Necessary Attributes, Preparations, and Skills for the Selection and Promotion of Accounting Professionals

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In a recent report the Pathways Commission expressed its concern by stating that accounting students often lack the preparations and skills that are necessary for a thorough comprehension of the multifaceted and complex environment of the accounting profession (The Pathways Commission, 2012). A questionnaire was distributed among a random sample of accounting professionals representing two different groups: the American Institute of Certified Public Accountants and the Institute of Management Accountants. The results indicate that personal attributes are more important than traditional educational preparations. The significance of personal attributes as being more important than educational preparations is also found in promotion decisions.

INTRODUCTION

Students in accounting programs too often are only exposed to technical accounting skills. They often lack, and fail to develop, a thorough comprehension of the multifaceted setting and complex environment of the accounting profession (The Pathways Commission, 2012). The Pathways Commission encourages faculty to develop new standards of excellence through several recommendations. First, "accountants are to build a "learned profession" through purposeful integration of accounting research, education, and practice for students, accounting practitioners, and educators." (The Pathways Commission, p 27) Faculty are to focus more academic research on practice issues, and enhance the value of practitioner-educator exchanges. (The Pathways Commission, p 30). Faculty are to facilitate and create mechanisms for collecting, analyzing, and disseminating information about the current and future markets for accounting faculty and practitioners. (The Pathways Commission, p 42) These objectives provide the impetus for this study.

The need for change in the expected skills of future accountants has placed quite a bit of pressure on educators and accounting students alike. "The consensus opinion is that university courses can no longer be entirely content-driven and limited to specific technical skills. If students are to succeed as knowledge professionals in the highly changeable business environment, they must exhibit a range of technical and *generic* skills. Generic skills, in this context, encapsulate transferrable qualities to suit the industry in which graduates work; these include but are not limited to communication, team skills, leadership, problem solving, analytical and interpersonal skills. Therefore, it has been suggested that the actual content of accounting courses should reflect a greater focus on the development of generic skills to ensure

the accounting profession gains access to proficient graduates." (De Lange, Jackling, and Gut, 2006, p. 384).

As the number of students at degree-granting institutions grows, enrollment continues to increase in the accounting programs across the country (NCES, 2011). The AICPA's latest report on supply of accounting graduates indicates that college enrollments in the Accounting programs reached the 240,000 level for the first time in 2012. In addition, the report shows that the total graduates with both bachelors and masters' degrees topped 82,177 in 2012, nearly 84% higher than the number in 2002. During the same period, demand for new accounting graduates by the CPA firms reached a total of 40,350 still less than half of the supply. According to this report, the highest rate of growth in demand occurred between 2004 and 2007 when it changed from 19,705 to 36,112, an increase of more than 83%. In fact, since 2007 when the U.S. economy dropped into recession, demand for accounting graduates has increased by only 4,238 or less than 12%, while the supply jumped by 17,956 or 28%. (AICPA, 2013).

On the demand side, accounting and auditing jobs are projected to be among the top 30 occupations with the most job growth from 2012 through 2022 (BLS, 2013). Based on this projection, it is expected that employment will grow at a rate of 15.7% by the year 2020. This indicates that a total of 166,800 additional Accounting jobs will become available during the ten-year period or an average annual job growth of 16,680. Thus, it is apparent that there is a sizable disparity between the supply of and demand for accounting graduates. The current job market is capable of absorbing only 27% (or less than one-third of 61,334) of those that graduated from all Accounting programs in 2011-12.

Thus, the Accounting programs are faced with the challenge of training students that are more marketable than ever before. Teaching traditional technical skills may no longer be adequate to make students qualified to compete for the inadequate number of positions that are available for accountants. Our students' education should take a much broader approach and go beyond the conceptual and technical accounting knowledge. By involving practitioners, academics can learn how to improve students' abilities so as to benefit the entire profession and making the job market most efficient. The purpose of this research is to facilitate this goal by investigating what additional attributes, preparations, and skills are necessary to improve qualifications of Accounting graduates.

