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The relevance of accounting education to the demands of the Saudi labor market: A case study from Majmaah University

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Abstract:

This study aims to explore the alignment of the accounting program at Majmaah University with the needs of the labor market from 2020 to 2023 based on a survey of 160 graduates, and the data was analyzed using descriptive statistics. The results indicated that graduates generally possess the basic knowledge and skills required for careers in accounting fields. However, notable gaps have been identified in key areas such as information technology, taxation, and practical application. Graduates also reported having fundamental professional values that support their integration into the workplace. The main challenges have been identified as insufficient technological skills, followed by difficulties related to legal and regulatory frameworks and limitations in personal skills. Thus, the study recommended updating the curriculum to include emerging technologies and revised regulatory standards, as well as strengthening continuous collaboration between academic institutions and industry to enhance graduates' employability and better meet evolving labor market demands.

Keywords: The Saudi labor market; accounting graduates; university accounting program.

مدى ملاءمة التعليم المحاسبي لمتطلبات سوق العمل السعودي: دراسة حالة جامعة المجمعة

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المستخلص:

هدفت الدراسة إلى تقييم مدى توافق برنامج المحاسبة بجامعة المجمعة مع احتياجات سوق العمل السعودي، دراسة حالة كلية إدارة الأعمال في عامي 2020 و2023. وقد أُجري المسح على 160 خريجًا. وتم تحليل البيانات باستخدام الإحصاء الوصفي واختبارات t للعينات المستقلة. وتشير النتائج إلى أن الخريجين يمتلكون عمومًا المعرفة والمهارات الأساسية اللازمة للعمل في مجال المحاسبة والمراجعة. إلا أنه تم تحديد أوجه قصور كبيرة في مجالات مثل تقنيات المعلومات والضرائب والزكاة. وأكد الخريجون أنهم يتمتعون بالقيم المهنية الأساسية التي تمكنهم من الاندماج في سوق العمل. وكان التحدي الأكثر هو نقص المعرفة التقنية، يليه الصعوبات المتعلقة بالأطر القانونية والتنظيمية والقيود المرتبطة بالمهارات الشخصية. وبناءً على هذه النتائج، توصي الدراسة بتحديث المناهج المحاسبية لتشمل التقنيات والمعايير التنظيمية بالإضافة إلى دعم التعاون بين المؤسسات الأكاديمية والجهات المعنية في الميدان لضمان موائمة المخرجات التعليمية مع تطور متطلبات سوق العمل. وتسهم الدراسة في تسليط الضوء على ضرورة تطوير مخرجات التعليم الجامعي لتحسين قابلية توظيف خريجي المحاسبة.

الكلمات المفتاحية: سوق العمل السعودي؛ خريجو المحاسبة؛ برنامج المحاسبة.

1. Introduction

One of the basic objectives of higher education is to prepare qualified human resources for various industries (Kerby and Romine, 2009). In addition, accounting education is essential for equipping graduates with the necessary knowledge, skills, and values required by the labor market, as they form the basis for optimal accounting procedures (Ayroots, 2012). Studies' waves show that the labor market plays an important role in shaping duties and skills that accountants have to succeed in the real business environment (Alsughayer and Alsultan, 2023; DAFF, 2021; Elo et al., 2024; Fajaryati et al., 2020; Lange et al., 2006). Universities are therefore responsible for equipping accounting graduates with knowledge and skills considered desirable for professional accounting practice (Carnegie and Napier, 2010).

Current literature shows that graduates of accounting play a key role in defining and developing the skills and attributes needed for professions in today's competitive labor market (DAFF, 2021; Elo et al., 2024; HU, 2022; Kavanagh and Drennan, 2008). However, a recurring problem identified in global and regional studies is a mismatch between theoretical teaching and practical application (Banasik and Jubb, 2021; Gyekye and AMO, 2024; Albrecht and Sack, 2000). This mismatch often leads to graduates lacking critical competencies such as technological expertise, regulatory awareness, and analytical reasoning—transport is increasingly appreciated in modern accounting roles (Alsughayer and Alsultan, 2023; Fajaryati et al., 2020).

Educational plans and curriculum are necessary to achieve the objective of balancing the results of education with developing labor market needs. In Saudi Arabia, this alignment became even more urgent under the Vision 2030, which seeks to build a knowledge economy requiring highly qualified professionals (HU, 2022). Despite the reforms led by the Education and Training Commission (ETEC) and the National Qualification Framework (NQF), the gaps remain in how effectively universities produce accounting graduates (Alsughayer and Alsultan, 2023).

