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ACADEMIA'S ROLE IN ACCOUNTING CAREER CHOICE: AN APPLICATION OF THE THEORY OF REASONED ACTION

This paper examines the role of academics in the formation of students' perceptions of accounting and the ability to modify those perceptions. The study made use of a single class career-based lecture and a questionnaire to evaluate students' perceptions of the accounting profession. The findings of the study suggest that a career-based lecture is a useful component of the introductory accounting course and may provide a number of benefits to students and to the accounting profession. In addition to recommending that other academics implement a career-based lecture, the paper presents a recommended format and inclusions.

Introduction

As we approach the new millenium, professional accountants (and other professionals) are faced with a changing environment in education, public practice, and industry. Recently, concern has been expressed that the number and quality of students pursuing a professional accounting designation is declining in Canada (Andrew, 1998). The number of students writing the CICA's Uniform Final Examination in Canada has steadily declined over the past six years, and a United States study indicates a decline in enrollment in undergraduate business degrees and students majoring in accounting over the same period (Garner and Dombrowski, 1997). The decline can be partially attributed to the reduced demand for professional accountants due to the implementation of new technologies combined with the recession of the early 1990s. However, some recruiters in Canada claim that finding quality students is becoming more difficult each year (Andrew, 1998). Although it is possible that fewer students are interested in the profession of accounting due to diminished market demand, negative perceptions and stereotypes of the profession may also play a role.

Accountants tend to be stereotyped as conservative, non-athletic, and boring through images portrayed on television and in the media. Stereotyping is a process in which traits are attributed to people because of their membership in a particular group (McShane, 1995). Changes to the profession over time have resulted in a diversity of individuals and work opportunities and as such stereotypes are inappropriate. This study examines the impact of a career-based lecture on students' perception of the accounting profession and the potential impact on the intention to choose a career. The Theory of Reasoned Action is used to support the study as it has been applied to the prediction of behaviors in a number of fields (Sheppard et. al., 1988). Sheppard et. al. (1988) state that "the Fishbein and Ajzen model has strong predictive utility, even when utilized to investigate situations and activities that do not fall within the boundary

conditions originally specified for the model," indicating that its predictive utility for career choice should be beneficial.

The Theory of Reasoned Action is based on the premise that behavioral intention is the most relevant determinant of a person's behavior (Fishbein, 1975). An individual's behavioral intention is primarily determined by attitudes and subjective norms. In the case of career choice, attitudes toward the choice are affected by personal feelings, perceptions, and knowledge of the careers being considered. Since previous studies (DeZoort et al., 1997) have shown that students can graduate with an improper understanding of the accounting career, this study looks at changes in perception (leading to attitude formation) of the accounting profession as a career by delivery of career-based information. Subjective norms are measures of social-normative influences, which may indicate pressures from external sources to act on a particular behavior (Fishbein, 1975). This study does not consider the impact of subjective norms such as parents' careers on career choice but notes that subjective norms may override attitudes in some instances in formation of a behavioral intention. Based on the Theory of Reasoned Action, the present study holds that the attitude toward the behavior (choosing an accounting career) will change when information is provided and that the change in perceptions/attitude may lead to a different behavior (different career choice) than would have occurred prior to receiving the information since attitude is one of the two key factors in formation of a behavioral intention.

Students require information early in their education if they are to be able to alter career paths and pursue alternative fields of study. This is not to suggest that the objective of providing career information is to attract large numbers of students to the accounting field, rather to provide them with accurate and useful information so they can make informed decisions about their future. DeZoort et al. (1997) suggest that there is a growing body of evidence indicating that many students graduate with inaccurate perceptions of the accounting field. Many students' first experience with accounting is an introductory accounting course that the majority perceive to be quantitatively oriented, boring, and tedious (Cohen and Hanno, 1993). Students making career decisions based on the introductory accounting course (which arguably is not representative of a professional accounting career) and inaccurate perceptions of the career are likely to reach sub-optimal conclusions.