LITERATURE REVIEW

Several earlier studies draw attention to the fact that in today's environment accounting students need to demonstrate more qualifications than just the technical skills they learn in traditional accounting classes. In one study, 322 students from three Australian universities and 28 practitioners working in various organizations across the country were surveyed. Researchers discovered that there were considerable differences between the two groups in prioritizing the skill sets that students need (Kavanagh and Drennan, 2008). While students included decision-making, continuous learning, and oral communication among the most important skills, the employers considered analytical/problem-solving skills, business awareness, and basic accounting skills more important for graduates entering the profession.

In another study, Jackling and De Lange (2009) surveyed 650 accounting graduates as well as 28 professionals. The results showed that both groups agreed on the importance of technical accounting skills. However, the professionals found it necessary that the universities teach a broad set of additional skills including team skills, leadership, oral communication, and interpersonal skills. Along this line of research, Ahadiat (2010) in a survey of 250 accounting professionals identified five attributes that were rated highly important for entry-level employment in public accounting. These included accounting technical skills, analytical skills, critical thinking, leadership skills, and team orientation. Accounting recruiters from the private industry viewed many of the skills significantly more important than public accountants. These professionals' preferences included analytical skills, creative ability, critical thinking, leadership skills, people skills, team orientation, and personal demeanor.

Stovall and Stovall in a survey of local employers discovered that generic or soft skills were ranked more important for success in the field of public accounting than technical skills (Stovall and Stovall, 2009).

With these and similar findings, it is evident that universities have no choice but to redesign their curriculum to help students develop the skills needed in order for them to succeed in a rapidly evolving and globally expanding business environment. Students who lack these skills may find it more and more difficult to find employment and if employed, may find it harder to move up in their firm. Furthermore, the accounting programs that fail to incorporate these skills in their curriculum may see their enrollments drop or their reputation jeopardized (Stovall and Stovall, 2009, p. 104).

While the majority of previous studies have focused their investigations on a limited set of skills such as technical skills, leadership potential, interpersonal communication skills, enthusiasm, and motivation toward the profession, few have examined the importance of such traits and attributes as, manners, attitudes, and self-confidence. In a recent paper, Violette and Chene (2010) looked at a campus recruiting process by four accounting firms and identified several social and personal etiquettes extremely essential. These etiquettes include students' attire, handshake, and eye contact when students meet with the interviewers.

Furthermore, with the increasing emphasis on globalization of business, accounting programs are now expected to go beyond teaching students the technical country-specific accounting knowledge and should include trainings that prepare them as global citizens, as life-long learners, and as agents for social and personal development (Kavanagh, Drennan, 2008). These graduates should be expected to develop a sense of cultural diversity and sensitivity, make efforts to further develop a different level of communication skills by becoming multilingual, and learn to become frequent travelers. They should also have an understanding of or the training to apply the international accounting standards (IFRS). Just as the business environment is undergoing a more globalized change, the traditional role of an accountant has evolved to more of a professional advisor or an information specialist (Jackling, De Lange, 2009). In an effort to move their ranks from a staff or assistant position to a managerial or executive level, accountants are expected to need a much broader set of skills and competencies than those of traditional accountants (Bui, Porter, 25). As Howieson (2003) pointed out "It seems likely that the traditional approaches will be inadequate and that new philosophies, materials, and technologies will be needed. The end objectives of innovations in accounting education will be to develop students' skills in abstraction, systems thinking, experimentation, and the capacity for communication and collaboration".

In line with the above recommendations, the purpose of this study is to survey practitioners to investigate the skills, preparations, and attributes that are considered relevant for a successful employment in accounting. This study is unique in that unlike previous research it examines the following research questions:

Research Question 1: What skills, preparations, and attributes do practitioners seek in entry-level accounting graduates?

Research Question 2: What skills, preparations, and attributes do practitioners seek for promoting accounting employees?

Finally, the study compares responses from public accounting practitioners with non-public accountants. Some studies suggest that public accountants are more interested in traditional accounting skills such as generally accepted accounting principles used for financial reporting, auditing techniques, and taxation rules while non-public accountants seek more contemporary skills such as organizational behavior, group skills, and personal attributes (Jones, et, al, 2009; Howieson, 2003).

Research Question 3: Are there any differences in skills, preparations, and attributes that professionals in public accounting expect of accounting employees at entry-level than non-public accounting professionals?