The aim of this study is to evaluate the importance of accounting education at Majmaah University on the requirements of the Saudi labor market. Majmaah University was selected due to a growing contribution to the production of graduates who serve in local and national markets and because it reflects wider trends in public education in Saudi Arabia. Research questions that control this study are

- Do graduates of the accounting program have sufficient knowledge that is relevant to the demand of the Saudi labor market?
- Do graduates of the accounting program have sufficient skills that are relevant to the demand of the Saudi labor market?
- Do graduates of the accounting program have sufficient values that are relevant to the demand of the Saudi labor market?

There is a debate on the objectives of accounting education from a theoretical point of view. Previous literature (e.g., DAFF, 2021; Howieson, 2003) confirms the rapidly developing nature of accounting procedures and emphasizes the need for curriculum that reflects current industry standards. Universities must adapt their teaching methods to adapt to the requirements for the emerging skill, especially in areas such as digital accounting tools, taxing, and Islamic financial principles such as Zakat (Elo et al., 2024; Alsughayer & Alsultan, 2023).

Academics are key players in managing innovation in skills development and must be informed of technological advances. Accounting programs should encourage students to obtain competencies in accordance with the labor market expectations (Alsughayer & Alsultan, 2023). This involves accepting integrated learning strategies that increase students' involvement and prepare them for professional challenges (Fajaryati et al., 2020).

Employability concerns the knowledge, skills, and abilities that employees must ensure and maintain to proceed in their careers, adapt to changes, and re-enter the labor market if necessary. Individuals with strong educational backgrounds, teamwork skills, knowledge, problem-solving skills, and communication competence are more likely to adapt to the labor market dynamics (Fajaryati et al., 2020). These competences are particularly essential in the accounting profession, where continuous rapid changes in technology and regulation redefine employment requirements (Elo et al., 2024; HU, 2022).

For many years, they have faced criticism for accounting educational programs for not providing graduates with the competencies needed in the rapidly changing business environment (Albrecht and Sack, 2000; Dixon, 2004; Lange et al., 2006). Employers and experts raised concern about the quality of accounting education, but the prospects of key stakeholders—such as academics and experts—were rarely included in the curriculum proposal (McNamara, 2006). Most of the studies on accounting education have also focused on developed countries and leave a gap in understanding similar issues in developing economies such as Saudi Arabia (Gallhofer et al., 2009).

This study deals with this gap by exploring the alignment of accounting education with the labor market requirements from the perspective of graduates at Majmaah University. It contributes to a limited set of empirical research in accounting education in the Gulf Cooperation Council (GCC) and provides knowledge of improving the curriculum in accordance with the objectives of the national development.

The importance of this study is to emphasize the extent to which accounting education is in accordance with the requirements of the labor market in Saudi Arabia. Within Vision 2030, universities are underway with monitoring and evaluation to ensure that the curriculum meets international standards and local needs. Scientists hope that these findings will contribute to the refinement of accounting education programs across Saudi institutions and support to produce competent graduates.

This article is organized in five sections. First, an overview of the study topic is listed. Second, an overview of previous studies is included. Third, the study hypotheses are outlined. The fourth time, the methodology is explained. Finally, the conclusion summarizes key findings and consequences.

2. Literature review

The growing interest in skills required by accounting and methods of acquiring these skills—average work experiences, personal development, or university education—was well documented (Low et al., 2013; Parsons et al., 2020). Employers are increasingly appreciating interdisciplinary skills that exceed the knowledge of technical accounting and emphasizing the need for their integration into the curriculum (Ballantine & Larres, 2004; Boyce et al., 2001). This overview of literature synthesizes existing research according to four key topics: (1) required skills for accounting graduates, (2) gaps in accounting education, (3) technological impacts on accounting education, and (4) regional perspectives in Saudi Arabia. By critical analysis of these topics, this overview identifies the gaps in the literature, in particular the lack of perspectives of graduates on the gap in skills and technological impact in Saudi

Arabia, thus determining the justification of the current study.

Research consistently emphasizes the importance of technical and general skills for graduates in accounting. Kavanagh and Drennan (2008) conducted a comprehensive study including 322 graduates at three Australian universities and 28 experts in various industries. Their finding revealed that continuous learning was evaluated as the most critical skill of students, reflecting its importance for adapting to the evolving accounting profession. Students and employers agreed on the importance of solving problems, oral and written communication, teamwork, and continuous learning, although their prioritization was different. Employers placed greater emphasis on oral communication, while the accounting programs focused more on written communication, indicating an incorrect balance of skills development. Similarly, Banasik and Jubb (2021) emphasized the need for skills in the field of digital technologies, accounting software, oral presentations, teamwork, and managerial and leadership skills. They argued that these skills are necessary for graduates to satisfy modern requirements in the workplace, yet they are often insufficiently developed in the academic environment. Gyekye and Amo (2024) further explored employer expectations in Ghana, surveying 160 employers to identify discrepancies between desired and demonstrated skills among accounting graduates. Their findings emphasized that employers prioritize general skills—such as applying accounting principles, problem-solving, decision analysis, written communication, corporate ethics, and continuous learning—over purely technical competencies. This preference for interdisciplinary skills highlights a broader trend where employers value adaptability and professional capabilities alongside technical expertise (Ebekozien et al., 2023). However, these studies also suggest that graduates often lack proficiency in these general skills, pointing to a gap in educational preparation.

