

**University Students and Tax Literacy:
Opportunities and lessons for tax teaching***

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Abstract

The Organisation for Economic & Development (OECD) argues that financial literacy is important in the context of the growing complexity and range of financial products available, increases in life expectancy, changes in the ways governments fund retirement and reported low levels of financial literacy (Organisation for Economic & Development, 2005). The benefits of increasing financial literacy and providing financial education are argued to be in the context of personal improvements in budgeting, saving and investing, wider economic benefits in terms of the development of better quality financial products, increases in overall levels of investment and less likelihood of consumers making poor financial decisions. These arguments are mirrored in the Australian National Financial Literacy Strategy which states that “financially literate consumers and investors are more likely to make effective financial decisions and less likely to choose unsuitable products and services” (Australian Securities and Investments Commission, 2014). Previous research has identified that there are aspects of tax and superannuation that form part of overall financial literacy and that there are gaps in the understanding of some of these concepts which could lead to poor financial decisions being made (Chardon, 2014).

For many of the reasons outlined above, financial literacy education programs have been common at the University level in the United States for some time. Yet in Australia, despite research suggesting there are certain population groups with low levels of financial literacy and despite the National Financial Literacy Strategy, financial literacy education programs in Australian universities are scarce. This paper reports on the tax literacy aspects of a recent Australian survey of University students. The paper reports on the student’s perceptions of the importance of financial literacy, the extent to which they had been taught financial literacy at school and their level of understanding of some basic tax and superannuation concepts. The results of the survey further highlight the importance of taxation as a component of financial literacy and opportunities available for cross-disciplinary tax teaching within university programs more widely. The results also provide some important insights for tax teaching and advisor training more broadly. These tax teaching lessons and cross-disciplinary opportunities could not only serve to further the National Financial Literacy Strategy but also to create better tax advisors and more tax literate consumers that are able to make more informed contributions to tax policy into the future.

Introduction

Improving the financial literacy of the Australian population is currently high on the Government's agenda. A revised National Strategy for Financial Literacy was released for the period 2014-2017 as well as a National Stakeholder Forum being held in November 2015 (Australian Securities and Investments Commission, 2014). The Strategy is important in the context that:

“In today's fast-paced consumer society, financial literacy is an essential everyday life skill. It means being able to understand and negotiate the financial landscape, manage money and financial risks effectively and avoid financial pitfalls” (Australian Securities and Investments Commission, 2013).

The Government has suggested that improving financial skills and providing financial education is central to economic prosperity and that low levels of financial literacy act as a barrier to participation in the financial system (Commonwealth Department of Treasury, 2006). In recent times, many investors and retirees have been faced with economic circumstances that have impacted on their life savings and superannuation balances. Financial literacy of consumers, financial decision making, advisor/client relationships and their impact on increased wealth and economic prosperity is therefore an important area of research.

Previous studies of financial literacy in Australia have found that financial knowledge of younger persons tends to be lower and they are therefore an age group that is at risk for less optimal financial decision making (ANZ, 2005, 2008, 2011; Beal & Delpachitra, 2003). Further, previous research by Chardon (2014) has argued that there are basic concepts of tax and superannuation literacy that should form part of any measurements of overall financial literacy and that tax literacy also tends to be lower for those in younger age groups. This paper reports on the specific tax literacy findings from a 2015 financial literacy survey of university students, specifically those participants aged 20 years or younger. The paper will firstly give an overview of financial and tax literacy research in Australia which will be followed by an overview of financial literacy research specifically in the context of university student. The methodology, results and analysis of the current survey will be then presented. The findings from this analysis will be explored to determine whether there are any impacts on current tax teaching curriculum or further opportunities for financial and tax literacy education programs at universities

Financial and Tax Literacy Overview

In this paper, 'financial literacy' is defined as 'the ability to make informed judgements and to make effective decisions regarding the use and management of money' (ANZ, 2015; Financial Literacy Foundation, 2007b). The importance of financial literacy lies in the potential financial difficulty arising from poor financial decision making as acknowledged by the Organisation for Economic Co-operation and Development ('OECD') in the context of the global financial crisis:

“the lack of understanding of households on financial issues and, in particular, on credit and investment, has also a major role. As a result, individuals have accepted (sometimes unknowingly) to support more financial risk than what they could afford” (OECD - International Network for Financial Education, 2009, p. 4).

