

ASSESSING THE CONTRIBUTION OF ACCOUNTING EDUCATION IN SAUDI PUBLIC UNIVERSITIES TO STUDENTS' PROFESSIONAL SKILLS DEVELOPMENT: A STUDY IN LIGHT OF INTERNATIONAL ACCOUNTING EDUCATION STANDARDS 3

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Abstract

The study aims to assess the extent to which accounting education in Saudi public universities contributes to the development of students' professional skills in accordance with the requirements of the International Accounting Education Standard 3 (IES3). A descriptive and analytical approach was employed in this study. A survey questionnaire was designed to collect data from the faculty members of the accounting department of Saudi Public University. The findings of the study contribute to developing students' professional skills in accordance with the requirements of the International Accounting Education Standard 3, and show a strong positive correlation of accounting education with improvement in the professional competency of students. Furthermore, the findings reveal mediators of intellectual skills, technical and functional skills, personal skills, organisational skills and communication skills in this relationship. Such findings highlight the role of an integrated educational model that covers both technical content and soft skills necessary for the development of accountants' employability and professional suitability. The study has a number of recommendations, the most important of which are continuing to support and develop accounting education in Saudi public universities to provide students with academic and professional skills by the requirements of the International Accounting Education Standard 3 and encouraging scientific research that deals with the application of the requirements of the International Accounting Education Standard 3 in accounting education curricula in universities.

Keywords: accounting education, professional skills, International Accounting Education Standard 3 (IES3), accounting curriculum, accounting profession

JEL Classification: M41, M53, J24

1. INTRODUCTION

Accounting education played a crucial role in economic development, business management and professional skill development by ensuring accurate financial reporting. According to Alsughayer and Alsultan (2023), graduates often face a gap between the skills they acquire in university and the expectations of the job market, which highlights the necessity for universities to adapt their curricula to include more practical and market-relevant skills training (Alsughayer and Alsultan, 2023). Therefore, integrating sustainable development, entrepreneurship, and accounting education within the accounting curriculum significantly enhances students' preparedness to contribute to the sustainable development goals outlined in Saudi Vision 2030. This integration also helps to develop professional skills and fosters a culture of innovation and entrepreneurship among accounting students (Hassan et al., 2022). According to Ebaid (2022), undergraduate accounting students recognised the importance of sustainability, but their understanding of the concept was limited, primarily due to insufficient integration of sustainability topics within the accounting curriculum. Additionally, general dissatisfaction was found among students with the current level of sustainability education, and it was suggested that sustainability issues be incorporated into existing accounting courses to better prepare students for

the evolving demands of the profession (Ebaid, 2022). Students appreciated the development of technical skills, but there was a perceived gap in the development of critical thinking, communication, and other essential soft skills, which indicates a need for a more holistic approach in the curriculum that balances technical proficiency with the cultivation of broader professional competencies (Al Mallak et al., 2020). According to Al-Dhubaibi (2022), an exploratory study on the alignment of accounting education in Saudi universities with the International Accounting Education Standards found that there is still room for improvement in fully meeting IAES, which requires continuous curriculum development and enhanced focus on practical applications of accounting principles to meet global benchmarks (Al-Dhubaibi, 2022).

International Accounting Education Standard 3 (IES 3) mainly focuses on the Assessment of Professional Competence. This standard is crucial in ensuring that accounting education programs adequately prepare students for the demands of professional practice in accounting. A set of procedures that educational institutions follow in accordance with generally accepted standards and requirements ensures that graduates meet the competencies and skills necessary for a profession. Mameche et al. (2020), Masli et al. (2024), Kutluk et al. (2019), and Aljohani and Shehata (2022) reported on the

compliance and importance of accounting education programs in different countries in relation to international standards. Most scholars evaluate the extent to which educational settings meet the requirements of the IES 3 in terms of curriculum, delivery and assessment. They also discuss curriculum content and organisation, methods of student evaluation, faculty credentials and training, and overall educational efficacy for cultivating students' professional performance in accounting. From the preceding investigations, we can conclude that compliance with IES 3 is important not only in considering quality education but also regarding the employability and success of accounting graduates (Mameche et al., 2020; Masli et al., 2024). It is essential to benchmark the performance of accounting education programs offered in various cultural, regulatory and institutional settings worldwide to enhance the consistency and quality of accounting education.

With the transformation of the accounting profession from simple jobs that primarily focus on calculations to more complex roles that involve collaboration with various business departments, there has been a very high demand for qualified and skilled accountants who possess both technical and interpersonal skills. As Rebele and Pierre (2019) highlighted, technical know-how is still considered crucial; however, communication skills, teamwork, and problem-solving have become critical, especially in management accounting education. Such a shift aligns with the evolution of the accounting profession, where accountants serve strategic decision-making processes and organisational strategies (Rebels & Pierre, 2019). A study by Tan and Laswad (2018) that gives the trend by examining job listings in Australia and New Zealand reveals that the key competencies required in the accounting employment market involve working well with others, articulating ideas persuasively to others, and having an optimistic attitude. These skills demonstrate the need for accountants to interact with different parties and add value to organisational processes and activities beyond compliance with financial reporting requirements alone (Tan and Laswad, 2018). Dolce et al. (2020) established a mismatch between the skills possessed by accounting graduates and those expected to be possessed by graduates. According to them, interpersonal and communication skills are highly valued by employers, especially since today's accountants operate in complex organisational environments that require teamwork. Therefore, this study evaluates the role of accounting education in enhancing students' professional competencies in light of IES3 with reference to public universities.

