Unraveling the path: assessing compliance and impact of accounting education in Libya with IES 3 standards on students’ academic performance

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**Abstract**

**Purpose** – This study aims to investigate the extent of compliance of university accounting programs in Libya with the International Education Standard (IES 3) and the extent of the impact of the skills included in programs of accounting education in Libya aligned with IES 3 requirements on students’ academic performance and then to identify factors that can hinder the implementation of professional skills in accounting education in Libya.

**Design/methodology/approach** – A questionnaire was prepared and circulated among accounting graduates from public universities in Libya. A total of 116 useable responses were received from many of these universities. An exploratory factor analysis based on a pairwise polychoric correlation matrix was carried out to validate the scale. Also, it applies the regression analysis for a robustness check.

**Findings** – The findings indicate that the skills included in accounting education programs in Libya partially comply with the instructions of IES 3 (Intellectual, Interpersonal and Communication, Personal and Organizational). They provide empirical evidence that the accounting education program in Libya is a partial tool for implementing professional skills in accounting education in Libya. The findings of this study also show that there is no statistically significant relationship between the skills included in programs of accounting education in Libya aligned with IES 3 requirements and the academic performance of students.

**Practical implications** – Findings may help the government, higher education officials and accounting faculty members in Libya pay more attention to accounting education to improve its effectiveness and meet the requirements of IES 3. Therefore, it fills an information gap in the accounting literature by investigating university accounting programs and their compliance with IES 3 in Libya, a context that is still poorly understood.

**Originality/value** – Little is known about accounting education in the Middle East and North African (MENA) countries, where the literature shows that little research has been conducted on accounting students in the countries of this region, particularly in Libyan universities.

**Keywords** Accounting education, International Education Standards, University accounting programs, Libya

**Paper type** Research paper

1. Introduction

The qualification of the accountant is one of the most important pillars of achieving the objectives of the financial reports (Zureigat, 2018), which are to provide relevant accounting
information that assists to make rational decisions (Badenhorst and Brügger, 2015; Alfatiemy and Masli, 2019). However, accounting education is insufficient to meet the requirements of the accounting profession from the point of view of practitioners and employers (Mameche et al., 2020). Needle (2010) argues that globalization is having an important impact on accounting education and accounting educators. Not only does it impact the curriculum, but it also places demands on both instructors and students. Even in developed countries, there is a gap between the knowledge included in the curriculum for accounting education and the skills and experiences required by the business environment (Majzoub and Aga, 2015; Alshbili and Elamer, 2019), where employability skills of accounting graduates are considered as a major issue in the economies of the 21st (Mameche et al., 2020). This has increased the demand for high professional skills and continuous accounting education for accountants (Needle, 2010; Apriliana et al., 2017).

For these criticisms, the International Federation of Accountants (IFAC) to form the International Accounting Education Standards Board (IAESB) to begin issuing standards that aim at providing guidance to improve the quality of international accounting education programs (Zureigat, 2018). Accordingly, the IAESB has set some objectives: Establishing a series of internationally-relevant standards reflecting good practice in the learning, development and assessment of professional accountants; developing education benchmarks for measuring the implementation of International Education Standards (IES); advancing international debate on issues relating to the learning and development of professional accountants (Needle, 2010). IAESB has issued its IES to develop accounting education standards, guidance and information papers on pre-qualification education, training of professional accountants and continuing professional education and development (IAESB, 2014), which are designed for all stakeholders who are related to learning and development in accounting professions, such as educational organizations, employers, regulators and the governments (Suryawathy and Putra, 2016). These standards include the skills to be included in the accounting education programs which are listed in the International Educational Standards number 3 (IES 3) (Zureigat, 2018) that will be the focus of our study. In 2019, the IAESB categorized revised professional skills into four areas of competence as listed in Table 1.

The purpose of this study is to answer three main questions; firstly, to what extent are the skills included in programs of accounting education in Libya compatible with the requirements of IES 3? Secondly, whether the skills included in programs of accounting education in Libya aligned with IES 3 requirements affect students’ academic performance? Thirdly, what factors can hinder the implementation of professional skills in accounting education in Libya?