The notion of financial literacy has expanded over the last decade, with more focus being placed on a combination of knowledge, behaviour, confidence and attitudes (Kempson, Collard, & Moore, 2005; Leskinen & Rajjas, 2005; Worthington, 2006). Internationally, 'financial capability' is a more

common term used in the literature (Hogarth, 2002; Kempson et al., 2005). Although financial literacy is now an embedded term in Australia, given the National Strategy, this broadening of concepts has been seen in the ANZ National Surveys of Adult Financial Literacy in Australia which have acknowledged that financial literacy “is a complex combination of a person’s skills, knowledge, attitudes and ultimately their behaviours in relation to money” (ANZ, 2008, 2011).

It has been argued that an increase in the availability of financial products, has led to an increasingly complex market for consumers (Worthington, 2006). There is also an increased focus by governments on self-funded retirement and evidence suggesting there are certain at-risk groups which have low levels of financial literacy particularly in relation to financial products and superannuation (ANZ, 2015; ANZ, 2008; ANZ, 2005).

The ANZ ‘Survey of Adult Financial Literacy in Australia’ is the most widely cited measurement of financial literacy in Australia and has been conducted across a number of years (2003, 2005, 2008, 2011 and 2014). The surveys have consistently reported Australians are broadly financially literate when it comes to basic concepts such as budgeting and saving, but that certain demographic groups have lower levels of literacy, and more complex financial concepts are not as well understood or utilised by these groups (ANZ, 2008, p. 1). Further, all population groups tend to find superannuation concepts more difficult than basic financial concepts such as banking (ANZ, 2005a, p. 2). Lower financial literacy is more likely to be found in the following groups; lower levels of education, those not working, with lower incomes, females, and at both the younger and older ends of the age categories (ANZ, 2005, 2008, 2011).

Previous research by Chardon (2011) has argued that financial literacy frameworks need to include an understanding of basic taxation and superannuation concepts that impact on day-to-day financial decision making, financial obligations and effective communication with advisors. Both taxation and superannuation are usually poorly covered in financial literacy surveys and education programs. Chardon et al., (forthcoming) reported the results of an adult survey of tax literacy in Australia and found that 19% of Australians had tax literacy scores classified as either ‘poor’ or ‘low’. Also, it was found that certain demographic groups with low financial literacy (females, younger age categories and less employment) were also likely to have lower levels of tax literacy.

Recently, Australia participated in a trial of the financial literacy assessment framework as part of the OECD Programme for International Student Assessment (PISA) survey. Australian students performed relatively well (ranked between 4th of 18 participating countries) (OECD, 2014). Interestingly, the OECD Financial Literacy Assessment Framework specifically recognised that the financial landscape incorporates an understanding of the ‘consequences of changes in economic conditions and public policies, such as changes in interest rates, inflation, taxation or welfare benefits’ (OECD, 2012, p. 18). Similarly, the 2008 ANZ Adult financial literacy survey also recognised the potential for tax to be a component of a financial literacy framework where it states:

“Please note that other potential aspects of adult financial literacy (e.g. taxation; understanding of how and why government is financed; awareness and understanding of government benefits; understanding of how fees are calculated and how to minimise them) were agreed upon as being beyond the scope of the current project, and therefore not included in the framework” (ANZ, 2003, p. 18)

As stated earlier the most recent National Financial Literacy Strategy has a number of priorities. The strategic priorities relevant to the research presented in this paper are; 1. Educate the next generation, particularly through the formal education system and 5. Improve research, measurement and

evaluation (ASIC, 2014). This paper therefore puts forward ways that the next generation, particularly university students may be better financially educated and also provides empirical evidence that adds to the research in this field.

