

Bridging the Gap in Undergraduate Accounting Education Programs in Jordanian Universities: A Call for Action

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Abstract

This paper comes to investigate the current status of undergraduate accounting education programs at Jordanian universities. This has been performed through identifying the most important accounting courses for students' future profession, the relevant generic skills that should be included in accounting education curriculum, and the weakness aspects of accounting programs in Jordanian universities. The paper also identifies the necessary actions to improve the accounting education programs.

In general, the results show that accounting students are satisfied with the current accounting education model, but this satisfaction is not as required. Therefore, to bridge the gap between the current status of accounting education programs and the students' future expectations toward such programs in Jordanian universities, accounting departments in different universities should add all the necessary courses to their plans. In addition, many generic skills should be rooted in accounting education curricula such as computer skills, decision making skills, time management skills, problem solving skills, information collection skills and analytical skills. Moreover, it seems that accounting education curricula lack the necessary fieldwork and training programs.

Consequently, accounting departments in Jordanian universities must give more emphasis to the fieldwork and training programs. Accounting departments must also offer all the relevant accounting software programs along with scientific research methods in accounting to their students. In addition, using the current technological tools (e.g. web-based learning) will increase the efficiency of accounting students. Moreover, one updated accounting education plan should be adopted by all Jordanian universities.

To perform the mentioned reforms, efforts of all related parties (e.g. Ministry of Higher Education, management of public and private universities and Jordanian Association of Certified Public Accountants) should be met.

Keywords: accounting education, curricula, current status, future expectations, weakness aspects

1. Introduction

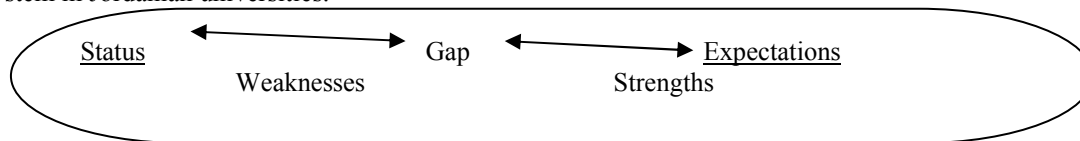
Accounting is one of the most important sciences in today's business market. Thus, global financial markets pinpoint the need for clear reliable accounting information, which depends, in the first instance, on the output of accounting education process in universities (Yücel, Saraç & Çabuk, 2012). However, the students' beliefs about the accounting profession are important determinants of the choice of accounting education in universities (Tan & Laswad, 2006). Therefore, the undergraduate stage is considered critical in the professional life of any student (Lawson et al., 2014). In this stage, the accounting students try to build their accounting skills as they learn progressively different accounting courses.

Despite the growing demand for accounting career, accounting education has witnessed a significant decline recently (Buckhaults & Fisher, 2011). In this context, Bui and Porter (2010, p.23) argued that since the mid-1980s, professional accounting bodies, managers and academics have sensed the failure of universities to provide accounting graduates with the competencies required for the current business environment for many reasons. However, accounting education, as a part of the whole education system in any country, is subject to many changes but it is not clear how these changes affect the accounting education system (Gonzalez & Hassall, 2008).

However, the International Accounting Education Standards Board (IAESB) offers the necessary rules and information to improve the accounting education practices worldwide (McPeak, Pincus & Sundem, 2012).

The current study tries to identify the current status of accounting education in Jordan and to assess the expectations of undergraduate accounting students regarding the current and future status of accounting education in Jordan. Accordingly, the current study tries to investigate if there is an expectation gap between the current status of undergraduate accounting programs and the expected ambitions of accounting students in Jordan (see figure 1). The main objective can be achieved through two sub-objectives: firstly; measuring the current status of undergraduate accounting education programs in Jordan through identifying its main

weaknesses and strengths. Secondly; assessing the students' expectations for the future of accounting education system in Jordanian universities.



To achieve the research objective, the quantitative approach was incorporated in this study.

The remainder of the paper is organized as follows. Section two overviews the accounting profession in Jordan; section three presents the relevant literature on the subject; section four describes data collection process, study variables, hypotheses to be tested and statistical techniques adopted; section five discusses study findings and section six concludes the study.

2. Accounting Education System in Jordan

In addition to the scientific, literary, commercial, nursing and other streams in the comprehensive secondary education system, the Ministry of Education in Jordan provided in 2003 a new stream called Information Management. This stream focuses mainly on management courses. Only three levels of one accounting course are provided in this stream during two years. Thus, the universities are the main provider of accounting education in Jordan.