Research Question 4: Are there any differences in skills, preparations, and attributes that professionals in public accounting expect of accounting employees for promotion than non-public accounting professionals?

STUDY DESIGN

To investigate the skills, preparations, and attributes accounting professionals need, the survey research method was found most appropriate. The details of data collection, sampling, and mailing of the survey instrument are described below.

Data Collection

The data required for this study were collected via a questionnaire containing two general sections. Electronic survey and E-mail were used as the primary data collection tools for this research. The instrument included a list of skills, preparations, and attributes that were either noted in the previous studies (De Lange, Jackling, and Gut, 2006; Kavanagh and Drennan, 2008; Ahadiat, 2010) or discussed in the relevant literature (Howieson, 2003; Jackling and De Lange, 2009; Bui and Porter, 2010). It also contained demographic questions to be used for classification purposes. Participants were asked to indicate the level of importance of each item by choosing one of seven possible responses ranging from, "Most Important" to "Most Unimportant".

Sampling

The sampling frame contained the accounting professionals from two different groups. The first group consisted of the American Institute of Certified Public Accountants (AICPA) membership available through the 2013 Nextmark.com. The second group included membership of the Institute of Management Accountants (IMA) available through infocusmarketing.com. Using systematic random design, a sample of 250 subjects was drawn from each of the above groups. The sample included subjects only residing in the United States of America.

The survey link was sent to each participant by E-mail. The E-mail explained the purpose of the study and why the results were important to the profession as well as the accounting education. It also assured anonymity of the responses. Two subsequent reminders were sent to encourage participation.²

RESULTS

Background Information

The two mailings resulted in a total of 198 useable responses, producing a response rate of 39.6 percent.³ The majority of the respondents indicated that they were CPAs (66%), 22 percent were CMAs, only 3 percent were CIAs, 8 percent were CFEs, and the remainder had other or no certifications. Most of the participants worked for the state-wide and regional firms (52%), with nearly one quarter working for the small firms (26%), and the other 22 percent were employed with the national and multinational firms.

Nearly one-third of the practitioners surveyed (32%), were in the ages of 45-54 years, 18 percent were between 35-44 years, 31 percent were less than 35 years old, and the other 19 percent were 55 years or older. Participants' primary employment was in public accounting (72%), with only 6 % working for the Big-4 firms. One quarter of the respondents worked for public or private industries (25%), and only 3% worked for the government. Table 1 contains a summary of all demographic information.

TABLE 1
DEMOGRAPHICS OF RESPONDENTS

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Analysis of Research Questions

Research Question 1

The survey results indicated that although many of the skills, preparations, and attributes were rated important (the scale ranged from Most Important to Somewhat Important), only thirty were among the most notable. Table 2 contains a list of these items along with their means and standard deviation. A closer look at this list reveals that the items can be divided into two distinct groups, personal attributes and educational preparations. Interestingly, the top five items on the list were the personal attributes of trustworthiness, dependability, oral communication skills, cleanliness, and punctuality. These results are consistent with previous research that pointed out that personal trait and communication skills are among

TABLE 2
TOP 30 ATTRIBUTES, PREPARATIONS, AND SKILLS ACCOUNTING PROFESSIONALS
SEEK IN ENTRY-LEVEL COLLEGE GRADUATES

Rank	Attributes, Preparations, and Skills	Mean	S.D.
1.	Trustworthiness	1.87	1.503
2.	Dependability	1.94	1.208
3.	Oral communication skills	1.99	1.385
4.	Cleanliness	2.09	1.318
5.	Punctuality	2.11	1.056
6.	B.S. or B.A in Accounting	2.15	1.759
7.	Positive attitudes	2.19	1.432
8.	Desire to learn new skills	2.21	1.21
9.	Ability to get along with others	2.22	1.305
10.	Ability to work overtime	2.30	1.244
11.	Business attire	2.34	1.143
12.	Manners	2.45	1.207
13.	Sense of responsibility	2.45	1.269
14.	Technical skills	2.46	1.207
15.	Enthusiasm and Energy Level	2.50	1.351
16.	Sincerity	2.52	1.253
17.	Friendliness	2.54	1.431
18.	Interpersonal Skills	2.55	1.335
19.	Accounting Grade Point Average	2.56	1.376
20.	Poise and Composure	2.59	1.166
21.	Written Communication Skills	2.60	1.449
22.	Maturity	2.61	0.980
23.	Self-control when provoked	2.61	1.206
24.	Conceptual accounting knowledge	2.63	1.081
25.	Overall grade point average	2.69	1.389
26.	Self-confidence	2.72	1.282
27.	Tactfulness	2.73	1.256
28.	Ability to work in pressure situations	2.86	2.533
29.	Plan to become a Certified Public Accountant	2.89	2.291
30.	Reputation of the university attended	2.96	1.258

