

What do non-public accountants want in accounting education? An exploratory investigation

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Abstract

Evidence suggests that accounting departments at many universities and colleges focus their programs on preparing students for a career in public accounting and successful completion of the certified public accountant (CPA) exam. However, the majority of students who earn these degrees subsequently pursue a non-public accounting career. This exploratory study looks at the non-public accountants' perspective on degree preference, importance of topics to be covered in courses and priority of skills to be attained prior to graduation. Additionally, the relevance of several professional certifications is investigated. Results indicate that a 120-hour bachelor's degree in accounting is the preferred degree, intermediate accounting is the most important topic to be covered, critical thinking skill attainment has the highest priority and the CPA is the most relevant certification. Implications for accounting educators are identified and discussed.

Keywords: accounting course topics, non-public accounting, accounting education, accounting certifications

Most universities and colleges have maintained collegial relationships with public accounting firms in hopes of gleaning information that will allow their accounting graduates to be well prepared and thus more qualified to attain entry level positions. This being noted, it is apparent that educational institutions across the nation have continually geared their accounting curricula for students interested in public accounting and to prepare them to sit for the CPA exam (Tatikonda, 2004, Ahadiat, 2008). At times, this singular career path preparation seems sensible, especially when looking at the pressure public accounting firms have steadily put on accounting educators. A prime example of this occurred when the (then) Big-8 Accounting Firms published their White Paper, "Perspectives on Accounting Education," (Arthur Andersen & Co., 1989) and also when they donated five million dollars for the creation of the Accounting Education Change Commission (AECC). The AECC quickly published several position statements recommending change in accounting education. Most notably, in 2000 Albrecht and Sack (A&S) expressed concern about the gap between accounting education and accounting practice and stated that if it widened further it would actually result in the disappearance of accounting programs. Their work spawned a flurry of studies about accounting education and was expected to mobilize accounting educators to encourage policy changes regarding accounting curriculum. In fact, Johnson and Halabi (2009) determined that A&S was cited in 29.3% of research papers during the seven-year period between the beginning of 2001 and the end of 2007.

Nonetheless, in 2002 Gabbin decried the continued resistance of accounting educators to change and noted little response amongst accounting programs. He also feared that the academic community's resistance to change had contributed toward the loss of top students to other business disciplines. However, as a result of the accounting scandals in recent years as well as the passage of Sarbanes-Oxley, the need for high quality accountants has increased, creating a surge in interested students who are aware that accounting certification is one key measure of quality in the profession (Hargadon & Fuller, 2007, Brausch, 2009a).

Although the CPA is certainly the most prevalent and widely recognized professional certification (Hargadon & Fuller, 2007), statistically it might not always be the most relevant certification. Tatikonda reveals in his article, "Naked Truths about Accounting Curricula," that only 34% of new accounting graduates chose public accounting in 2000 and that prior to that time there had continually been a steady decline in the number of graduates choosing that career path. This indicates that almost two-thirds of accounting students are currently learning material that they may not find useful in their future careers. Other information of more relevance for their future non-public accounting careers would be more beneficial for them. Further, the Institute of Management Accountants (IMA) reported that the certified management accounting (CMA) candidate pool increased by 16% in 2009 (Thomson, 2010) and that the market had responded positively to the revised CMA exam (Brausch, 2010). Additionally, their vision is for the CMA to become the "world's leading certification for accountants and financial professionals in business" (Brausch, 2009b, p. 9). Therefore, it would seem that interest in this professional designation continues to grow.

This being said, educators should consider devising a plan to meet the needs for preparing students for the CPA exam as well as for non-public accounting certifications, specifically the CMA (Hargadon & Fuller, 2007, Hargadon & Fuller, 2010). However, there does not seem to be a great deal of consensus about the courses, professional skill sets, or preferred degree necessary for success in the non-public accounting arena (see, for example, Frecka, Morris & Ramanan, 2004, Cheng, 2007 and Hurt, 2007). Consequently, the question arises as to whether educators should focus their accounting curricula on meeting the needs of students

wanting to meet the 150 hours of education now required in most states for sitting for the CPA exam, to prepare students for other professional certifications such as the CMA, or whether to widen the curricula to capture “a broader set of competencies” (Gabbin, 2002, p. 82). Currently, accounting students usually arrive at their first post-graduation job with a universal degree in hand. The purpose of this paper is to explain the findings of a preliminary study looking into necessary topics to be covered in courses, skill sets to be attained and preferred degree for non-public accounting new-hires. Additionally, the perceived relevance of various professional certifications is reported.