2. LITERATURE REVIEW

2.1. An overview of International Education Standard 3 (IES3)

IES3 refers to International Education Standard 3 which was developed by International Accounting Education Standards Board (IAESB), that outlines the specific and general competencies prospective accountants should

acquire during their early years of practice to make them more competent in their working practice (Mameche et al., 2020). IES3 highlights several skills. These skills are categorised into several key areas. The categories of skills include the acquisition of intellectual skills, technical and functional skills, personal skills, interpersonal and communication skills and organisational and business management skills. Intellectual skills entail problem-solving aptitudes, critical evaluation skills, professional judgment, and analysis skills. Technical and functional skills include computer literacy, numerical skills, accounting, and knowledge of laws and rules. Personal skills include self-management, ethics, adaptability, and learning skills. Teamwork and interpersonal and communication skills include effective communication, customer relations, intercultural competence, and negotiation skills. Management skills deal with leadership, organisation, business planning, and execution, which includes project and strategic organisational skills. These skills must be imparted in accounting education programs through the use of theories, examples, modelling, case studies, and applications (Kalev, 2023). To keep up with the requirements outlined by IES3, the educational programs require updates to match the rigours of the profession and, hence, provide the quality graduates necessary to meet the expectations of high professional standards (Kroon and Alves, 2023).

According to Borgonovo et al., (2019), IES3 encompasses and defines the standard for professional skills development in accounting education, guaranteeing that learners are equipped to execute their responsibilities efficiently (Borgonovo et al., 2019). Masli et al. (2024) investigated the level of adherence to IES3 and its effectiveness on students' performance. The study also revealed that Libyan accounting education programs positively impact students' intellectual and interaction skills, particularly in the areas of logical thinking and multicultural communication. The non-compliance with IES3 in Libya has provided improved academic standards and readiness for the professional accounting environment (Masli et al., 2024). Mameche, Omri and Hassine (2020) also evaluated accounting education programs in Tunisia in relation to IES3. According to Michel's study, Tunisian programs effectively helped to develop graduates' critical thinking skills and technical competencies to meet international standards. This compliance has contributed to a certain level of professional training for graduates of accounting programs in Tunisia (Mameche et al., 2020). In Turkey, Kutluk, Dnmez and Gnen (2019) investigated undergraduate accounting programs by using IES2, which is to some extent relevant to IES3. In their study, Akbas and his associates stated that Turkish accounting programs were compatible with the standards because they stress technical and functional capacities and provide a broad appreciation of accounting standards (Kutluk et al., 2019). Such alignment is crucial because it guarantees that graduates will be equipped with the right skills that enable them to thrive in the workplace (ibid). Thus, the

existing and continually evolving business environment requires accountants to be familiar with regulatory changes, enhanced technologies, and different societies.

Furthermore, IES3 also improves the quality and global recognition of accounting education. It also ensures quality because it provides the guidelines for developing the skills required in learning institutions and from one geographical region to another. This standardisation is crucial for continued professionalism because it guarantees that all the accountants practising have the necessary skills to do the right job. IES3 also aligns with the need to ensure that the courses that accounting students are taught in the universities fit the market needs (Mah'd & Mardini, 2022).

2.2. Accounting education in Saudi Arabia

The educational program of accounting in Saudi Arabia has witnessed several progresses over the years; there are increased efforts to ensure that the educational programs offered in the country adhere to international standards and improve the skills of the graduates to fit the international markets (Al Mallak et al., 2020). Al Mallak et al. (2020) describe the Saudi Arabian accounting students' attitude towards the development of generic skills in accounting education. According to their study, the students understand and appreciate the competencies that included critical thinking, problem-solving and communication, but they felt that the current curricula did not adequately address them. The study also indicates that lectures need to be more practical and engaging to reduce the gap between what was taught in the classroom and what is practised, to better equip students for the working world (Al Mallak et al., 2020). Al-Ebaid (2022) discusses the attitudes of 120 undergraduate accounting students towards sustainability and accounting education in Saudi Arabia. The results showed that students have a good understanding of sustainability within the context of accounting; however, they did not believe they were receiving adequate exposure to it. Thus, according to Ebaid, it is crucial to work on sustainability concepts in accounting courses so that students know what is necessary for modern environmental and social problems in their professions (Ebaid, 2020). Alsughayer and Alsultan (2023) highlight the expectation gap, the market skills, and the issues relevant to accounting education in Saudi Arabia. They observe that the knowledge possessed by graduates usually does not match what is expected of them by employers. This gap calls for revamping educational programs, especially in terms of practical experience and market skills, which help to prepare graduates to meet the market demand in the accountancy profession (Alsughayer, 2021).

