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Are We There Yet? Changing Perceptions of Accounting as a Career Preference

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Abstract: Much has been written about student attitudes and perceptions of the accounting profession over the past decades. Similarly various efforts have been undertaken by accounting educators and professional accounting bodies to change negative perceptions of the profession. Efforts to improve the perception of the profession have been driven by evidence that demonstrates that perceptions are important in career choice. This study examines whether efforts to change perceptions have filtered down to secondary school students who are contemplating career choices. The study specifically examines perceptions of secondary school students about the accounting profession. The results at the secondary school level suggest that the stereotypical negative image of the accountant continues, with students expressing the view that the work of an accountant is boring and precise. However, the study showed that attitudes toward accounting differed significantly depending on whether or not students were studying accounting at secondary school. Overall, the results of the study suggest that we are 'not there yet' in terms of projecting positive and accurate perceptions of the accounting profession to a broad range of secondary students.

Keywords: Perceptions, Secondary School Students, Accounting Profession

Introduction

AN IMPORTANT PRIORITY for the accounting profession is to recruit good-quality students who have an understanding of the role of an accountant. Changes in the nature of the work of an accountant, which incorporates high degrees of engagement with clients, complex technology and the emergence of sophisticated financial instruments, have placed increased pressures on accounting professionals. The profession therefore needs to appeal to students who have the capacity to deal with a wide range of techniques, including well-developed analytical abilities and flexibility to adapt to changing business environments. Unfortunately, students unfamiliar with the contemporary accounting environment may result in the wrong people being interested in an accounting career as well as creating an 'occupational reality shock' (Dean et al., 1988) for graduates commencing employment in accounting.

Prior studies have shown that the perceptions and stereotypes that people have are important factors that influence career decisions (Holland, 1973). More relevant to this study is the fact that prior research shows that many students have fixed career goals by the time they complete secondary school (Karnes, King & Hahn, 1997; Furlong & Biggart, 1999; Smyth & Hanan, 2000; Hartwell, Lightle & Maxwell, 2005). Consequently, it is important for the accounting profession to monitor public perceptions, including the perceptions of secondary

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students, to maximise the opportunity for prospective students to have an accurate perception of accounting.

One of the aims of this study is to investigate secondary students' attitudes towards the accounting profession. If secondary students have a negative attitude to accounting, they are less likely to progress their studies to undertake a career as an accountant and more specifically become a member of a professional accounting body. This is reflected in the studies undertaken by Felton, Buhr and Northey (1994), Chen, Jones and McIntyre (2005), and Jackling and Calero (2006), who demonstrated a link between studying accounting at school and pursuing a career in accounting.

Although there have been studies in other countries of secondary students' perceptions of accounting (e.g. Byrne & Willis, 2005), there have not been studies from an Australian perspective. This study will aim to provide insights that will assist the accounting profession in Australia in marketing accounting as a career choice. The research questions therefore are:

1. What are secondary school students' perceptions of the work of an accountant and the accounting profession?
2. What are the key factors influencing secondary school students' perceptions of the profession?
3. Do secondary school students perceive that society has a higher regard for the accounting profession than for other professions?

The next section of the paper reviews prior literature related to secondary students' perceptions of the work of an accountant, as well as the factors that influence their attitudes towards the accounting profession. The subsequent section outlines the research approach, incorporating the research design, data collection and data analysis techniques. This is followed by a results section which provides an analysis and discussion of results. The paper concludes by identifying limitations of the study and opportunities for further research.

Literature Review

Accounting has traditionally been viewed by society as boring, tedious and monotonous number crunching (Albrecht & Sack, 2000). Consequently, students who have perceived that they are not 'good with numbers' may have steered away from accounting as a major course of study and as a career choice. Initially, the literature review examines secondary school students' perceptions of the work of an accountant and the accounting profession. This is followed with a review of the key factors influencing students' perceptions. Finally, the status of accounting compared to other professions will be examined.

Image of Accountants and the Accounting Profession in Society

Typically, accountants have been referred to as number crunchers, focussing on numerical accuracy, routine recording and calculation methods (Parker, 2000). Albrecht and Sack (2000), Cory (1992), and Garner and Dombrowski (1997) attribute these negative perceptions to misinformation or lack of information about what accounting is and the nature of the duties performed by accountants. To date, efforts by professional accounting bodies and professional

accounting firms to change the negative and inaccurate perceptions of accounting and accountants have been limited in their success (Jackling & Calero, 2006; Jeacle, 2008).

Mladenovic (2000) found that Australian university students tend to perceive accounting as primarily numerical, objective and non-controversial, with an affinity towards mathematics and statistics. Similarly, studies conducted in the USA, Canada and the UK (Luscombe, 1988; Cohen & Hanno, 1993; Fisher & Murphy, 1995) show that many students form an impression that 'accountants are dull, boring number crunchers.' Conversely, Hartwell et al.'s (2005) study found that contrary to the stereotype, only 39% of respondents agreed that accounting is predictable and stays the same, while 56% indicated that accounting would be useful for someone who wants variety in work. From a New Zealand perspective, the evidence suggests that students studying accounting tend to have more positive perceptions of the work of accountants than non-accounting students (Tan & Laswad, 2006, 2009; Malthus & Fowler, 2008). Thus, students who do not intend to major in accounting may be deterred from studying accounting due to the perception that accounting requires a demanding workload and dealing with a lot of numbers.