Jordan has more than 30 public and private universities. Most of these universities award the bachelor degree in accounting after finishing about 132 credit hours in the Faculties of Administrative and Financial Sciences (also called Business Faculty in some Jordanian universities). The undergraduate accounting study plan in Jordan follows the mixture approach (Wu, Huang, Kuo & Wu, 2010) with two main categories; namely compulsory courses and elective courses. However, there is no one unified study plan for accounting program in all Jordanian universities. In general, the undergraduate accounting program in most universities includes some common accounting courses. These include accounting principles 1 and 2, intermediate accounting 1 and 2, advanced accounting, corporate accounting, auditing, cost accounting, managerial accounting, taxations, accounting theory, accounting information systems, governmental accounting and accounting for financial institutions. Although these courses are common among Jordanian universities in undergraduate accounting programs, there is a big gap among the accounting graduates in Jordan for many reasons. Firstly, the language of teaching differs from one university to another in Jordan, in that some universities provide accounting education in English language while others in Arabic language. Secondly, the ability of Jordanian universities in providing the technical tools necessary to the education process is different, in that some universities have all the necessary infrastructures to conduct the educational process, while some universities have suffered deficit in their budgets for many years. For example, some universities have crowded classrooms. Thirdly, a lot of academics (i.e. PhD) in accounting leave Jordan to Arab Gulf universities, where they earn higher salaries and benefits in comparison with their colleagues in Jordanian universities. Fourthly, there are no clear standards in selecting relevant lecturers in accounting departments. Fifthly, there is a lack of practical courses and accounting scientific research courses in some universities during the undergraduate stage. Sixthly, there is a perceived defect in the policy of students' admission in accounting programs, which leads to a weak output in accounting graduates. Therefore, many actions must be taken by the Ministry of Higher Education, universities and professional bodies to enhance and improve the environment of accounting education in Jordan.

Accordingly, the current study comes to identify the main weaknesses and strengths of undergraduate accounting education programs in Jordan and to assess students' perceptions toward effective programs.

3. Literature Review

Recently, a broad set of studies have covered the reality of accounting education especially in developed countries. The relevant prior studies for the current study are those focused on the current status of accounting education system in different cultures. In addition, the current study investigates those studies which have offered new models for the accounting education.

A study by Yücel, Saraç and Çabuk (2012) discussed the current status of accounting education in Turkey through investigating the current problems and future expectations. The authors indicated that accountants today are incorporating many technological tools to accomplish their main works such as auditing, control, analysis, planning, financial statements' preparation and consultant services. In respect to the problems and obstacles of accounting education, the respondents ranked insufficient training courses as the most important problems of accounting education in Turkey, followed by crowded classrooms, lack of knowledge about accounting profession, insufficient communication skills, insufficient number of accounting courses and inability to deal with different accounting software programs respectively. The respondents also listed many expectations and hopes for the future of accounting education. These include; holding training courses, introducing

accounting profession to the students, developing communication and computerized skills among students to solve different management problems and bridging the gap between accountant candidates and professional practitioners in order to prepare accounting graduates for business market. In the same context, Paul, Codrina, Nicoleta, Catalina and Gorgan (2011) focused on the main professional and behavioural skills necessary for a job occupation in business markets that should be included in Romanian accounting education curriculum. The authors indicated that the education approach followed in Romanian university is necessary but needs a lot of improvements and amendments to meet the today labor market requirements. In particular, the authors stressed the importance of developing the graduates' behavioral skills, such as foreign languages and technical skills. These skills, as indicated by the authors, should be integrated and completed with the suitable behavioral skills of the respective jobs such as accounting as a communication tool, motivation, honesty, capacity of analysis and teamwork skills. Cory and Huttenhoff (2011) investigated some important issues in accounting education system. These include: degree and professional certificate preference, courses and topics to be covered and priority of skills to be learned in universities. The results of the study indicated that a 120-hour undergraduate's degree in accounting is the optimal degree and the CPA is the most relevant professional certificate, critical thinking skills should be given priority to learn. In respect to the different accounting courses, the authors indicated that intermediate accounting is the most important accounting course, followed by ethics, finance, advanced accounting, information systems and auditing respectively.

Tan and Laswad (2009) discussed the factors that may influence students' decisions to major in accounting. They include: availability of employment, earnings, job satisfaction, aptitude, interest in subject area, and the influence of students' teachers at secondary schools, family and friends. Marriott and Marriott (2003) compared UK accounting students' attitudes toward accounting profession at the beginning and ending of their study periods and found that students have a positive attitude at the beginning of their study but this attitude fell significantly by the end of their study periods.