Similarly, Ebaid (2022) explore accounting students' perceptions regarding implementing forensic accounting in their learning. The survey shows students' positive learning disposition towards forensic accounting as this field receives more attention regarding the fight against fraud and the credibility of financial reports. This implies that integrating forensic accounting into the curriculum

helps to boost the skills and competencies of accounting graduates in Saudi Arabia (Ebaid, 2020). Mah'd and Mardini (2022) present evidence from Middle Eastern and North African countries. This indicated that their study focused on the idea that the methods used in accounting education programs need enhancement regarding international standards with the aim of producing accountants who are skilled and qualified. However, Mameche, Omri and Hassine (2020) also pointed out the matter of implementing IES3 in relation to the Accounting Education Programs. Although some of the recommendations concern Tunisia, some can be implemented in Saudi Arabia regarding the integration of educational programs with the global context to develop the professional skills that, in turn, should serve as the foundation of the accounting profession (Mameche et al., 2020).

2.3. Impact of accounting education on professional skills development

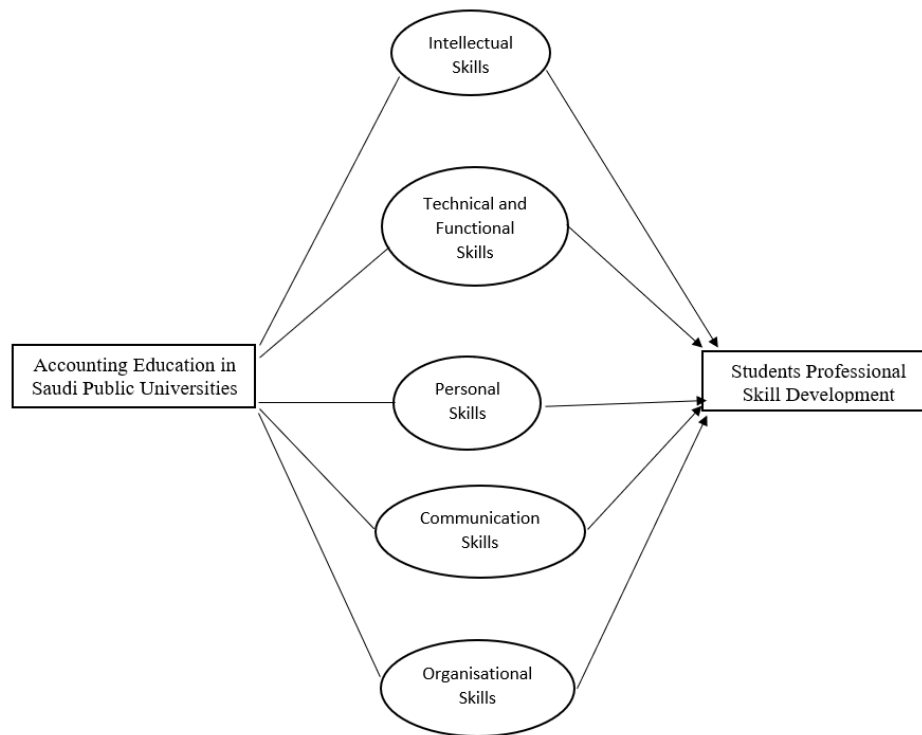
Accounting education is important in developing professional competencies and considerably impacts the qualification of graduates in the labour market (Ishola et al., 2018). Several authors have emphasised the need for soft skills and subject-matter content knowledge and the need for congruency between educational objectives and workforce demands as well as the effect of technology on the profession (Khattari, 2023; Lyons & Bandura, 2020; Oraison et al., 2019). Rebele and Pierre stress the importance of integrating soft skills and technical knowledge in accounting education. According to them, apart from technical skills, which are imperative for the profession, soft skills like communication, teamwork and problem-resolving skills are equally vital to succeed in the professional world. The authors recommend that accounting programs should incorporate learning outcomes that develop these competencies so that graduates are ready to operate in the contemporary business environment (Rebele and Pierre, 2019). Tan and Laswad (2018) review job advertisements to uncover the career competencies expected of accountants. They identify high demand for technical competencies and soft skills based on their research studies. These highlighted competencies include financial analysis, accounting software proficiency and interpersonal skills. Consequently, the study reinforces the need for accreditation of accounting curricula to match current market demands and standards so that employees are well placed to be accorded employability status and be placed on the career market (Tan & Laswad, 2018).

Dolce, Emanuel, Cisi, and Ghislieri (2020) assess the expectations regarding the soft skills of graduates in accounting. This showed that there was a wide gulf between what the graduates believe they possess and what employers expect them to possess. This implies that although the students can approach problems with the techniques they learn in class, they need more confidence to exercise interpersonal skills. This gap indicates that accounting education programs need to focus more on

incorporating such skills in students through the course delivery system, including the use of experiential learning, internships and simulations (Dolce et al., 2020). For instance, Gulin, Hladika, and Valenta (2019) highlight factors that digitisation presents to the accounting profession. These changes emphasise the necessity of digital literacy and the ability to operate with highly

developed technologies. Incorporating these into accounting education with the increasing focus on automation and data analytics in the business field is inevitable. This helps ensure that the graduates are not only experts in the conventional ways of accountancy but also know how to use technology to increase proficiency (Gulin et al., 2019).

Figure 1. | Conceptual framework



2.4. Developed hypotheses

Based on the literature review and the paper's aims, the following hypotheses were developed:

H1: Accounting education in Saudi public universities positively impacts students' professional skill development.

H2: Students' intellectual skills positively mediate the relationship between accounting education and students' professional skill development.

