The Role of Perceptions Toward the Accounting Profession by Japanese Tertiary Business Students in the Process of Career Choice

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ABSTRACT

This study aims to investigate tertiary business students' perceptions of the CPA in Japan. A questionnaire-based survey was administered to students in Japanese tertiary institutions – at both the undergraduate and graduate level. Samples were collected from both accounting and non-accounting students.

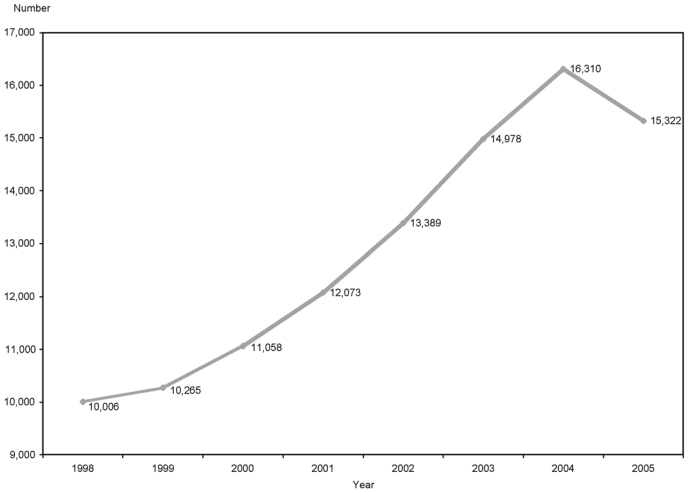
The analysis of perceived skills needed for success in the CPA revealed that non-accounting students perceived communication skills as less necessary compared to accounting students. This study also revealed that accounting students' perceptions of intrinsic values were more highly valued compared to those of non-accounting students. As for job market factor, one distinctive finding was that non-accounting students perceived CPA careers to be male dominated compared to accounting students. This may discourage female candidates to choose a CPA pathway.

Keywords: *Career Choice, Accounting Profession, Certified Public Accountants; Certifed Public Accountant, Perceptions, The Best and Brightest Issue*

INTRODUCTION

It has been observed that the number of Certified Public Accountants (CPA) examinees has drastically dwindled in Japan over recent years. Figure 1 shows that such examinees dropped by more than 1000 during 2005 compared to the previous year. Besides, we have also seen the number of students studying accounting majors in different venues around the world dropping significantly over the latest decade. This phenomenon is commonly referred to as the "best

Figure 1: Longitudinal data showing CPA examinees in Japan



Source: Financial Service Agency: FSA (http://www.fsa.go.jp/indexe.html)

and brightest issue". Accounting professional bodies and academia have struggled with the issue as to why the accounting profession remains unpopular among our brightest business students. Such an occurrence has never been seen before in Japan since the introduction of the CPA scheme that was introduced just after World War II. Even more worrying is the fact that accounting literature in Japan has been virtually silent regarding this issue.

So how does this "best and brightest issue" arise? Albrecht & Sack (2000) analyzed similar incidents occurring in the United States and suggested six major reasons why this happens. Reasons included that the unpopularity of the accounting profession by business students is caused partly because of the misinformation and lack of information regarding accounting and accounting career paths. As a result of these wrong messages negative perceptions are widely dispersed.

Eventually, it is easy to imagine that students' perception of certain careers could play an important role in their major study or vocational choice. Prior lit-

erature has also empirically found that a preferable perception of accounting is positively correlated with a rewarding career choice in accounting (Hermanson *et al*., 1995; Felton *et al*., 1995; Allen, 2004; Tan & Laswad, 2005).

The question now arises as to how we can encourage our "best and brightest" students to attempt the CPA examinations and follow an accounting career in Japan. The first step to tackle this issue is to develop appropriate strategies. Firstly we must strongly encourage students whose primary goal is to become a CPA not to change their vocational decision. Secondly, we must inspire and motivate those students who currently do not expect to be a CPA (ie non-accounting students) the rewards and virtues that await them by choosing a CPA career.

To achieve these two undertakings, we need to investigate student perceptions of the CPA. Once we know how these students perceive the accounting profession, we will be in a better position to develop appropriate guidelines and strategies that could attract them into the profession. Additionally, we need to focus on the differences in perceptions between accounting students and non-accounting students. This investigation will bring us to identify unique characteristics held by non-accounting students. This will hopefully enable us to develop better strategies in order to encourage these students to embark on an accounting career.

Consequently, this study aims to examine tertiary business students' perceptions of the accounting profession and how such perceptions influence students' career choices. Perception analysis will bring us significant strategies in which to address this "best and brightest issue".

The next section will provide prior literature reviews in an attempt to understand the historical perspective on this issue. From this examination, several hypotheses will be developed and empirically analyzed. In conclusion, this paper will describe the findings, which will also draw strategies and implications in an attempt to address the "best and brightest issue" in Japan.