Similar results were obtained from a study undertaken in Ireland using secondary school students. It found that those studying accounting considered the work of an accountant to be less compliance driven and definite compared to non-accounting students (Byrne & Willis, 2005). Byrne and Willis (2005) suggested that the course being followed has a positive impact on students' perceptions of the profession with the accounting course attracting those who hold views that are more positive. This paper investigates whether differing perceptions of the work of an accountant occur between accounting and non-accounting secondary students in Australia.

Key Factors Influencing Perceptions of the Profession

Several factors have been linked to influences on a student's career choice in accounting. Research by Silverstone and Williams (1979) was one of the earliest studies that considered the human influence on accounting career choice from a female perspective. Subsequent research has explored the potential influence of reference groups such as parents, teachers and peers. A number of these studies have shown that parental influence was the most significant in impacting secondary student decision making (see Cohen & Hanno, 1993; Allen, 2004; Byrne & Flood, 2005; Sugahara & Boland, 2005; Tan & Laswad, 2006), while some US studies (Paolillo & Estes, 1982; Hermanson & Hermanson 1995; Lowe & Simons, 1997; Maudlin et al., 2000; Strasser, Ozgur & Schroeder, 2002) found parents to be less important. Other principal factors found to influence students' perceptions of accounting have been related to the study of the subject in school, the factual media and teachers (Byrne & Willis, 2005). Cangelosi et al. (1985) demonstrated that other groups such as friends do not influence most students toward or away from accounting careers. Given the range of influences, this study investigates the reference groups that have the most influence in shaping a group of Australian secondary school students' perceptions of the accounting profession.

Status of Accounting Compared with other Professions

Students are more likely to aspire to a career that is held in high esteem by society. A prior study of Irish high school students ranked accountants behind doctors, lawyers, dentists and

architects as professionals (Byrne & Willis, 2005). However, in the Byrne and Willis (2005) study, the actual ranking of accounting as a profession varied between accounting students (who ranked it 5th) and non-accounting students (who ranked it 7th) of ten professional categories. In a New Zealand study incorporating the views of high school teachers, the results showed that the accounting profession was of lower ranked social status to the professions of law, medicine and engineering (Wells & Fieger, 2005). This was also the view of high school teachers in the US (Hardin et al., 2000) and Japan (Sugahara et al., 2006). Until now, no previous study has examined Australian secondary students' perceptions of the status of accountants amongst other professions.

Perceptions of Accounting Study at School

The need to recruit students interested in accounting as a profession, has led many researchers gathering evidence from high school students in relation to the exposure they have received about accounting. In Byrne and Willis's (2005) study, students studying accounting at secondary school had a less negative image of accounting than those not studying accounting. However, they still held a traditional view of the profession and of the work of the accountant. Byrne and Willis (2005) found that the reason for the findings was due to the fact that the nature of the accounting pedagogy being experienced by secondary school students was not significantly dispelling pre-existing negative perceptions or giving them a realistic impression of accounting practices. In fact, prior research undertaken by Byrne and Willis (2001) into the secondary school accounting course provides evidence that secondary schools emphasised mechanical bookkeeping and assessment promoting rote learning. This approach is likely to confirm rather than challenge students' traditional stereotypical view of the work of an accountant and the profession. Byrne and Willis (2005) recommended that the profession should seek to influence the content of the syllabus in secondary schools to ensure that the work of an accountant is seen as less definite, precise and compliance driven and more interesting.

These finding are similar to that of Inman's et al.'s. (1989) study. Students' experiences with uninteresting accounting coursework and rote learning may also discourage the best students from pursuing an accounting major. Students are more likely to choose an accounting major when they consider accounting interesting and enjoyable (Saeman & Crooker, 1999). Tan and Laswad (2009) showed that a higher proportion of accounting students than other business students decide on their major prior to university study. They therefore recommended that the profession should promote the positive aspects of an accounting career not only to pre-university students but also to the public, as this strategy would enhance the public profile of members of the profession. There is evidence to suggest that the accounting curriculum in secondary schools may be playing a part in terms of students' perceptions of accounting, which may not necessarily indicate the true nature of the profession.

For example, figure 1 below shows that there were 8,748 students enrolled in units 1 and 2 (Year 11) in Victoria Australia in 2008. However, this number was lower by approximately 30 per cent for units 3 and 4 (Year 12) in the same year. This decline in enrolments is not typical of enrolments in business subjects more generally in Victoria (VCAA, 2010a, 2010b).