H3: Students' technical and functional skills positively mediate the relationship between accounting education and students' professional skill development.

H4: Students' personal skills positively mediate the relationship between accounting education and students' professional skill development.

H5: Students' organisational skills positively mediate the relationship between accounting education and students' professional skill development.

H6: Students' communication skills positively mediate the relationship between accounting education and students' professional skill development.

3. METHODOLOGY

3.1. Research design

The research design of this study aims at assessing the effectiveness of accounting education in Saudi public universities in preparing the students in conformity to IES3 as the basis of the research. The population consisted of the faculty members from the accounting departments of fifteen Saudi Arabian public universities through a random sampling technique. The data were collected using an electronic self-administered questionnaire. The questionnaire consisted of two parts. The first part included demographic information, while the second part included variables in professional skill development, measured on a 5-point Likert scale. The study assessed six key skill areas: thinking skills including Intellectual, technical and functional, personal, organisational, communication and problem-solving. The validity of the constructs was checked with the help of cross-sectional validation with the help of expert reviews and correlation analysis followed by the reliability test using Cronbach's alpha. The data collected were statistically analysed using the Statistical Package of Social Sciences (SPSS). The following techniques were used to test the hypotheses of the study: Frequencies, percentages, Pearson correlation, Cronbach's alpha and a one-sample t-test.

3.2. Population of the study

The study population consists of faculty members of accounting departments in Saudi public universities. A random sampling method was used to select the faculty members from the following universities: (Northern Border University, King Khalid University, Shaqra University, King Abdulaziz University, King Faisal University, Princess Noura University, Al-Jouf University, Umm Al-Qura University, Taif University, Qassim University, Jeddah University, Najran University, Al-Baha University, Jizan University, Institute of Public Administration) in the academic year 1444/1445 AH (2023/2024) as a model for Saudi public universities.

3.3. Data collection

The researcher relied on an electronic questionnaire form as a primary source to obtain the data necessary to conduct the study. It was designed in a way that is consistent with the objectives of the study and the variables according to the study hypotheses for the professional skills required by the International Accounting Education Standard 3. The form consists of two sections. The first section relates to the demographic data of the study sample, and the second section relates to the variables of the study hypotheses. The number of questions reached thirty items for all of these variables, with a rate of six items for each variable. The questions in the questionnaire were formulated so that the answers were converted into quantitative values according to a five-point Likert scale (strongly agree, agree, neutral, disagree, strongly disagree) and take the range from 1 to

5 so that each answer gives (5, 4, 3, 2, 1) respectively. The items of the questionnaire were verified by university faculty members specialised in accounting who have extensive experience in the field, and their directions and comments were considered. Then eighty questionnaires were distributed to faculty members in these universities, and seventy five questionnaires were retrieved, with a percentage of 94% being analysable.

3.4. Variables of the study

The study has different variables such as intellectual, technical and functional, personal, organisational and communication skills, which individually help to identify that the accounting education in Saudi public universities contributes to the professional development of students in accordance with the IES3. There were thirty items for all of these variables, distributed at a rate of six items for each variable. The answers to these items were according to a five-point Likert scale (strongly agree, agree, neutral, disagree, strongly disagree). The hypothetical mean of the study was calculated according to a five-point Likert scale by summing the scale scores and dividing them by their number ($1+2+3+4+5/5=3$), in order to describe the variables of the study and know the extent to which accounting education in Saudi public universities contributes to the development of personal professional skills. The lower limits and upper limits (length) were determined for each degree of the five-point Likert scale by calculating the range ($5 - 1 = 4$), dividing the range by the number of degrees of the scale ($4 / 5 = 80\%$), then adding this value.

Table 1 | Correlation Coefficient between the total score of the interviewer and the total score of the tool

Variable	Probability value	Correlation coefficient
Intellectual skills	0.000	.800**
Technical and functional skills	0.000	.845**
Personal skills	0.000	.864**
Interpersonal and communication skills	0.001	.380**
Organisational and Business Management skills	0.000	.910**

Table 2 | Cronbach's Alpha Coefficient

Variable	Alpha coefficient
Intellectual skills	0.911
Technical and functional skills	0.866
Personal skills	0.890
Interpersonal and communication skills	0.848
Organisational and Business Management skills	0.941
All	0.942

3.5. Validity and reliability

The study verified the items and construct of the study with two different methods, such as ensuring apparent honesty, which was done through arbitration of the questionnaire tool by a group of faculty members specialised in accounting education at universities, and the recommendations and comments received from them were approved. Then, the structural validity was ensured by calculating the correlation coefficient between the total score for each axis of the study tool and the total score of the tool.

In the Table1, the results of the study indicate that accounting education in Saudi public universities significantly contributes to the development of students' professional skills as outlined by International Accounting Education Standards 3 (IES3). The highest mean score (4.49, SD=0.554) was observed for the contribution to developing students' intellectual skills and their ability to identify and obtain information, which indicates a very high degree of effectiveness. Similarly, the enhancement of student's ability to make optimal use of information received a high mean score (4.37, SD=0.588). The contribution to building logical, analytical, and critical thinking skills (mean=4.28, SD=0.583) and applied

research skills (mean=4.25, SD=0.840) were also rated very high. Additionally, the development of predictive and decision-making skills (mean=4.13, SD=0.759) and problem-solving skills (mean=4.12, SD=0.821) were perceived as high. All items were statistically significant ($p < 0.001$), which confirms that the accounting education provided aligns well with IES3 requirements and effectively supports professional skill development in students.