The current study, therefore, contributes to the accounting literature in three folds. First, by exploring the compliance of accounting education with the IES 3 in the Libyan context, it addresses an information gap by providing new evidence from a developing country, where this context is still poorly understood practice in developing countries. Second, as far as researchers know, it is unique in covering this compliance in Libyan universities as well as it is one of the few studies in the Middle East and North African (MENA) countries. Furthermore, this exploration is a useful first step; its findings may help the government, higher education officials and accounting faculty members in Libya to pay more attention to accounting education to improve its effectiveness and meet the requirements of the IES. The current study, therefore, attempts to explore the extent of compliance of university accounting programs with the IES 3 in developing countries, such as Libya.

This study is structured as follows. After the introductory section, Section 2 reviews the related literature. Data and methodology are presented in the Section 3 followed by the empirical results in Section 4. Finally, Section 5 summarizes the key conclusions and provides some policy implications.


<table>
<thead>
<tr>
<th>Competence area</th>
<th>Learning outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>(level of Proficiency)</td>
<td></td>
</tr>
<tr>
<td>(a) Intellectual (Intermediate)</td>
<td>(i) Evaluate data and information from a variety of sources and perspectives through research, integration and analysis (ii) Apply critical thinking skills to solve problems, inform judgments, make decisions and reach well-reasoned conclusions (iii) Identify when it is appropriate to consult with specialists (iv) Recommend solutions to unstructured, multi-faceted problems (v) Respond effectively to changing circumstances or new information to solve problems, inform judgments, make decisions and reach well-reasoned conclusions</td>
</tr>
<tr>
<td>(b) Interpersonal and communication (Intermediate)</td>
<td>(i) Demonstrate collaboration, cooperation and teamwork when working towards organizational goals (ii) Communicate clearly and concisely when presenting, discussing and reporting in formal and informal situations (iii) Demonstrate awareness of cultural and language differences in all communication (iv) Apply active listening and effective interviewing techniques (v) Apply negotiation skills to reach solutions and agreements (vi) Apply consultative skills to minimize or resolve conflict, solve problems and maximize opportunities (vii) Present ideas and influence others to provide support and commitment</td>
</tr>
<tr>
<td>(c) Personal (Intermediate)</td>
<td>(i) Demonstrate a commitment to lifelong learning (ii) Set high personal standards of performance and monitor through reflective activity and feedback from others (iii) Manage time and resources to achieve professional commitments (iv) Anticipate challenges and plan potential solutions (v) Apply an open mind to new opportunities (vi) Identify the potential impact of personal and organizational bias</td>
</tr>
<tr>
<td>(d) Organizational (Intermediate)</td>
<td>(i) Undertake assignments in accordance with established practices to meet prescribed deadlines (ii) Review own work and that of others to determine whether it complies with the organization’s quality standards (iii) Apply people management skills to motivate and develop others (iv) Apply delegation skills to deliver assignments (v) Apply leadership skills to influence others to work towards organizational goals</td>
</tr>
</tbody>
</table>

Source(s): International Accounting Education Standards Board (IAESB) (2019)

Table 1. Professional skills (IES 3)

2. Literature review
The review of the literature indicates the role of higher education in accounting and its economic importance in investment in human capital (García et al., 2016). Until recently, a great many academic studies, particularly in developed countries, have focused on the importance of accounting education (e.g. Aliak et al., 2016; Carenys and Moya, 2016; Schiopoiu et al., 2016; Pincus et al., 2017 Aldredge et al., 2018; Sahloul et al., 2019; Rebele and Pierre, 2019; Butler et al., 2019; Conrath-Hargreaves and Wüstemann, 2019; Feinstein et al., 2019; Heiling, 2020; Golyagina, 2020; Carvalho and Almeida, 2022; Twyford and Dean, 2023; Schröder and Pontoppidan, 2023). However, accounting education has been criticized by many researchers and professionals during the past two decades due to some deficiencies (AlMotairy, 2016). A number of studies found that there is a gap between the knowledge included in the curricula for accounting education and the skills and experiences required by the business environment, which has negatively affected the graduates’ competence (Majzoub and Aga, 2015; Alshbili and Elamer, 2019) and that this accounting education in universities is not provided Students with enough skills to succeed in practice (Van
Similar results have been found by Masli (2019) who found that the current accounting curricula are insufficient to provide students with the requirements of the labor market in terms of skills and necessary expertise, and there is an absence of communication between accounting departments at the institutions of higher education and labor market to qualify students to practice the skills required.