Some studies have focused on the presentation way of accounting courses. For example, Sugahara and Boland (2006) conducted a study to show the effect of using Power Point way of presenting the financial accounting "1" on the students' academic performance. The result of their study indicated a significant relationship between students' preferences for Power Point and their academic results. Similarly, a study by King and Mo (2013) found that including the web-based learning in some accounting courses increased the efficiency of students in terms of their overall grades and helped instructors to monitor their students' educational activities (see also Kotb & Robert, 2011; Ng, 2012).

Some previous studies also focused on the generic skills necessary for accounting students. This is because accounting students need to build their critical thinking and to act as a professional (Hilton & Johnstone, 2013; Lawson et al., 2014). For example, Crawford, Helliard and Monk (2011) investigated the importance of 16 generic audit and education skills in UK universities. In particular, the authors examined the perceptions of academics and practitioners toward the importance of working on these generic skills at undergraduate level and how these skills help students in gaining professional certificates. The results of the study indicated that practitioners emphasized all the 16 skills with analytical skills as the most important, followed by presentation skills and written communication skills respectively. On the other hand, the authors asked academics to select the main generic skills that students should learn at undergraduate level, and which skills that business market emphasized. In both cases, the academics emphasized the same three skills (i.e. analytical, presentation and written communication) as the most important, whereas analytical skills were ranked first during the undergraduate level and oral communication skills during the market business stage. Aldhizer (2013) urges accounting departments to include a new course entitled accounting negotiation. The author justifies the importance of such course based on the necessity of negotiation skills for accounting students who used to decide the fees for several accounting services such as audit fees. A study by Chaker and Abdullah (2011) identified the necessary skills that were obtained by the accounting students of Kazakhstan Institute of Management Economics and Strategic Research during their study in undergraduate stage. The authors focused on three categories of skills. These include: technical and functional skills, interpersonal and communication skills, and organisational and management skills. In general, the results of the study indicated that accounting graduates were good in professional ethics, communication skills, auditing skills and information and distribution skills.

However, Bui and Porter (2010) summarized the reasons for accounting education failing to provide graduates with the necessary competences in four reasons according to some prior research. These include: (p.27)

- (a) "*Differences in the expectations of accounting academics and employers*";
- (b) "*Students' perceptions of accounting programmes and the profession, and their ability and aptitude*";
- (c) "*Institutional constraints*";
- (d) "*The ineffectiveness of university teaching*".

In respect to other courses within accounting program, Kotb and Roberts (2011) assessed the state of e-business education in undergraduate university accounting degree programs in the UK and Ireland. The authors

found that e-business is covered in accounting education curriculum to a small extent. One important application of the study is for universities, professional bodies, and researchers to integrate their efforts in preparing accounting graduates for the new business market. Webb et al. (2009) assessed the importance of International Study Tour (IST) for accounting students. The findings of this study suggest that the IST provides students with the necessary life experience not available in classrooms.

In general, the above mentioned studies (see also Etherington & Richardson, 1994; Pincus, 1997; Dillon & Kruck, 2004; Fisher, Swanson & Schmidt, 2007; Vinen & Selvarajah, 2007; Bui & Porter, 2010; Crisostomo, 2010; Willcoxson, Wynder & Laing, 2010; Cook, Bay, Visser, Myburgh & Njoroge, 2011; Wally-Dima, 2011) revealed that undergraduate accounting programs suffer many weaknesses in providing behavioural and technical skills which they can gain by holding continuous training courses and seminars with other interested parties such as professional bodies and researchers. These skills can also be gained by including new courses to the undergraduate accounting programs such as training, ethics, accounting information systems and scientific research methods. Thus, it can be argued that the gap between the current status of undergraduate accounting programs and the expected ambition of accounting students is in need for considerable efforts to be bridged.

4. Research method

4.1 Sample and data collection

A sample was drawn from both public and private universities in Jordan. The questionnaire was directed to those students who were undertaking their undergraduate study in departments of accounting, particularly students in the third and fourth study years (e.g. Tan and Laswad, 2009). The researchers depended on the previous literature and their own experience in developing the questionnaire. Several academicians were consulted to assess the construct and content validity of the questionnaire. Their relevant comments were incorporated, which improved the quality of the questionnaire. The questionnaire was translated into Arabic as the native language of the students. Back translation was performed to ensure the relevancy of the Arabic version of the questionnaire. Again, the Arabic version of the questionnaire was pre-tested by several academicians in accounting and research methodology to ensure the construct validity of the questionnaire. 396 questionnaires were distributed to accounting students during their lectures, and then collected (e.g. Sugahara & Boland, 2006; Yücel, Saraç & Çabuk, 2012). Only 343 questionnaires were collected. 79 of them were excluded because they were fully or partially uncompleted, which means that the current study is based on 264 usable questionnaires.