Financial Literacy - Young People and University Students

Over the years, adult financial literacy research in Australia by ANZ has consistently found younger age groups (under 25 years) tend to have the lowest financial literacy scores and this was confirmed in the most recent survey which also found lower scores in behavioural indicators such as planning ahead and choosing financial products (ANZ, 2014). Further, younger people were also the most likely group to have obtained financial information or advice from family or friends (65%) (ANZ, 2014). A 2007 Australian survey of young people between the ages of 12-17 found that they were less confident than adults when it came to managing money and that they were most likely to gain their information and advice from family (Financial Literacy Foundation, 2007, p. 57).

More recently, a survey of 207 Australian year 11 school students found there was lower financial literacy in the areas of financial risk awareness and consumer rights when compared with financial decision-making (Ali, Anderson, McRae, & Ramsay, 2014). The majority of participants also agreed (70%) that learning more about financial management was important. The authors suggest that “some groups of young people have lower levels of financial literacy and therefore are be more vulnerable to poor decision-making” (Ali et al., 2014, p. 352).

One of the most widely cited surveys of university students’ financial knowledge was that of Beal and Delpatrica (2003). This survey preceded all of the international government strategies for financial literacy, yet similarly found there was evidence of low financial skill and knowledge amongst university students and recommended comprehensive secondary and primary school education programs be developed (Beal & Delpachitra, 2003).

A 2009 survey of the financial literacy of 472 Australian university students found that there were low levels of financial literacy overall and that this was impacted by a range of variables depending on the specific area of financial knowledge tested (Cull & Whitton, 2011). Interestingly, this survey is one of very few in Australia that has included and/or measured understandings of tax and superannuation. Here, the survey found that only 29.5% of participants correctly understood the difference between a tax offset and a deduction and that this was only marginally higher amongst business students (34.5% correct) (Cull & Whitton, 2011). The authors argued that it cannot be “assumed that university students, even business students are immune from financial illiteracy” (Cull & Whitton, 2011, p. 112).

It has been argued that the increasing debt load of younger persons from either secondary school or university is of concern when coupled with this evidence suggesting financial literacy levels may be low in such groups (Lusardi, Mitchell, & Curto, 2010). In the United States financial literacy education programs as general education courses within universities are more common than in Australia. Due to the style of learner, their interest and engagement, it has been argued these programs at the college (university) level have better outcomes for investment literacy than those in high school (Peng, Bartholomae, Fox, & Cravener, 2007). Crain (2013) undertook a review of 308 universities that offer financial literacy courses and found that although only 37 of the schools allowed the particular course to be taken as a general elective by all students, there was substantial support for their availability amongst academic staff. The review concluded that successful implementation of financial literacy initiatives should be driven by the discipline and that they were often difficult to achieve due to university politics and competing disciplines (Crain, 2013). Similar arguments could be made in relation to competing disciplines in university accounting programs and the importance of

gathering empirical evidence which supports the inclusion of particular concepts (such as financial literacy) because of their social and economic importance.

Research by Palm and Bisman (2010) has argued that introductory accounting courses at university could benefit from more constructive alignment of objectives and development of generic skills if there are to remain relevant in a modern accounting environment. Similarly, Freudenberg and Boccabella (2014) have argued that accounting curriculum needs to reflect current industry practices (specifically in relation to the popularity of trusts and SMSFs) if they are to remain relevant and useful for practitioners. This research therefore provides valuable evidence for academics designing tax, financial and accounting education courses at the university level as it provides a contextual background of the learner as well as providing evidence useful for training students in communicating with clients.

Methodology

As highlighted, previous financial literacy measures have found that financial literacy tends to be lower in younger age groups. This study aimed to explore levels of financial literacy amongst university students as well as their perception of the financial education they received in high school. Previous research has explored financial literacy of university students at a particular University (Beal & Delpachitra, 2003; Cull & Whitton, 2011) whereas this survey was distributed across four Australian universities as well as advertised through social media. The use of social media to distribute surveys is argued to be valid (notwithstanding its limitations) (Brickman-Bhutta, 2012).