Over the past two decades, a number of investigations have focused on the required skills to include in the curricula of accounting education, for example, Lin (2008) identified six areas of knowledge and skills to include in the curricula of accounting education, and these areas are managerial skill, management knowledge and knowledge in the essence of accounting, personal characteristics, techniques and basic skills. While Jackling and De Lange (2009) found that accounting graduates demonstrate a clear lack of general skills and personal communication skills, and thus, there is a gap between the academic educational programs and skills necessary to develop the accounting profession. A recent study by Al Mallak et al. (2020) suggests that students perceived all five generic skill categories, outlined in the IFAC’s IES 3, to be important in accounting education. This is roughly consistent with the findings of Abayadeera and Watty (2016), who found that the generic skills that accounting students assent to be important are intellectual and personal skills, followed by management, communication and analytical skills.

In Libya, some studies have pointed out that accounting education in the country is still based on a traditional curriculum, which lacks systematic development that has not kept pace with the evolution of accounting in the international context (Alfatiemy, 2013; Maatoug, 2014; Masli, 2019), but, to the best of our knowledge, no one has yet attempted to investigate the extent to which the university accounting programs in the Libyan context comply with the requirements of IES 3. This context is still poorly understood in the MENA countries (Mameche et al., 2020). By offering a different perspective from a different context as a result of the plurality of cultures, languages, social, educational and legal systems that influence the development and the application of international accounting education standards (McPeak et al., 2012), it may enhance the improvement of accounting education’s effectiveness in Libya and meet the requirements of IES 3. This highlights the need to examine the compliance of accounting education programs in Libya with IES 3, and therefore, three research questions were framed:

**RQ1.** To what extent are the skills included in programs of accounting education in Libya compatible with the requirements of IES 3?

**RQ2.** Whether the skills included in programs of accounting education in Libya aligned with IES 3 requirements affect students’ academic performance?

**RQ3.** What factors can hinder the implementation of professional skills in accounting education in Libya?

Accordingly, from the research questions above, the following subsidiary hypotheses were proposed:

**H1.** The skills included in accounting education programs in Libya are incompatible with the requirements of IES 3.

This hypothesis is divided into the following sub-hypotheses:

**H1.1.** Accounting education programs applied in Libyan Universities do not provide intellectual skills to accounting graduates.

**H1.2.** Accounting education programs applied in Libyan Universities do not provide Interpersonal and communication skills to accounting graduates.
H1.3. Accounting education programs applied in Libyan Universities do not provide Personal skills to accounting graduates.

H1.4. Accounting education programs applied in Libyan universities do not provide organizational skills to accounting graduates.

H2. The skills included in programs of accounting education in Libya aligned with IES 3 requirements affect students’ academic performance.

H3. There are factors that can hinder the implementation of professional skills in accounting education in Libya.

3. Data and research design

3.1 Sampling the structure of the questionnaire

The questionnaire survey was distributed to all accounting graduates from public universities in Libya, rather than to a selected sample. Statistics are not available about these graduates in Libyan, and thus, the questionnaire was distributed to all graduates from universities and asked them to deliver the questionnaire to these graduates, as well as the questionnaire was distributed to many accounting graduates in Libyan companies. A total of 116 usable responses were received from many of these universities. The initial section of the survey centers around five skill categories: intellectual, personal, interpersonal and communication, organizational and business management (OBM) and accounting or business ethics. Each category specifies a group of skills that are included within that particular category.