The introductory course may lead individuals who are quantitatively inclined to pursue a major in accounting and dissuade individuals who are analytical and qualitative. This inclination could attract individuals who are not well suited to professional accounting. It is beneficial to have a mixture of quantitative, qualitative, analytical, and technological skills to be successful on examinations leading to a designation, and also, in public practice. A report by several of the large public accounting firms identified communication and interpersonal skills as critical to success in the profession (Perspectives on education, 1989). Providing accurate information to students about the profession may also be beneficial in dissuading individuals who are not well suited to the profession.

A need for change in accounting education has been identified by the academic and professional community in North America and a number of educational revisions have been implemented in recent years. The Accounting Education Change Commission (AECC) released its report "Objectives of Education for Accountants" in 1990 which included the statement that accounting educators should include as a core component of courses "knowledge of the accounting profession" (AECC, 1990). It is unlikely that students can gain a sound understanding of the profession through the limited information on careers included in introductory textbooks so the knowledge must be provided by academics. A recent study examined students' and professors' opinions on the role of academics in providing career information to students. Two

key results of the survey were (1) that students felt professors were the most important source of information they had about the accounting profession, and (2) professors felt they were not providing as much information about the profession as students needed (DeZoort et al., 1997). These results suggest that many programs do not provide adequate career related information to students, yet students are looking to their professors as their primary source of information.

In considering the importance of providing students with career-based information we must remember that professions are competing to attract the "best and brightest". The growth of the technology sector is a potential threat to many disciplines, including accounting. The demand for programmers and other technology experts has grown increasingly as we approach the new millennium and if predictions are correct, there will continue to be demand for many of these individuals following the turn of the millennium. The job market is very attractive and students perceive technology-related careers as challenging, well paying, and interesting. This perception along with social norms which consider technology to be the way of the future may lead many students into a profession which is not ideal for them. To preserve the quality of our own profession we must take a strong look at the educational methods we use to ensure that we both attract the "best and brightest" to the accounting programs and that once they have entered the programs they are provided with accurate and useful information.

Description of the Study

The participant group for the study included three sections of an Introductory Financial Accounting course consisting of sophomore students primarily enrolled in business degrees. The two largest sections composed the test group while the smaller section became the control group for the study. These students were chosen because they were enrolled in the business program and had not formally chosen a major field of study by that point in their education.

The study used a questionnaire to examine students' perceptions of various aspects of accounting careers and professional accounting. The questions were adapted from two previous studies (DeZoort et. al. and Carcello et. al.) and a number of additional questions impacting on perceptions and beliefs were added. The questions were designed to gain an understanding of student attitudes toward the accounting profession as well as evaluate the accuracy of their knowledge of educational requirements, salary, and career opportunities. To eliminate the distortion of results by student discussion and other factors, the survey was administered at the beginning (pre-test) and end (post-test) of the 75 minute lecture to both the test group and the control group. Seven-point Likert scales were used to measure students' responses and the pre-test and post-test were paired to allow for analysis of the impact of the study on the group or on an individual basis. The pre-test and post-test used were identical, with the exception of the pre-test including questions to gather demographic data (Table 1). Both positively and negatively worded questions were included to prevent response bias.

The test group was provided with a lecture and information session covering a variety of topics considered relevant to the accounting profession. The lecture was conducted by three professional accountants (a Chartered Accountant in academia, a Chartered Accountant from public practice, and a Certified Management Accountant from academia) to provide an array of experiences. Educational requirements of the three Canadian professional designations were discussed in some detail to provide the students with an understanding of the qualifications to be achieved including a discussion of the course work and examinations which must be completed. Employment opportunities for professional accountants were highlighted to illustrate the diversity of the job market including the ability to transfer or work internationally within public practice

and industry. All of the session providers gave examples of the non-routine tasks (including industry and public practice) and experiences they had experienced during their careers while also revealing some of the difficulties of working as a professional accountant (time demands, stress, and salary concerns). The students were provided with statistics regarding salaries in public practice and industry within Canada and abroad. The participation of three professionals allowed for an ample number of experiences and opinions to be shared so as to avoid bias while also providing the students with perspectives of different aspects of the profession.