Method

Although A&S’s prediction of possible doom for accounting programs certainly has not proven true to date, their research has served as the foundation for many studies that followed its publication, wide dissemination and discussion. As indicated above, Johnson and Halabi (2009) found that A&S has been cited in a significant number of studies. This includes several instances of other researchers using the A&S approach in their surveys. For example, Burnett (2003) based her questionnaire on A&S when she queried West Texas CPAs and employers to determine their ranking of specific skills desired of new accounting hires. Ulrich, Michenzi, and Blouch (2003), also based their work on A&S for their survey of public accounting firms when they investigated specific skills (as identified by the AECC, 1990) necessary for entry-level accountants, and their evaluation of how well those skills were developed by academia. Madison, Cory and Persellin (2008) also based their survey about required knowledge and skills of accounting graduates on A&S while Cory (2009) used the A&S questionnaire as the basis for her investigation of course topics that practicing CPAs believed were essential in accounting education and their preference as to what kind of degree should be earned by accounting graduates. Therefore, the current exploratory study was also based on the A&S questionnaire.

Entry into government, industry or not-for-profit accounting does not require 150 hours of education. Rather, certifications such as the certified management accountant (CMA) require one to take a two-part exam (formerly four-part), attain necessary work experience before or after passing the exam, as well as require that one ultimately earn a bachelor’s degree from an accredited college or university within seven years of passing the CMA exam. Hence, one key difference between the requirements necessary for sitting for the two exams (CPA and CMA) is that a student is not required to have earned a degree prior to sitting for the latter; he or she merely has to be taking six hours of credits a semester during the academic year. This is a luxury not available to CPA candidates, who must have at least a bachelor’s degree prior to sitting for their exam (Hargadon & Fuller, 2010, p. 49).

According to Tatikonda (2004, p. 62), “[i]ndustry leaders are not happy with the state of current accounting education.” Obviously, these individuals represent some of the key external stakeholders of all accounting programs. This is especially true in preparation for a career in accounting other than public accounting (non-public accountants). Therefore, these individuals should be well-informed about the topics in courses that should be covered and skills that should be attained in order for graduates with an interest in non-public accounting careers to be viable entrants into their chosen fields. Finally, based on both A&S’s suggestions and the Association for Advancement of Collegiate Schools of Business’s (AACSB) mission-based emphasis, each accounting program should be primarily interested in the needs of its own key stakeholders when considering curriculum revision.

Valuable insight into the curricula required by non-public accounting entrants should be available by surveying those currently practicing in this component of the profession in the local area. This group of individuals should be knowledgeable about the skills and the topics in coursework to which students should be exposed prior to graduation and entry into the workforce. Further, they should have knowledge about the preferred degree for new entry accountants and professional certification relevance. Burnett's results (2003) may be limited to the employment environment of West Texas and Ulrich et al.'s (2003) nationwide sample may make local extrapolation difficult. Neither of the aforementioned studies differentiated between public accountants and non-public accountants. More recently, Ahadiat (2008) surveyed members of the IMA and the American Institute of Certified Public Accountants (AICPA) to gain insight into the knowledge, skills and abilities they felt were most important for management accountants in entry-level as well as in senior-level positions. Although his sample included members of these two organizations, he did not consider their current employment status in accounting when analyzing his results. It is not unusual for an accounting professional to be a member of one of these organizations, but not currently practicing in that particular field of accounting. Further, similar to the issue with Ulrich et al. (2003), local extrapolation of his results might be difficult. Madison et al. (2008) reported their findings regarding the perspectives of practicing accountants about knowledge and skills required upon graduation from an accounting program, but did not restrict their results to the non-public accounting arena. Cory (2009) reported results of her study about course topics and degree preference, but limited the analysis of responses from her survey participants to only those currently practicing public accounting.