the most important criteria for selecting accounting employees (De Villiers, 2010; Kavanagh and Drennan, 2008). The results also indicated that while many states have passed legislations requiring 150 semester hours of education for the CPA licensure, accounting professionals still look for college graduates who hold a bachelor's degree for the entry-level employment. Other highly important college level preparations included knowledge of both technical and conceptual accounting as well as written communication skills. In addition, professionals have rated both students' overall and accounting GPA among the important factors.

TABLE 3 TOP 30 ATTRIBUTES, PREPARATIONS, AND SKILLS ACCOUNTING PROFESSIONALS SEEK IN PROMOTING ACCOUNTING EMPLOYEES

Rank	Attributes, Preparations, and Skills	Mean	S.D.
1.	Dependability	1.65	1.405
2.	Trustworthiness	1.76	1.488
3.	Ability to work in pressure situations	1.83	1.467
4.	Sense of responsibility	1.86	1.424
5.	Positive attitudes	1.87	1.404
6.	Written Communication Skills	1.89	1.103
7.	Ability to get along with others	1.93	1.346
8.	Knowledge of a firm's expectations	1.94	1.367
9.	Interpersonal skills	2.01	1.465
10.	Technical skills	2.02	1.398
11.	Leadership skills	2.02	1.472
12.	Conceptual Accounting Knowledge	2.02	1.489
13.	Business attire	2.06	1.297
14.	Enthusiasm	2.11	1.426
15.	Ability to work overtime	2.17	1.402
16.	Business Awareness	2.18	1.102
17.	Conscientiousness	2.20	1.316
18.	Self-control when provoked	2.20	1.410
19.	Ability to represent the firm	2.22	1.258
20.	Maturity	2.22	1.447
21.	Self confidence	2.25	1.516
22.	Cleanliness	2.25	1.281
23.	Poise and Composure	2.29	1.327
24.	Punctuality	2.29	4.137
25.	Sincerity	2.32	1.277
26.	Tactfulness	2.33	1.139
27.	B.S. or B.A. degree in Accounting	2.38	1.642
28.	Desire to learn new skills	2.39	1.633
29.	Manners	2.45	1.035
30.	Stability	2.49	1.269

Research Question 2

Mean ratings for the top 30 skills, preparations, and attributes relevant to promotion are presented in Table 3. Accounting practitioners in both public and corporate accounting felt that personal attributes such as dependability, trustworthiness, ability to work in pressure situations, sense of responsibility, and positive attitudes were more important than written communication skills. In addition, we found that the ability to get along with others, knowledge of firm's expectations, and interpersonal skills are considered significantly superior for promoting employees than their technical or conceptual accounting skills. These findings are extremely significant as they are somewhat in contrast with criteria for employee selection outlined in this research and by earlier studies suggesting that oral and written communication are the two most important skills (Morgan, 1997; De Lange et al., 2006; Kavanagh and Drennan, 2008).

It is interesting to note that accounting professionals believe that for promotion to a higher rank, employees' personal attributes are much more significant than holding a bachelor's degree in accounting. Twelve other personal traits that are found important in promoting accounting staff included leadership skills, enthusiasm, conscientiousness, self-control, maturity, self-confidence, sincerity, poise and composure, punctuality, tactfulness, desire to learn new skills, and stability. It was also noted that wearing business attire and knowledge of business are highly important when employees are being considered for promotion. In addition, ability to work overtime, cleanliness, and manners play an important role in the professionals' decision process.