LITERATURE REVIEW

There have been considerable previous studies that have addressed various factors that affect students' career choice over many decades. Among this research, Brown *et al*. (2002, p.4) claims Parsons (1909) as being the forerunner who advocated the conceptual framework in a person's career choice.

Several researchers attempted to expand Parson's theory, by introducing and developing "the trait and factor theory". Much of the current career choice research originated from this trait and factor theory. For example, Ginzberg *et al*. (1951) added a psychological flavor to Parsons (1909)'s study and continuously refined the core concept of its theory (Ginzberg, 1972).

Since the trait and factor theory was widely applied for psychological development of general vocational selection theory, various accounting literature has also addressed factors influencing students' career choice in the accounting profession. For instance, Thielens (1966), Ashworth (1969), Carpenter & Strawser (1970) and Evans (1974) conducted empirical studies to identify the relative importance of the psychological traits and factors held by accounting graduates as they choose their careers. These studies attempted to determine students' preference toward certain attributes that may influence their future career destinations.

Over time, a new type of vocational theory emerged from the original trait and factor theory. This also had a great impact on accounting literature with regard to career choice. Super (1953; 1984; 1990) and Super *et al*. (1996) for example have exposed a new set of vocational selection theories. Their research saw the birth of the idea of "self-concept". This is a perceived image that career seekers have or would like to have toward certain occupations. Under this theory, career choice is regarded as the implementation of self-concept.

Applying Super's theories to accounting, DeCoster & Rhode (1971) and

Buckley & McKenna (1973) discovered, via empirical testing, that accounting students personally possess more positive and favorable images toward accountants than the stereotype of which the general public imagine accountants to be. Similarly, Taylor and Dixon (1979) and Inman *et al*. (1989) found that non-accounting business students have a generally less positive image toward the accounting profession compared to students who study accounting majors.

Investigation of the self-concept and the stereotype toward accounting profession has been currently rebadged as the studies of ones' perception, attitude or opinions. These notions still maintain a prominent position in accounting literature. For example, Hermanson *et al*. (1995) investigated the effectiveness of influential factors on a students' career choice and concluded that the influential power of these factors was basically derived from their perception of the accounting profession. Felton *et al*. (1995) also employed an integrated social psychology framework such as the Theory of Planned Behavior to specify the perceived components of a students' career choice in accounting. Similar to Felton *et al*. (1995), both Allen (2004) and Tan & Laswad (2005) focused on students' perception of outcomes of being an accounting professional under the Theory of Planned Behavior. They also examined the attributes that may affect a students' choice of an accounting major in their degree structure.

Compared to these overseas studies, very limited research has been undertaken in Japan on issues such as the vocational choice behaviour by business students. Sugahara *et al*. (2005) for example investigated high school teachers' perception of 24 attributes for several professions. The ANOVA analysis of this study found that their perceptions of the accounting profession were relatively lower for most of the tested attributes compared to other professions such as medicine, engineering and law. Teachers in high schools are likely to have a strong impact on students' career choice. Empirical findings in this study also showed that there is a necessity to understand the actual image and perceptions of the accounting pro-

fession before we develop strategies to tackle the "best and brightest issue".

Similar to teachers' perceptions of accountants, students' perceptions seem likely to have a more direct and stronger influence on their chosen vocation. Sugahara & Boland (2006) attempted to examine, via factor analysis, the influential factor profiles structured using several vocational attributes toward general career choice for both accounting and non-accounting students in Japan. This study identified differences in specific patterns of influential factors between two groups of business students. It discovered that accounting students regarded the intrinsic value of the job as the most important factor while non-accounting students considered career prospects as the most important factor in their profile.

Although Sugahara & Boland (2006) attempted a new exploration of business students' career choice for the accounting profession in Japan, no study has investigated students' actual perception toward the accounting profession. Consequently, this current study aims to investigate perception of the accounting profession by business tertiary students in Japan.

HYPOTHESIS DEVELOPMENT

To gain an insight into this study, we examined business students' perceptions classified according to several attributes using the 6 categories below. These attributes and categories were mainly selected from previous literature regarding both career choice within the accounting profession and a students' major choice of accounting in their studies.

1) Perceived Skills Needed For Success in Accounting Professions

Students usually have a particular image toward skills required for certain occupations. These images may attract people who possess these skills or who would like to obtain these skills in order to enter such occupations. The AECC Position Statement No.2 (AECC, 1992) suggested the introductory accounting

course will shape a students' perception of the aptitudes and skills needed for successful career opportunities. Additionally, these factors are supposed to play an important role in students' career choice in the accounting profession. Accordingly, perception of skills required is more likely than not to drive their career choice.