Sample

Accountants currently employed in non-public accounting represent the population of interest in this study. Therefore, 2,300 individuals who were either (1) members of a large, regional south Texas CPA society, (2) members of the IMA in the same area or (3) employers who had interviewed students on campus during the previous three years received the survey. Usable surveys were received from a total of 464 respondents, for a response rate of about 20%. This is a response rate comparable with similar studies (20% for A&S (2000), 27.7% and 21.7% (for her two different respondent groups) for Burnett (2003), 21.75%, for Ulrich et al. (2003) and 16% for Sedki, Madison & Treacy (2003). Ahadiat (2008) enjoyed an overall 39.6% response rate, but used two mailings. Economic resource limitations for the current study prevented more than one request for survey completion. The analysis was then restricted to the 170 respondents currently practicing non-public accounting.

Although limited to a geographic area, the respondents represent a substantial pool of viewpoints toward accounting education as it relates to graduates aspiring for careers in non-public accounting. For example, analysis of company size where the 170 non-public accountants were employed indicated that the mean average size of firm, based on full-time employees, was 155. The largest company where a respondent worked employed approximately 5,000 people. Respondents were also asked to indicate the most recent year in which they had been enrolled in a college or university course. The mean average year was 1988, which indicated that the typical respondent had sufficient employment experience to be able to express an opinion as to professional certification relevance and the preferred degree completed by a new-hire. Additionally, respondents should be able to express an opinion as to the importance of

accounting topics in courses and the skills they think new non-public accounting entrants should attain prior to graduation.

RESULTS

First, the preference of the degree earned by the newly-hired non-public accountant was determined. The mean average for each degree (5 = most preferred) was computed and t-tests were used to determine whether the ranking of a preferred degree was statistically significant, from one to the next. Results are shown in Table 1. The degree most preferred by the respondents is the standard, 120-hour bachelor's degree in accounting, which is statistically more preferred than a bachelor's degree with completion of 150 hours. Also, the bachelor's degree with completion of 150 hours is statistically more preferred than a bachelor's degree in another field (primarily finance, information systems, business administration or economics). However, the category of "some other bachelor's degree" was not significantly different from an MBA with an accounting concentration and the MBA with an accounting concentration was not significantly different from a master's degree in accounting. A master's in accounting was strongly preferred over a master's in information systems and the master's in information systems was preferred over a master's in tax. Thus, it seems that a specialized graduate degree in tax is least preferable for a career in non-public accounting. Further, a bachelor's, either the 120-hour or 150-hour degree in accounting, as well as a bachelor's degree in another subject are preferred over any master's degree. This indicates a strong preference for undergraduate education by this group of accountants.

Next, the mean score for the relevance of different professional certifications available for the new-hire to obtain was determined and t-tests used to determine whether the relevant certification was statistically significant, from one to the next. Note that a score of one means the certification is highly relevant. Results are shown in Table 2. Interestingly, the CPA was regarded as the most highly relevant certification, with a mean of 1.6391. The mean score for the Certified Internal Auditor (CIA), the next most relevant certification, is 3.0309. The level of significance in the t-test for the difference between those two certifications is less than .0001. The CMA was ranked third, and its relevance is not statistically difference from the CIA. However, the CMA is statistically more preferred than the CISA. There were no significant differences found between the CISA and the CFA, the CFA and the CFM, the CFM and the CFE. The CFE was statistically more preferred than the CFP, which was preferred over the CVA. Hence, this group of respondents indicated that the CPA is by far the most preferred certification, substantially above any others. The CIA and CMA, which were the second and third preferred, were viewed as being very similar, but certainly more preferred than the other certifications listed.

The questionnaire listed 22 topics and 18 skills, and asked respondents to indicate the importance of the topics to be covered in courses and the priority of the skills to be attained prior to graduation. Ratings for the importance for topics to be covered in courses were: 1 (not important – no courses), 2 (somewhat important – part of a course), 3 (moderately important – one college course) and 4 (very important – more than one course). Ratings for priority of skills were 1 (no priority should be placed on this skill – it is not important), 2 (low priority – this skill is important, but it can be developed on the job), 3 (moderate priority – this skill is important and should have some time out-of-class devoted to it, but it is not important enough to justify spending class time on it), 4 (high priority – this skill is highly important and should have both

class time and out-of-class activities devoted to its development, even if some accounting content cannot be covered) and 5 (highest priority – this skill should be the primary focus of some classes).

Due to the large quantity of data for these two research questions, a principal components factor analysis was completed for each and rotated to improve interpretability of the factors (Pedhazur & Schmelkin 1991). All resulting factors have an eigenvalue of at least 1 and are composed of courses or skills that load at least at the .60 level. As shown in Table 3, a total of 16 of the 22 courses load on seven different factors. Table 4 indicates 19 skills loaded on six factors. There were no instances of items loading on the same factor in either case.