The survey asked both subjective and objective questions in relation to the following financial literacy concepts: general interest, inflation, investment, budgeting and saving, insurance, superannuation and taxation. There were fourteen literacy questions that went toward an overall financial literacy score. As a subset, there were four specific tax knowledge questions which will be the focus of analysis in this paper. The questions were designed from a range of existing research on financial literacy with some modifications for the age of participants and the Australian context (ANZ, 2008; Bateman et al., 2012; Chardon, 2014; A Lusardi & Mitchell, 2006).

Previous research has highlighted the importance of confidence as a critical aspect of building financially capable populations (Blue & Brimble, 2014). Indeed previous tax literacy research has found that females, younger age groups and those on lower incomes tend to be less confident when it comes to taxation and superannuation issues specifically (Chardon et al., publication forthcoming). Acknowledging the difference between self-rating of understanding and confidence, the current survey asked participants to self-rate their understanding of particular financial concepts. The self-rating of taxation understanding by participants will therefore be analysed in this paper in the context of actual levels of understanding of taxation concepts.

Descriptive statistics

The survey was conducted during the period May through July 2015. The following section of the paper will present the specific tax literacy results of the survey along with any relevant statistical analysis. The sample size for participants aged 20 years or under is 297 with 165 (55.6%) complete responses (over 70% missed one or no questions). The analyses were conducted using SPSS22 with pairwise deletion of responses with missing data, unless indicated otherwise.

Table 1 presents the summary statistics. This sample is overrepresented by female (80.4%) and employed (72.1% excluding ‘not working’ and ‘never worked’) students which should be considered in terms of the limitations of the research. Each participant was assigned an Australian Tertiary Admission Rank (ATAR) to enable comparison of university entry scores across states. The ATARs of this sample range from 32 to 99 with an average of 79.4 and standard deviation of 12.2.

Table 1- Summary Statistics of Variables (N=297)

Variable (n)	Category	Count (% of n)
Gender (209)	Male	41 (19.6)
	Female	168 (80.4)
Employment (208)	Full time	7 (3.4)
	Part time	39 (18.8)
	Casual	89 (42.8)
	Other modes	15 (7.2)
	Not working	56 (26.9)
	Never worked	2 (1.0)
Self-rating of Tax knowledge (267)	Very low	69 (25.8)
	Low	102 (38.2)
	Fair	62 (23.2)
	High	23 (8.6)
	Very high	11 (4.1)
Question 1 (236) Taxation of Superannuation	Correct	87 (36.9)
	Incorrect	149 (63.1)
Question 2 (220) Calculating Assessable Income	Correct	44 (20.0)
	Incorrect	176 (80.0)
Question 3 (220) Calculating Tax Payable	Correct	125 (56.8)
	Incorrect	95 (43.2)
Question 4 (297) Negative Gearing Meaning	Correct	52 (17.5)
	Incorrect	245 (82.5)
Overall Tax Score (220)	0	51 (23.2)
	1	75 (34.1)
	2	60 (27.3)
	3	29 (13.2)
	4	5 (2.3)
Variable (n)	Median (min, max)	Mean (SD)
ATAR (198)	79.7 (32, 99)	79.4 (12.2)
Quiz score (220)	1 (0, 4)	1.4 (1.1)

Results

This section of the paper reports the results of the specific tax literacy questions that were posed in relation to the sample aged 20 years of age or less as summarised in Table 1 above. Comparisons of the results against the previous adult tax literacy survey by Chardon (2014) will also be made where relevant. The survey also provided participants an opportunity to add any relevant comments about their financial skills education. A thematic analysis of the responses to that question will also be presented at the end of this section.