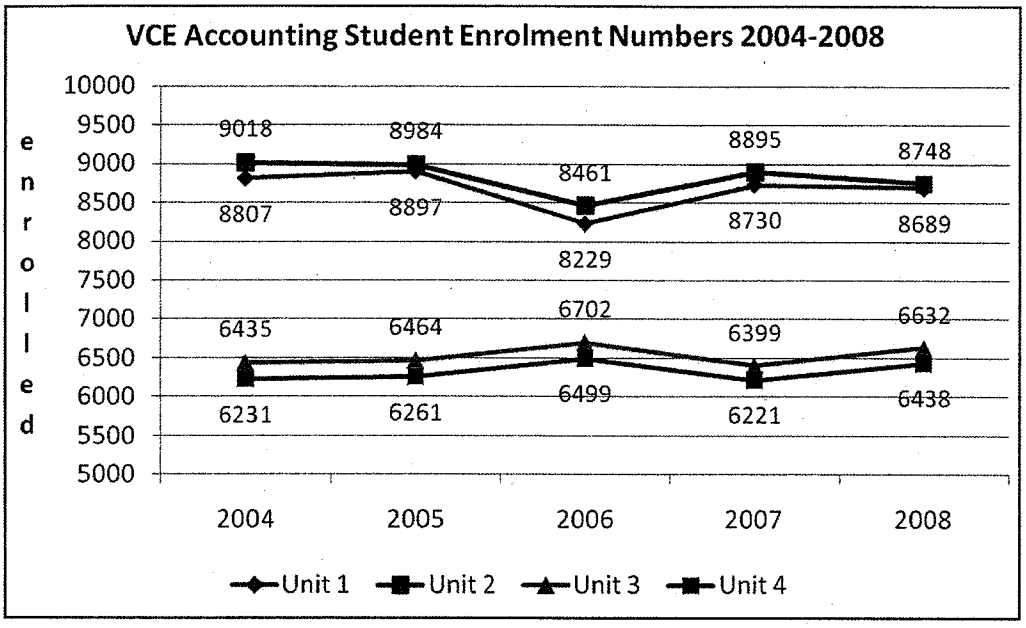

Figure 1: VCE Accounting Unit Enrolment Numbers: 2004–2008

Figure 2 shows the percentage decline in business subject enrolments at the secondary school level from Year 11 to Year 12. The Accounting subject showed declines between 25 and 30 per cent, compared with between 3 and 15 per cent for Business Management, Legal Studies and Economics subjects, being the other three offerings in business at secondary school level over the period 2004-2008. The result suggests that in the Victorian secondary school context the accounting curriculum does not endear students to the study of accounting at the most senior secondary school levels (VCAA, 2010a, 2010b).

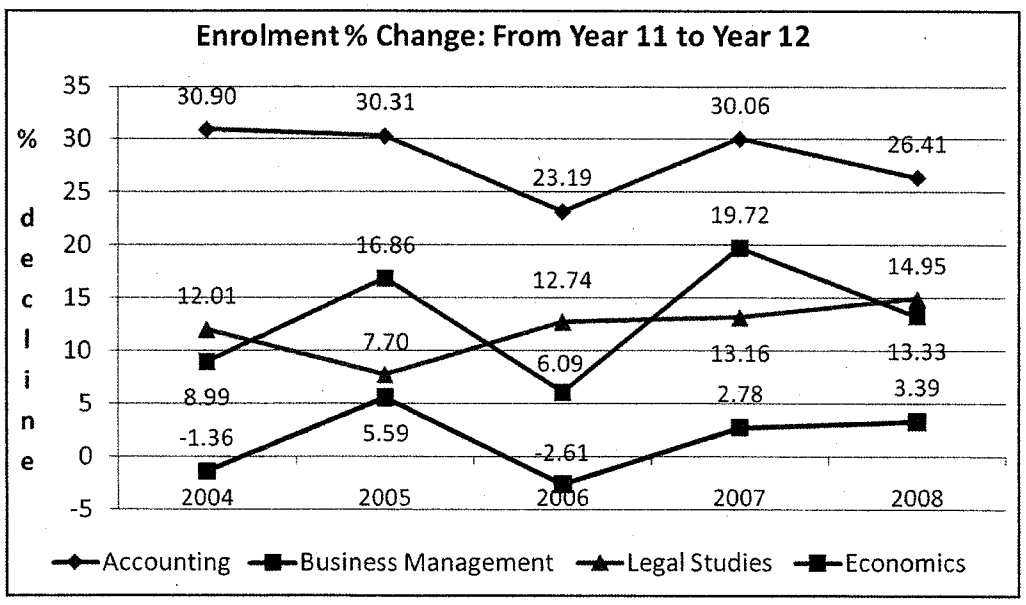

Figure 2: VCE Enrolment % Change: from Year 11 to Year 12

Consequently, this study investigates secondary school students' perceptions towards accounting and the accounting profession, taking into account the issues addressed in existing literature as outlined above.

Research Approach

Data Analysis

A questionnaire was designed to seek the views of secondary school students regarding their perceptions of:

- their current study;
- their future occupations;
- the status of various occupations; and
- the accounting profession.

After approval was gained to approach secondary schools, the questionnaire and necessary ethics approval documents were distributed to a range of public, private and Catholic schools across the State of Victoria, requesting participation in the study. Initially a number of schools were interested in participating by having Year 11 students complete the questionnaire. Year 11 students were chosen for the study for two reasons. Firstly, at this stage of their secondary schooling, students may have made subject choices linked to potential post-secondary studies and/or proposed employment. Secondly, year 11 is often a stage when student perceptions are formed towards possible careers. This is evidenced by the decline in enrolments as shown in figure 2 for accounting in Year 12 being the final year of secondary school study. Consequently, focusing on a Year 11 cohort provides a more insightful view of student perceptions and thus subject and career choices.