Hermanson *et al*. (1995) for example, examined students' perceptions of skills needed in the accounting profession and calculated mean scores in order to evaluate each rating. The results revealed significant differences in the importance of communication skills and creativity between accounting and non-accounting students. This examination propelled an attempt to investigate difference in perceptions of skills required for the accounting profession.

To investigate this issue the following hypothesis was developed:

H 1: There is no significant difference in perceived skills required for success in the accounting profession between accounting students and non-accounting students.

2) Human Influences

Much previous literature has undertaken the testing of the human aspect influence -**Human Influences**. For instance, Paolillo and Estes (1982) examined the influences of 12 factors including teachers' influence on undergraduate career choice. Gul, *et al*. (1989; 1992), Inman *et al*. (1989), Ahmed, *et al*. (1997), Mauldin *et al*. (2000) explored the influences from peer, friends of family, professors at the university and practitioners in the real world.

Further related research conducted by Cohen & Hanno (1993), Felton, *et al*. (1995),[1)] Allen (2004) and Tan & Laswad (2005) applied the social psychologi-

1) Felton, *et al*. (1995) applied the Theory of Reasoned Action (the TRA). The TRA is the refined theory from TPB, which also allow researchers to examine the relation of ↗

cal framework called "The Theory of Planned Behaviors" (TPB) to examine the influence of human factors. According to the TPB, career choice is affected by three elements; 1) attitude toward the behavior; 2) subjective norm and 3) perceived behavioral control. Subjective norm is defined as the social pressure from someone related to the decision maker. Empirical analysis of these studies produced evidence that the subjective norm is significantly correlated with students' career intention and behavior. To focus on human influence, we developed the following hypothesis:

H 2: There is no significant difference in human influence in career choice between accounting students and non-accounting students.

3) Intrinsic Value

Intrinsic Value is regarded as one of the most important factors in career choice. Such values are specifically defined in prior studies such as Felton *et al*., (1994) and Ahmed *et al*., (1997) as the factor related to someone's satisfaction derived from jobs. This satisfaction provides vocational decision makers the chance to be creative, autonomous, intellectually challenged and work within a dynamic environment.

To describe this factor, other studies used different titles/headings such as non-financial characteristics of a job (Hermanson *et al*., 1995), attitudes toward career (Felton *et al*. 1995) and beliefs (Auyeung & Sands, 1997) to investigate job satisfaction, nature of the work and genuine interests respectively. However, these categories made the component characteristics more obscure, because those group titles contained an array of different attributes. To obtain a clear understanding of influential vocational factors, we labeled **Intrinsic Value**. Accord-

↘ intention with behavioral beliefs and subjective norm.

ingly, the following hypothesis was developed to examine these intrinsic value phenomena.

H 3: There is no significant difference in perception of the intrinsic values between accounting students and non-accounting students.

4) Career Prospects

Several prior studies have examined students' perception of "**Career Prospects**" in the accounting profession. This factor usually refers to advancement opportunities (Horowitz and Piley, 1990) and social status (Cohen & Hanno, 1993; Tan & Laswad, 2005). Although these studies primarily focused on a student's major decision, it is certainly thought that this factor has a strong impact on students' career choice especially toward the accounting profession (AECC & AAA, 2000).

Moreover, financial rewards such as high initial and high prospective salaries have also been regarded as one of these "**Career Prospect**" factors that affect a students' career choice decision. There is still controversy as to whether these attributes effectively influence a person's career choice (Paolillo & Estes, 1982; Kochanek & Norgaard, 1985; Inman, *et al*., 1989; Adams *et al*., 1994; Felton *et al*., 1994; Ahmed *et al*, 1997; Haswell & Holmes, 1988). Regardless of whether the directions of influence are negative or positive, the present study will include these financial attributes in the category of "**Career Prospects**".

While several prior studies have examined similar attributes under different factors such as social issues (Hermanson *et al*., 1995) and materials (Auyeung & Sands, 1997), these factors were too narrowly defined to describe all four attributes appropriately as one grouped factor category. As a result the following hypothesis was tested:

H 4: There is no significant difference in perception of career prospects between accounting students and non-accounting students.

5) Job Market Factor

The variety of factors relating to job market conditions is believed to have a strong influence over students' career choice activities. For example, some prior studies indicated elements of job variety & adventure, flexibility in career options, job availability and job security as the influential factors in students' career choice (Paollilo & Estes, 1982; Kochanek & Norgaard, 1985; Ahmed *et al*., 1997).

This category also contains the working environment attributes such as length of the job and other physical working conditions that exist in the workplace (Buckley & McKenna, 1973). The following hypothesis was created to help shed insight into students' perceptions of the "**Job Market Factor**".