Although significant differences exist between the rankings of skills, preparations, and attributes necessary for the selection and promotion of accounting employees (Tables 2 and 3), commonalities also abound. It is interesting to note that twenty of the personal attributes and four of educational preparations are shared in both tables.

Research Question 3

Review of Tables 4 and 5 indicate significant differences in the rankings of top skills, preparations, and attributes expected in new hires by public accountants vs. corporate accountants. Public accountants (CPAs) rank trustworthiness as most important (corporate accountants rated this as 7th in importance), while corporate accountants selected B.S. or B.A. in Accounting as most important (public accountants rated the degree at the 13th position). Looking at the next 9 mean ratings for public accountants brings the following attributes into focus: plan to become a CPA (not ranked by corporate accountants in the Top 30), dependability (13th), positive attitude (26th), cleanliness (6th), oral communication skills (4th), desire to learn new skills (14th), written communication skills (not ranked by corporate accountants), friendliness (25th), and ability to get along with others (15th)⁴. Corporate accountants ranked their next 9 selections as follows: accounting grade point average (not ranked by public accountants in the Top 30), punctuality (12th), oral communication skills (6th), overall grade point average (not ranked by public accountants), cleanliness (5th), trustworthiness (1st), class standing (not ranked by public accountants), AACSB accreditation of business school attended (not ranked by public accountants), and business attire (15th)⁵.

Looking at the top 10 mean rankings for both corporate and public accountants only brings oral communication skills, cleanliness, and trustworthiness into this set of common attributes. Interestingly, corporate accountants included three items that are not included in the Top 30 by public accountants: accounting grade point average, overall grade point average, and AACSB accreditation of school. It could be that public accountants included these 3 preparations within their assessment of plan to become a Certified Public Accountant (CPA), which they ranked 2nd in importance.

Although in general the top 30 rankings of both public and corporate accountants contain similar attributes, the individual rankings vary substantially. These differences could be driven by the different nature of the work environments in which each type of accountant is expected to perform and the different types of demands they must satisfy. As the public accountant deals directly with the public in the communication and presentation of financial information, the corporate accountant only communicates with the public in an indirect fashion. New hires in public accounting could be expected to do more written communication, and work in teams with tight deadlines. Every assignment a public accountant

receives would be subject to time pressure, whereas a corporate accountant at entry level would have time pressure expectations at month end close.

TABLE 4 TOP 30 MOST IMPORTANT ATTRIBUTES, PREPARATIONS, AND SKILLS USED BY PUBLIC ACCOUNTANTS IN ENTRY-LEVEL SELECTION DECISIONS

No.	Attributes, Preparations, and Skills	Mean	S.D.
1	Trustworthiness	1.91	1.683
2	Plan to become a Certified Public Accountant (CPA)	2.04	1.541
3	Dependability	2.05	1.436
4	Positive attitudes	2.21	1.478
5	Cleanliness	2.21	1.438
6	Oral communication skills	2.27	1.546
7	Desire to learn new skills	2.36	1.323
8	Written communication skills	2.38	1.277
9	Friendliness	2.43	1.477
10	Ability to get along with others	2.43	1.382
11	Business awareness	2.43	1.405
12	Punctuality	2.46	1.001
13	B.S. or B.A. degree in accounting	2.52	1.946
14	Ability to work overtime	2.54	1.360
15	Business attire	2.56	1.217
16	Tactfulness	2.57	1.031
17	Interpersonal skills	2.62	1.326
18	Sense of responsibility	2.62	1.356
19	Ability to work in pressure situations	2.65	1.286
20	Manners	2.66	1.260
21	Poise and composure	2.67	1.187
22	Maturity	2.67	1.110
23	Sincerity	2.68	1.343
24	Technical accounting skills	2.70	1.273
25	Enthusiasm and energy level	2.70	1.404
26	Conceptual accounting knowledge	2.71	1.179
27	Conscientiousness	2.73	1.411
28	Self-confidence	2.81	1.269
29	Body language	2.85	1.321
30	Self-control when provoked	2.85	1.284

TABLE 5
TOP 30 MOST IMPORTANT ATTRIBUTES, PREPARATIONS AND SKILLS USED BY CORPORATE ACCOUNTANTS IN ENTRY-LEVEL SELECTION DECISIONS

