.0012</b>
<b>Finance-related occupation</b>	<b>14.761562</b>	<b>4.629771</b>	<b>.211824</b>	<b>3.188</b>	<b>.0017</b>
Working PT	.881070	2.421015	.025224	.364	.7163
Female	-.326492	2.356398	-.009422	-.139	.8899
<b>Rural Location</b>	<b>-5.026626</b>	<b>2.541573</b>	<b>-.143338</b>	<b>-1.978</b>	<b>.0494</b>
(Constant)	.432760	20.012996		.022	.9828

The adjusted r-square figure for this regression (bearing in mind that social survey analyses are never as exact as econometric data) evidences a fair degree of explanation. It was of some interest that neither the gender of the participant, nor whether they are holding down part-time employment, has any effect on test scores. However, participants who had at least one parent engaged in a financial services related occupation report a greater likelihood of a higher test score in financial literacy. The coefficient for this variable was positive and statistically significant (at the 0.01 level). In addition, those located in a rural area reported poorer results: in this case the coefficient is negative and statistically significant (in this case at the 0.05 level). But of more relevance to this paper, the SES variable ICSEA was also statistically significant (at the 0.01 level) and positive: in other words, the higher the SES of the school (as measured by ICSEA), the more likely the case that the average school test score is raised.

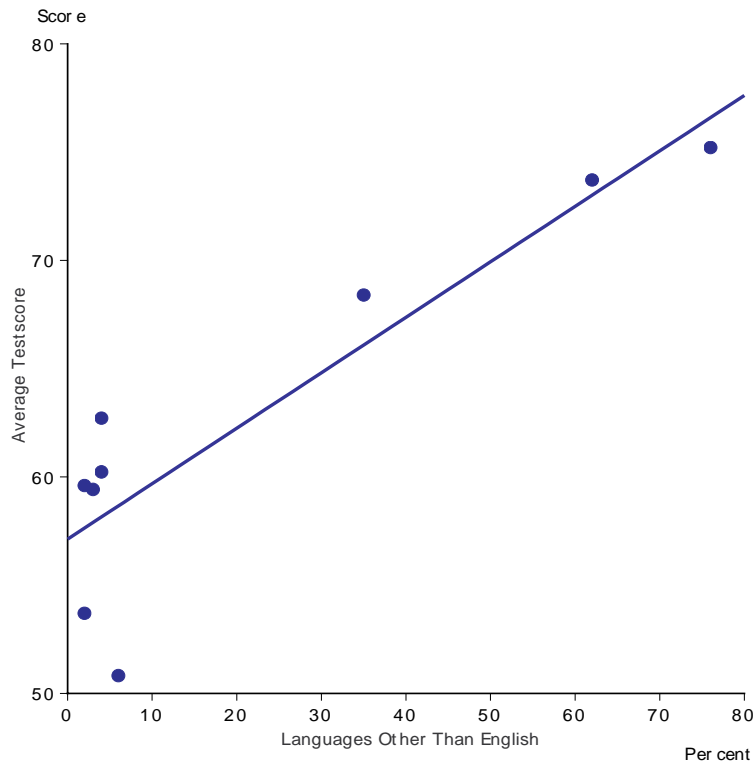
We further tested this in a regression dropping the rurality dummy - in case this variable was overly confounding the SES measure (ICSEA). But as expected, the ICSEA coefficient was still significant and positive. We rotated in and out the other two SES measures – as well as including and then excluding rurality. In all six regressions, the picture did not change: all regressions reported high (and significant) F-stats. In all six the SES variable was statistically significant and positive; in all six, the 'Financial services (parental occupation)' dummy was significant and positive; and in all six neither sex or 'part-time work' was significant.

The next step was to look at the impact of LOTE in the regressions. A visual indication is provided in Figure 2 that plots test scores (vertical axis) with LOTE (horizontal axis). A regression of the nine observations confirms a positive relationship with a high t-value (in this case, above 5.00): clearly a statistically significant relationship.<sup>7</sup>

<sup>6</sup> We rotated these two variables in and out of a series of regressions. Having found they had no effect, they were dropped in the final set of regressions.

<sup>7</sup> The regression reports an r-square figure of 0.79232; the t-stat for the LOTE explanatory (Test score being the dependent variable) reports at 5.168, with a p-value of 0.0013.





**Figure 2: Plot of Average Test Scores (Financial Literacy Survey) with Proportion of Student Body Reporting Languages Other Than English (LOTE) in the Home**

We then ran regressions on the 207 observations including the same explanatory variable as before in Table 2) but included both LOTE and the SES variable ICSEA: this is reported in Table 3.

**Table 3: OLS Regression Results for Overall Test Score and Selected Explanatory Variables**

Variable	B	SE B	Beta	T	Sig T
Community SES	1.276795	.996717	.093745	1.281	.2017
<b>LOTE</b>	<b>.214634</b>	<b>.051566</b>	<b>.332412</b>	<b>4.162</b>	<b>.0000</b>
<b>Finance-related occupation</b>	<b>15.082317</b>	<b>4.513477</b>	<b>.216427</b>	<b>3.342</b>	<b>.0010</b>
Working PT	1.637260	2.369815	.046872	.691	.4905
Female	.806383	2.328969	.023270	-.346	.7295
Rural Location	-1.750685	2.712955	-.049922	-.645	.5195
(Constant)	52.425669	4.504015		11.640	.0000

Notes: OLS regression for Overall Test Score (Dependent Variable). F-Stat for whole regression 9.08227 (Significant F-Score 0.0000). Degrees of freedom: 6 (regression) and 193 (residual); adjusted r-square: 0.19594. Significant variables highlighted in bold.