H 5: There is no significant difference in perception of job market factors between accounting students and non-accounting students.

6) Opportunity Cost of becoming a CPA

Generally, opportunity cost of choosing a certain profession or not could be one of the biggest issues for vocational decision-makers. It is assumed that people choose a career with consideration to the balance between cost and benefits generated from the final decision.

According to the psychology theory known as the TPB (Theory of Planned Behavior), certain behavior should be reflected in the opportunity cost. Therefore, persons' intention to pursue a CPA career or not could be explained by the cost of becoming a CPA. Applying this theory to career choice analysis, Felton *et al*. (1995) explored differences in perception of several costs such as "no time

to relax in the first few years" and " too many hurdles to qualify" between accounting students and non-accounting students. This study discovered significant differences in perception relating to the cost of becoming a CPA.

Similar to Felton's study, we replicated a statistical test, reflected in the following hypothesis to investigate the difference in students' perception on the opportunity cost factor.

H 6: There is no significant difference in perception of opportunity costs of becoming a CPA between accounting students and non-accounting students.

RESEARCH METHOD

Data Collection

The data used in this study was collected via questionnaires completed by students who were studying at Japanese undergraduate and graduate universities. These students were mainly majoring in business related subjects such as business administration, finance, insurance, commercial law, accounting and so on. Our sample also included students studying in specialized accounting schools, which were established as Japanese new professional graduate schools in 2003 to provide students a high quality professional accounting education. Questionnaires were administrated in the classroom at three undergraduate schools, three graduate schools and two accounting schools toward the end of first semester in 2005.

Total samples collected were 463. After eliminating unusable samples, 373 effective responses (80.56% effective response rate) were obtained. **Panel A** of **Table 1** shows our sample descriptive information. This comprised 279 males (74.79%) and 94 females (25.20%), and also consisted of 99 students (26.54%) who wanted to become a CPA and 274 students (73.46%) who did not want to become a CPA. When it comes to majoring in accounting, Japanese tertiary edu-

Table 1: Descriptive Information

Panel A: General Information

	Accounting students	Non-accounting students	Total
Number of Students	99	274	373
Average age (Min - Max)	25.3 (19–53)	26.48 (18–57)	26.17 (18–57)
Gender			
Male	80	199	279
Female	19	75	94
Year status			
First Year for Undergrad	0	0	0
Second Year for Undergrad	25	83	108
Third Year for Undergrad	10	26	36
Fourth Year for Undergrad	9	35	44
First Year for Grad	53	96	149
Second year for Grad	2	34	36
Academic status			
Undergraduate	44	141	185
Graduate (Accounting school)	55 (51)	133 (32)	188 (83)

Panel B: Timing of Career Choice of Business Students

	Accounting students	Non-accounting students	Total
Pre-high school	9 (9.1%)	10 (3.6%)	19 (5.1%)
High school	22 (22.2%)	33 (12.0%)	55 (14.7%)
First year of Uni.	13 (13.1%)	13 (4.7%)	26 (7.0%)
Second year of Uni.	11 (11.1%)	17 (6.2%)	28 (7.5%)
Third year of Uni.	14 (14.1%)	46 (16.8%)	60 (16.1%)
Forth year of Uni.	14 (14.1%)	67 (24.5%)	81 (21.7%)
Graduate school	5 (5.1%)	17 (6.2%)	22 (5.9%)
Still undecided	11 (11.1%)	71 (25.9%)	82 (22.0%)
Total	99	274	373

cation is unique in that students frequently major in accounting even though they may not want to become a CPA. This is because the CPA law allows people to take the CPA exam without necessarily graduating from accredited universities in Japan.

The data regarding the question of timing for a students' career choice is reported in **Panel B** of **Table 1**. As indicated the majority of accounting students decided to become a CPA when they were in high school (22.2% of accounting students). Nelson, *et al*. (2002) reports the results of consecutive research for ongoing longitudinal studies found that in the US the timing of decision-making for majoring in accounting was during sophomore in college followed by the final year/s in high school. The data obtained in the present study is consistent with Nelson *et al*. (2002).

Contrary to this above outcome, about one quarter of non-accounting students still did not have clear visions with regard to their career option. This is because 25.9% of them replied that they had not decided on their career pathway at this stage. Another 24.5% indicated that they decided/would decide their vocational choice during their fourth year of university.

The data collection technique was anonymous with respondents not required to record their names or ID. To maintain this anonymity, the surveys were administrated by researchers who were not responsible for the course delivery. The respondents were given class time to complete the questionnaire with forms collected immediately upon completion.