Furthermore, the study intended to ensure that the answer would not differ if the study tool were applied repeatedly to the same sample at another time. Cronbach's alpha was used to measure the stability of the method and the sample.

Table 2 shows the results of the reliability analysis of the study, as measured by Cronbach's alpha coefficients, demonstrating strong internal consistency across all assessed variables, which indicates reliable and consistent results. Intellectual skills showed a high alpha coefficient of 0.911, which suggests a very reliable measure. Technical and functional skills had a coefficient of 0.866, while personal skills had 0.890, both indicating good reliability. Interpersonal and communication skills also showed a strong reliability with an alpha coefficient of 0.848. The highest reliability was observed for organisational and business management skills, with an alpha coefficient of 0.941. Thus, the study's tool displayed excellent reliability with a combined alpha coefficient of

0.942. These results confirm that the questionnaire consistently measures the intended professional skills development areas, supporting the validity of the findings regarding the positive impact of accounting education in Saudi public universities in line with IES3 standards.

3.6. Data Analysis

The study data were analysed, and its hypotheses were tested using the Statistical Package for the Social Sciences (SPSS) program. The following statistical methods were used: frequencies and percentages to describe the personal variables of the study. To measure the internal consistency of the Pearson correlation coefficient, the test was used, and Cronbach's alpha coefficient was used to measure the stability of the study tool and the binary T-Test for one sample. The decision to accept when the arithmetic mean of the item, axis, or hypothesis was greater than the mean of hypothesis (3) of the study according to the five-point Likert scale, and with a significance level less than 0.05, and vice versa, the decision to reject when the arithmetic mean was less than the hypothesised mean adopted in the study, with a significance level less than 0.05.

4. RESULTS

The following results were generated from the data collected through an electronic questionnaire from the faculty members of the Saudi public universities.

Table 3 | Demographic analysis

Variable	Clause	Repetition	The ratio
Age	From 30 and less than 35 years old	5	6.7%
	From 35 and less than 40 years old	7	9.3%
	From 40 and less than 45 years old	29	38.7%
	From 45 years and above	34	45.3%
Academic Qualification	Ph.D.	69	92.0%
	Master's	6	8.0%
Scientific Specialisation	Business Management	1	1.3%
	Accounting for zakat and taxes	1	1.3%
	Accounting	61	81.3%
	Accounting and finance	11	14.7%
	accounting information systems	1	1.3%
Job title	Manager	5	6.7%
	Assistant Professor	47	62.7%
	Associate Professor	14	18.7%
	lecturer	8	10.7%
	Teaching Assistant	1	1.3%
Years of Experience	10 and under 15 years old	27	36.0%
	15 years and over	37	49.3%
	5 and less than 10 years	10	13.3%
	Less than 5 years	1	1.3%
	Total	75	100%

Table 3 provides the details regarding the respondents' age distribution, which shows that the majority were seasoned professionals, with 45.3% being over 45 years old and 38.7% aged between 40 and 45. Academic qualifications reveal a highly educated sample, with 92% holding a Ph.D. In terms of scientific specialisation, 81.3% were in accounting, with smaller percentages in related fields like accounting and finance (14.7%) and other areas. Job titles indicate that most respondents were at the level

of assistant professors (62.7%), with associate professors and lecturers also represented. Regarding years of experience, nearly half of the sample (49.3%) have over 15 years of experience, and 36% have between 10 and 15 years, which indicates a significant level of expertise among the participants. Thus, the overall data represents a highly qualified and experienced group of educators, which is essential for effectively developing students' professional skills in line with IES3.

Table 4 | Role of accounting education in developing intellectual skills

	Items	Mean	Std. Deviation	Degree of contribution	Sig. (2-tailed)
1	Accounting education in Saudi public universities contributes to developing students' intellectual skills and ability to identify and obtain information in accordance with the requirements of the accounting education standard International 3 (IES3).	4.49	0.554	Too high	0.000
2	Accounting education in Saudi public universities contributes to enhance the student's ability to make optimal use of the information he obtains after organising and understanding it.	4.37	0.588	Too high	0.000
3	Accounting education in Saudi public universities contributes in building the student's ability to think logically, analytically and critically in accordance with the requirements of the accounting education standard International 3 (IES3).	4.28	0.583	Too high	0.000
4	Accounting education in Saudi public universities contributes in building the student's ability to verify and conduct applied research in accounting in accordance with the requirements of the accounting education standard International 3 (IES3).	4.25	0.840	Too high	0.000
5	Accounting education in Saudi public universities contributes to building the student's ability to predict, draw conclusions and make decisions in accordance with the requirements of the Accounting Education Standard International 3 (IES3.)	4.13	0.759	High	0.000
6	Accounting education in Saudi public universities contributes in building the student's ability to identify and solve complex problems in accordance with the requirements of the accounting education standard International 3 (IES3).	4.12	0.821	High	0.000

Table 4 reveals that accounting education in Saudi public universities significantly contributes to developing various professional skills in students, which aligns well with International Accounting Education Standards 3 (IES3). The highest contribution was noted in developing students' intellectual skills and their ability to identify and obtain information, with a mean score of 4.49 (SD=0.554), which indicates a very high impact. Enhancing students' ability to organise and make optimal use of information also received a high mean score of 4.37 (SD=0.588). The development of logical, analytical, and critical thinking skills showed a mean of 4.28 (SD=0.583), while skills in verifying and conducting applied research had a mean of 4.25 (SD=0.840), both reflecting a very high contribution. Additionally, the ability to predict, draw conclusions, and make decisions (mean=4.13, SD=0.759) and the ability to identify and solve complex problems (mean=4.12, SD=0.821) were rated high. All contributions were statistically significant ($p < 0.001$), which demonstrates that accounting education in these universities effectively supports students' professional skills development in line with IES3 standards.