Several studies have identified disconnection between accounting curriculum and labor market needs. Ayroots (2012) examined accounting education in Ghana and found that programs often emphasize advanced theoretical techniques with limited practical significance. Studies based on data from academic institutions and experts emphasized insufficient emphasis on computer accounting systems, despite their widespread use in industry. Ayroots recommended the integration of practical training, such as computer accounting, into the curriculum to better prepare graduates. Similarly, Johnson (2014) conducted a survey of 16 postgraduate accounting experts in the southeastern United States to assess the impact of academic training on practice. The results confirmed a significant abyss between theoretical education and practical requirements and urged the faculty to focus on professional training and develop the curriculum that bridges this division.

Kwarteng and Mensah (2022) carried out a descriptive survey of 435 accounting employees and graduates, finding that strengthening personal and information technology (IT) skills is decisive for employment. However, they found that universities often cannot develop these skills reasonably, and graduates are unprepared for workplace requirements. Elo et al. (2024) further explored the perception of students and revealed the irregularities between their expectations of the importance of skills and the real skills developed during their education. This discrepancy underlines the need for curriculum to better reflect the requirements for the workplace, especially in support of employability skills such as interpersonal communication and adaptability.

Integration of technology into accounting practice has changed skill requirements. Rîndaşu (2021) analyzed 1000 job advertisements across European economies and found that IT skills, especially in

accounting information systems (AIS) and data processing systems (OSS), are increasingly required but often not gained by graduates. Only half of employment contributions explicitly required AIS skills, indicating that employers may not fully use the IT capabilities of employees. Similarly, HU (2022) has explored the impact of artificial intelligence (AI) on accounting education through a case study. The findings emphasized the transformation effects of AI on accounting procedures, quality of information, and personnel requirements and recommended the integration of AI education into the curriculum to prepare graduates for technology. These studies collectively indicate that technological progress overcomes education reforms, which requires a stronger focus on digital competences.

In the context of Saudi Arabia, North studies have examined the alignment of accounting education with labor market needs. Alsughayer and Alsultan (2023) examined the gap in the skills by examining members of the faculty and professionals in Saudi accounting companies. Their findings revealed that accounting programs prefer technical skills over general skills such as interpersonal communication and management that employers highly appreciate. The study recommended integrating employability skills into the curriculum and encouraging graduates to devote themselves to lifelong learning beyond formal education. Similarly, Ebaid (2022) explored the perception of university students about sustainable development in Saudi accounting education. The results indicated limited integration of sustainability principles into the curriculum, despite the awareness of students about their social importance and their support for incorporating these topics into existing courses.

Masood (2020) also emphasized the mismatch between accounting education and the needs of the labor market in Saudi Arabia and emphasized the need for the curriculum to include practical skills, such as computer accounting, and soft skills, such as teamwork. Similarly, Senan (2019) conducted an empirical study and found that Saudi accountants often lack practical and interdisciplinary skills required by employers, such as adaptability and communication. This regional study underlines a consistent abyss between academic preparation and market expectations, especially in practical and technological competencies.

Literature reveals a consensus on the existence of a gap of skills between accounting education and labor market requirements, driven by incorrectly aligned curriculum, insufficient focus on general and technological skills, and regional changes in educational priorities. While studies such as Kavanagh and Drennan (2008) and Gyeky and AMO (2024) provide robust insight into the desired skills, others like Ayroots (2012) and Alsughayer and Alsultan (2023) emphasize the shortcomings of the curriculum in Saudi Arabia. Alumni, as individuals with direct exposure to academic education and the labor market, offer unique knowledge about how education is translated into practice and challenges in fulfilling market requirements. Personal interviews with graduates can provide a deeper understanding of this dynamic and solve the critical gap in the literature. The aim of this study is to fill this gap by assessing the applicability of accounting education in the Saudi labor market, focusing on the perspectives of graduates and challenges they face.

On the basis of the questions and goals of the study, we have created the following hypotheses for this research:

Hypothesis 1: Upon completing the accounting program, graduates acquire the necessary knowledge in accounting, auditing, and related fields to enter the job market.

Hypothesis 2: Upon completing the accounting program, graduates acquire the necessary skills in accounting, auditing, and related fields to enter the job market.

Hypothesis 3: Upon completing the accounting program, graduates acquire a set of values in accounting, auditing, and related fields to enter the job market.