No.	Attributes, Preparations, and Skills	Mean	S.D.
1	B.S. or B.A. degree in accounting	1.27	0.660
2	Accounting grade point average	1.43	0.728
3	Punctuality	1.52	0.792
4	Oral communication skills	1.64	0.718
5	Overall grade point average	1.66	0.834
6	Cleanliness	1.70	0.509
7	Trustworthiness	1.70	0.594
8	Class standing	1.93	1.189
9	AACSB accreditation of business school attended	2.00	0.835
10	Business attire	2.02	0.263
11	Ability to work overtime	2.05	0.645
12	Technical accounting skills	2.09	0.936
13	Dependability	2.11	0.538
14	Desire to learn new skills	2.14	0.554
15	Ability to get along with others	2.18	0.870
16	Reputation of university attended	2.23	0.937
17	Leadership role in student clubs or professional organizations	2.30	0.553
18	Sincerity	2.36	0.718
19	Recommendations letters from faculty	2.39	0.841
20	Poise and composure	2.43	0.501
21	Conceptual accounting knowledge	2.43	0.789
22	Manners	2.52	0.792
23	Self-confidence	2.55	0.761
24	Enthusiasm and energy level	2.59	0.583
25	Friendliness	2.61	0.970
26	Positive attitudes	2.70	0.765
27	Body piercing	2.70	2.348
28	Membership in student clubs or professional organizations	2.73	0.872
29	Ability or desire to specialize	2.82	0.947
30	Self-control when provoked	2.89	0.813

Research Question 4

Tables 6 and 7 indicate the Top 30 skills, preparations, and attributes ranked as important by public and corporate accountants as to employee promotion decisions. Again, the rankings of each table show significant differences in 7 practitioner assessments. The next 3 are held in common by both corporate and public accountants in the top 10. Public accountants (CPAs) ranked dependability as most important (corporate accountants rated this as 22^{nd} in importance), and corporate accountants selected ability to get along with others as most important (public accountants rated this attribute at the 10^{th} position). The next 9 mean ratings for public accountants are the following: trustworthiness (ranked 20^{th} by corporate accountants), plan to become a Certified Public Accountant (not ranked by corporate accountants), plan to become a Certified Internal Auditor (not ranked by corporate accountants), positive attitude (16^{th}), written communication skills (18^{th}), ability to work in pressure situations (2^{nd}), knowledge of firm's expectations (7^{th}), and ability to get along with others (1^{st}) ⁴. Corporate accountants ranked their next 9 selections as:

ability to work in pressure situations (ranked by public accountants as 8th), punctuality (19th), selfconfidence (25th), sense of responsibility (11th), conceptual accounting knowledge (not ranked by public accountants), knowledge of firm's expectations (9th), enthusiasm and energy level (23rd), business attire (15th), and leadership skills (17th)⁵.

Three of these attributes are held in the top 10 mean rankings for both public and corporate accountants: ability to work in pressure situations, ability to get along with others, and knowledge of firm's expectations. These selections make sense when we consider that an accountant would be promoted to a position that would require team leadership responsibilities. The promoted accountant would also be expected to carry out their job responsibilities in line with the firm's goals and expectations. We would also expect a public accountant to require their employees to become licensed, whereas the license may be optional for corporate accountants. It is interesting that the top 20 attributes on Table 7 (containing corporate accountant assessments) are rated as more important than all attributes on Table 6 (public accountant assessments).