In this regression, LOTE alone was statistically significant. It is of interest that this variable to some extent appropriates the variance from both rurality and the SES variable (in this case, the 'Community SES' measure). The t-stat for 'Community SES', while not overly high, could nevertheless be interpreted as 'indicative' (the t-stat was 1.281) – given the limitation, explained

earlier, of the small variability (that is only nine schools). Again, regressions were run rotating in and out all three SES variables. Rurality was included in all six, but we rotated in and out both the LOTE measure and its 'grouped' measure, ESL. All six regressions returned high and significant F-stats; and in all six the 'Financial services-related occupation' dummy was statistically significant and positive. However, in all six none of the 'Part-time employment, Gender or Rurality variables were found to be significant.

The other finding is that none of the SES variables were statistically significant in the regressions where LOTE was included. Partly – as there is some level of tracking between the SES and LOTE variables – we may expect some appropriation of variance: that is, LOTE captures an 'SES' effect more strongly than the actual SES-type variables.

## DISCUSSION

How should these results be interpreted? Ordinarily, we might conclude that LOTE is the main predictor of financial literacy test scores. However since the SES variables on their own certainly do predict test scores very well, the effect of these variables (giving some consideration to how they are composed) should not be ignored. And given that there are only nine levels of SES (one for each school) we ought be alert to the fact that lack of variability plays a part. Higher sample sizes (especially number of schools) randomly selected, would help eliminate this problem. However, as we have argued, the LOTE variable on its own is a probable proxy indicator of 'true SES' – given that high LOTE reflects a certain degree of social capital, and that the high LOTE schools are all located in high resource (urban) areas.<sup>8</sup>

Financial literacy is a life skill. Individual demographics do impact on the levels of financial literacy that a person attains over their life. Large cohort studies of young Australians, such as the 2013 *State of Australia's Young People Report* (Muir et al., 2013), have found that SES and geography are two key factors that determine educational outcomes. Compared with their urban counterparts, rural and regional students are at a disadvantage. It is therefore not surprising that financial literacy, a skill that is impacted by demographic factors, is shown in our study to have a relationship to where students live and go to school. The findings of our study generally have found that the financial literacy of rural and regional students was lower than urban students. Rural and regional areas face *significant challenges when it comes to achieving sustainability and are struggling under the influences of globalisation, rationalisation in essential services and the privileging of urban contexts in government policy* (Kline, Soejatminah, & Walker-Gibbs, 2014, p. 50). Further, many rural and regional schools struggle with *the challenge of providing high quality education to Australian children in rural and remote locations*. (Reid et al., 2010, p. 263). These, and the relative factors of disadvantage canvassed previously in the article, may well contribute to the financial literacy levels of students in rural or regional areas. However, care needs to be taken when discussing rural and regional differences with urban areas, to not promote a discourse based on perceived deficiencies in rural or regional schools (Reid et al., 2010). Rural and regional areas in Australia are increasingly diverse. As Gee (2012) suggests, literacy is highly contextual to the social group in which a person is raised. Financial literacy is no different. The finding of this study, that rural or regional school attendance is related to lower levels of financial literacy, may suggest that place-based (Bartholomeaus, 2013; Gruenewald & Smith, 2008; Bryden & Boylan, 2004) responses to financial literacy are necessary. Moreover, our findings suggest that further research is warranted to determine the specifics of how rural or regional school attendance shapes individual financial literacy. Further, in-depth study will give a more nuanced understanding of these factors, and what responses may be best tailored for rural and regional students.

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<sup>8</sup> Further, we should emphasise that at least one school in the sample is both a high LOTE institution as well as being a high academic performance inner urban school.

## CONCLUSION

It is difficult to argue with the proposition that financial literacy is a paramount life-skill that should be learned from youth. Our study, though a mid-sized survey instrument, was limited to only nine schools and a sample size of 207 individuals. The confounding between LOTE and SES was, of course, unexpected, and this finding in itself may assist the design of future surveys. Rurality is certainly a factor (and an adverse one), and further research will no doubt identify what it is within SES (and its LOTE confounding) that impacts financial literacy: but that it does impact is beyond doubt. Further, we did not find a participant's sex or part-time work obligation detracting or contributing to their level of financial literacy. Finally, with one exception, parental occupation does not appear to impact greatly the financial literacy of participants, and it is surprising, perhaps, that this potential influence remains effete. The exception concerns those participants with at least one parent in a finance-related occupation. We should stress that the sample size of this subgroup is small (some 13 cases, or 6.3 percent of the participant base having at least one parent with a finance-related occupation). Nevertheless it is a reasonable hypothesis that it ought to favourably impact participant financial literacy, and our research should spur more refined inquiry along these lines.

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