3. Methodology of the study

This study conducted a field study on graduates of the accounting program at the College of Business Administration at Majmaah University. The study included all accounting graduates in the last four years, from 2020 to 2023, a total of 730 men and women. Regarding the ethical considerations involved in the study, we have obtained informed consent from the participants, protected their privacy and confidentiality, and followed ethical instructions and regulations. The relevant data were given in Table 1.

Table 1. ***Graduates of accounting program by year.***

Year	Graduates
2020	126 Graduates
2021	150 Graduates
2022	232 Graduates
2023	222 Graduates
Total	730 Graduates

The size of the sample for the study was determined using the Slovenian formula, a statistical tool for determining the appropriate sample size for the population. The equation for calculating the sample size is as follows:

Sample size = $n / (1 + n \times e^2)$

where:

N = size of the community, which in this case is 730 graduates.

E = Error edge that will be estimated at 10%.

According to this formula, the study should have at least 88 graduates, and about 160 questionnaires were distributed. Access to a collection of benefits was used due to practical restrictions on access to the full population of graduates. However, it is acknowledged that this method is a potential sampling distortion (Ethican et al., 2016). To alleviate this restriction and ensure importance for the objectives of the study, we focused on GPA graduates over 3 (equivalent to 60%). This criterion assumed that graduates with higher performance are more likely to ensure employment and thus have first-hand experience regarding their training requirements and the labor market—the rejection of previous studies investigating the employability and relevance of the curriculum (Alsughayer & Alsultan, 2023; Senan, 2019). Table 2 shows the number of distributed questionnaires and the number received.

Table 2. ***The count of lists that were distributed and received.***

Lists distributed	160
Lists Received	99
Response rate	60%
Completed listings	90
Percentage of completed lists	56.25%

The structured questionnaire was developed based on previous verified tools used in similar studies (Kavanagh & Drennan, 2008; Banasik & Jubb, 2021; Masood, 2020) and adapted to the Saudi context. The tool consisted of 22 items that dealt with knowledge, skills, and values. To increase the content of the content, the questionnaire was reviewed by five professors and experts in accounting education and ensuring the quality of education. In addition, a pilot study with a small group of graduates (n = 15) was conducted to evaluate the clarity, understanding, and validity of the face. The feedback was incorporated through revisions, including the addition of open questions to capture qualitative knowledge of the challenges facing the labor market.

The final version of the questionnaire has reached the validity of the content (CVI) of 0.85 or higher for all items, indicating a strong agreement between experts on the relevance and clarity of each item (Lynn, 1986). Language and phrasing were adjusted based on participant feedback during the pilot phase to improve readability and reduce ambiguity. The completion of the questionnaire required at least 85% agreement between reviewers, which is in line with standard instrument development procedures (POLID & Beck, 2006).

Cronbach's alpha was also calculated to assess the reliability of internal consistency, which brought a value of 0.82 for the total scale, indicating acceptable reliability (Nunnally, 1978). The questionnaires were distributed to all sample participants by e-mail. The final version consisted of two parts.

Part First: Collected demographic data on participants, including gender, employer, specialization, and academic performance.

Second part: 22 items Likert's scale, categorized in three domains:

Knowledge (7 items): focused on basic accounting principles and concepts relevant to the labor market.

Skills (11 items): covered competencies such as problem solving, communication, teamwork, and technological knowledge.

Values (4 items): In practice, professional ethics, integrity, and responsibility examined professionally.

Participants evaluated each command on a five-point scale, with the responding numeral response as follows: I strongly agree = 5, agree = 4, neutral = 3, disagree = 2, and I strongly disagree = 1.

4. Empirical results

This part represents findings from a survey of accounting graduates in Saudi Arabia, examining their perception of knowledge, skills, and values acquired through their academic program and their importance for the labor market requirements. The analysis is organized in four subsections: reliability statistics, descriptive statistics, results of T-tests with one sample, and other analyses, including open answers. These findings deal with the study hypotheses and provide insight into the alignment of accounting education with market needs.

4.1. The reliability statistics

A total of 160 questionnaires were distributed to accounting graduates, with 90 completed and valid responses retrieved, yielding a response rate of 56.25%. To ensure the instrument's appropriateness, a panel of accounting experts and faculty members reviewed the questionnaire, achieving an agreement rate of at least 85% on its alignment with the study's objectives. The internal consistency of the ques-

tionnaire was assessed using Cronbach's Alpha, with a minimum threshold of 0.70 deemed acceptable (Sekaran & Bougie, 2012). Table 3 presents the Cronbach's Alpha coefficients for the questionnaire's three dimensions: knowledge (Q1–Q7), skills (Q8–Q18), and values (Q19–Q22). The coefficients were 0.919, 0.950, and 0.860, respectively, with an overall coefficient of 0.971, indicating high reliability across all items and dimensions.