Although more than 30 schools were contacted for the data collection phase, only four participated in the study. The four schools represent a mix of locations across the eastern and northern regions and are known for having a high proportion of students that progress to tertiary education.[1] After the collection of data was complete, there were 24 unusable responses, which were omitted from the study. This meant that the study sample size was reduced to 161 respondents. Of the 161 respondents, almost two-thirds of the respondents (106 or 65.8%) were not studying accounting, compared with just over one-third (55 or 34.2%) who were studying accounting at secondary school.

Method

Data on students' perceptions of the accounting profession was obtained via a research instrument developed by Saemann and Crooker (1999) to measure perceptions of the accounting profession (PAPI). This instrument contained 36 pairs of adjectives representing opposing views of the accounting profession. Students were asked to use a five-point scale located between each pair of adjectives to express the strength of their opinion. Approximately half of the items were reverse coded (see Appendix 1 for a copy of this instrument).

[1] As potential respondents were under 18 years of age, parental consent was required for participation. The need to effectively communicate with parents and receive written consent minimised responses.

Empirical studies examining the perception of the accounting profession have been undertaken by Saemann and Crooker (1999), Worthington and Higgs (2003) and Byrne and Willis (2005) using the PAPI paired adjectives instrument. All three studies employed a factor analysis on the same research instrument adopted in this study. The results demonstrated that perceptions of the accounting profession could essentially be divided into four main factors since the factors contained similar themes that dealt with the accounting professions: precise nature; interest level (boredom); structure; and rules. The identified factors reinforce the themes identified in the literature review above (see, for example, Luscombe, 1988; Cohen & Hanno, 1993; Fisher & Murphy, 1995).

Although the current study, which examines secondary students, differs in some aspects from the empirical research carried out both Worthington and Higgs (2003), a number of similarities exist with the other two studies. For instance, Saemann and Crooker's (1999) study focussed solely on accounting and explored the extent to which introductory accounting courses changed students' perceptions and major choices. The empirical work of Byrne and Willis (2005) however is the most similar to this current study. Byrne and Willis (2005) examined Irish secondary school students' perceptions of the work of an accountant and the accounting profession.

The measurement of 36 variables is a difficult analytical undertaking, therefore an approach was required that could facilitate the reduction of variables while still not compromising the integrity of the study. Therefore, the adoption of an appropriate research approach therefore was based on two key factors: (i) an extensive literature review which found that numerous studies demonstrated that accountants, and the study of accounting, were constantly perceived as being boring, number crunching, exact, etc; and (ii) the comparable nature of the studies particularly with that of Byrne and Willis in terms of data from secondary school students.

A factor analysis approach was employed where the factors were selected according to prior theoretical notion (knowledge of theory) and previous empirical research. Accordingly, four factors and their corresponding variables were identified based on Byrne and Willis' work on secondary student perceptions. The four factors were: *definite; boring; precise;* and *compliance driven.* This reduced the pairings from 36 to 31. The internal reliabilities of the four factors identified for this study were obtained using Cronbach alpha and ranged from 0.67 to 0.82, with an overall reliability for the model of 0.82. These values are acceptable for scales of this length and type. The range also compares favourably to the three aforementioned empirical studies.[2] Table 1 below lists the variables that comprise the four factors and their corresponding reliabilities.

[2] The internal reliability values for Saemann and Crooker (1999), Worthington and Higgs (2003), and Byrne and Willis (2005) ranged from 0.64 to 0.89; 0.41 to 0.84; and 0.71 to 0.81 respectively.

Table 1: Reliability for Perceptions of Accounting Profession Instrument

Factor 1	**Definite**		**Cronbach Alpha 0.75**
Ambiguity	1	5	Certainty
Abstract	1	5	Concrete
Intuition	1	5	Facts
Effectiveness	1	5	Efficiency
Dynamic	1	5	Stable
Unpredictable	1	5	Routine
Conceptual	1	5	Analytical
Alternative views	1	5	Uniform standards
Factor 2	**Boring**		**Cronbach Alpha 0.79**
Interesting	1	5	Boring
Fascinating	1	5	Monotonous
Exciting	1	5	Dull
Absorbing	1	5	Tedious
Prestigious	1	5	Ordinary
Variety	1	5	Repetition
Factor 3	**Precise**		**Cronbach Alpha 0.67**
Imprecise	1	5	Accurate
Verbal	1	5	Mathematical
Decision making	1	5	Record keeping
Superficial	1	5	Thorough
Spontaneous	1	5	Planned
Easy	1	5	Challenging
Overview	1	5	Details
Novelty	1	5	Methodical
Factor 4	**Compliance driven**		**Cronbach Alpha 0.82**
New Ideas	1	5	Established rules
Flexible	1	5	Structured
Creative solutions	1	5	Cut & dry (fixed)
Innovation	1	5	Compliance
Adaptable	1	5	Inflexible
Changing	1	5	Fixed
People-oriented	1	5	Number crunching
Originality	1	5	Conformity
Extrovert (outgoing)	1	5	Introvert (withdrawn)

The first factor, *definite,* is represented by adjectives such as routine, concrete, analytical, facts, certainty, stable, uniform standards and efficiency. These adjectives reflect the concrete factual nature of the accounting profession. The contrasting adjectives capture the more uncertain side of the accounting profession, such as dynamic and unpredictable. The next factor, *boring,* is reflected with the terms boring, dull, tedious, ordinary, and monotonous and repetition. Conversely, adjectives such as exciting, absorbing, fascinating and interesting form the perception of accounting as exciting.