Table 5 shows that accounting education in Saudi public universities significantly enhances various technical and functional skills among students, meeting the requirements of International Accounting Education Standards 3 (IES3). The highest mean score of 4.41 (SD=0.595) was observed for the development of students' ability to measure, disclose, and prepare financial statements, indicating a very high contribution level. The ability to apply mathematical and statistical methods in accounting fields also received a very high mean score of 4.33 (SD=0.502). Similarly, students' adherence to regulatory requirements of the profession (mean = 4.23, SD = 0.606) and development of technical and functional skills (mean=4.21, SD=0.527) were rated very high. The contribution to mastering information technology and using its tools to solve accounting problems had a high mean score of 4.13 (SD=0.741), as well as the ability to deal with decision models and risk analysis (mean=4.05, SD=0.733). All contributions were statistically significant ($p < 0.001$), which highlights that accounting education in these universities effectively supports the development of essential technical and functional skills in alignment with IES3 standards.

Table 5 | Role of accounting education in developing personal skill

	Items	Mean	Std. Deviation	Degree of contribution	Sig. (2-tailed)
1	Accounting education in Saudi public universities contributes in developing the student's ability to apply mathematical and statistical methods in accounting fields in accordance with the requirements of the accounting education standard International 3 (IES3).	4.33	0.502	Too high	0.000
2	Accounting education in Saudi public universities contributes in developing the student's ability to master information technology and use its tools to solve accounting problems in accordance with the requirements of the accounting education standard International 3 (IES3).	4.13	0.741	High	0.000
3	Accounting education in Saudi public universities contributes in developing the student's ability to deal with decision models and risk analysis in accordance with the requirements of the accounting education standard International 3 (IES3).	4.05	0.733	High	0.000
4	Accounting education in Saudi public universities contributes to developing the students' ability to measure, disclose, and prepare financial statements in accordance with the requirements of the Accounting Education Standard International 3 (IES3).	4.41	0.595	Too high	0.000
5	Accounting education in Saudi public universities contributes to developing the students' ability to adhere to the profession's regulatory requirements in accordance with the requirements of the Accounting Education Standard International 3 (IES3).	4.23	0.606	Too high	0.000
6	Accounting education in Saudi public universities contributes to developing students' technical and functional skills following the requirements of the Accounting Education Standard International 3 (IES3).	4.21	0.527	Too high	0.000

Table 6 | Role of accounting education in developing communication skills

	Items	Mean	Std. Deviation	Degree of contribution	Sig. (2-tailed)
1	Accounting education in Saudi public universities contributes to building the students' ability to self-manage, initiative, and self-learning and to develop their personal skills per the accounting education standard International 3 (IES3) requirements.	4.15	0.711	High	0.000
2	Accounting education in Saudi public universities contributes to building the student's ability to organise work and respect time in accordance with the requirements of the International Accounting Education Standard 3 (IES3).	4.24	0.633	Too high	0.000
3	Accounting education in Saudi public universities contributes to building the student's ability to adapt to business environment changes per the requirements of the Accounting Education Standard International 3 (IES3).	4.19	0.538	High	0.000
4	Accounting education in Saudi public universities contributes to building the student's ability to choose and set priorities within limited resources in accordance with the requirements of the Accounting Education Standard International 3 (IES3).	4.13	0.622	High	0.000
5	Accounting education in Saudi public universities enhances the students' ability to adhere to the profession's values and ethics when making decisions per the requirements of the Accounting Education Standard International 3 (IES3).	4.28	0.559	Too high	0.000

In Table 6, the results demonstrate that accounting education in Saudi public universities significantly enhances various personal skills among students, in accordance with International Accounting Education Standards 3 (IES3). The ability to adhere to professional values and ethics when making decisions received the highest contribution rating with a mean score of 4.28 (SD = 0.559), which indicates a very high impact. The ability to organise work and respect time was also rated very high, with a mean score of 4.24 (SD=0.633). Other areas, such as the ability to adapt to changes in the business environment (mean=4.19, SD=0.538), self-management, initiative, and self-learning (mean=4.15, SD=0.711), and setting priorities within limited resources (mean=4.13, SD=0.622), were rated high. All contributions were statistically significant ($p < 0.001$), which affirms that accounting education in these universities effectively

fosters essential personal skills and aligns well with the standards set by IES3.