The students were requested to rate the significance of various skills for accounting graduates on a scale of 1–5, with 1 representing “not important” and 5 representing “very important.” In the second question, the students were asked to assess their perception of the level of competence they should attain upon completing their academic studies, as well as their expectations regarding their actual level of competence. A Likert-type scale with five points was utilized, where 1 denoted “not competent” and 5 denoted “very competent.” The third question presented a list of potential factors that may have limited the development of generic skills in accounting education at the university level. The aforementioned factors were derived from previous scholarly works, particularly Bui and Porter (2010) and Hassall et al. (2005). Students were requested to express their agreement using a Likert-style scale ranging from 1 (strongly disagree) to 5 (strongly agree). The final part of the study gathered demographic details from the students. Since this is an exploratory investigation, open-ended questions were included for students who wished to provide additional information or comments. The Statistical Package for Social Sciences (SPSS) software was utilized to analyze the findings. The data pertaining to importance and competence were assessed for normality and were discovered to be normally distributed for the majority of the items being considered.

3.2 Research strategy and model specifications

To estimate the impacts of factors that determine the students’ performance, ordinary least squares (OLS) estimation is a commonly used method in questionnaire analysis to examine the relationship between variables and estimate the parameters of a regression model. The main purpose of this study is to estimate the following model.

\[
GPA = \beta_0 + \beta_1(\text{Intellectual}) + \beta_2(\text{Interpersonal & communication}) + \beta_3(\text{Personal}) \\
+ \beta_4(\text{Organizational}) + \epsilon
\]

Equation(1)
Where is the grade point average (GPA) is the measure of a student’s performance proxied by GPA as a dependent variable and Intellectual, Intellectual and communication, personal and organizational are the independent variables. $\beta$s are the parameters of the model.

**4. Results**

This section presents the key finding of the study. These results started with hypothesis testing and correlation analysis (bivariate) then the regression analysis (multivariate).

The results of the study are presented and arranged according to the hypotheses of the study, as the following:

**4.1 Testing the first major hypothesis**

Before obtaining the results of the first major hypothesis, four sub-hypotheses were tested, as the following:

**4.2 Testing the first sub-hypothesis**

The null hypothesis is:

$H_{1.1}$: Accounting education programs applied in Libyan Universities do not provide intellectual skills to accounting graduates.

Table 2 presents the mean scores and standard deviations for the participants’ perceptions of this question. Participants were asked to indicate on a five-point Likert scale the extent to which the skills included in programs of accounting education in Libya are compatible with the requirements of intellectual skills in IES 3. Statement 1 (“Evaluate data and information from a variety of sources and perspectives through research, integration, and analysis”) obtained the highest aggregated mean score (3.84), followed in descending order by statement 2 (“Apply critical thinking skills to solve problems, inform judgments, make decisions, and reach well-reasoned conclusions” – 3.71), statement 5 (“Respond effectively to changing circumstances or new information to solve problems, inform judgments, make decisions, and reach well-reasoned conclusions”) – 3.36, statement 3 (“Identify when it is appropriate to consult with specialists”) – 3.35, and statement 4 (“Recommend solutions to unstructured, multi-faceted problems”) – 3.30.

<table>
<thead>
<tr>
<th>No</th>
<th>Statements</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Sig. (2-Tailed)</th>
<th>Rank</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Evaluate data and information from a variety of sources and perspectives through research, integration and analysis</td>
<td>3.84</td>
<td>0.919</td>
<td>0.000</td>
<td>1</td>
<td>0.887</td>
</tr>
<tr>
<td>2</td>
<td>Apply critical thinking skills to solve problems, inform judgments, make decisions and reach well-reasoned conclusions</td>
<td>3.71</td>
<td>0.960</td>
<td>0.000</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Identify when it is appropriate to consult with specialists</td>
<td>3.35</td>
<td>0.935</td>
<td>0.000</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Recommend solutions to unstructured, multi-faceted problems</td>
<td>3.30</td>
<td>1.023</td>
<td>0.002</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Respond effectively to changing circumstances or new information to solve problems, inform judgments, make decisions and reach well-reasoned conclusions</td>
<td>3.36</td>
<td>0.973</td>
<td>0.000</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Overall</strong></td>
<td>3.51</td>
<td>0.799</td>
<td>0.000</td>
<td>–</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Descriptive statistics on intellectual skills statements

Source(s): Authors’ work
conclusions” – 3.36), statement 3 (“Identify when it is appropriate to consult with specialists” – 3.35) and lastly statement 4 (“Recommend solutions to unstructured, multi-faceted problems” – 3.30). The Cronbach’s Alpha test generated a value of 0.89 for this question, which is higher than 0.70, indicating that all the data are reliable.