4.2 Study variables

The questionnaire includes eight sections with a well-designated covering letter. All the questions of the questionnaire are close-ended, except one open-ended question at the end of the questionnaire asking respondents to add any idea, comment or suggestion. Five-point likert scale was used in developing the questionnaire (e.g. strongly disagree = 1, strongly agree = 5), except for the seventh section which was built based on a three-point scale. The first section of the questionnaire includes eight demographic questions. The second section includes one question asking students about their satisfaction degree concerning accounting education in their universities. The third section includes 22 accounting courses and asks the respondents to indicate the importance of each course for their professional future. The fourth section includes 19 generic skills adapted from Crawford, Helliard and Monk (2011). Respondents were asked whether they think that these skills should be taught in their universities. Consistent with Cory and Huttenhoff (2011), the fifth section includes 11 potential weaknesses in accounting education. Six of them were adapted from Yücel, Saraç and Çabuk (2012) and five were self-formulated by researchers. Students were asked to express their opinion about these potential weaknesses. The sixth section includes 15 potential suggestions to improve the accounting education. Five of them were adapted from Yücel, Saraç and Çabuk (2012) and ten were self-formulated by researchers. Students were asked to express their opinion about these potential suggestions. The seventh section includes one question asking students if their perceptions toward accounting education have been changed during their study period and why (have been changed positively = 1, have not been changed = 2, have been changed negatively = 3) (see Marriott and Marriott, 2003). Finally, section eight asks respondents to add any idea or suggestion on the accounting education program as a whole.

4.3 Hypotheses

Based on the above discussion, the following hypotheses were developed:

- H1. There is no significant difference in the students' satisfaction with accounting teaching due to the gender.
- H2. There is no significant difference in the students' satisfaction with accounting teaching due to the Age.
- H3. There is no significant difference in the students' satisfaction with accounting teaching due to their university accumulated average score.
- H4. There is no significant difference in the students' satisfaction with accounting teaching due to university sector (i.e. private or public).
- H5. There is no significant difference in the students' satisfaction with accounting teaching due to language of

teaching.

H6. There is no significant difference in the students' satisfaction with accounting teaching due to the students' desire to continue higher education.

H7. There is no significant difference in the students' satisfaction with accounting teaching due to the students' desire to achieve professional certifications.

H8. In general, accounting students are dissatisfied with accounting education in their universities.

H9. Students' perceptions toward accounting changed negatively during the period of studying accounting in university.

5. Results and Discussion

5.1 Demographic Characteristics

Table 1 shows the demographic characteristics of the respondents. In particular 65.5% of the sample was male and the rest were female. 16.3% of the sample was between 18-20 years old, 72% was between 21-23 years old, and 11.7% was over 23 years old.

On the other hand 56.8% of the sample was studying at public universities, while 43.2% was studying at private universities. In the same context 44.3% of the sample was taught using Arabic language, 43.2% using English language, and 12.5% using both languages.

Concerning future ambition, 84.1% of the sample desired to have professional certifications related to accounting (e.g. CPA, JCPA, and CMA). Also, 75% of the sample was planning to pursue their higher education (Master, Ph.D.).

Table 1. Demographic information

Characteristic	No.	%	Characteristic	No.	%
<u>Gender</u>			<u>Teaching Language</u>		
Male	173	65.5%	Arabic	117	44.3%
Female	91	34.5%	English	114	43.2%
Total	264	100%	Both	33	12.5%
<u>Age</u>			Total	264	100%
18-20	43	16.3%	<u>Desire to have professional certification</u>		
21-23	190	72.0%	Yes	222	84.1%
Over 23	31	11.7%	No	20	7.6%
Total	264	100%	Have no information about these certifications	22	8.3%
<u>University Score</u>			Total	264	100%
50-59.9	9	3.4%	<u>Desire to continue higher education</u>		
60-67.9	94	35.6%	Yes	198	75.0%
68-75.9	97	36.7%	No	66	25.0%
76-83.9	51	19.3%	Total	264	100%
84-100	13	4.9%			
Total	264	100%			
<u>University Sector</u>					
Public	150	56.8%			
Private	114	43.2%			
Total	264	100%			

5.2 Descriptive Statistics

5.2.1 Satisfaction with the current accounting education model

Respondents were asked to express their opinion toward the current accounting education model using a five-point- likert scale (1= strongly disagree, 5=strongly agree). As shown in Table 2, results indicated that students were almost satisfied with their accounting education model with a mean of 3.76. This mean value indicates that students had a lot of criticism on their education model. This is very clear in the next sections where results show that students still needed many courses and skills to be included to their curricula. In addition, results indicated that their accounting education model still suffered many weaknesses.