Results in Table 7 reveal that accounting education in Saudi public universities significantly enhances students' interpersonal and communication skills in alignment with International Accounting Education Standards 3 (IES3). The ability to interact culturally and intellectually received the highest mean score of 4.44 (SD=0.758), which indicates a very high contribution. Skills in presenting, discussing, and defending opinions effectively also scored very high, with a mean of 4.39 (SD=0.787). The ability to listen, read, and write effectively in different business environments had a mean score of 4.40 (SD=0.753), further highlighting the significant impact. Additionally, the ability to negotiate acceptable solutions and agreements in professional situations (mean=4.35, SD=0.762), work within a team (mean=4.25, SD=0.639),

and adapt to a multicultural environment (mean=4.19, SD=0.766) were all rated high or very high. All contributions were statistically significant ($p<0.001$), which highlights that accounting education in these

universities effectively supports the development of essential interpersonal and communication skills in accordance with IES3 standards.

Table 7 | Role of accounting education in developing communication skills

	Items	Mean	Std. Deviation	Degree of contribution	Sig. (2-tailed)
1	Accounting education in Saudi public universities contributes to building the student's ability to work with others within the team in accordance with the requirements of the Accounting Education Standard International 3 (IES3).	4.25	0.639	Too high	0.000
2	Accounting education in Saudi public universities contributes to building the student's ability to adapt and work in a multicultural environment in accordance with the requirements of the Accounting Education Standard International 3 (IES3).	4.19	0.766	High	0.000
3	Accounting education in Saudi public universities contributes to building the student's ability to interact culturally and intellectually in accordance with the requirements of the accounting education standard International 3 (IES3).	4.44	0.758	Too high	0.000
4	Accounting education in Saudi public universities contributes to building the students' ability to present, discuss, and defend opinions effectively, in accordance with the requirements of the accounting education standard International 3 (IES3).	4.39	0.787	Too high	0.000
5	Accounting education in Saudi public universities contributes to building the student's ability to negotiate acceptable solutions and agreements in professional situations in accordance with the requirements of the Accounting Education Standard International 3 (IES3).	4.35	0.762	Too high	0.000
6	Accounting education in Saudi public universities contributes to building the students' ability to listen, read, and write effectively in different business environments, in accordance with the requirements of the accounting education standard International 3 (IES3).	4.40	0.753	Too high	0.000

Table 8 | Role of accounting education in developing organisational skills

	Items	Mean	Std. Deviation	Degree of contribution	Sig. (2-tailed)
1	Accounting education in Saudi public universities contributes to building the student's ability to strategic planning and leadership to the development following the requirements of the accounting education standard International 3 (IES3)	4.15	0.817	High	0.000
2	Accounting education in Saudi public universities contributes to building the students' ability to manage projects and individuals and make decisions regarding development in accordance with the requirements of the Accounting Education Standard International 3 (IES3).	4.12	0.734	High	0.000
3	Accounting education in Saudi public universities contributes to building the students' ability to organise and delegate tasks to motivate human resources, as required by the accounting education standard International 3 (IES3).	4.13	0.704	High	0.000
4	Accounting education in Saudi public universities contributes to the student's ability to organise and delegate tasks to develop human resources per the accounting education standard International 3 (IES3) requirements.	4.07	0.644	High	0.000
5	Accounting education in Saudi public universities contributes to building the student's ability to lead and have acumen in the profession, in accordance with the accounting education standard International 3 (IES3) requirements.	4.19	0.692	High	0.000
6	Accounting education in Saudi public universities contributes to building students' ability to excel when making professional judgements, following the requirements of the accounting education standard International 3 (IES3).	4.16	0.616	High	0.000

In Table 8, the results indicate that accounting education in Saudi public universities significantly enhances students' organisational and business management skills, which aligns with the requirements of International Accounting Education Standards 3 (IES3). The ability to lead and have acumen in the profession received the highest mean score of 4.19 (SD=0.692), indicating a high contribution level. Developing skills in strategic planning and leadership also showed a high contribution, with a mean score of 4.15 (SD=0.817). Similarly, the ability to

excel in making professional judgments (mean=4.16, SD=0.616), manage projects and individuals, make decisions (mean=4.12, SD=0.734), and organise and delegate tasks to motivate human resources (mean=4.13, SD=0.704) were all rated high. The ability to organise and delegate tasks to develop human resources had a slightly lower, yet still high, mean score of 4.07 (SD=0.644). All these contributions were statistically significant ($p<0.001$), confirming that accounting education in these universities effectively supports the development of

essential organisational and business management skills per IES3 standards.

In Table 9, the study results show that accounting education in Saudi public universities significantly enhances various professional skills among students, which aligns with International Accounting Education Standards 3 (IES3). Intellectual skills received a very high contribution rating, with a mean score of 4.28 (SD=0.583). Technical and functional skills also had a very high contribution rating, with a mean of 4.23 (SD=0.483).

Personal skills were rated high, with a mean score of 4.20 (SD=0.503). Interpersonal and communication skills received the highest mean score of 4.34 (SD=0.562), which indicates a very high contribution. Organisational and business management skills were rated high, with a mean of 4.14 (SD=0.619). Thus, the overall development of professional skills was rated very high, with a mean score of 4.23 (SD=0.483). All results were statistically significant ($p < 0.001$), confirming that accounting education provided effective support in the development of essential skills per IES3 standards.