The mean scores for the five statements were also aggregated in order to arrive at an overall mean for this question, which was (3.51), while the associated $p$-value of the T-Test (0.00) suggests the null hypothesis to be rejected. This means that accounting education programs applied in Libyan Universities provide, to some extent, intellectual skills to accounting graduates. This lower mean score suggests that many participants might not be completely satisfied with the performance of accounting education programs applied in Libyan universities in terms of providing intellectual skills to accounting graduates.

4.2.1 Testing the second sub-hypothesis.

**H1.2:** Accounting education programs applied in Libyan Universities do not provide Interpersonal and communication skills to accounting graduates.

Table 3 presents the mean scores and standard deviations for the participants’ perceptions about the extent to which the skills included in programs of accounting education in Libya are compatible with the requirements of interpersonal and communication skills in IES 3. Statement 2 (“Communicate clearly and concisely when presenting, discussing, and reporting in formal and informal situations”) generated the highest aggregated mean score (3.59), followed in descending order by statement 1 (“Demonstrate collaboration, cooperation, and teamwork when working towards organizational goals” – 3.56), statement 7 (“Present ideas and influence others to provide support and commitment” – 3.44), statement 4 (“Apply active listening and effective interviewing techniques” – 3.39) and statement 5 (“Apply consultative skills to minimize or resolve conflict, solve problems, and maximize opportunities” – 2.91) are rejected. The Cronbach’s Alpha test gave a value of 0.89 for this question, which is higher than 0.70, showing high reliability.

<table>
<thead>
<tr>
<th>No</th>
<th>Statements</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Sig. (2-Tailed)</th>
<th>Rank</th>
<th>Cronbach's alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Demonstrate collaboration, cooperation and teamwork when working towards organizational goals</td>
<td>3.56</td>
<td>1.032</td>
<td>0.000</td>
<td>2</td>
<td>0.894</td>
</tr>
<tr>
<td>2</td>
<td>Communicate clearly and concisely when presenting, discussing and reporting in formal and informal situations</td>
<td>3.59</td>
<td>1.039</td>
<td>0.000</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Demonstrate awareness of cultural and language differences in all communication</td>
<td>3.19</td>
<td>1.079</td>
<td>0.061</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Apply active listening and effective interviewing techniques</td>
<td>3.39</td>
<td>1.002</td>
<td>0.000</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Apply negotiation skills to reach solutions and agreements</td>
<td>3.27</td>
<td>1.058</td>
<td>0.008</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Apply consultative skills to minimize or resolve conflict, solve problems and maximize opportunities</td>
<td>2.91</td>
<td>0.983</td>
<td>0.347</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Present ideas and influence others to provide support and commitment</td>
<td>3.44</td>
<td>1.015</td>
<td>0.000</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Overall</strong></td>
<td>3.34</td>
<td>0.805</td>
<td>0.000</td>
<td>–</td>
<td></td>
</tr>
</tbody>
</table>

**Source(s):** Authors’ work
When the means were aggregated across the seven statements, this yielded overall means of (3.34), while the associated $p$-value of the T-Test (0.00) suggests the null hypothesis to be rejected, which indicates that the null hypothesis is rejected. This means that accounting education programs applied in Libyan Universities provide, to some extent, interpersonal and communication skills to accounting graduates. This lower mean score may be partly attributable that most of the participants might not be completely satisfied with the performance of accounting education programs applied in Libyan universities in terms of providing interpersonal and communication skills to accounting graduates.

4.2.2 Testing the third sub-hypothesis.

H1.3: Accounting education programs applied in Libyan Universities do not provide Personal skills to accounting graduates.

Table 4 presents the mean scores and standard deviations for the participants’ perceptions about the extent to which the skills included in programs of accounting education in Libya are compatible with the requirements of personal skills in IES 3. Statement 1 ("Demonstrate a commitment to lifelong learning") and statement 5 ("Apply an open mind to new opportunities") both obtained the highest aggregated mean score (3.50), followed in descending order by statement 2 ("Set high personal standards of performance and monitor through reflective activity and feedback from others" – 3.36) and statement 3 ("Manage time and resources to achieve professional commitments" – 3.33). While statement 4 ("Anticipate challenges and plan potential solutions" – 3.16) and statement 6 ("Apply active listening and effective interviewing techniques" – 3.11) are rejected. The Cronbach’s Alpha test gave a value of 0.90 for this question, which is higher than 0.70, showing high reliability.