Table 2. Accounting students perception toward the current accounting education model

	<i>Mean</i>	<i>Std. Dev.</i>
Satisfaction of accounting students with the current education model	3.76	0.988

5.2 .2 Reasons behind selecting accounting as a major

Table 3 shows the main reasons why students choose accounting as a major. It seems that the desire to have accounting professional certificates (22%), followed by the availability of employment opportunity for accountants (20.8%), job satisfaction (14%) and influence of students' family and relatives (11%) were the main reasons that encouraged students to major in accounting. These reasons are almost similar to that of Tan and Laswad (2009), who found that availability of employment, job satisfaction, and the influence of family and friends are the main factors that may influence students' decisions to major in accounting. This result is also consistent with that of Cory and Huttenhoff (2011) who found that CPA is the most important professional certificate that students hope to earn.

Table 3. Reasons for major in accounting

Reason	No.	%
According to high secondary score	23	8.7%
Availability of employment	55	20.8%
Earnings	19	7.2%
Stature	13	4.9%
Job satisfaction	37	14.0%
Aptitude	14	5.3%
Influence of students' teachers at secondary schools	9	3.4%
Influence of students' family and relatives	29	11.0%
Influence of students' friends	7	2.7%
Desire to have professional certifications related to accounting	58	22.0%
Total	264	100%

5.2 .3 Accounting courses importance

In the third section of the questionnaire the students were asked to indicate the importance of each accounting course for their professional future. Table 4 shows results.

After testing these courses using one sample t-test, it is obvious that all these courses are considered significantly ($p=0.05$) important to students for their professional future.

Students rank accounting principles as the most important course among other courses followed by field training, financial statement analysis, accounting using computers, auditing, accounting ethics, intermediate accounting, and corporate accounting respectively. Previous research (e.g. Cory and Huttenhoff, 2011) reported mixed results in respect to the relevant courses.

However, some courses (e.g. accounting principles, intermediate accounting, field training, auditing, international accounting standards, international standards on auditing, cost and managerial accounting, and advanced accounting) are very important for any accounting education program at any university in any country. Some researchers suggested new courses to be included in accounting curricula. These include, for example, ethics in Uyar and Güngörmüş (2013), which also occupied advanced position in the current study as it comes sixth as shown in Table 4 below. Others such as Aldhizer (2013) suggested that accounting departments should include accounting negotiation course.

Table 4. Accounting courses importance

Rank	Course	Mean	Sig.	Rank	Course	Mean	Sig.
1	Accounting principles	4.59	0.00	12	Bank accounting	3.98	0.00
2	Field training	4.31	0.00	13	International standards on auditing	3.97	0.00
3	Financial statements analysis	4.23	0.00	14	Advanced accounting	3.97	0.00
4	Accounting using computers	4.21	0.00	15	Sales tax	3.94	0.00
5	Auditing	4.17	0.00	16	Managerial accounting	3.91	0.00
6	Accounting ethics	4.16	0.00	17	Accounting research	3.53	0.00
7	Intermediate accounting	4.11	0.00	18	Accounting theory	3.45	0.00
8	Corporate accounting	4.08	0.00	19	Special accounting	3.40	0.00
9	Income tax	4.05	0.00	20	Accounting information systems	3.39	0.00
10	International accounting standards	4.00	0.00	21	Governmental accounting	3.36	0.00
11	Cost accounting	4.00	0.00	22	Insurance accounting	3.24	0.00

5.2.4 Generic skills importance

In the fourth section of the questionnaire the students were asked about generic skills that should be taught in their universities which are considered important for their future. Table 5 shows the rank of the importance of these generic skills.

After testing these skills using one sample t-test, it is obvious that all these skills are considered important to the students for their professional future.

Students rank computer skills as the most important skill among other skills followed by decision making skills, time management skills, problem solving skills, information collection skills, analytical skills, leadership skills, and planning skills respectively, and so on as shown in Table 5. It seems that there is a big gap between the findings of the current study and those of previous research in context of the generic skills that should be taught to accounting students in developed countries. For example, Crawford, Helliard and Monk (2011) found that analytical skills, oral and written communication skills are the main three important skills that should be included in accounting education curricula in UK. Similarly, Cory and Huttenhoff (2011) found that critical thinking, written communication and interpersonal skills are the main three important skills for USA students. Accordingly, it seems that the cultural values of a country are critical factors in determining the educational required skills and standards (see, for example, Chand, Cummings & Patel, 2012; McPeak, Pincus & Sundem, 2012; Hu, Chand & Evans, 2013).