TABLE 6 TOP 30 MOST IMPORTANT ATTRIBUTES, PREPARATIONS AND SKILLS USED BY PUBLIC ACCOUNTANTS IN PROMOTION DECISIONS

No.	Attributes, Preparations, and Skills	Mean	S.D.
1	Dependability	1.65	1.536
2	Trustworthiness	1.68	1.543
3	Plan to become a Certified Public Accountant (CPA)	1.70	1.244
4	Plan to become a Certified Internal Auditor (CIA)	1.85	1.699
5	Positive attitudes	1.96	1.334
6	Written communication skills	1.99	1.089
7	Others	2.04	1.450
8	Ability to work in pressure situations	2.06	1.387
9	Knowledge of firm's expectations	2.08	1.235
10	Ability to get along with others	2.10	1.355
11	Sense of responsibility	2.12	1.446
12	Technical accounting skills	2.15	1.302
13	Oral communication skills	2.15	1.487
14	Conceptual accounting knowledge	2.15	1.432
15	Business attire	2.17	1.348
16	Desire to learn new skills	2.19	1.474
17	Leadership skills	2.20	1.420
18	Conscientiousness	2.25	1.242
19	Punctuality	2.26	1.158
20	Interpersonal skills	2.27	1.364
21	Ability to represent the firm (e.g., recruiting, meetings)	2.28	1.280
22	Ability to work overtime	2.29	1.436
23	Enthusiasm and energy level	2.30	1.350
24	Poise and composure	2.34	1.092
25	Self-confidence	2.34	1.289
26	Cleanliness	2.34	1.277
27	Sincerity	2.38	1.155
28	Maturity	2.42	1.509
29	Tactfulness	2.45	1.260
30	Self-control when provoked	2.50	1.318

TABLE 7 TOP 30 MOST IMPORTANT ATTRIBUTES, PREPARATIONS AND SKILLS USED BY CORPORATE ACCOUNTANTS IN PROMOTION DECISIONS

No.	Attributes, Preparations, and Skills	Mean	S.D.
1	Ability to get along with others	1.14	0.347
2	Ability to work in pressure situations	1.14	0.462
3	Punctuality	1.16	0.370
4	Self-confidence	1.20	0.408
5	Sense of responsibility	1.23	0.522
6	Conceptual accounting knowledge	1.25	0.438
7	Knowledge of firm's expectations	1.32	0.639
8	Enthusiasm and energy level	1.32	0.561
9	Business attire	1.32	0.561
10	Leadership skills	1.36	0.487
11	Technical accounting skills	1.39	0.895
12	Maturity	1.41	0.726
13	Self-control when provoked	1.43	0.625
14	B.S. or B.A. degree in accounting	1.45	0.697
15	Interpersonal skills	1.45	0.504
16	Positive attitudes	1.48	0.505
17	Business awareness	1.52	0.664
18	Written communication skills	1.59	0.757
19	Poise and composure	1.64	0.780
20	Trustworthiness	1.64	0.487
21	Cleanliness	1.66	0.479
22	Dependability	1.66	0.479
23	Body piercing	1.75	1.123
24	Oral communication skills	1.75	0.438
25	Prior work experience	1.75	1.203
26	Ability to work overtime	1.89	0.618
27	Ability to travel	1.91	1.178
28	Ability to represent the firm (e.g., recruiting, meetings)	1.91	0.603
29	Manners	1.98	0.151
30	Sincerity	2.02	0.821

The data do not suggest, as reported by previous studies, that public accountants are more interested in traditional accounting skills such as generally accepted accounting principles used for financial reporting, auditing techniques, and taxation rules and that non-public accountants seek more contemporary skills such as organizational behavior, group skills, and personal attributes. Both public and corporate accountants rank personal attributes as highly important. A review of Tables 4-7 shows many commonalities in the Top 30 rankings of preparations and attributes. In fact, when reviewing the rankings for promotion we see more common rankings between corporate and public accountants than in entry level hiring decisions.

CONCLUSION

The purpose of this research was to investigate what skills, knowledge, and characteristics are necessary to prepare students for successful employment. The focus of this investigation was on soft skills, to go beyond traditionally required technical skills, to ascertain what generic skills would enable the knowledge professional to succeed in the highly changeable business environment. Generic skills were operationalized as including but not limited to communication, team skills, leadership, problem solving, analytical and interpersonal skills.

Given the first recommendation of The Pathways Commission, "Build a learned profession for the future by purposeful integration of accounting research, education, and practice for students, accounting practitioners, and educators", a survey was designed and administered to accounting professionals from two different groups: the American Institute of Certified Public Accountants (AICPA) and the Institute of Management Accountants (IMA). The overall results indicate that the top five most important items for hiring entry-level accountants are personal attributes such as trustworthiness, dependability, oral communication skills, cleanliness, and punctuality. Based on these findings, it is evident that accounting programs should prepare graduates so that their qualities go beyond technical accounting skills and include attributes that prepare students as ethical citizens. Accordingly, accounting curriculum is in need of reform to produce graduates that have a broader set of skills, preparations, and attributes than taught in a traditional accounting program.