Questionnaire Development

The questionnaire collected students' background information and their responses to several influential attributes in accordance with the hypotheses shown above (see **Table 2**). **Panel A** indicates the necessary skills that will most likely lead to success in the accounting profession. Students were asked to choose the top 10 significant skills and place each one in order. **Panel B** describes several influential attributes covered in our hypotheses development. Students were asked to rate all 30 attributes in the 5 categories on a five-point Likert scale. A score of 1 on this scale indicated the attribute is of no importance

Table 2: Factors Influencing Students Career Choice

Panel A: 19 Skills likely to give success in the Accounting Profession

1	Excellent Quantitative Skills	11	Ability to think critically about issues
2	Excellent Computing and Related Skills	12	Analytical skills
3	Excellent Accounting Knowledge	13	Excellent Problem Solving Skills
4	Skills for Applying Accounting Techniques	14	Ability to identify the relevant data in a case
5	Broader Liberal Arts	15	Creativity
6	Broader Business Related Knowledge	16	Excellent Interpersonal Skills
7	High Ethics	17	Excellent Negotiation Skills
8	Excellent Communication Skills	18	Leadership
9	Judgment Skills	19	Time Management
10	Skills in Interpreting Data		

Panel B: Influential Attributes

Human Influences	Parents Peers (Classmates) Professors or lecturers in University Friends of family High school teachers or counselors Professional Practitioners
Intrinsic Value	Accounting Profession (AP) is interesting AP is glamorous AP has many challenges AP gives great satisfaction AP challenges you intellectually AP allows for independence / autonomy AP is a job that positively contributes to society
Career Prospects	AP provides excellent prospects AP gives you powerful authority AP gives good advancement opportunities AP has a high social prestige AP gives you a high salary AP gives you a high initial salary
Job Market Factor	AP offers good level of job availability AP has job security AP allows you to enjoy quality family life AP require you to work long hours AP is male dominated AP provide women good opportunities
Opportunity Costs	You have no time to relax in the first few years from being a CPA. It takes too much time to sit for a CPA exam. It costs a lot of money to sit for a CPA exam. Being a CPA requires difficult entry qualification. Being a CPA requires one to bare personal liabilities for any malpractices.

in career choice and a score of 5 indicated that the attribute is very important.

Statistical Analysis

Mean scores of each response were calculated to compare students' perceptions among the various attributes. A t-test analysis was then conducted to test any significant differences in perceptions of attributes with regard to the accounting profession between accounting students and non-accounting students.

RESULTS AND INTERPRETATIONS

Perceived Skills Needed For Success in Accounting Professions

The difference in perceptions toward skills for success in the accounting profession between both accounting students and non-accounting students are reported in **Table 3**. Both groups rated excellent accounting knowledge and ethical behavior highly and perceived quantitative skills, computing skills, creativities and leadership skills relatively lower.

The distinctive difference between both groups was shown in the rating of "excellent communication skills". While accounting students regard communication skills as relatively significant for a CPA career, non-accounting students perceived this skill as being relatively insignificant. This result supports the evidence in the previous anecdotal study by Albrecht & Sack (2000) that warned about existing public misunderstanding and misconception of the accounting professions where people tend to perceive communication skills as being insignificant.

The results of the present analysis may also provide empirical evidence that non-accounting students perceived the CPA with the unfavorable image of bean counters who are willing to work only with numbers. It is necessary to address this misunderstanding.

Table 3: Perceived Skills Needed For Success In Accounting Professions

	Accounting Students		Non-Accounting Students	
	Rank	Mean (S.D.)	Rank	Means (S.D.)
Excellent Accounting Knowledge	1	7.00 (3.692)	1	6.34 (3.910)
High Ethics	2	5.53 (3.918)	4	3.87 (3.922)
Skills for Applying Accounting Techniques	3	5.17 (3.826)	2	5.93 (3.876)
Excellent Communication Skills	4	4.50 (3.458)	10	2.88 (3.390)
Judgment Skills	5	3.76 (3.136)	7	3.41 (3.295)
Analytical Skills	6	3.72 (3.120)	3	4.81 (3.724)
Critical Thinking	7	3.64 (3.174)	6	3.54 (3.283)
Broader Business Related Skills	8	3.05 (3.420)	9	2.94 (3.278)
Skills in Interpreting Data	9	2.71 (2.956)	5	3.84 (3.289)
Excellent Problems Solving Skills	10	2.67 (2.888)	8	2.95 (3.109)
Excellent Interpersonal Skills	11	2.30 (3.253)	13	1.69 (2.702)
Excellent Negotiation Skills	12	2.05 (2.945)	15	1.63 (2.747)
Broader Liberal Arts	13	2.00 (3.115)	14	1.67 (2.640)
Time Management	14	1.87 (2.600)	12	2.11 (2.736)
Abilities to Identify Relevant Data	15	1.43 (2.408)	11	2.17 (2.851)
Excellent Quantitative Skills	16	0.92 (2.274)	16	1.53 (2.893)
Excellent Computing and Related Skills	17	0.73 (1.837)	17	1.00 (2.270)
Creativities	18	0.72 (2.012)	19	0.46 (1.619)
Leadership	19	0.58 (1.465)	18	0.55 (1.702)