Table 3. ***The reliability results using Cronbach's alpha coefficient.***

The study cases		Cronbach's coefficient	Honesty coefficient
1	Knowledge questions Q1–Q7	0.919	0.958
2	Skills Questions Q8–Q18	0.950	0.975
3	Values Questions Q19–Q22	0.860	0.927
The list's reliability and validity as a whole		0.971	0.985

4.2. Descriptive statistics

The study sample included 90 graduates, with 84.4% male (n = 76) and 15.6% female (n = 14). The employment industry included 53.3% in the private sector (n = 48), 24.4% in the public sector (n = 22), 15.6% in non-profit institutions (n = 14), and 6.7% in other sectors (n = 6). Specializations were distributed as follows: 66.7% in financial accounting (n = 60), 13.3% in audit (n = 12), 8.9% in Zakat and Taxes (n = 8), and 11.1% in other fields (n = 10). Academic signs showed 6.7% excellent (n = 6), 26.7% very good (n = 24), 48.9% good (n = 44), and 17.8% acceptable (n = 16). The years of graduation have been from 2020 (23.3%, n = 21) to 2023 (22.2%, n = 20), with the highest representation (27.8%, n = 25).

Table 4. ***Distribution of study sample participants according to demographic variables.***

	Number	Percentage
Gender:		
Male	76	84.40%
Female	14	15.60%
Total	90	100%
Employment sector:		
Private sector	48	53.30%
Public sector	22	24.40%
Non-profit institutions	14	15.60%
Other	6	6.70%
Total	90	100%
Specialization:		
Financial Accounting	60	66.70%
Auditing	12	13.30%
Zakat and Taxes	8	8.90%
Other	10	11.10%
Total	90	100%
Grade:		
Excellent	6	6.70%
Very good	24	26.70%
Good	44	48.90%
Acceptable	16	17.80%

Total	90	100%
Graduation year:		
2020	21	23.33%
2021	24	26.67%
2022	25	27.78%
2023	20	22.22%
Total	90	100%

The graduates reported adequate knowledge across financial accounting, audit, cost and management accounting, and taxes and information technology, as well as related areas such as economics, finance, and administration (Table 5). The total average for knowledge questions was 3.64 (SD = 0.99), while Q1 (financial accounting) scored the highest (M = 4.00, SD = 0.97) and Q5 (Zakat and Tax) the lowest (M = 3.04, SD = 1.42). The high variability of responses reflected in variation coefficients (e.g., 2.02 for Q5) indicates differences in the exposure of education among respondents.

Table 5. ***Descriptive statistics for knowledge questions.***

Questions	Arithmetic average	Standard deviation	Variation coefficient	Ranking
Q1	4.0000	0.97150	0.944	1
Q2	3.9111	0.99034	0.981	2
Q3	3.6889	1.26885	1.610	5
Q4	3.3556	1.36003	1.850	6
Q5	3.0444	1.42143	2.020	7
Q6	3.7111	1.15384	1.331	3
Q7	3.8000	1.19173	1.420	4
Overall average	3.6444	0.98771	0.976	-

For skills (Table 6), graduates have shown expertise in financial accounting, audit, cost and administrative accounting, and computer systems, with a total average of 3.61 (SD = 1.10). Q9 (audit skills) had the highest diameter (M = 3.78, SD = 1.22), while Q12 (computer systems) scored the lowest (M = 3.21, SD = 1.43). It has been reported that field training increases adaptability in the workplace (M = 3.91, SD = 1.29) and critical thinking (M = 3.73, SD = 1.30), although variability indicates inconsistent skills development.

Table 6. ***Descriptive statistics for skills questions.***

Questions	Arithmeticaverage	Standard deviation	Variation coefficient	Ranking
Q8	3.7778	1.28761	1.658	5
Q9	3.7778	1.21579	1.478	1
Q10	3.6667	1.25421	1.573	2
Q11	3.2444	1.44028	2.074	10
Q12	3.2067	1.42844	2.040	9
Q13	3.5333	1.49306	2.229	11
Q14	3.9111	1.28644	1.655	3
Q15	3.4222	1.36553	1.865	7
Q16	3.7333	1.29649	1.681	6

Q17	3.7111	1.36772	1.871	8
Q18	3.6889	1.28644	1.655	4
Overall average	3.6121	1.09522	1.200	-

Values (Table 7) showed a strong perception of teamwork (M = 3.78, SD = 1.30), professional development (M = 4.04, SD = 1.10), and ethical standards (M = 3.40, SD = 1.30), with a total of 3.51 (SD = 1.10). Communication skills (Q21) had the lowest diameter (M = 2.80, SD = 1.51), indicating the need for better focus on oral and written communication training.

Table 7. Descriptive statistics for values questions.