In relation to participants self-rating of their tax knowledge, more than half of the students rated themselves low (38.2%) or very low (25.8%) in terms of tax knowledge. Although the previous tax

literacy survey by Chardon (2014) explored participants' self-rated 'confidence' as opposed to 'understanding', the results here are broadly consistent in that participants appear to self-rate both their confidence and understanding of taxation concepts as much lower than financial concepts such as budgeting and saving. Interestingly, the current survey found that financial concepts such as superannuation and retirement planning also have a low level of self-rated understanding. A finding of low self-rated understanding might be expected for those areas which will be more relevant later in life, however the same cannot be said for taxation concepts which would be relevant earlier in life particularly given the current sample is over-represented by those currently in paid employment.

In relation to specific tax knowledge questions, the first question posed was presented as follows:

As far as you are aware, is superannuation generally taxed at a lower, higher or the same rate as other investments?

As seen in Table 1, 36.9% of participants answered correctly that superannuation was taxed at a lower rate than other investments. The most common alternative response was 'Do not know'. In comparing the results of this question against the adult tax literacy survey by Chardon (2014) where 57.3% of adults scored correctly for the same question, it appears that those under 20 years of age have less understanding of the taxation of superannuation.

The second tax knowledge question was in relation to the calculation of assessable income and therefore an understanding of the difference between assessable income and taxable income. The question was posed as follows:

If a person has total employment income of \$70,000, interest from a bank account of \$100, gross income from a rental property of \$16,000, \$4,000 in deductible salary expenses, and deductions (including interest) relating to their rental property of \$14,000, what is their total assessable income? (Please use a calculator if preferred)

The correct response was \$86,100 (i.e. the gross assessable amount excluding deductions). As seen in Table 1, only 20% of participants scored correctly for this question. The most common alternative response was 'Do not know'. This demonstrates that the concept of assessable income and/or the difference between assessable income and taxable income is not well understood by university students aged 20 years and under. The adult tax literacy survey by Chardon (2014), found 53.1% of adults scored correctly. Again, those under 20 years of age appear to have much lower understanding in relation to assessable income.

The third tax knowledge question explored participant's ability to calculate tax payable given a taxable income figure and a current version of the tax tables. The question was presented as follows:

If a person's total taxable income for the 2014/2015 tax year was \$40,000, what is their total tax payable for the year (excluding medicare levy)? Use the following personal tax rates (please use a calculator if preferred)

Taxable income	Tax on this income
0 – \$18,200	NIL
\$18,201 – \$37,000	19c for each \$1 over \$18,200
\$37,001 – \$80,000	\$3,572 plus 32.5c for each \$1 over \$37,000
\$80,001 – \$180,000	\$17,547 plus 37c for each \$1 over \$80,000
\$180,001 and over	\$54,547 plus 45c for each \$1 over \$180,000

The correct answer was therefore \$4,547. The results were that 56.8% of participants chose the correct answer. The most common alternate response was ‘Do not know’. Previous tax literacy research found a much higher correct response rate to the same question amongst adults (71.5%) (Chardon, 2014).

The final tax knowledge question asked about participant’s understanding of negative gearing. The question was presented as follows:

A negatively geared investment means (select all that apply)

- *The investment is likely to decrease in value over time*
- *The interest on the loan is less than the income received from the investment*
- *There are no borrowings associated with the investment*
- *The interest on the loan is greater than the income received from the investment*
- *Negative gearing means something else*
- *Do not know*
- *Prefer not to answer*

The correct option to choose here was therefore ‘The interest on the loan is greater than the income received from the investment’. Only 17.5% of participants selected the correct response as one of their selections. The most common alternative responses were ‘Do not know’ followed by ‘The investment is likely to decrease in value over time’. The adult tax literacy survey found 54.1% of adults selected the correct response, again signalling potentially much lower understanding in younger persons.

Self-Rated Understanding compared to Actual Understanding

A total tax score was computed for each participant as the number of correct answers to the four tax questions. Table 1 (above) shows that nearly 85% of the students could not correctly answer more than two out of the four tax questions.