Human Influences

Table 4 shows t-test results for several human influences. This analysis revealed that professional practitioners were ranked the highest in terms of mean scores' assessment for both accounting students and non-accounting students, while the difference between both students groups for its attribute were not statistically significant. Accordingly, regardless of students' intentions on career choice, providing more chances to meet and talk with actual CPA practitioners will be effective in trying to promote and attract our best business tertiary students. For example, guest lectures by the CPA at universities may be effective in achieving this goal.

The influence from parents reported significant difference in perception

Table 4: The Results of t-test for Human Influences

	Accounting Students	Non-accounting Students	p-value
Parents	3.46	3.12	0.019***
Peers (Classmates)	3.16	3.01	0.251
Professors or lecturers in Uni.	3.12	2.98	0.330
Friends of Family	2.02	1.95	0.541
High School Teachers or counselors	2.20	2.13	0.581
Professional Practitioners	3.65	3.77	0.388

Applied one tail t-tests. *** Significant at the level of less than 0.01

between accounting and non-accounting students. Perceived influence from parents for accounting students was measured higher than on-accounting students. That is, accounting students perceived parents to have a relatively stronger impact on their career choice toward the CPA compared to non-accounting students when deciding their vocational choice. Consequently, our **hypothesis H2** was rejected at the less than 5% level to the extent of parents' influence.

It is not clear whether or not this parental feature revealed by the present study is unique to Japan. It may be that some parents work in certain accounting areas where they have succeeded and so they wish their children to follow in the accounting profession. If this is true, then the general public enhancement of the CPA profession could prove effective to positively increase the perception of non-accounting student parents as well.

Although many previous studies overseas such as Albrecht & Sack (2000), Hardine *et al*. (2000) and Wells & Fieger (2004; 2005) suggested high school teachers have a strong impact on students' vocational choice, the results of our present study was inconsistent with these prior results. The results indicated that impact from high school teachers and counselors is weak in comparison to other influential people and there was also no significant difference between the two student groups.

Importance Mean Score Rating

To compare the comprehensive structure of students' perceptions between accounting and non-accounting students, the top five and bottom five mean scores were chosen from 24 attributes including intrinsic value, career prospects, and job market factors. To conduct this investigation, we excluded attributes of both human influence and opportunity costs from the comparison. Similarly, attributes from human influences were excluded because students were asked their perception of human influences toward general career choice which would make such a comparison difficult. Attributes from Opportunity Costs were also ignored because they were rated contrary to other attributes, which could give distorted results. **Table 5** contains **Panel A** and **Panel B**, which reports the top five highest and the bottom five lowest ranked attributes for both students' groups respectively.

Comparative analysis demonstrated that accounting students highlighted three

Table 5: Importance Rating for All Attributes

Panel A: The Top Five Highest Perceptions for both Tertiary Student Groups

Accounting Students		Non-accounting Students	
AP is interesting	4.69	AP gives you a high salary	4.49
AP is glamorous	4.65	AP allows to enjoy quality family life	4.11
AP requires difficult entry qualification	4.60	AP challenges you intellectually	3.97
AP has many challenges	4.54	AP provides advancement chances	3.97
AP has a high social prestige	4.27	AP provides women good advancement chance	3.79

Panel B: The Five Lowest Perceptions for both Tertiary Student Groups

Accounting Students		Non-accounting Students	
AP is male dominant	2.67	AP requires you to work long hours	2.68
AP allows you to enjoy quality family life	3.05	AP allows you to enjoy quality family life	2.77
AP provides excellent prospects	3.27	AP is interesting	2.88
AP provides good advancement chances	3.37	AP gives great satisfaction	2.96
AP requires you to work longer hours	3.52	AP gives you powerful authorities	2.98

specific attributes from the category "**Intrinsic Value**" among the top five perceptions. Conversely, attributes picked up as the top five for non-accounting students were quite diverse: one from intrinsic value, two from career prospects and two from job market factors. One peculiar feature for non-accounting students was that the mean scores among the top five attributes were relatively lower. Only two attributes among them were over 4.0 and the remaining three scores were less than 4.0. That is, generally speaking, non-accounting students perceive the CPA as being an unfavorable place to be.

In relation to the bottom five attributes, accounting applicants appear to have excellent intrinsic value images of the CPAs' and these perceptions surpass the disadvantages or bad images from being a CPA.