Questions	Arithmetic average	Standard deviation	Variation coefficient	Ranking
Q19	3.7778	1.30494	1.703	3
Q20	4.0444	1.10068	1.211	1
Q21	2.8000	1.50803	2.274	4
Q22	3.4000	1.29649	1.681	2
Q19	3.5056	1.09965	1.209	-
Overall average	3.7778	1.30494	1.703	3

4.3. One sample *t*-test

One-sample t-tests were conducted to assess whether graduates' perceptions of knowledge, skills, and values significantly exceeded the neutral value of 3 on a five-point scale, following Eissa et al. (2024). Effect sizes (Cohen's d) were calculated to evaluate practical significance.

Knowledge (H1): Table 8 shows that graduates reported significantly higher knowledge than the neutral value for most areas ($p<0.01$), except for zakat and taxes (Q5: M=3.04, SD=1.42, t=0.297, $p>0.05$, d=0.03). Strong effect sizes were observed for financial accounting (Q1: M=4.00, t=9.765, d=1.03) and auditing (Q2: M=3.91, t=8.728, d=0.92), indicating robust knowledge acquisition. The non-significant result for Q5 suggests a curriculum weakness in zakat and taxes, necessitating targeted revisions to enhance practical training in this area.

Table 8. ***One sample t-test for H1.***

The first set of questions					
Question		**Average**	**Standard deviation**	**Difference from neutral value "3"**	***t* value**
Q1	The program helped me gain sufficient knowledge in financial accounting and its standards.	4.0000	0.97150	1.00000	9.765***
Q2	The program helped me gain sufficient knowledge in auditing and its standards.	3.9111	0.99034	0.91111	8.728***
Q3	The program helped me gain sufficient knowledge in cost and management accounting.	3.6889	1.26885	0.68889	5.151***
Q4	The program helped me gain sufficient knowledge in information technology and its systems used to solve accounting problems.	3.3556	1.36003	0.35556	2.480**

Q5	The program helped me gain sufficient knowledge in zakat and taxes.	3.0444	1.42143	0.04444	0.297
Q6	The program helped me learn about the basic principles and concepts related to accounting, such as economics, finance, and management.	3.7111	1.15384	0.71111	5.847***
Q7	The program helped me learn about the latest scientific developments in accounting and auditing that are applied in practice.	3.8000	1.19173	0.80000	6.368***

Please note that * represents significant results at the 90% confidence level, ** at the 95% confidence level, and *** at the 99% confidence level.

Skills (H2): Table 9 indicates significant skill acquisition ($p<0.01$) for most areas, except zakat and taxes (Q11: M=3.24, SD=1.44, t=1.610, $p>0.05$, d=0.17) and computer-based systems (Q12: M=3.21, SD=1.43, t=1.571, $p>0.05$, d=0.14). Strong effect sizes were noted for field training adaptability (Q14: M=3.91, t=6.719, d=0.71) and critical thinking (Q16: M=3.73, t=5.366, d=0.57). These findings highlight the need for enhanced training in Zakat, taxes, and IT systems to align with market demands for technological proficiency.

Table 9. ***One sample t-test for H2.***

The second set of questions					
Question		**Average**	**Standard deviation**	**Difference from neutral value "3"**	***t* value**
Q8	The program helped me acquire the necessary skills to carry out the tasks required in financial accounting.	3.7778	1.28761	0.77778	5.731***
Q9	The program helped me acquire the necessary skills to carry out the tasks required to perform audits.	3.7778	1.21579	0.77778	6.069***
Q10	The program helped me acquire the necessary skills to perform the tasks required in cost and administrative accounting.	3.6667	1.25421	0.66667	5.043***
Q11	The program helped me acquire the necessary skills to carry out the tasks required in zakat and tax.	3.2444	1.44028	0.24444	1.610
Q12	The program helped me to improve my ability to deal with various computer-based accounting information systems and to use accounting programs in my field of work.	3.2067	1.42844	0.20667	1.571
Q13	Field training contributed to enhancing my experiences in my field of work.	3.5333	1.49306	0.53333	3.389***

Q14	Field training contributed to increasing my ability to adapt to the work environment.	3.9111	1.28644	0.91111	6.719***
Q15	There is a balance between the theoretical aspect of the courses and the practical aspect.	3.4222	1.36553	0.42222	2.933***
Q16	The courses helped me develop critical thinking and analytical skills.	3.7333	1.29649	0.73333	5.366***
Q17	The program helped me improve my ability to express opinions on complex subjects with multifaceted perspectives.	3.7111	1.36772	0.71111	4.932***
Q18	The program improved my ability to find relevant information for decision-making.	3.6889	1.28644	0.68889	5.080***

Please note that * represents significant results at the 90% confidence level, ** at the 95% confidence level, and *** at the 99% confidence level.