The control group attended a regular class lecture and completed the pre-test and post-test in the same fashion as the test group. The class lecture in which the test was administered was a normal lecture in the accounting course (covering the Statement of Changes in Financial Position) to avoid any information relating to accounting careers being relayed to students. The professor for this class was not involved in the presentation to the test group and informed the class that the survey was part of a study on professional accounting.

Results

An analysis of the survey results indicates a change in students' perceptions of a career in accounting in a number of areas (see Table 2). It was apparent from the results that students were unaware of the educational requirements of becoming a professional accountant as their responses regarding further study were more accurate after learning the process. The ability of professional accountants to work outside of Canada (mean change of 1.4) as well as the fact that the job market for chartered accountants is strong (mean change of 1.3) were also topics which students had incomplete or incorrect information about. Students perceived the work of accountants to be less repetitive than they had originally perceived following the lecture (mean change of 1.0) and disagreed with the statement that accountants tend to deal with numbers all day (mean change of 1.0). The presentation of salary information positively influenced student perceptions regarding income after obtaining a designation (mean change of 0.6) while the attractiveness of starting salaries did not change. The test group responses revealed that students were provided with some valuable information regarding a career in accounting and that overall they perceived a career in accounting to be more attractive (mean change of 0.6) and more interesting (mean change of 0.8) subsequent to the lecture.

Students' responses within the control group varied only slightly (< 0.5) for all questions on the survey indicating no significant change in their perception of accounting during a 'normal' accounting class. Small variances by the control group were expected as the pre-test was collected after completion and identical responses by all participants would be unlikely.

To examine the significance of the perception changes the paired results were further examined (Table 3), and t-values and probabilities were calculated. The results of t-value analysis indicated that significant changes ($t > 1.99$) did occur within the test group but did not occur for the control group (with one exception). The matched-pair results in Table 3 indicate that a large portion of the control group's individual responses were unchanged, as expected. The test group's responses were changed for the majority of the questions, confirming the impact of the lecture on individual students' perceptions.

Discussion and Conclusion

This study's results indicate that a career-based lecture does allow the accounting educator to change the perceptions of students regarding some aspects of a professional accounting career. Overall, responses indicate that the exercise is a valuable one. As educators we should consider implementing a career-oriented lecture in our curriculum to provide our students with valuable information upon which to make important decisions relating to further study and career choice. If the information is to be of use in student career choice it must be provided early in the undergraduate degree, preferably prior to choice of a major field of study.

The study does not indicate that career information will result in attracting a larger number of 'quality' students to the profession or address the need of the profession to carry out its own recruiting efforts through advertising and public information. As discussed earlier, attitude formation tends to be of an enduring nature and may take more than a single lecture to alter. The CICA and other professional associations have implemented advertising campaigns in various forms of the media to raise awareness of the variety of skills professional accountants possess. Although the study does not conclude that a career-based lecture results in a permanent attitude change, it does indicate that the lecture changes the perceptions of an accounting career (overall in a positive direction). Perception is one aspect of attitude formation and as discussed earlier, the Theory of Reasoned Action holds that attitude toward a behavior (career choice in this case) is one of the major determinants of the behavior. Since the attitude toward an accounting career can be modified through a career-based lecture it is likely that this lecture may lead to a better informed and possibly, a different career choice.

Public practice has been under pressure for a period of time to raise salaries and modify the working environment to better reflect the desires of today's graduates. A Coopers and Lybrand International Survey (1997) indicated that business graduates ranked a balanced lifestyle as a more attractive employment characteristic than competitive salary, with salary remaining an important characteristic. A study by Carcello et al. (1991) found that false perceptions are a cause of educational major selection and employment turnover in public practice. The study suggests that academic preparation for the reality of the working environment of professional accountants may be beneficial and the current study finds that the academic session is effective. To maintain the high standards and quality of our profession it is necessary for educators, public practitioners, and professional accountants in industry to ensure that we provide the best information and opportunities to business students seeking to find their place in the world.