The mean scores for the four statements were also aggregated in order to arrive at an overall mean for this question, which was (3.33), while the associated $p$-value of the T-Test (0.00) suggests the null hypothesis to be rejected, which shows that accounting education programs applied in Libyan Universities provide, to some extent, personal skills to accounting graduates. This lower mean score indicates that most of the participants may not be completely satisfied with the performance of accounting education programs applied in Libyan universities in terms of providing personal skills to accounting graduates.

<table>
<thead>
<tr>
<th>No</th>
<th>Statements</th>
<th>Mean</th>
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<th>Sig. (2-Tailed)</th>
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<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Demonstrate a commitment to lifelong learning</td>
<td>3.50</td>
<td>1.107</td>
<td>0.000</td>
<td>1</td>
<td>0.897</td>
</tr>
<tr>
<td>2</td>
<td>Set high personal standards of performance and monitor through reflective activity and feedback from others</td>
<td>3.36</td>
<td>1.033</td>
<td>0.000</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Manage time and resources to achieve professional commitments</td>
<td>3.33</td>
<td>0.985</td>
<td>0.001</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Anticipate challenges and plan potential solutions</td>
<td>3.16</td>
<td>1.052</td>
<td>0.115</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Apply an open mind to new opportunities</td>
<td>3.50</td>
<td>0.991</td>
<td>0.000</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Identify the potential impact of personal and organizational bias</td>
<td>3.11</td>
<td>0.967</td>
<td>0.215</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>3.33</td>
<td>0.831</td>
<td>0.000</td>
<td>–</td>
<td></td>
</tr>
</tbody>
</table>

Table 4. Descriptive statistics on personal skills statements

Source(s): Authors’ work
4.2.3 Testing the forth sub-hypothesis.

**H1.4:** Accounting education programs applied in Libyan universities do not provide organizational skills to accounting graduates.

Table 5 presents the mean scores and standard deviations for the participants’ perceptions about the extent to which the skills included in programs of accounting education in Libya are compatible with the requirements of organizational skills in IES 3. Statement 1 (“Undertake assignments in accordance with established practices to meet prescribed deadlines”) had the highest aggregated mean score (3.53), followed in descending order by statement 5 (“Apply leadership skills to influence others to work towards organizational goals” – 3.45), statement 4 (“Apply delegation skills to deliver assignments” – 3.34), and statement 2 (“review own work and that of others to determine whether it complies with the organization’s quality standards” – 3.30). While statement 3 (“Apply people management skills to motivate and develop others” – 2.93) is rejected. The Cronbach’s Alpha test gave a value of 0.87 for this question, which is higher than 0.70, showing high reliability.

When the means were aggregated across the seven statements, this yielded overall means of (3.31), while the associated p-value of the T-Test (0.00) suggests the null hypothesis to be rejected, which indicates that the null hypothesis is rejected. This means that accounting education programs applied in Libyan Universities provide, to some extent, interpersonal and communication skills to accounting graduates. This lower mean score may be partly attributable that many participants might not be completely satisfied with the performance of accounting education programs applied in Libyan universities in terms of providing organizational skills to accounting graduates.

To test the first major hypothesis:

The null hypothesis is:

**H1:** The skills included in accounting education programs in Libya are incompatible with the requirements of IES 3.

In Table 6, the results of the T-test show that the p-value is less than 0.05, we reach significance; the decision is to reject the null hypothesis meaning that we can accept the alternative that the skills included in programs of accounting education in Libya are more or less compatible with the requirements of IES 3.