The third factor, *precise,* comprises the adjectives accurate, mathematical, thorough, planned, details and record keeping. It represents the perceived nature of accounting work. The opposite adjectives, such as verbal and spontaneous, reflect a more ad-lib aspect of the accounting profession. The final factor, *compliance driven,* is captured by adjectives such as compliance, structured, cut and dry, fixed and established rules, which represents a rules-oriented view of the accounting profession. The contrasting adjectives take a more adaptable/flexible perception of accounting work by including items like flexible, innovative, changing, adaptable and creative solutions. The identified four factors were then tested.

The results section endeavours to examine any differences in perceptions towards accounting based on whether respondents study accounting or not.

Results

Perceptions of Accounting Profession

The mean scores of the four factors identified via the CFA are shown in Table 2 below. One-sample t-tests were performed on *all* the mean averages (total, studying accounting, and not study accounting) against a value of 3. This figure represents 'neutrality' on the 5-point scale. Additionally, differences between the groups were assessed via independent sample t-tests.

Table 2: Mean Score of the Four Factors

	Total	Studying accounting	Not studying accounting
Definite	3.64	3.66	3.63
Boring	3.56	3.26	3.74*
Precise	3.68	3.59	3.73
Compliance driven	3.53	3.37	3.62**

All mean scores are significantly greater than 3 at the 1% level ($p < 0.010$).

* Differences between groups significant at 1% ($p < 0.010$).

** Differences between groups significant at 5% ($p < 0.050$).

The results show that both groups (studying accounting and not studying accounting) find the profession to be *definite* (t-value = 7.74, $P = 0.000$; t-value = 8.79, $P = 0.005$), *boring* (t-value = 2.96, $P = 0.000$; t-value = 9.35, $P = 0.000$), *precise* (t-value = 6.95, $P = 0.000$; t-value = 10.25, $P = 0.000$), and *compliance driven* (t-value = 4.67, $P = 0.000$; t-value = 8.30, $P = 0.000$). However, a significant difference exists between the two groups regarding the factors *boring* (t-value = -3.83, $P = 0.000$) and *compliance driven* (t-value = -2.28, $P = 0.024$). Respondents who were studying accounting perceived the accounting profession as less boring and compliance driven than those not taking the subject. Although no significant differences were identified for the remaining two factors, accounting students viewed the accounting profession as being less precise than non-accounting students, while opinions on the remaining factor, *definite,* were similar.

Influence of Reference Groups on Career Choice

Respondents were asked to indicate how important various people's opinions were in shaping their career choice using a 5-point Likert scale. The scale ranged from 1 = *Not at all important* to 5 = *Very important*. The mean scores of the four variables representing this construct are shown in Table 3 below, listed in descending order of the total response sample. Differences between the groups were explored using the Mann-Whitney U test.

Table 3: Mean Score for Persons Influencing Career Choice

	Total	Studying accounting	Not studying accounting
Parents	3.93	3.98	3.90
Friends	3.01	2.94	3.04
Career counsellor/adviser	2.88	3.02	2.81
Relatives	2.75	2.94	2.65

Overall, the results illustrate that only parents had any influence on students' career choice, regardless of whether the students studied accounting or not. The other three influences (friends, career counsellor and relatives) seemed to have no real influence, which concurs with the prior literature. The results of the Mann-Whitney U tests found no significant differences between the two groups.

Perceived Perceptions of Professional Status

Respondents were asked to indicate their perception of the status that society places on a list of 10 professions using a 5-point Likert scale. The scale ranged from 1 = *Very low status* to 5 = *Very high status*. The mean scores of the 10 variables representing this construct are presented in Table 4 below, listed in descending order of the total response sample. A Wilcoxon signed ranks test was employed to determine the rankings of the occupations, while differences between the groups were explored using the Mann-Whitney U test.

Table 4: Mean Score for Status of Selected Professions

Profession	Total	Studying accounting	Not studying accounting
Doctor	4.60*	4.60	4.60
Dentist	3.94*	3.84	3.99
Scientist	3.94*	3.89	3.96
Solicitor	3.93*	3.93	3.93
Architect	3.80*	3.73	3.84
Engineer	3.80*	3.65	3.88
Accountant	3.40	3.71	3.24**
Computer specialist	3.19	3.11	3.23
Teacher	2.99	3.04	2.97
Social worker	2.65	2.71	2.63
* Significantly higher status awarded to non-accounting professions ($p < 0.010$)			
** Differences between groups significant at 1% ($p < 0.010$).			

The results from the Wilcoxon signed ranks test showed that secondary students believe that society grants a significantly higher status to six of the nine non-accounting professions listed. They are: doctor ($Z = -8.98$, $P = 0.000$); dentist ($Z = -5.24$, $P = 0.000$); scientist ($Z = -5.15$, $P = 0.000$); solicitor ($Z = -5.02$, $P = 0.000$); architect ($Z = -4.10$, $P = 0.000$); and engineer ($Z = -4.37$, $P = 0.000$). A Mann-Whitney U test revealed that accounting students believe that society holds accountants at a higher status compared with non-accounting students (Mann–Whitney $U = 2063.00$, $Z = -3.056$, $P = 0.002$). This finding confirms the literature, which posits that significant differences occur between accounting and non-accounting students' regarding the status society attaches to accountants.