The following suggestions may be beneficial with regard to structuring the career-based lecture. Representation by more than one of the professional designations provides students with a better understanding of the similarities and differences of each. Academics, as professionals who have left public practice for a variety of reasons should consider inclusion of an accountant from public practice to reduce biases that should not be relayed to students. The information should include educational requirements, job characteristics (salary, hours, and atmosphere) for both public practice and industry, and requirements to be successful (analytical, teamwork, goal-oriented). As discussed earlier, the objective of the session should be to provide accurate information and therefore inclusion of both attractive and negative aspects of the profession should be included. Handouts from the professional institutes and availability of further information for students seeking additional detail may also be beneficial. A well-rounded session will provide students the opportunity to learn about a profession that they are likely to deal with in some manner in the future and provide the foundation for an informed decision on a choice of major.

The results of this study need to be interpreted with a recognition of potential limitations and biases. The survey has been carried out in only one university which may impact on the outcomes although the population of the university (as in most Canadian universities) draws students from a number of areas which helps to reduce demographic bias. The delivery of information by a short lecture does limit its content, however the participants were asked to provide as much relevant information as possible during the timeframe. Although some bias from the above may have existed, the author feels that the study indicates that the career-based lecture is valuable and would propose that further research be carried out in this area. Future research could evaluate whether the lecture method is truly superior to print only information which could be provided by the professional accounting organizations, determine at what point in students' education the career- information is most beneficial, and whether students are more inclined to pursue an accounting career.

In conclusion, the results of this study suggest that a single lecture can provide useful information to students and alter their perception of a professional accounting career. The Theory of Reasoned Action implies that this change in attitude is one of two key factors leading to a change in behavior, the choice to pursue or not pursue an accounting career. Ancillary benefits of the session include increased awareness of the abilities of professional accountants and respect for the designations due to the awareness of the additional educational and experience requirements. Those students who do not pursue an accounting designation may be more inclined to consult a professional accountant in their future business endeavours having an appreciation for the variety of services they provide (this has been the objective of recent CICA marketing campaigns). Students who decide to pursue a major in accounting and a designation are equipped with knowledge of the environment they are entering and may be better suited to the profession. The benefit of providing career-based information to students is a worthwhile use of one class lecture as it allows them to make better informed decisions about their futures.

**Table 1
Demographic Data**

		<u>Test Group</u>		<u>Control Group</u>		<u>Total</u>	
		<u>Number</u>	<u>Percentage</u>	<u>Number</u>	<u>Percentage</u>	<u>Number</u>	<u>Percentage</u>
Gender:	Female	41	50	6	27	47	45
	Male	41	50	16	73	57	55
Age:	19 or under	61	74	11	50	72	69
	20-22	18	22	6	27	24	23
	23-25	2	2	4	18	6	6
	Over 25	1	1	1	4	2	2
Average Grades:	50-65	26	32	11	50	37	36
	66-80	45	55	8	36	53	51
	Over 80	11	13	3	14	14	13
Preference of Major:	Management	12	15	4	18	16	15
	Marketing	7	8	0	0	7	7
	Accounting	3	4	1	5	4	4
	Information Systems	52	63	15	68	67	64
	Other	8	10	2	9	10	10