We found that ability to get along with others, knowledge of firm's expectations, and interpersonal skills are considered significantly superior for promoting employees than their technical or conceptual accounting knowledge. Personal attributes such as dependability, trustworthiness, ability to work in pressure, sense of responsibility, and positive attitudes are all too often more important than theoretical and technical accounting skills or even business awareness. For promotion to a higher rank, employees' personal attributes are much more significant than holding a bachelor's degree in accounting. Accounting professionals are seeking a diverse set of skills, preparations, and attributes in college graduates, which signals the need for a change in accounting curriculum.

The results indicate that it is not possible for accounting students to acquire all that is necessary for a successful career by taking university courses which are focused primarily on a rule based curriculum. Instead, the accounting curriculum must include a set of well-planned activities designed to teach students a wide range of generic skills and attributes that employers pursue for the selection and/or promotion of accounting employees. The findings herein support earlier research suggesting that many of the non-technical skills necessary for one's professional development are not adequately taught in accounting curricula. Thus, all indications are that accounting curricula must be revised to produce graduates with a mix of skills, preparations, and attributes that seem essential to solve the challenges faced by business organizations.

As technology continues to modernize accounting, and as the various technical functions and processes become computerized, the accountant's role is changed from the provider of information to information analyst. The Pathways Commission notes, "As in the past, in the face of challenges of the changing environment for the profession, the Committee believes that the educational system should thoughtfully consider the feasibility of a visionary educational model. The commission should consider developments in accounting standards and their application, auditing needs, regulatory framework, globalization, the international pool of candidates, and technology" (The Pathways Commission, pp. 26-27).

While the technical skills and preparations are still required, it is evident that students and prospective accountants are to take their abilities a step further and be able to serve as business experts. To achieve this objective, accounting programs should revise their faculty merit and reward systems in a way that place more emphasis on teaching excellence. Presently the faculty merit and compensation schemes at top-ranked universities are entrenched with publication ranking which is highly skewed to non-education-related research (Bonner, et al, 2006). Improvement in teaching may only be possible by bringing more real-world discussions into the classroom and enhance teaching by incorporating the expectations and

feedback from the accounting profession. As stated by The Pathways Commission "A robust partnership between the accounting academic community and the accounting practice community is critical to the relevance of accounting education and, ultimately, the accounting profession's future" (The Pathways Commission, 2012, p. 55). In addition, university administrators should takes steps to encourage faculty to undertake more research directed towards improved teaching, learning, and pedagogy if they are interested to promote the Commission's recommendations.

As with other survey research this study is marred by several limitations.

- 1. The number of respondents in the CPA and non-CPA groups was different, which can potentially result in a certain degree of bias. A total of 66% of the respondents possessed a CPA certificate while only half as many had a certificate other than CPA (e.g. CMA, CIA, etc.). The remaining 11% possessed no certificates.
- 2. A non-response bias can inhibit the results' generalization. After several attempts, we were able to improve the response rate to nearly 40%. However, the attitudes of the other 60% of the professionals who did not participate in the study are unknown.
- 3. Finally, the results are biased by self-selection. Undoubtedly, some individuals are more likely to respond to a questionnaire than others. Given the lack of information about the entire sample, it is impossible to know how the non-respondents would have reacted in completing the survey.

ENDNOTES

- 1. To ensure validity and reliability of the questions, the instrument was pre-tested by using a small group of accounting practitioners in Southern California. As the result of this pre-testing, several questions were added or modified prior to mass distribution.
- 2. In order to measure the probability of non-response bias, statistical tests were conducted on the early and late responses. The results showed no significant differences between the two groups, leading to the conclusion that the chance of non-response bias was statistically non-existent (P = 0.05).
- 3. The first E-mail produced 101 useable responses. Ninety-seven additional useable responses were received after the second and third E-mail bringing the total to 198 responses.
- 4. The numbers in the parentheses indicate the rankings by the corporate accountants for the same attribute.
- 5. The numbers in the parentheses indicate the rankings by the public accountants for the same attribute.

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