Values (H3): Table 10 confirms significant acquisition of values ($p<0.01$), with strong effect sizes for professional development (Q20: M=4.04, t=9.002, d=0.95) and teamwork (Q19: M=3.78, t=5.654, d=0.60). **Communication** skills (Q21: M=2.80, t=4.258, d=0.45) showed the smallest effect size, indicating a potential area for curriculum enhancement to improve oral and written communication.

Table 10. ***One sample t-test for H3.***

The third set of questions					
Question		**Average**	**Standard deviation**	**Difference from neutral value "3"**	***t* value.**
Q19	The program helped me improve my teamwork skills.	3.7778	1.30494	0.77778	5.654***
Q20	The program helped me to develop myself professionally.	4.0444	1.10068	1.04444	9.002***
Q21	The program improved my abilities in both oral and written communication.	3.8100	1.50803	0.8100	4.258***
Q22	The program assisted me in maintaining professional integrity and ethical standards.	3.4000	1.29649	0.40000	2.927***

Please note that * represents significant results at the 90% confidence level, ** at the 95% confidence level, and *** at the 99% confidence level.

4.4. An additional analysis

Spearman correlation analysis (Table 11) examined relationships between demographic variables (gender, employment sector, specialization, grade, graduation year) and perceptions of knowledge, skills, and values. Private sector employment was positively correlated with skills ($r=0.258$, $p<0.05$) and values ($r=0.250$, $p<0.05$), suggesting that private sector roles may reinforce these competencies. Conversely, auditing specialization showed a negative correlation with knowledge ($r=-0.245$, $p<0.05$),

indicating potential gaps in auditing education. No significant correlations were found for gender or academic grade, suggesting these factors have limited influence on perceptions.

Table 11. ***Correlation matrix.***

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1-Graduates knowledge	1.000																
2-Graduates skills	0.873**	1.000															
3-Graduates values	0.831**	0.878**	1.000														
4-Gender	0.069	0.038	0.012	1.000													
5-Private sector	0.181	0.258*	0.250*	0.336**	1.000												
6-Public sector	−0.098	−0.206	−0.174	−0.184	−0.608**	1.000											
7-Non-profit institutions	−0.185	−0.159	−0.142	0.015	−0.459**	−0.244*	1.000										
8-Other sectors	0.076	0.069	0.007	−0.377**	−0.286**	−0.152	−0.115	1.000									
9-Financial Accounting	0.106	0.104	0.078	−0.043	0.094	−0.037	0.173	−0.378**	1.000								
10-Auditing	−0.245*	−0.043	−0.053	0.168	0.236*	−0.071	−0.168	−0.105	−0.555**	1.000							
11-Zakat and Taxes	0.054	−0.172	−0.079	0.134	−0.177	0.367**	−0.134	-0.083	−0.442**	−0.123	1.000						
12-Other specializatio n	0.057	0.046	0.011	−0.238*	−0.236*	−0.201	0.043	0.756**	−0.500**	−0.139	−0.110	1.000					
13-Grade	−0.085	−0.064	−0.052	−0.171	−0.019	0.067	0.028	−0.118	0.076	0.092	−0.019	−0.197	1.000				
14-Y2020	−0.122	−0.082	−0.090	−0.271**	−0.063	−0.069	0.126	0.063	0.000	0.093	−0.172	0.056	0.171	1.000			
15-Y2021	0.116	0.079	0.086	0.259*	0.060	0.066	−0.120	−0.060	0.000	−0.089	0.165	−0.053	−0.164	−0.333**	1.000		
16-Y2022	−0.067	−0.013	−0.054	−0.213*	−0.017	−0.064	0.076	0.033	0.018	0.122	−0.194	0.018	0.086	−0.342**	−0.374**	1.000	
17-Y2023	0.072	0.014	0.058	0.229*	0.018	0.069	−0.082	−0.036	−0.019	−0.131	0.209*	−0.019	-0.092	−0.295**	−0.322**	−0.331**	1.000

*, **, *** reflects the significant of the correlations at 10, 5, 1% levels respectively

4.5. Open-ended questions analysis

Open-ended responses (Table 12) identified key labor market challenges. Technological advancements were the most cited challenge (62.5%, n=10), with graduates emphasizing the need for proficiency in accounting software and data analytics to remain competitive. Legal and regulatory challenges, such as compliance with accounting laws and tax audits, were noted by 50% (n=8), highlighting the need for updated curricula on zakat and tax regulations. Personal skills, particularly communication and English proficiency, were cited by 37.5% (n=6) as critical for employability, with suggestions to offer courses in English to better prepare graduates.