**Table 2
Survey Results**

	Statement	Test Group				Control Group		
		Pre-Test Mean	Post-Test Mean	Mean Change		Pre-Test Mean	Post-Test Mean	Mean Change
1	An accounting career is challenging.	5.6	5.8	0.2		5.9	5.7	(0.1)
2	A Canadian professional accounting designation limits your opportunities to Canada.	3.6	2.2	(1.4)		3.4	3.7	0.3
3	An accounting career is interesting.	3.6	4.4	0.8		4.4	4.0	(0.3)
4	Accountants are ethical.	4.8	5.0	0.2		5.0	4.8	(0.2)
5	Accountants have a broad knowledge of business.	5.6	5.7	0.1		5.9	5.7	(0.2)
6	Television portrays accountants as interesting people.	3.0	3.1	0.1		3.1	3.1	0.0
7	The starting salaries of chartered accountants are attractive.	5.1	5.1	0.0		5.1	5.0	(0.1)
8	Work in accounting firms is repetitive and monotonous.	4.7	3.7	(1.0)		4.5	4.3	(0.2)
9	The job market for chartered accountants is strong.	4.7	6.0	1.3		4.8	4.9	0.1
10	Accountants require limited computer skills.	3.4	3.5	0.1		3.0	3.2	0.2
11	Accountants tend to have limited athletic ability.	3.0	2.9	(0.1)		3.5	3.5	0.0
12	Rules, procedures and work hours tend to be very rigid in accounting firms.	4.3	4.1	(0.2)		4.4	4.5	0.2
13	Job security in accounting firms is very high.	4.5	5.1	0.6		4.3	4.8	0.5
14	Accountants deal with numbers day after day.	5.5	4.5	(1.0)		5.5	5.3	(0.2)
15	Mergers in accounting firms make them more attractive to work for.	4.2	4.5	0.3		4.1	4.4	0.2
16	An accounting career provides ample time for family and leisure activities.	4.3	4.5	0.3		4.2	4.1	(0.1)
17	After completing an undergraduate degree you must study further to obtain a professional designation.	5.2	6.2	1.0		5.1	5.0	(0.1)
18	The income of a Chartered Accountant after a few years experience is typically very high.	5.1	5.7	0.6		5.2	5.3	0.0
19	Accounting does not change much over time.	4.2	3.9	(0.2)		3.6	3.9	0.3
20	A career in accounting is an attractive one.	3.8	4.4	0.6		3.8	4.0	0.2

Table 3
Change in Individual Perceptions

	Statement	Test Group			Control Group		
		Negative ¹	Unchanged	Positive	Negative ¹	Unchanged	Positive
1	An accounting career is challenging.	15%	60%	26%	23%	68%	9%
2	A Canadian professional accounting designation limits your opportunities to Canada.	71%	18%	11%	9%	73%	18%
3	An accounting career is interesting.	10%	45%	45%	23%	77%	0%
4	Accountants are ethical.	23%	40%	37%	27%	68%	5%
5	Accountants have a broad knowledge of business.	23%	51%	26%	27%	68%	5%
6	Television portrays accountants as interesting people.	18%	61%	21%	14%	68%	18%
7	The starting salaries of chartered accountants are attractive.	28%	38%	34%	18%	73%	9%
8	Work in accounting firms is repetitive and monotonous.	60%	21%	20%	32%	50%	18%
9	The job market for chartered accountants is strong.	6%	13%	80%	5%	77%	18%
10	Accountants require limited computer skills.	28%	41%	30%	14%	68%	18%
11	Accountants tend to have limited athletic ability.	23%	59%	18%	9%	82%	9%
12	Rules, procedures and work hours tend to be very rigid in accounting firms.	37%	40%	23%	18%	55%	27%
13	Job security in accounting firms is very high.	13%	35%	51%	9%	45%	45%
14	Accountants deal with numbers day after day.	57%	26%	17%	45%	32%	23%
15	Mergers in accounting firms make them more attractive to work for.	16%	51%	33%	9%	68%	23%
16	An accounting career provides ample time for family and leisure activities.	15%	44%	41%	18%	73%	9%
17	After completing an undergraduate degree you must study further to obtain a professional designation.	5%	35%	60%	23%	68%	9%
18	The income of a Chartered Accountant after a few years experience is typically very high.	16%	26%	59%	23%	50%	27%
19	Accounting does not change much over time.	41%	33%	26%	18%	50%	32%
20	A career in accounting is an attractive one.	13%	45%	41%	5%	73%	23%

¹ The terms negative and positive indicate the shift in responses on the Likert scale and are not intended to suggest that the responses are better or poorer. Depending on the wording of the question certain responses would be expected to move in a negative direction.

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