The findings presented in Table 3 indicate that intermediate accounting is the most important topic to cover, with a mean of 3.9108, (4=most important) which indicates the respondents felt that more than one college course should be devoted to it. This is consistent with the results of Cory (2009) and Madison et al. (2008). The second most important topic was ethics, followed by finance, advanced accounting, information systems, auditing, strategy, cost/managerial accounting, and business law, all with means of at least 3 (moderately important). Notably, cost/managerial accounting was ranked eighth, with a mean of 3.0549, which corresponds to the IMA's focus on moving the image of the CMA away from that of "cost accountant." Also, information systems, economics and organizational behavior, ranked as numbers 5, 11 and 15, respectively, are no longer tested on the recently revised CMA exam. The four lowest-ranked topics, all with a mean less than 2.5, were supply chain, tax research, personal tax and international business. Hence, two of the topics ranked as the lowest four relate to tax, and their means of 2.2096 for tax research and 2.1091 for personal tax indicate that respondents felt these topics could actually be learned on the job. Corporate tax was ranked sixteenth of 22 topics, with a mean of 2.7134.

The seven factors shown in Table 3 incorporate 16 of the 22 topics. Finance, information systems, financial accounting research, organizational behavior, statistics/quantitative methods and international business did not load on any of the factors. Both ethics and intermediate accounting were the only topics to load on their respective factor.

Turning to the results presented in Table 4, critical thinking was ranked as the skill with the highest priority, followed by written communication, interpersonal, oral communication, team, leadership and professional demeanor as the top seven skills. These first seven topics listed all have means greater than 4 (high priority – this skill is highly important and should have both class time and out-of-class activities devoted to its development, even if some accounting content cannot be covered). Only one skill, entrepreneurship, had a mean of less than 3 (moderate priority). Fifteen skills loaded on the six factors identified. Critical thinking, project management and performance management did not load on any factor.

At this point, the mean average score for each factor in Tables 3 and 4 was computed and t-tests used to determine whether the ranking of a factor was statistically significant, from one to the next. Results for the factors relating to course topics are shown in Tables 5 and results for the factors relating to skills are shown in Table 6.

Table 5 indicates that the difference between means of factors, except between Factor 3 (Management) and Factor 1 (Attest Function) were statistically significant. Therefore, the respondents felt that intermediate accounting was a topic of more importance than ethics, but ethics was of more importance than advanced accounting. In each of these three cases, only one topic loaded on each factor. Results presented in Table 6 indicate that each factor listed has a statistically higher mean than the next, except for the difference between Factor 5 (Risk) and

Factor 6 (History). Therefore, Factor 4, which is comprised of written, interpersonal and oral communication, has the highest priority, followed by Factor 1, which is comprised of teams, leadership, professional demeanor, and continuous learning.

DISCUSSION

The preference for a 120-hour bachelor's degree, as shown in Table 1, is not surprising. The preference for undergraduate degrees over graduate degrees is also not unexpected. However, the group surveyed indicated that the most relevant certification, according to the results presented in Table 2, is the CPA, which requires 150 hours of education in most states. These results are somewhat puzzling and contradictory. If the CPA is the most relevant certification, it would seem that earning a bachelor's degree and 150 hours of education would be the most preferred degree, but that is not the case with the respondents. Turning to the additional information provided in Table 2, certifications dealing with a more narrow financial focus (e.g., certified fraud examiner, certified financial planner, certified valuation analyst) are less preferred. These represent expertise in finer business fields and these certifications may be less well-known than the CPA, CIA or CMA. As indicated previously, the CMA does not require completion of a bachelor's degree to sit for the exam, but a candidate must earn such a degree within seven years of passing it. The CIA requires that candidates hold at least a bachelor's degree, or be a full-time university student in their senior year, prior to sitting for the exam. Thus, neither certification requires 150 hours of education. The CPA, CIA and CMA are more broad certifications than the others listed, requiring knowledge in a wider field of financial information.