Similar to accounting students, the bottom five attributes for non-accounting students came from various diverse categories. Also similar to the top five attributes, non-accounting evaluations for the bottom five factors were also relatively lower. To attract them to the accounting profession, a continuous effort should be demanded in an attempt to raise the scores of the attributes in all categories.

To conduct deeper investigation into those attributes, separate analyses for each category were conducted as follows:

Intrinsic Value

The differences in perception of intrinsic value for the CPA are reported in **Table 6**. In this analysis, all seven attributes that belong to this category were ranked higher for accounting students than those for non-accounting students. Moreover, six attributes out of seven represented significant differences at the level of less than 0.01 between the two student groups, resulting in a rejection of hypothesis **H3**.

It is interesting that mean scores for accounting students were relatively

Table 6: The Results of t-test for Intrinsic Value

	Accounting students	Non-accounting Students	p-value
Accounting Profession (AP) is Interesting	4.69	2.88	0.000***
AP is glamorous	4.65	2.52	0.000***
AP has many challenges	4.54	2.96	0.000***
AP gives great satisfaction	4.19	2.96	0.000***
AP challenges you intellectually	4.19	3.97	0.060
AP allows for independence / autonomy	3.95	3.35	0.000***
AP is a positively contributes job to society	4.14	3.07	0.000***

Applied one tail t-tests. *** Significant at the level of less than 0.01

higher, while non-accounting students rated them mostly lower. The mean score for non-accounting students' perceptions were found to be less than 3.0 at the four attributes out of seven.

These results reveal that accounting students tend to consider the intrinsic value for the CPA as relatively favorable. Sugahara & Boland (2006) suggested that vocational factor profiles for accounting students that were examined by factor analysis had the intrinsic value factor as the primary influential factor. Such students would significantly take this into consideration when choosing their career.

Contrary to accounting students, we found a tendency that non-accounting students perceived the CPA as unfavorable in terms of intrinsic value. It is partly natural that non-accounting students are reluctant to become a CPA because they are not interested in its intrinsic value. However, this result simultaneously revealed that there are still broader possibilities remaining that can be pursued in an attempt to improve these lower rating scores for non-accounting students.

Career Prospects

In this category for **"Career Prospects"**, the statistical t-test analysis reported in **Table 7,** in terms of "good advancement opportunities" and "potentially high

Table 7: The Results of t-test for Career Prospects

	Accounting students	Non-accounting Students	p-value
AP provides excellent prospects	3.27	3.35	0.565
AP gives you powerful authority	3.76	2.98	0.000***
AP gives good advancement opportunities	3.37	3.97	0.000***
AP has a high social prestige	4.27	3.66	0.000***
AP gives you a high salary	3.88	4.49	0.000***
AP gives you a high initial salary	3.58	2.59	0.000***

Applied one tail t-tests. *** Significant at the level of less than 0.01

salaries" for the CPA were regarded significantly preferable by non-accounting students relative to accounting students. On the other hand, three attributes such as "powerful authority", "high social prestige" and "high initial salary" for accounting students were rated higher than those of non-accounting students. The mean scores for both groups of tertiary students were mostly more than 3.0, which results in a relatively higher rating. However, the directions of students' perceptions for each attribute within this category were inconsistent.

Sugahara & Boland (2006) examined the differences in influential factor profiles between accounting students and non-accounting students, and found that "**Career Prospects**" was regarded as the prime factor for non-accounting students choosing accounting as a career. Their study concluded that by improving images of the CPAs' career prospects would encourage them to seek a CPA career path.

The results of the present study suggesting perceptions of a lower possibility to obtain a "higher initial salary" or have "powerful authority" as a CPA could possibly discourage non-accounting students to select a CPA as their career option. This is of real concern. Some political treatment or actual efforts by the accounting professional body and accounting firms should be effectively employed to maintain or improve these aspects of career prospects.

Job Market Factor

The results in this category "**Job Market Factor**" in **Table 8** reveal that 3 attributes out of 6 had significant differences between the two groups. Among them, 2 attributes such as "male dominant" and "work long hours requirement" were rated significantly higher by non-accounting students than accounting students. Only one attribute "allowing you to enjoy quality family life" was regarded preferable for accounting students than for non-accounting students. Our **hypothesis H5** was rejected at the less than 1% level to the extent of these three attributes.

The results also indicated that mean scores for both job availability and job security by the two student groups were higher, which demonstrates that the CPA career is believed to be a stable profession in terms of employability, although there was no significant statistical difference between accounting students and non-accounting students.

Perhaps of more concern in this category it was found that non-accounting students perceived that the CPA as a busy profession, because non-accounting students evaluated time availability for family life as the CPA much poorer while they regarded the CPA to require longer work hours than accounting students did. It is difficult but important to identify the reason why non-accounting students tend to perceive the CPA in this way.