<table>
<thead>
<tr>
<th>No</th>
<th>Statements</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Sig. (2-Tailed)</th>
<th>Rank</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Undertake assignments in accordance with established practices to meet prescribed deadlines</td>
<td>3.53</td>
<td>0.899</td>
<td>0.000</td>
<td>1</td>
<td>0.874</td>
</tr>
<tr>
<td>2</td>
<td>Review own work and that of others to determine whether it complies with the organization’s quality standards</td>
<td>3.30</td>
<td>1.032</td>
<td>0.002</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Apply people management skills to motivate and develop others</td>
<td>2.93</td>
<td>0.862</td>
<td>0.391</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Apply delegation skills to deliver assignments</td>
<td>3.34</td>
<td>0.884</td>
<td>0.000</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Apply leadership skills to influence others to work towards organizational goals</td>
<td>3.45</td>
<td>0.990</td>
<td>0.000</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>3.31</td>
<td>0.763</td>
<td>0.000</td>
<td>–</td>
<td></td>
</tr>
</tbody>
</table>

Source(s): Authors’ work

Table 5. Descriptive statistics on organizational skills statements
4.3 Testing the second major hypothesis

H2: The skills included in programs of accounting education in Libya aligned with IES 3 requirements affect students’ academic performance.

As noted in Table 7, the results indicate the correlations between each of the independent variables (Intellectual, Interpersonal and communication, Personal, Organizational) and the dependent variable (Graduate GPA), some of which are positive correlation coefficients and others are weak and statistically insignificant, where the results show a positive correlation coefficient ($p$-value<0.05) in Intellectual (Corr = 0.201) and Organizational (Corr = 0.194). While the results show a weak correlation coefficient ($p$-value>0.05) in: Personal (Corr = 0.128) and Interpersonal and Communication (Corr = 0.158).

4.4 Testing the third major hypothesis

Based on the data obtained from the questionnaire, the participants were asked to identify factors that can hinder the implementation of professional skills in accounting education in Libya. The majority of participants agreed on the following factors: Failure of accounting education within Libyan universities to meet the requirements of the labor market properly, lack of training on professional skills in IES 3 during university studies, lack of curricula and a thoughtful plan for accounting students to prepare the students academically and provide them with the skills required for the labor market, lack of qualified faculty members familiar with accounting standards, failure of professors in Libyan universities to keep pace with scientific development and to use information technology properly and Libyan legislation regulating the accounting and auditing profession does not comply fully with IES 3.

4.5 Regression analysis

Table 8 presents the results of the multivariate regression analysis, which shows the results of graduate GPA against its perceived determinants as measured from questionnaire responses. The results indicate that all variables are not associated with graduate GPA. As a

<table>
<thead>
<tr>
<th>No</th>
<th>The first major hypothesis</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-value</th>
<th>Sig. (2-Tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The skills included in programs of accounting education in Libya are not compatible with the requirements of IES 3</td>
<td>3.53</td>
<td>0.899</td>
<td>5.481</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source(s): Authors’ work

<table>
<thead>
<tr>
<th>Variables</th>
<th>Intellectual</th>
<th>Interpersonal and communication</th>
<th>Personal</th>
<th>Organizational</th>
<th>Graduate GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual</td>
<td>0.814**</td>
<td>0.814**</td>
<td>0.689**</td>
<td>0.723**</td>
<td>0.201*</td>
</tr>
<tr>
<td>Interpersonal and communication</td>
<td>0.814**</td>
<td>0.825**</td>
<td>0.808**</td>
<td>0.194**</td>
<td>0.158</td>
</tr>
<tr>
<td>Personal</td>
<td>0.689**</td>
<td>0.825**</td>
<td>0.803**</td>
<td>0.128</td>
<td>1.00</td>
</tr>
<tr>
<td>Organizational</td>
<td>0.723**</td>
<td>0.808**</td>
<td>0.803**</td>
<td>0.194**</td>
<td>0.128</td>
</tr>
<tr>
<td>Graduate GPA</td>
<td>0.201*</td>
<td>0.158</td>
<td>0.128</td>
<td>0.194**</td>
<td>0.128</td>
</tr>
</tbody>
</table>

Note(s): **Correlation is significant at the 0.01 level (2-tailed) *Correlation is significant at the 0.05 level (2-tailed)

Source(s): Authors’ work
result, the null hypothesis is rejected because there is no significant relationship between the skills included in programs of accounting education and the GPA of participants. It can be said that the empirical results support the alternative hypothesis that the skills included in programs of accounting education in Libya aligned with IES 3 requirements do not affect students’ academic performance.