The results presented in Table 3 are very informative. Both finance and cost/managerial accounting have means greater than 3, which indicates they are moderately important, deserving of one college course. Yet both of these topics are tested extensively on the CMA exam (approximately one-eighth of the exam is devoted to each of these topics). It seems that these topics should be ranked as more important for this group of respondents. Instead, intermediate accounting is the highest ranked topic. These results are supported by factor analysis as shown in Table 5. Intermediate accounting is again ranked number one, with cost/managerial accounting loading on the Business Environment factor, which ranked sixth out of seven. Finance did not load on any factor and thus was not subject to this additional analysis. Table 4 clearly indicates that critical thinking has the highest priority in skill development, followed closely by written, interpersonal, and oral communication skills, which is also not surprising. However, project management was ranked tenth of out 18 skills and did not load on any factor, despite recent calls for its inclusion in accounting programs (Stout, West, & Liberatore, 2004, and Kless, 2010). Results in Table 6 indicate that Factor 4, Communication, was the number one priority for skill attainment prior to graduation.

Looking at the implications for accounting educators, they are somewhat difficult to define as they relate to coursework. It would seem that basing accounting curricula on the needs of students planning to sit for the CPA exam may actually be the best approach despite calls for changing this focus. A 150-hour program may seem excessive or unnecessary for some of the other professional certifications. One challenge that may arise for students planning to enter the non-public accounting arena is to adjust their course schedules so they take fewer accounting courses that focus on CPA exam preparation and take more classes in other areas that may be more beneficial for their accounting career choice. In short, they could be encouraged to adapt

their academic careers for their future desired professional accounting careers based on their specific needs. For instance, those students seeking to enter the non-public sector with a CMA, would probably benefit more from taking a project management course, or an additional course in finance or cost accounting rather than an advanced income tax course. These additional courses would still help meet the 150-hour requirement and allow those students to sit for the CPA exam, enabling them to earn the most relevant certification. They would also help prepare them for an accounting career in industry, and would certainly enhance their employability as an entry-level accountant in that field.

This approach also allows students to wait until fairly late in their academic career to choose the accounting sector in which they are most interested. This enables students to attain a background and foundation in the core accounting skills, necessary for success in any accounting field. Students may not know which accounting sector is truly most interesting to them until their senior year or even later. In addition, this approach allows flexibility for the student as well as an opportunity to sit for both the CPA and the CMA exams without having to completely redesign their degree plans.

Turning to implications for accounting educators in the area of skill attainment, the results, as illustrated in Table 4, clearly indicate that critical thinking skills are of utmost importance for non-public accountants. Table 6 shows that the factor relating to communication (written, interpersonal and oral) is ranked as the top skill set and is of significantly higher priority than the next skill (ethics). This is certainly not to say that ethics should be disregarded as a skill to be attained prior to graduation, nor that critical thinking and communication skills should be reinforced at the expense of ethics. As accounting educators, it is imperative that students following a non-public accounting career path are helped to develop their skills in all of these areas. This requires thoughtful class preparation and promotion of activities, both inside and outside the classroom, fostering improvement in writing, oral communication and interpersonal skills, and allowing students to think critically rather than simply memorizing accounting rules. It should be obvious that these are essential skill sets to be attained by all accounting graduates, not just those focusing on non-public accounting careers.

Although this approach to accounting education may be time-consuming and difficult to implement in some instances, this exploratory study shows that the current state of accounting education is fairly close to fulfilling the needs of accounting students interested in either the public or non-public accounting career paths. The advice to accounting educators is to encourage students seeking careers in non-public accounting to complete 150 hours of education to enable them to sit for the CPA exam and also to alter or add specific courses to meet the needs of the CMA professional certification. Additionally, a focus on honing students' critical thinking and communication skills as well as ethics is needed.

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Table 1
Degree Preference
5=More Preferred

RANK/DEGREE	Mean	T-Value	Significance
1/Bachelor's Degree in Accounting	4.1375	n/a	
2/Bachelor's Degree in Accounting and 150 hours	3.8896	2.25	0.0259
3/Some Other Bachelor's Degree*	2.9730	4.35	<.0001
4/MBA Degree with Accounting Concentration	2.9133	0.27	0.7866
5/Master's Degree in Accounting	2.8039	0.91	0.3633
6/Master's Degree in Information Systems	2.4800	3.10	0.0023
7/Master's Degree in Tax	2.1081	3.58	0.0005

*Other recommended undergraduate degrees were:

- Finance (38%)
- Information Systems (37%)
- Business Administration (7%)
- Economics (6%)
- Miscellaneous Other Degrees (12%)