Table 9 | Testing of hypotheses

	Variables	Mean	Std. Deviation	Degree of contribution	Sig. (2-tailed)
1	Intellectual skills	4.2756	0.58285	Too high	0.000
2	Technical and functional skills	4.2289	0.48303	Too high	0.000
3	Personal skills	4.1956	0.50253	High	0.000
4	Interpersonal and communication skills	4.3356	0.56186	Too high	0.000
5	Organisational and Business Management skills	4.1356	0.61920	High	0.000
6	Professional Skills	4.23426	0.48303	Too high	0.000

5. DISCUSSION

This study implies that accounting education in Saudi public universities enhances the students' professional competencies in conformity with IES3. The findings confirm that from the perspective of different categories of skills, such as intellectual, technical, functional, personal, interpersonal, communication, and organisational, a holistic approach is employed in the enhancement of professional skills. The improvement in the acquisition of intellectual skills was especially marked, with the ability to search and retrieve information emerging as the most advanced (mean=4.49, SD=0.554), closely followed by the ability to think logically, analytically and critically (mean=4.28, SD=0.583). This result is consistent with Mameche, Omri and Hassine (2020), who found comparable results in Tunisian accounting programs, highlighting the centrality of intellectual skills in accounting education. Solving essential problems requires the use of analytical and logical thinking skills, which are crucial in the field of accounting (Mameche et al., 2020).

Regarding technical and functional skills, measurement and disclosure of financial statements and preparation received a mean score of 4.41 (SD=0.595). This is in line with the study of Al Mallak, Tan and Laswad (2020), in which Saudi students acknowledged that their education effectively cultivates these competencies. Achievement of technical skills guarantees compliance with professional standards and efficiency in the given positions (Al Mallak et al., 2020).

Personal skills were also improved with adherence to decision-making in professional values and ethics, recording a high mean score (mean=4.28, SD=0.559). This is in line with the assertion made by Al-Dhubaibi (2022) that Saudi accounting programs place a significant degree of emphasis on ethical considerations and the

development of personal skills. These skills are essential for upholding the ethical standards and credibility of the accounting profession (Al-Dhubaibi, 2022). Interpersonal and communication skills emerged as highly relevant; however, competence to engage in culturally and intellectually appropriate ways received the highest rating with a mean of 4.44 and an SD=0.758. This is in line with the study conducted by Masli et al. (2024), which revealed that Libyan accounting education also helps students develop their verbal communication skills, particularly in multicultural environments. These skills are crucial as most accounting professionals practice within varied and globalised settings (ibid). Managerial competencies like strategic planning and leadership were other well-developed competencies with a mean score of 4.19 (SD=0.692) for the ability to lead and have acumen in the profession. Similarly, Mah'd and Mardini (2022) noted the same for Middle Eastern and North African accounting programs and stressed the enactment of organisational skills as per IES3. Organisation skills are essential when it comes to leading teams and managing projects (Mah'd & Mardini, 2022).

Therefore, when comparing the results with other similar research, the results obtained in this research are consistent with earlier research. According to Mameche, Omri and Hassine (2020), the level of compliance with IES3 is similar in Tunisia, especially in the development of intellectual and technical competencies. Al Mallak, Tan and Laswad (2020) described Saudi accounting education as the ability to foster comprehensive skills, technical competencies, and personal competencies. According to Al-Dhubaibi (2022), ethical aspects were highlighted in Saudi accounting programs, aligning with the results of the current study on personal skills. Masli et al. (2024) supported the findings in relation to communication skills in multicultural environments, while Mah'd and Mardini (2022) revealed efficient incorporation of organisational skills in that area.

6. CONCLUSION

In conclusion, this research provided a broad assessment of the impact of accounting education in Saudi public universities on developing professional competency requirements, according to IES3, among students. The results highlighted important enhancements in many areas of expertise, such as intelligence, technique, personality, organisational management, and communication. The study affirmed that the current curriculum broadly satisfies IES3 expectations but pointed out certain ways to improve them, such as by offering more real-life examples during lessons, technological skills, and ethics. Additionally, the measures used in the present study were highly reliable and valid, strengthening the generalizability of the conclusions. Thus, the recommendations made seek to enhance the quality of accounting education so that students can prepare to compete in the global world of accounting. Future studies should be conducted to study the long-term effects of these educational approaches and fine-tune them even further to fit the new requirements and trends of the working world.

Based on the study's conclusion, the following recommendations may be given. Firstly, there is a need to advance the curriculum in a way that reflects the IES3

criteria, especially highlighting the aspects that contributed greatly to the skills development, including critical thinking, technical skills, and interpersonal communication. The use of active learning approaches should be encouraged to foster students' interest in practical exercises and other forms of activities that replicate actual accounting scenarios. Furthermore, faculty development programs should be offered continually to ensure that educators are familiar with the changes in industry practices and specific teaching approaches. Moreover, effective incorporation of sophisticated technological aids in the learning-teaching process also contributes positively to the achievement of bringing theory into practice in accounting.

Additionally, professional ethics complements the curriculum to prepare graduates to embrace professionalism in their respective fields. Lastly, following up with graduates through surveys to trace their future employment status would be helpful in evaluating the effects of these educational reforms on graduates' career growth in the long run. Thus, these recommendations intend to enhance the quality and content of accounting education in Saudi universities to better equip students for the challenges of the accounting profession.

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