Table 5. Generic skills importance

Rank	Course	Mean	Sig.	Rank	Course	Mean	Sig.
1	Computer skills	4.52	0.00	11	Remembering skills	4.06	0.00
2	Decision making skills	4.46	0.00	12	Persuasion skills	4.05	0.00
3	Time management skills	4.31	0.00	13	Oral communication skills	4.04	0.00
4	Problem solving skills	4.28	0.00	14	Scientific research skills	3.98	0.00
5	Information collection skills	4.20	0.00	15	Listening skills	3.94	0.00
6	Analytical skills	4.19	0.00	16	Risk analysis skills	3.93	0.00
7	Leadership skills	4.18	0.00	17	Written communication skills	3.88	0.00
8	Planning skills	4.17	0.00	18	Persistence skills	3.83	0.00
9	Teamwork skills	4.11	0.00	19	Criticism skills	3.73	0.00
10	Presentation skills	4.08	0.00				

5.2.5 Potential weakness aspects

In the fifth section of the questionnaire, the students were asked to express their opinion about potential weakness aspects of the current accounting education in their universities. Table 6 shows the rank of the potential weakness aspects.

Table 6. Potential weaknesses aspects

Rank	Aspect	Mean	Sig.
1	Lack of visits to accountants working places	4.36	0.00
2	Insufficient training courses provided by university	4.35	0.00
3	Lack of activities towards developing communication competencies of students	4.01	0.00
4	Effectiveness of accounting education is limited by crowded classrooms	3.99	0.00
5	Lack of necessary accounting software programs	3.89	0.00
6	Lack of accounting scientific research courses	3.58	0.00
7	Difficulties of learning a computerized accounting software	3.57	0.00
8	Insufficient number of accounting education courses to meet the expectation of accounting profession	3.53	0.00
9	Lack of introduction of accounting profession to the students	3.48	0.00
10	Difficulty in understanding accounting courses presented in English language	3.47	0.00
11	Lack of accounting qualified instructors	3.43	0.00

After testing these potential weakness aspects using one sample t-test, it is obvious that accounting students agreed that these aspects were potential weaknesses in the current status of accounting education in Jordanian universities.

Students considered practical problems as the most important aspects that weaken current accounting education in Jordanian universities. As shown in Table 6, they view the lack of field visits to work sites of accountants as the most important weakness aspect in the current status of accounting education followed by insufficient training courses provided by universities, lack of activities towards developing communication competences of students, crowded classrooms, lack of necessary accounting software programs, lack of accounting scientific research courses respectively. This result is almost consistent with that of Yücel, Saraç and Çabuk (2012) who found that insufficient training courses are the most important problems of accounting education in Turkey. Similar to that of accounting education weakness aspects in Jordan the findings of Yücel, Saraç and Çabuk (2012) also indicated that crowded classrooms, insufficient communication skills and inability to deal with different accounting software programs were some of the education weakness aspects in Turkey (see also Webb et al., 2009).

However, previous research in the field (e.g. Lawson et al., 2014; Shih, Ku & Hung, 2013; Shapiro & Naughton, 2013) suggested several models and frameworks to overcome the limitations of current accounting education systems.

5.2.6 Potential strengths suggestions

In the sixth section of the questionnaire, the students were asked to express their opinion toward the potential strength aspects of accounting education in their universities.

Using One sample T-test, Table 7 shows that accounting students agree that these suggestions are important for strengthening accounting education in the future in Jordanian universities.

Table 7. Potential strengths suggestions

Rank	Suggestion	Mean	Sig.
1	Training course opportunities for accounting students should be provided by universities	4.72	0.00
2	Using technology in accounting education should be stressed	4.59	0.00
3	Accounting program should develop communication competencies of students	4.56	0.00
4	Accounting profession introductions should be increased in universities	4.56	0.00
5	Attracting qualified accounting instructors	4.48	0.00
6	Have professional accountants give practical courses in universities.	4.44	0.00
7	Accounting software programs should be provided by universities	4.41	0.00
8	Activating the scholarship program for outstanding students to pursue the higher education in accounting	4.39	0.00
9	Used a unified undergraduate accounting plan in all Jordanian universities	4.37	0.00
10	Accounting program should develop students skills to solve management problems and crisis	4.34	0.00
11	Activating students cultural exchange programs with other countries	4.25	0.00
12	Admission basis in undergraduate accounting program should be amended	4.21	0.00
13	Teaching in English language	4.11	0.00
14	New accounting course named "accounting ethics" should be provided by universities	4.08	0.00
15	New accounting course named "scientific research in accounting" should be provided by universities	3.83	0.00