Table 2
Certification Preference
1=Highly Relevant

RANK/CERTIFICATION	Mean	T-Value	Significance
1/Certified Public Accountant (CPA)	1.6391	n/a	
2/Certified Internal Auditor (CIA)	3.0309	12.85	<.0001
3/Certified Management Accountant (CMA)	3.0311	0.22	0.8300
4/Certified Information Systems Auditor (CISA)	3.2515	2.06	0.0414
5/Certified Financial Analyst (CFA)	3.4843	1.49	0.1370
6/Certified Financial Manager (CFM)	3.4875	0.13	0.9002
7/Certified Fraud Examiner (CFE)	3.6012	1.45	0.1492
8/Certified Financial Planner (CFP)	4.0062	3.48	0.0006
9/Certified Valuation Analyst (CVA)	4.1987	2.28	0.0242

Table 3
 Topics in Courses (Rating of 4 = Very Important)
 Listed in Order of Decreasing Importance

RANK/COURSE	Mean	Factor
1/Intermediate Accounting	3.9108	7: Intermediate Accounting
2/Ethics	3.5582	6: Ethics
3/Finance	3.5276	
4/Advanced Accounting	3.4074	5: Advanced Financial Accounting
5/Information Systems	3.1964	
6/Auditing	3.1310	1: Attest Function
7/Strategy	3.1018	3: Management
8/Cost/Managerial Accounting	3.0549	2: Business Environment
9/Business Law	3.0059	2: Business Environment
10/Financial Accounting Research	2.9451	
11/Economics	2.8994	3: Management
12/Internal Auditing	2.8690	1: Attest Function
13/E-Commerce	2.8282	3: Management
14/Sarbanes-Oxley	2.0816	1: Attest Function
15/Organizational Behavior	2.7425	
16Corporate Tax	2.7134	4: Tax
17Statistics/Quantitative Methods	2.6964	
18/Fraud Examination	2.5325	1: Attest Function
19/Supply Chain	2.3452	2: Business Environment
20/Tax Research	2.2096	4: Tax
21/Personal Tax	2.1091	4: Tax
22/International Business	2.0833	

Table 4
 Skills (Rating of 5 = Highest Priority)
 Listed in Order of Decreasing Priority

RANK/SKILL	Mean	Factor
1/Critical Thinking	4.5030	
2/Written Communication	4.4491	4: Communication
3/Interpersonal	4.2470	4: Communication
4/Oral Communication	4.2410	4: Communication
5/Teams	4.1273	1: Professionalism
6/Leadership	4.0964	1: Professionalism
7/Professional Demeanor	4.0060	1: Professionalism
8/Business Decision Modeling	3.8485	2: Analytical Ability
9/Continuous Learning	3.7892	1: Professionalism
10/Project Management	3.7679	
11/Performance Measurement	3.6190	
12/Risk Analysis	3.5241	2: Analytical Ability
13/Self-Directed Research	3.5212	3: Research and Management
14/Change Management	3.4727	2: Analytical Ability
15/Resource Management	3.4024	3: Research and Management
16/Negotiation	3.3988	5: Risk
17/Historical Concept Understanding	3.0848	6: History
18/Entrepreneurship	2.9341	5: Risk

Table 5
 Factor Analysis for Topics in Courses (Rating of 4 = Very Important)
 Listed in Order of Decreasing Importance

RANK/FACTOR	Mean	T-Value	Significance
1/7: Intermediate Accounting	3.9108		
2/6: Ethics	3.5583	6.67	<.0001
3/5: Advanced Accounting	3.4074	2.16	0.0322
4/3: Management	2.9565	6.91	<.0001
5/1: Attest Function	2.8463	1.42	0.1579
6/2: Business Environment	2.7025	3.16	0.0020
7/4: Tax	2.3313	4.74	<.0001

Table 6
 Factor Analysis for Skills (Rating of 5 = Highest Priority)
 Listed in Order of Decreasing Importance

RANK/FACTOR	Mean	T-Value	Significance
1/4: Communication	4.3433		
2/1: Professionalism	4.0568	6.01	<.0001
3/2: Analytical Ability	3.6190	8.55	<.0001
4/3: Research and Management	3.4691	2.36	0.0197
5/5: Risk	3.1617	3.79	0.0002
6/6: History	3.0849	1.14	0.2550