Perceptions of Accounting Study at School

An additional component of this research project was to examine students' perceptions of the secondary school accounting curriculum given that there is some evidence that accounting is held in higher esteem by accounting students compared with non-accounting students. Respondents were asked to indicate the extent of their agreement or disagreement to statements relating to the study of accounting at secondary school. This was assessed using a 5-point Likert scale. The scale ranged from 1 = *Strongly disagree* to 5 = *Strongly agree*. Items were linked to prior literature that associates accounting study with mathematical and number skills (e.g. Jackling, 2001; Mladenovic, 2000) and that accounting studies are linked with

extrinsic and intrinsic interests (Jackling & Calero, 2006). The mean scores of the five variables representing this construct are displayed in Table 5 below, listed in descending order of the total response sample. Differences between the groups were explored using the Mann-Whitney U test.

Table 5: Mean Score for the Perception of Accounting Study at Secondary Schools

	Total	Studying accounting	Not studying accounting
Requires math skills	3.77	3.56	3.88**
High workload	3.56	3.76	3.45**
Good opportunities exist	3.41	3.69	3.26*
I would perform well	3.23	3.67	2.99*
Level of interest	2.31	3.20	1.85*

* Differences between groups significant at 1% ($p < 0.010$).

** Differences between groups significant at 5% ($p < 0.050$).

The tests revealed significant differences between accounting and non-accounting students across *all* variables in the construct. Specifically, non-accounting students are more likely to associate the study of accounting with a higher prerequisite of mathematical skills than do accounting students (Mann–Whitney $U = 2259.50$, $Z = -2.361$, $P = 0.018$). Moreover, accounting students had a significantly higher interest in accounting (Mann–Whitney $U = 2269.50$, $Z = -6.242$, $P = 0.000$), were more optimistic regarding future work opportunities (Mann–Whitney $U = 2033.50$, $Z = -3.187$, $P = 0.001$), expected to perform better in the subject (Mann–Whitney $U = 1204.50$, $Z = -4.052$, $P = 0.000$), and associated it with a higher workload than non-accounting students (Mann–Whitney $U = 1798.50$, $Z = -2.281$, $P = 0.023$). The results confirm the literature in the area.

However, of particular interest is the decline in students studying Victorian Certificate of Education (VCE) accounting from units 1 and 2 (year 11) to units 3 and 4 (Year 12). Over the past five years from 2004–2008 there has been a significant drop in the number of students who do not enrol in units 3 and 4, although they have completed units 1 and 2.

Figures reveal that around one third of students do not continue to study accounting in Year 12. There may be a number of possible reasons for this such as: students attempting units 1 and 2 find it boring and as a result not attractive enough to continue with it in units 3 and 4. Alternatively students may consider accounting too hard and as accounting is not a prerequisite for university studies they believe it not necessary in Year 12. Of interest is the curriculum of the units 1 and 2 (Year 11). The current course, as per the documentation, states that the course is accredited until December 2011. With the evidence clearly showing that students do not continue with units 3 and 4, this can possibly be linked to the curriculum design in units 1 and 2 (VCAA, 2005). Students may be switched off by the current curriculum

and as a result discouraged from further study in accounting due to their perception of accounting dealing with procedural matters and perceived by many to be uninteresting.

Limitations

The results obtained in this study should be interpreted with a degree of caution. Although best efforts were made to involve secondary schools from as diverse a population as possible, the fact remains that the participating schools in the survey only comprise a small percentage of the total number of schools in the State of Victoria, Australia. Additionally, a 5-point Likert scale was employed which may produce slightly higher mean scores relative to the highest possible attainable score; however, it remains a valid and justifiable approach. Moreover, the measures are self-reported, which can lead to higher levels of inaccurate information being recorded. However, the questionnaire was conducted under anonymity, which should help reduce the incidence of bias. Finally, the research issue would benefit from further replication.

Conclusions

The objective of this study was to investigate the perceptions of secondary school students of the work of accountants and the accounting profession, together with the key factors influencing impressions and the status of accountants in society. The study is the first to investigate these perceptions using a sample of Australian secondary students. Previous studies, particularly from the US, Ireland and New Zealand, have shown that secondary school students hold negative views of the accounting profession and the work of accountants. Overall, the findings from the present study are consistent with studies in other countries. Similarly, the findings suggest that little progress has been made in changing the negative perceptions of the profession despite the distinctly changed role of the accountant in the global business environment.

Implications for Future Research

In the current study, although students studying accounting at secondary school had fewer negative perceptions of accounting, they still held views that were typical of a traditional view of the profession and the work of an accountant. The results suggest that the accounting curriculum at secondary school level continues to perpetuate the mechanistic approach linked to bookkeeping. It is possible that this is reinforced potentially by an outdated curriculum. Further investigation of the role of the curriculum in reinforcing and/or changing perceptions of the accounting profession is warranted. Efforts to influence the content of secondary school accounting curriculum are needed to ensure that accounting is viewed as less definite, precise and compliance driven. With plans to introduce a national curriculum in 2011 for some units, it is recommended that for the other units such as accounting although not part of the 2011 plan, will hopefully be part of the national curriculum in the future. The analysis of the retention of secondary school students studying Accounting at secondary school in Victoria between 2004 and 2008 demonstrates that a revision of the curriculum is warranted. Curriculum revision would appear vital for the profession to attract high quality students.