Students considered providing training course opportunities for accounting students as the most important suggestion to enhance the future of accounting education in Jordanian universities followed by using technology in accounting education, developing communication competencies of students, increasing the introduction of accounting profession in universities, attracting qualified accounting instructors, giving practical courses by professional accountants in universities respectively. As shown in Table 7, 14 out of 15 suggestions earned a mean above 4 on a five-point-likert scale. This, however, indicates that the accounting education programs are in need for additional efforts to develop.

This result concurs with the study of Yücel, Saraç and Çabuk (2012) which revealed that holding training courses and introducing accounting profession to accounting students are considered to be the most important expectation by accounting students to improve the future of accounting education in Turkey. In addition, this result concurs with (Sugahara and Boland, 2006) studies which concluded that using technological tools (i.e. Internet, Email, MS PowerPoint and MS Excel) is necessary and helpful in the accounting education process. However, King and Mo (2013) argued that using web-based learning, for example, is a very important tool to enhance the capability of students to perform their educational activities in an effective way. This tool is unfortunately not adopted in the Jordanian education system and only some individual attempts to adopt the web-based learning is found and are ended in failure due to the lack of supporting from the decision-makers in universities.

5.3 Hypotheses Testing

The study hypotheses have been divided into three groups according to the statistical test to be used as follows:

First group includes hypotheses 1, 4, and 6. This group will be tested using Independent sample T-test.

Second group includes hypotheses 2, 3, 5, and 7. This group will be tested using One-way-ANOVA test.

Third group includes hypotheses 8 and 9. This group will be tested using One sample-T-test.

Table 8 shows Independent sample T-test results for the first group of hypotheses. As shown, the means for these hypotheses are not significant ($p= 0.05$). Therefore, these hypotheses are accepted, which means that there are no significant differences in the students' satisfaction with accounting teaching due to the gender or university sector or student desire to continue higher education. Thus, it seems that accounting students in Jordan are satisfied with their current education model regardless of their gender, university sector or students' ambition to continue their higher education.

Table 9 shows One way ANOVA test results for the second group of hypotheses.

As shown, the means for these hypotheses are not significant ($p= 0.05$). Therefore, these hypotheses are accepted, which means that there are no significant differences in the students' satisfaction with accounting teaching due to age, university average score, language of teaching, or student's desire to achieve professional certifications. Thus, it can be concluded that accounting students in Jordan are satisfied with their current education model regardless of their age or university average score or language of teaching or student's desire to achieve professional certifications.

Table 10 shows One Sample T-test statistical results for the third group of hypotheses, which contains the following hypotheses:

H8. In general, accounting students are dissatisfied with accounting education in their universities.

H9. Students' perceptions toward accounting changed negatively during the period of studying accounting in university. In this hypothesis a three-point scale was used (have been changed positively = 1, have not been changed = 2, have been changed negatively = 3).

As shown in Table 10, the mean for hypothesis 8 is (3.76) and it is significant ($p= 0.05$). Therefore this hypothesis is rejected, which means that accounting students are satisfied with accounting education in their universities. Also, Table 10 shows that the mean for hypothesis 9 is (1.52) and it is significant ($p= 0.05$). Therefore this hypothesis is rejected, which means that students' perceptions toward accounting changed positively during their period of study. This result is not consistent with that of Marriott and Marriott (2003) who concluded that accounting students had positive perceptions toward accounting education only in their beginning periods, but their perception changed at the later periods due to several reasons.