5. Conclusions

This study contributes to the ongoing discussion to investigate the extent to which the university accounting programs in the Libyan context comply with the requirements of IES 3. This context is still poorly understood in the MENA countries. By offering a different perspective from a different context as a result of the plurality of cultures, languages and social, educational and legal systems that influence the development and application of international accounting education standards. Therefore, it seeks to examine Libyan accounting graduates’ views on how closely accounting programs in Libyan universities comply with the IES 3 and on how the skills included in these programs aligned with IES 3 requirements affect students’ academic performance. However, the most important of these, according to the participants in the study, is how to identify the factors that can hinder the implementation of professional skills in accounting education in Libya, as well as how to enhance the effectiveness of accounting programs in Libya, in order to meet the requirements of IES 3.

A number of survey participants agreed that the skills included in programs of accounting education in Libya are compliant with the instructions of IES 3 (Intellectual, Interpersonal and communication, Personal and Organizational), but not to a significant degree, which does not seem in line with (Van Romburgh, 2014; Majzoub and Aga, 2015; Alshbili and Elamer, 2019). The findings of this study provide empirical evidence that the participants agree that the accounting education program in Libya is a tool for the implementation of professional skills in accounting education in Libya.

Regarding the impact of The skills included in programs of accounting education in Libya aligned with IES 3 requirements on students’ academic performance, although there is only a positive correlation coefficient in Intellectual and Organizational, the multivariate regression analysis shows that all variables (Intellectual, Interpersonal and communication, Personal, Organizational) are not associated with the performance of students’ academic.

A number of factors can hinder the implementation of professional skills in accounting education in Libya perceived by the participants including failure of accounting education to meet the requirements of the labor market properly, lack of training on professional skills in IES 3 for students, lack of qualified faculty members familiar with accounting standards and Libyan legislation regulating the accounting and auditing profession does not comply fully.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.319</td>
<td>–</td>
<td>3.564</td>
<td>0.001</td>
</tr>
<tr>
<td>Intellectual</td>
<td>0.188</td>
<td>0.181</td>
<td>1.117</td>
<td>0.266</td>
</tr>
<tr>
<td>Interpersonal and communication</td>
<td>−0.067</td>
<td>−0.065</td>
<td>−0.307</td>
<td>0.760</td>
</tr>
<tr>
<td>Personal</td>
<td>−0.103</td>
<td>−0.104</td>
<td>−0.578</td>
<td>0.565</td>
</tr>
<tr>
<td>Organizational</td>
<td>0.216</td>
<td>0.199</td>
<td>1.138</td>
<td>0.258</td>
</tr>
</tbody>
</table>

Dependent Variable: Graduate_GPA

Source(s): Authors’ work

Table 8. Regression analysis

Impact of accounting education in Libya
with IES 3, which are consistent with those identified by previous authors including Alfatiemy (2013), Maatoug (2014), Al Mallak et al. (2020).

Accordingly, the study suggests a number of steps to enhance the effectiveness of accounting programs in Libyan universities to meet the requirements of IES 3: Reconsidering accounting education curricula to keep pace with the requirements of the labor market in Libya, the need to conduct practical training for accounting students and provide them with the necessary skills, introducing IES 3 to all concerned by holding workshops and scientific conferences, Libyan legislation governing the accounting and auditing profession should be updated to comply with IES 3 and holding workshops and training courses in IES 3 for accounting faculty members in Libya.

Although the findings of the study are interesting and important and the study’s objectives are achieved, it is nevertheless necessary to acknowledge some limitations of the study. For example, the study’s sample of 116 completed questionnaires could be seen as limited. Also, some respondents may have been hesitant about answering questions because they lacked accurate knowledge about professional skills that aligned with IES3 requirements. This is not implausible, given that IES 3 is still a relatively new concept in Libya and that its implementation is still at an early stage. Future studies may include investigating the opinions of accounting academics at universities and professional institutions in determining the compliance of accounting education programs in Libya with IES 3.

References


Further reading


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