This study provides important feedback to the accounting profession in Australia and to accounting educators. Although there have been attempts to promote the accounting profession at the secondary school level, particularly by the three accounting bodies in Australia, more needs to be done to change perceptions of secondary school students. It would appear that as a profession we are 'not there yet' in changing perceptions of the profession to promote the study of accounting to high-quality students studying at the secondary school level.

References

Albrecht, W.S. & Sack, R.J. (2000) Accounting education: charting the course through a perilous future, *Accounting Education Series*, 16, American Accounting Association, Sarasota, FL.

Allen, C.L. (2004) Business students' perceptions of the image of accounting, *Managerial Auditing Journal,* 19(2), 235–258. doi:10.1108/02686900410517849

Byrne, M. & Willis, P. (2001) The revised second level accounting syllabus: a new beginning or old habits retained? *Irish Accounting Review*, 8(2), 1–22.

Byrne, M. & Flood, B. (2005) A study of accounting students' motives, expectations and preparedness for higher education, *Journal of Further and Higher Education*, 29(2), 111–124.

Byrne, M. & Willis, P. (2005) Irish secondary students' perceptions of the work of an accountant and the accounting profession, *Accounting Education: an international journal*, 14(4), 367–381.

Cangelosi, J., Condi, F. & Luthy, D. (1985) The influence of introductory accounting courses on career choices, *Delta Phi Epsilon Journal*, 27(1), 60–68.

Chen, C., Jones, K., & McIntrye, D. (2005) A re-examination of the factors important to selection of accounting as a major, *Accounting and the Public Interest*, 5, 14–31.

Cohen, J. & Hanno D.M. (1993) An analysis choice of accounting as a major, *Issues in Accounting Education*, 8(2), 219–238.

Cory, S.N. (1992) Quality and Quantity of Accounting Students and the Stereotypical Accountant: Is There a Relationship? *Journal of Accounting Education*, 10(1), 1.

Dean, R.A., Ferris, K.R. & Konstans, C. (1988) Occupational reality shock and organizational commitment: Evidence from the accounting profession, *Accounting, Organizations and Society* 13(3), 235–250.

Felton, S., Buhr, N. & Northey, M. (1994) Factors influencing the business student's choice of a career in chartered accountancy, *Issues in Accounting Education,* 9(1), 131–141.

Fisher, R. & Murphy, V. (1995) A pariah profession? Some student perceptions and their effect on the decision to major in accounting, *Studies in Higher Education*, 20(1), 45–58.

Furlong, A. & Biggart, A. (1999) Framing 'choices': a longitudinal study of occupational aspirations among 13–16 year-olds, *Journal of Education and Work*, 12(1), 21–35.

Garner, R.M. & Dombrowski, R.F. (1997) Recruiting the best and brightest: The role of university accounting programs and state CPA societies, *Issues in Accounting Education*, 12(2), 299.

Hardin, J.R., O'Bryan, D. & Quirin, J.J. (2000) Accounting versus engineering, law, and medicine: Perceptions of influential high school teachers, in P.M.J. Reckers (Ed.), *Advances in Accounting*, 17, 205–220, Connecticut: JAI.

Hartwell, C.L., Lightle, S.S. & Maxwell, B. (2005) High School students' perceptions of Accounting, *The CPA Journal*, January, 62–67.

Hermanson, D.R. & Hermanson, R.H. (1995) Are America's top business students steering clear of accounting? *Ohio CPA Journal*, 54(2), 26–30.

Holland, J.L. (1973) *The Psychology of Vocational Choice*, Englewood Cliffs, NJ: Prentice Hall.

Inman, B.C., Wenzler, A. & Wickert, P.D. (1989) Square pegs in round holes: Are accounting students well-suited to today's accounting profession? *Issues in Accounting Education*, 4(1), 29–47

Jackling, B. (2001) Student perceptions of tertiary commerce studies: influences of accounting as a major study and career choice, *Published proceedings, ANZAM*, Auckland, N.Z., December.

Jackling, B. & Calero, C. (2006) Influences on undergraduate students' intentions to become qualified accountants: evidence from Australia, *Accounting Education: an international journal,* 15(4), 419–437.

Jeacle, I. (2008) Beyond the boring gray: The construction of the colorful accountant, *Critical Perspectives on Accounting*, 19(8), 1296–1320.

Karnes, A., King, J. & Hahn, R. (1997) Is the accounting profession losing high potential recruits in high school by default? *Accounting Educators' Journal*, 9(2), 28–43.

Lowe, D. & Simons, K. (1997) Factors influencing choice of business major – some additional evidence: a research note, *Accounting Education: an international journal*, 6(1), 39–45.

Luscombe, N. (1988) My Christmas wish-list, *CA Magazine*, 121(11), 3.

Malthus, S. & Fowler, C. (2008) Perceptions of Accounting as a Career: A Qualitative New Zealand Study, *Presented at the 2008 AFAANZ Conference, Sydney*.