As illustrated in the clustered bar chart in Figure 1 below, the sample groups of higher self-ratings tend to have higher quiz scores.

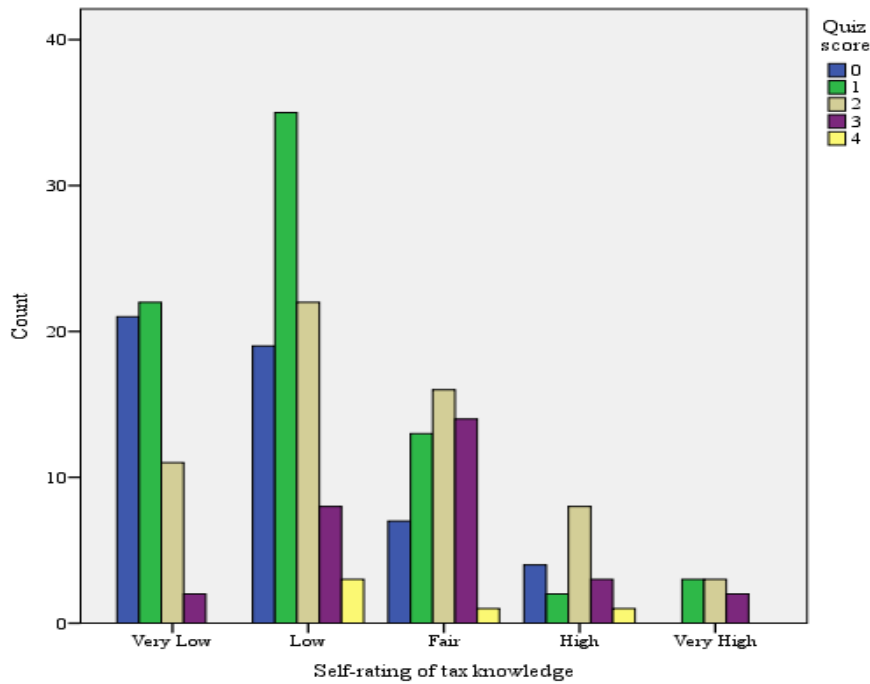


Figure 1- Clustered bar chart of tax score distribution by self-rating level

Table 2 below compares the distribution and the average of the individual tax question scores across self-rating levels. Chi-square test result ($\chi^2(1) = 20.096, p < .001$) confirmed the linear association between the two ordinal scales¹. One-way ANOVA result ($F(4, 215) = 6.48, p < .001$) confirmed the differences in the average of individual tax question scores between self-rating levels. All these support the claim of directional consistency between self-rating and question score. This is consistent with previous research by Chardon (2014) that found less over-confidence in relation to tax and superannuation issues broadly. Though over-confidence tends to be high in financial literacy research generally (Bateman et al., 2012; Gallery, Gallery, Brown, Furneaux, & Palm, 2011), it appears this is not necessarily the case for taxation concepts.

Table 2- Quiz Score Distribution by self-rating levels (N=220)

Self-rating (n)	Quiz score (%)					Quiz score Mean (SD)
	0	1	2	3	4	
Very low (56)	37.5	39.3	19.6	3.6	0.0	0.9 (0.8)
Low (87)	21.8	40.2	25.3	9.2	3.4	1.3 (1.0)
Fair (51)	13.7	25.5	31.4	27.5	2.0	1.8 (1.1)
High (18)	22.2	11.1	44.4	16.7	5.6	1.7 (1.2)
Very high (8)	0.0	37.5	37.5	25.0	0.0	1.9 (0.8)

Predictors of self-rated understanding, overall tax score and individual questions

To predict self-rated understanding and actual understanding respectively, an ordinal logistic regression model was estimated for each ordinal response variable using such predictors as gender (with females as reference), employment (with the employed as reference), ATAR (see Table 3 below). Both models are statistically significant at 5% level overall and both meet the parallel line

¹ Spearman's rank correlation coefficient = .325, $p < .001$

assumption for ordinal regressions. Both models also show acceptable goodness of fit, although the fit of self-rating model is marginally significant due to the small category of ‘very high’ (Long, 1997).