Table 8. Independent sample T- test results

		<i>Levene's Test for Equality of Variances</i>		<i>t-test for Equality of Means</i>				
		<i>F</i>	<i>Sig.</i>	<i>T</i>	<i>df</i>	<i>Sig.</i>	<i>Mean Difference</i>	<i>Std. Error Difference</i>
Gender	Equal variance assumed	0.110	0.741	0.123	262	0.902	0.16	0.128
	Equal variance not assumed			0.122	178.902	0.903	0.16	0.129
University sector	Equal variance assumed	2.105	0.148	1.087	262	0.278	-0.133	0.123
	Equal variance not assumed			1.080	237.527	0.281	-0.133	0.123
Desire to continue higher education	Equal variance assumed	1.179	0.279	1.734	262	0.084	0.242	0.140
	Equal variance not assumed			1.671	104.922	0.098	0.242	0.145

Table 9. One way ANOVA test

		<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Age	Between Groups	1.153	2	0.577	0.589	0.555
	Within Groups	255.332	261	0.978		
	Total	256.485	263			
University average score	Between Groups	2.055	4	0.514	0.523	0.719
	Within Groups	254.430	259	0.982		
	Total	256.485	263			
Language of teaching	Between Groups	1.364	2	0.682	0.698	0.499
	Within Groups	255.121	261	0.977		
	Total	256.485	263			
Desire to achieve professional certifications	Between Groups	4.173	2	2.086	2.158	0.118
	Within Groups	252.312	261	0.967		
	Total	256.485	263			

Table 10. One Sample T-test

	<i>Hypothesis</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>t-value</i>	<i>Sig.</i>
Accounting students are dissatisfied with accounting education		3.76	0.988	61.824	0.000
Students' perceptions toward accounting have been changed negatively		1.52	0.703	35.116	0.000

6. Conclusion

The current study comes to achieve several aims in respect to accounting education programs in Jordanian universities.

The study instrument was distributed to accounting students in both public and private universities in Jordan. It seems that most of the study respondents selected accounting as their major due to its importance in

offering them the opportunity to have professional certificates and relevant jobs.

However, the descriptive statistics results revealed that students were almost satisfied with the current accounting education model. This satisfaction, however, is not as required. The results also indicated that the most important ten accounting courses for students' future include accounting principles, field training, financial statement analysis, accounting using computers, auditing, accounting ethics, intermediate accounting, corporate accounting, income tax and international accounting standards.

Students were asked about the generic skills that should be taught in accounting departments; results indicated that computer skills are the most important skills among other skills, followed by decision-making skills, time management skills, problem solving skills, information collection skills, analytical skills, leadership skills, planning skills, teamwork skills and presentation skills respectively.

Students were also asked about the weakness aspects of accounting programs in Jordanian universities. It was found that the main weakness was the lack of visits to accountants' working places, followed by insufficient training courses provided by universities, lack of activities towards developing communication competencies of students, crowded classrooms, lack of necessary accounting software programs and lack of accounting scientific research courses respectively. On the other hand, students were also asked to rank the main potential strength aspects to develop accounting education programs in Jordan. Results indicated that providing training course opportunities for accounting students is the most important suggestion to improve the future of accounting education in Jordanian universities, followed by using technology in accounting education, developing communication competencies of students, increasing the introduction of accounting profession in universities, attracting qualified accounting instructors, giving practical courses by professional accountants in universities respectively.

In looking for the effect of demographic characteristics in identifying the satisfaction of students toward the level of accounting education in Jordanian universities, the results of hypotheses indicated that there are no significant differences in the students' satisfaction with accounting education model due to gender, age, university average score, university sector, language of teaching, student's desire to continue higher education, and student's desire to achieve professional certifications. Thus, the results of the study revealed that, in general, students are satisfied with the current accounting education model in their universities. This result is supported by another finding which shows that the perception of students toward accounting as a major has been changed positively in the later periods of their study.

To bridge the gap between the current status of accounting education and the students' future expectations toward the accounting education in Jordanian universities, decision makers at accounting departments in universities should include many courses as shown in the results of the current study to their accounting education curriculum. In addition, many generic skills should be rooted in accounting education curriculum such as computer skills, decision-making skills, time management skills, problem solving skills, information collection skills and analytical skills. Moreover, it seems that accounting education curriculum lacks the necessary fieldwork and training courses. Accordingly, accounting departments in universities should give more emphasis to the fieldwork and training courses through agreements with appropriate firms and organisations to train accounting students. Accounting departments must also offer all the relevant accounting software programs to their students. Scientific research in accounting is an important course to be included in accounting education curricula in all universities. One accounting education curriculum should be adopted in all Jordanian universities. These procedures need the cooperation of all related parties such as the Ministry of Higher Education, management of public and private universities and Jordanian Association of Certified Public Accountants (JACPA).

The results of the current study are very important to build on. Accordingly, a future opportunity for a similar study is very fruitful. That is, using a larger sample along with a mixed research approach will give the readers and decision-makers border ideas about the potential procedures to improve the accounting education system in Jordan. In addition, a comprehensive comparative study including both students and academicians will be very useful in developing a new framework in accounting education curriculum in Jordan.

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