Mauldin, S., Crain, J.L. & Mounce, P.H. (2000) The accounting principles instructors' influence on students' decision to major in accounting, *Journal of Education for Business*, 142–148.

Mladenovic, R. (2000) An investigation into the ways of challenging introductory accounting students' attitudes towards accounting as a profession, *Accounting Education: an international journal*, 12(2), 113–133.

Paolillo, J. & Estes, R. (1982) An empirical analysis of career choice factors among accountants, attorneys, engineers and physicians, *The Accounting Review*, 57(4), 785–793.

Parker, L.D. (2000) Goodbye, number cruncher, *Australian CPA*, March, 50–52.

Saemann, G.P. & Crooker, K.J. (1999) Student perceptions of the profession and its effect on decisions to major in accounting, *Journal of Accounting Education*, 17(1), 1–22.

Silverstone, R. & Williams, A. (1979) Recruitment, training, employment and career of women chartered accountants in England and Wales, *Accounting and Business Research*, 9, 105–121

Strasser, S., Ceyhun Ozgur, E. & Schroeder, D.L. (2002) Selecting a business college major: An analysis of criteria and choice using the analytical hierarchy process, *Mid-American Journal of Business*, 17(2), 47–56.

Smyth, E. & Hannan, C. (2000) Spoilt for choice? School factors and third-level entry, *Seminar paper*, The Economic and Social Research Institute, Dublin.

Sugahara, S. & Boland. G. (2005) Perceptions of the Certified Public Accountants by accounting and non accounting tertiary students in Japan, *Asian Review of Accounting*, 14(1/2), 149–167.

Sugahara, S., Kurihara O. & Boland. G. (2006) Japanese Secondary School Teachers' Perceptions of the Accounting Profession, *Accounting Education: an international journal*, 15(4), 405–418.

Tan, L.M. & Laswad, F. (2009) Understanding Students' Choice of Academic Majors: A Longitudinal Analysis', *Accounting Education: an international journal*, 18(3), 233–253.

Tan, L.M. & Laswad, F. (2006) Students' beliefs, attitudes and intentions to major in accounting, *Accounting Education: an international journal*, 15(2), 167–187.

Victorian Curriculum and Assessment Authority (VCAA). (2010a) Accounting: Victorian Certificate of Education unit completion outcomes, available on the internet at: http://www.vcaa.vic.edu.au/vcaa/vce/statistics/2009/section2/vce_accounting_09.pdf. Accessed 17.06.10.

Victorian Curriculum and Assessment Authority (VCAA). (2010b) Senior Secondary Certificate Statistical Information 2009, available on the internet at: http://www.vcaa.vic.edu.au/vce/statistics/2009/section1/Section1_09.pdf. Accessed 20.08.10.

Victorian Curriculum and Assessment Authority (VCAA). (2005) Accounting: Victorian Certificate of Education study design, available on the internet at: http://www.vcaa.vic.edu.au/vce/studies/account/accounting-sd-07.pdf. Accessed 17.08.09.

Wells, P. & Fieger, P. (2005) High school teachers' perceptions of accounting: An international study, Paper presented at the AFAANZ conference, Melbourne, Australia.

Worthington, A.C. & Higgs, H. (2003) Factors explaining the choice of a finance major: the role of students' characteristics personality and perceptions of the profession, *Accounting Education: an international journal*, 12(3), 261–281.

Appendix 1: Perceptions of the Accounting Profession

What follows are 36 pairs of words. Think of them as opposites. Consider each pair and select the word that you feel best describes the accounting profession and/or the work of an accountant. Please use the 5 point scale between the words to express the strength of you opinion in that particular direction. Please place a cross in the appropriate place. E.g. for the first item, if you think accounting is very boring place a cross in box 1. If you think accounting is interesting place a cross in box 5. If you think accounting is neither boring not interesting, place a cross in box 3.

Dynamic	1	2	3	4	5	Stable
Standard operating procedures	1	2	3	4	5	New solutions
Extrovert (outgoing)	1	2	3	4	5	Introvert (withdrawn)
Conceptual	1	2	3	4	5	Analytical
Innovation	1	2	3	4	5	Compliance
Intuition	1	2	3	4	5	Facts
Ambiguity	1	2	3	4	5	Certainty
Planned	1	2	3	4	5	Spontaneous
People-oriented	1	2	3	4	5	Number crunching
Practical	1	2	3	4	5	Theoretical
Tedious	1	2	3	4	5	Absorbing
Fascinating	1	2	3	4	5	Monotonous
Abstract	1	2	3	4	5	Concrete
Effectiveness	1	2	3	4	5	Efficiency
Imagination	1	2	3	4	5	Logic
Thorough	1	2	3	4	5	Superficial
Unpredictable	1	2	3	4	5	Routine
Details	1	2	3	4	5	Overview
Accurate	1	2	3	4	5	Imprecise
Alternative views	1	2	3	4	5	Uniform standards
Changing	1	2	3	4	5	Fixed
Methodical	1	2	3	4	5	Novelty
Record keeping	1	2	3	4	5	Decision making
Benefits society	1	2	3	4	5	Profit driven
Prestigious	1	2	3	4	5	Ordinary
Adaptable	1	2	3	4	5	Inflexible
Mathematical	1	2	3	4	5	Verbal

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