Gender and employment were found to be statistically significant predictors of self-rated understanding of tax knowledge, while ATAR was not (see Table 3). The positive coefficient for ‘male’ means that male students tend to rate themselves higher than females for any rating level. The ratio of the odds for lower to higher self-ratings for males and females is $0.44 = \exp(-\beta) = \exp(-0.816)$, holding all other variables constant. Similarly, the unemployed students tend to rate themselves lower than the employed. The ratio of the odds for lower to higher self-ratings for the unemployed and the employed is 2.26, all else being equal.

For the individual question score, gender and ATAR were statistically significant predictors whereas employment was not (see Table 3). Male students score higher in the tax quizzes than females. The odds for lower to higher quiz scores for males is 0.44 times (or 56%) smaller than that for females, holding all other variables constant. Students with higher ATAR also tend to score higher in the quizzes. For one unit increase in ATAR, the odds for lower to higher quiz scores decreases by a factor of 0.98 (or 2%), holding all other variables constant. This finding is consistent with the earlier findings in relation to adult tax literacy which found that gender and education level were significantly correlated with tax literacy score. However, previously it has been found that employment hours was strongly correlated with tax literacy score (Chardon et al., forthcoming).

Table 3- Results of ordinal logistic regressions of self-rating and quiz score and binary logistic regressions of questions (N=165)

Predictor	Response					
	Self-rating	Overall Tax Score	Question 1 Tax and Super	Question 2 Assessable Income	Question 3 Tax Payable	Question 4 Negative Gearing
Male	0.816**	0.831**	1.367***	0.177	0.320	0.356
Unemployed	-0.817**	-0.080	-1.093**	-0.068	0.259	0.445
ATAR	0.012	0.020*	0.016	0.014	0.015	0.014
Model fit						
Likelihood ratio test of omnibus significance X^2 (d.f.)	10.1(3)**	8.8(3)**	15.3(3)***	.819(3)	2.594(3)	3.055(3)
Parallel lines test X^2 (d.f.)	3.6(9)	9.3(9)	NA	NA	NA	NA
Pearson goodness of fit test X^2 (d.f.)	509.2(469)*	470.0(469)	114.5(115)	127.2(115)	130.4(115)	121.5(115)
Pseudo R ² (Nagelkerke)	.064	.055	.121	.008	.021	.028

*** Statistically significant at .01 level; ** significant at .050 level; * significant at .100 level

A binary logistic regression model was estimated to predict each tax question score using gender, employment, and ATAR. Considering the similar overall findings in the four tax questions, the errors terms of the logit functions might be substantially positively correlated. A multivariate probit model (Cappellari & Jenkins, 2003) was estimated using State13². Only the model for Question 1 (taxation

² The results were that no pair of error terms was substantially correlated (all correlation were less than .40). Therefore, the authors decided to interpret the results of four separate binary logistic regressions (see Table 3).

of superannuation) is statically significant, which means that none of the three predictors affects Question 2, 3, or 4. For Question 1 (taxation of superannuation), male and employed students have a higher chance of giving the correct answer. The odds of correctly answering this for males is nearly four times larger than the odds for females, all else being equal. For employed students, the odds of correctly answering is almost three times larger than the odds for the unemployed. This finding in relation to males and the employed is consistent with the adult tax literacy survey (Chardon et al., forthcoming) which found a relationship between high tax literacy scores and gender as well as employment hours.

Qualitative Analysis

Participants were able make further comment about their 'financial skills education' at the end of the survey. A thematic analysis of the responses in this section was also undertaken (Huberman & Miles, 2002). The most common theme was that participants identified family and/or parents as their primary source of financial knowledge to date. This is highlighted by the following comments:

'All I've learnt has been from my parents and even then I still don't know how to file tax returns or check my super or invest anything.'