Table 8: The Results of t-test for Job Market Factor

	Accounting students	Non-accounting Students	p-value
AP offers good level of job availability	3.82	3.64	0.120
AP has job security	3.78	3.55	0.074
AP allows you to enjoy quality family life	3.52	2.68	0.000***
AP requires you to work long hours	3.05	4.11	0.000***
AP is male dominated	2.67	3.20	0.000***
AP provides women good opportunities	3.56	3.79	0.048

Applied one tail t-tests. *** Significant at the level of less than 0.01

One distinctive difference was that non-accounting students statistically perceived the CPA career to be much more male dominated than accounting students. In reality the reverse is true. The CPA certification scheme would secure female candidates to be treated equally to male candidates. However, such perception of the CPA profession may be discouraging female non-accounting students from choosing a CPA career. This unfavorable image should be addressed to provide appropriate remedies.

Opportunity Cost

In the category of "**Opportunity Cost**", three attributes out of five displayed significant differences between accounting students and non-accounting students. These are "It costs you a lot of money to be a CPA."; "It requires difficult entry qualification" and "It requires you to bare personal liabilities for any malpractice" as shown in **Table 9**. For these three attributes, accounting students rated all three higher than non-accounting students did. Our **hypothesis H6** was rejected at the less than 1% level to the extent of these three attributes.

Obviously, it is true that there are several opportunity costs for the CPA, which students may be able to avoid when they choose careers other than the CPA. However, to some extent, accounting students recognize certain disadvantages in terms of opportunity costs and so they accept them as inevitable obstacles. Even

Table 9: The Results of t-test for Opportunity Cost

	Accounting students	Non-accounting Students	p-value
You have no time to relax in the first few year	4.21	4.40	0.051
It takes too much time to get CPA exam	4.63	4.28	0.263
It costs a lot of money to become CPA	4.32	3.23	0.000***
It requires difficult entry qualification	4.60	3.58	0.000***
It requires you to bare personal liabilities for any malpractice	3.96	2.97	0.000***

Applied one tail t-tests. *** Significant at the level of less than 0.01

though rating scores for opportunity costs were less favorable for accounting students, they still intend to pursue a CPA career. Consequently, these results indicated that the opportunity costs in becoming a CPA do not prevent students from heading down a CPA career path.

CONCLUSION

The purpose of this study was to investigate Japanese tertiary business students' perceptions of the accounting profession and how these perceptions influence students' career choice. Given the potentially "best and brightest issue" in Japan, the findings and interpretations of the present study will develop appropriate strategies to tackle this issue.

The analysis of perceived skills needed for success in the CPA revealed that non-accounting students perceived communication skills as less important than accounting students. It revealed that these students might misunderstand the nature of the job of the CPA. If this unfavorable image of accounting will harm the popularity of the profession, then we should find better ways to address this image.

The results indicate that professional practitioners appear to be perceived as the most influential person who can have the greatest impact on an accounting students' career choice. Nevertheless, access to actual professionals in Japan is a real concern. To the contrary, in Australia, the accounting professional body such as the ICAA often hosts several functions per year where students are invited to join and where they can network with actual Chartered Accountants. These opportunities certainly encourage students to consider their career choice as accounting professionals. In Japan we need a CPA publicity push such as inviting guest lecturers which in turn could inspire student aspirations in becoming a CPA.

This study also revealed that accounting students' perception of intrinsic values were relatively positive compared to those of non-accounting students. Con-

versely, some attributes of career prospects were regarded as being negative for non-accounting students, were actually considered as the prime factor for accounting students when they choose their career. These findings provide a great window of opportunities that can be employed to improve the negative images towards the CPA.

Regarding job market factors, one distinctive finding was that non-accounting students perceived the CPA career as being male dominated. This may discourage female candidates to choose a CPA pathway. We should tackle this issue so as to enhance gender equality perceptions.

We also investigated students' perception of opportunity cost in relation to becoming a CPA. Surprisingly, the results indicated that not only non-accounting students but also accounting students tend to consider its relatively high opportunity cost. Since this negative aspect may destroy the popularity of the accounting profession even for accounting students, we should market alternate advantages and so cover up the identified opportunity cost.

This study is the first one that has been conducted to investigate the best and brightest issue in Japan. In this regard, our findings will contribute to the development of accounting literature. However, our study does have limitations. One major limitation was the fact that we ignored the effects on career choice based on a student's personality type. Much previous research overseas has examined psychological aspects affecting career choice. Further work considered by the authors includes research into the stereotypical accountant and the effect this may have on a person's career choice. Putting this limitation aside, the results and interpretations of this study will contribute to building appropriate strategies to address the "best and brightest issue" in Japan.

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