Table 12. ***Analysis of open questions.***

Question		Number of Respondents	Frequencies
Q23	What are the challenges and opportunities in the labor market?	16	
Responses			
Technological challenges		10	62.5%
Legal and regulatory challenges		8	50%
Personal and skills challenges		6	37.5%

The results confirm that graduates have reasonable knowledge, skills, and value in most accounting areas, with significant strengths in financial accounting, auditing, and professional development. How-

ever, deficiencies in Zakat and Taxes (Q5, Q11) and IT systems (Q12) suggest that the curriculum should include more practical training in these areas. For example, reserved courses on observance and taxes, which are in accordance with Saudi regulations, and practical training using accounting software could solve these gaps. The slight effects on communication skills (Q21) indicate the need for increased training in oral and written English, especially due to the emphasis on the labor market. These findings are in accordance with previous research (e.g., Alsughayer & Alsultan, 2023; Senan, 2019) and emphasize the urgency of the curriculum reform to bridge the gap in Saudi Arabia skills in accounting education.

5. Conclusion

This study examined the alignment of accounting education at Majmaah University with the requirements of the Saudi labor market, focusing on the perception of their knowledge, skills, and values of graduates. The conclusion is structured to summarize key findings, discuss their consequences and recommendations, and recognize restrictions, thus dealing with the objectives of research and contributing to a wider discourse on accounting education.

5.1. Key findings

The main objective of the study was to assess how well the accounting program of Majmaah University is preparing graduates for the Saudi labor market, focusing on knowledge, skills, and value. The findings suggest that graduates are convinced of their knowledge of financial accounting, auditing, cost and management accounting, and related fields such as economics, finance, and management, in accordance with the aim of evaluating basic competencies. However, neutral reactions concerning systems, taxes, and information technologies (IT) indicate shortcomings in these areas, indicating a gap in the relevance of curriculum for specific market needs. Graduates have shown adequate technical skills in most accounting areas, except for Zakat and taxes and computer accounting systems, where the answers were neutral, emphasizing the need for increased practical training. It has been found that the program is equalized by theoretical and practical components, promotes critical thinking, analytical skills, and decision-making skills, as well as the ability to solve complex problems. Graduates also showed basic professional values, including teamwork, professional development, communication, and ethical integrity, with a program that is mainly strengthening skills in English, which meets the requirements of the labor market.

These findings are partially aligned with previous studies. In accordance with Alsughayer and Alsultan (2023) and Rîndaşu (2021), the study confirms the gap between accounting education and the requirements of the labor market, especially in IT and Zakat/Tax competences. Similarly, the emphasis on personal and IT skills reflects Kwarteng and Mensah (2022), and the limited focus on computer accounting is in line with Ayroots (2012). Unlike Alsughayer and Alsultan (2023) and Rîndaşu (2021), which reported shortcomings in communication skills, this study found strong communication and knowledge of English among graduates. This mismatch can reflect the recent updates of the curriculum at Majmaah University, which incorporated courses on communication and English terminology across academic modules, indicating improvement compared to other Saudi programs.

5.2. The consequences and recommendations

The findings contribute to new knowledge by concentrating on the perspectives of graduates that are insufficiently explored in Saudi Arabia and thus deal with the gap in the literature. Unlike previous

studies, which primarily relied on the opinions of the faculty or employer (e.g., Alsughayer & Alsultan, 2023), this study emphasizes the direct experience of graduates with challenges in the labor market and offers a nuanced understanding of the effectiveness of the curriculum. Identifying the calls for technological, legal, and personal skills through responses to open reactions provides knowledge about the curriculum reform and expands the work of Senan (2019) and Masood (2020) by determining specific areas for improvement in the Saudi context.

In order to bridge identified gaps, the accounting program at Majmaah University should integrate practical training in observance and taxes, potentially through reserved courses that agree with Saudi regulatory forms and procedures. Similarly, the integration of practical training in accounting software and data analysis tools is essential for solving technological requirements, as supported by Rîndaşu (2021). The success of the program in promoting communication and English skills should be maintained by offering selected English courses to increase global employability. It is also recommended to ensure the relevance of the curriculum to reflect legal and regulatory changes. These recommendations have wider consequences for Saudi universities, because the alignment of accounting education with the labor market needs can increase the employability of graduates and contribute to economic growth and innovation within the Vision 2030.

5.3. Limitations

The study has several restrictions. Sample size 90 graduates from Majmaah can reduce generalization to other Saudi institutions. Relying on the details of the reaction, graduates can overestimate their competences. The absence of employer or triangulation perspectives with other data sources, such as the performance of the workplace, limits the ability to verify the perception of graduates. Moreover, the focus on recent graduates (2020–2023) does not have to capture long-term career results. Future research should use a larger multi-institutional sample, incorporate employer feedback, and use mixed methods to increase robustness. Longitudinal studies could further explore how the curriculum is affecting career trajectories of graduates.

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