'Never really had any at school. I didn't even know how to do my taxes. I had to have my mother help me the first couple of times.'

'Virtually none, other than my parents.'

This theme highlights one of the common problems of the financial literacy context. In the past, financial literacy education programs within schools were scarce. Therefore the gaining of this important financial decision making knowledge tended to come from families or close friends. Since previous surveys of adult financial and tax literacy have found significant deficiencies in financial and tax knowledge and behaviour in the adult population (ANZ, 2011; Chardon, 2014), it is argued that misunderstandings are therefore passed on to the younger generation unless there is intervention.

Another common theme was that participants recognised the importance of financial education. The following comments highlight that within this broad theme, tax and superannuation knowledge were recognised as important aspects.

'But I have no recollections of learning anything about tax, superannuation or any of that other stuff. I like to think I am intelligent, but in this area I know nothing.'

'I believe all kids should be thought (sic) how to budget pay bills and other important life/financial skills esp (sic) super/tax and savings.'

Further, the survey found that 61.6% of participants 'would prefer to learn more financial skills in university'.

Implications and Opportunities for University Teaching

The results presented in this paper add to the growing evidence that basic tax and superannuation concepts are an important aspect to be included in any financial literacy or capability framework. Previous research by Chardon (2014) and Cull and Whitton (2011) has demonstrated that there may be low levels of understanding of some important basic tax and superannuation concepts. The results

presented in this paper support these previous findings and further find that understandings of basic tax and superannuation concepts are generally lower in those under the age of 20 years. The results also demonstrated a correlation between gender, ATAR and tax knowledge outcomes.

Given the literature presented in relation to the importance of continued financial education throughout school and university, the prevalence of financial education programs in the United States and the arguments that high levels of debt and low levels of financial literacy in university students is seen as a risk to poor financial outcomes, it is argued that the teaching of financial literacy (including tax aspects) at university should be considered as a priority. The qualitative data presented from the survey further supports this argument that it is seen as a worthwhile and important endeavour.

The results also provide some important insights for tax teaching and advisor training more broadly. It is submitted that the specific evidence presented in this paper and previous financial literacy evidence should be taught as part of any program that prepares accounting, legal or tax advisors for practice. Tax compliance research has suggested that complexity of tax concepts may cause misunderstandings between a taxpayer and their tax agent (McKerchar, 2002). If empirical research continues to find there are broad misunderstandings in relation to basic aspects of taxation policy such as the difference between tax offsets and deductions and concepts of assessable income, then this needs to be emphasised to potential advisors (whether accountants, lawyers or financial advisors) when undertaking tax law courses. Advisors need to be acutely aware of the level of financial, tax and superannuation knowledge their clients will have, which demographics are most likely to have poor levels of financial literacy (females and those with lower education levels) and strategies to explain these concepts most effectively. Understanding the levels of financial and tax literacy of clients and demographic groups will aid in ensuring our students are best equipped with the knowledge to communicate effectively with their clients.

Enthusiastic and committed discipline leaders are key to driving the inclusion of financial education programs at the university level, whether that be stand-alone cross disciplinary courses or embedded units in other courses (Crain, 2013). Crain argues “the foundations of financial knowledge and skills should be introduced in elementary schools, expanded in high schools and reinforced in colleges” (Crain, 2013). In the context of competing demands from University program reviews, other disciplines and professional bodies, it is important for university academics (specifically tax teachers) to remain committed to and passionate about the importance of tax education in University programs. This evidence that there are potentially low levels of tax literacy in the younger generation, that it is seen by them as important and worthwhile and that it is an important policy strategy by government, only serves to bolster the argument for the inclusion of tax literacy education programs more broadly within schools and universities.

These cross-disciplinary teaching opportunities could not only serve to further the National Financial Literacy Strategy but also to create better tax advisors and more tax literate consumers that are able to make more informed contributions to tax policy into the future.

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