

Research Article

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University Students' Possession of Entrepreneurial Skills Required for the Labor Market in Light of Entrepreneurial Education Goals

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Abstract

Background/purpose. The main objective of this research is to identify the degree to which students at Ajloun University College possess the entrepreneurial skills necessary for the labor market, in light of the objectives of entrepreneurial education. The study was conducted to identify the methods of contemporary universities in facing numerous challenges, such as technological advancements, the global shift toward a knowledge economy, And the shift towards entrepreneurial education.

Materials/methods. A descriptive approach was employed as it best suited the study's aim of assessing the entrepreneurial skills of students at Ajloun University College in relation to entrepreneurial education objectives. A questionnaire consisting of 34 items related to entrepreneurial skills was designed, and the study instrument was administered to a sample of 518 students. To answer the study question, means and standard deviations of the participants' responses were calculated.

Results. The findings of the study indicated that at Ajloun University College students possess the necessary entrepreneurial skills for the labor market to a high degree. The highest mean score was recorded for personal entrepreneurial skills, followed by social entrepreneurial skills, then managerial entrepreneurial skills. The lowest score, but still high, was recorded for technical and technological entrepreneurial skills.

Conclusions. The results revealed that students Ajloun University College possess of entrepreneurial skills at a high level. These skills such as: a strong desire for success, self-confidence, taking responsibility for decision-making, relying on oneself to complete tasks, thinking about future careers, having a drive for change, learning from professional experiences, adapting to work conditions and pressures, setting clear and accurate goals, and emotional regulation.



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1. Introduction

Higher education systems worldwide have recognized the importance of transforming universities from traditional institutions that merely provide theoretical knowledge into entrepreneurial universities that drive the economy and promote development in its various human, cultural, social, and economic dimensions. This transformation occurred through the adoption of educational policies and fundamental shifts known as entrepreneurial education, meaning the development of entrepreneurial skills and their integration into the goals of universities, their educational policies, strategies, curricula, programs, teaching methods, and assessment and examination systems. All these initiatives aim to strengthen the relationship between the academic and professional communities (Al-Ani, 2015, p. 250).

Transitioning to entrepreneurial education and developing entrepreneurship skills have become primary goals for contemporary Jordanian universities. The universities supported this transformation by establishing business incubators, innovation and entrepreneurship centres, and by developing curricula that focus on entrepreneurial learning strategies. Universities have also introduced courses that encourage entrepreneurial thinking by integrating entrepreneurship concepts and skills into elective and mandatory courses across all disciplines. Moreover, universities are working to discover students' talents and creativity in advanced, innovative ways, organizing training workshops on entrepreneurship and innovation, and supporting students' entrepreneurial ideas by transforming them into practical, and applicable projects (Shaker & Matar, 2024, p. 79).

The support of contemporary universities for the transition to entrepreneurial education and the development of entrepreneurial skills among university youth comes because it is an effective strategy to address population pressures and reduce unemployment rates among young people. This is done by equipping them with the knowledge and competencies that enable them to face social and economic challenges and adapt to changes throughout their lives, based on the premise that anyone with entrepreneurial skills can overcome poverty and secure a decent life (Abdullah, 2020, p. 417).

Al-Balqa Applied University, like other Jordanian universities, has started to focus on entrepreneurial education and developing entrepreneurial skills among its students. The Centre for Innovation, Creativity, and Entrepreneurship was established in 2017 within the Deanship of Scientific Research and Innovation. The centre has several departments specialising in entrepreneurship and innovation, such as the Business Incubators and Development Department, the Entrepreneurial Project Management Department, the Technology Transfer Department, and the Patents Department. These departments are in charge of promoting innovation, creativity, and entrepreneurship through seminars, training programs, conferences, and contests, as well as luring innovators and entrepreneurs. The centre also manages knowledge stations and business incubators at institutions, creating an environment that encourages, refines, and converts innovative ideas into unique products. The centre and its departments, which focus on entrepreneurship by supporting and developing outstanding applied research projects to market their outputs, managing relationships with partners to market innovative products, securing financial support for creative initiatives, and closely monitoring the progress of companies and projects emerging from knowledge stations and technology incubators, also track intellectual property rights and patents (<https://www.bau.edu.jo/bauar/Units/ICEC/about.aspx>).

Regarding the promotion of an entrepreneurial culture, the Centre for Innovation, Creativity, Entrepreneurship, and Quality Education at Al-Balqa Applied University organised a scientific conference in 2023 titled "From Venus to the Universe" in collaboration with the Jordanian-Korean Centre for Information and Communication Technology. In 2024, the university hosted the Entrepreneurship Summit for Jordanian universities under the slogan "Jordan: The Entrepreneurial

and Innovative Hub." It was the first summit of its kind in the country and brought together more than 20 innovation and entrepreneurship centres from various universities. The event featured an exhibition of 44 unique student projects, interactive workshops, and discussion sessions attended by around 200 students. Over the last three years, the university has provided total financial support for entrepreneurial enterprises amounting to 14,000 Jordanian dinars.

Al-Balqa Applied University contributes significantly to the development of entrepreneurship and innovation skills through training workshops, lectures, and seminars on topics such as "Social Entrepreneurship," "Innovation, Technology, Data Science, and Quality Education." To emphasise the value of entrepreneurship, the university has incorporated several entrepreneurship-related courses into its academic programs, including economic concepts, creative entrepreneurship, business management, digital marketing, financial management, contemporary management concepts and skills, computer skills, artificial intelligence, and software engineering.

The Al-Balqa Applied University seeks to provide its students with a varied set of entrepreneurship skills relevant to the employment market. Among the most crucial are entrepreneurial personal skills, such as drive for success, self-confidence, professional thinking, learning from failure, accuracy in goal planning, motivation for change, self-reliance, stress management, and emotional control.

As for social skills, they encompass participation in volunteer work, teamwork, rejection of dependency, judgment-making, negotiation, problem-solving, building social relationships, and learning from others' experiences. The technical and technological entrepreneurial skills include electronic communication, handling information technology, keeping up with technological advancements, designing e-commerce websites, digital marketing, and writing formal correspondence. Meanwhile, the managerial entrepreneurial skills involve strategic planning, adherence to work regulations, responsibility-taking, following standards, crisis and risk management, prioritization, finding alternatives, transforming ideas into productive projects, and professional evaluation.

It is worth noting that all studies addressing entrepreneurship and innovation have approached them from various aspects, such as supporting the transformation to entrepreneurial education, the requirements for entrepreneurship and innovation, entrepreneurial universities and the requirements for their establishment, without focusing on revealing the reality of entrepreneurial skills among university students and how to develop them. This is what the current study uniquely addresses compared to previous studies, in an attempt to bridge the knowledge gap that, if continued, will lead to a lack of awareness among decision-makers in universities about the importance of entrepreneurial skills and ways to develop them, as well as the importance of pathways to transforming towards entrepreneurial education through the development of university goals, policies, and visions that support entrepreneurial education and enhance entrepreneurial skills.

1.1. Problem of the Study

Entrepreneurship is generally considered a fundamental component of organizational and institutional culture, and universities, in particular, rely on it as an essential condition for the success of their missions and for achieving a competitive advantage among contemporary global universities. Globally, the world is witnessing developments driven by globalization and modern technological advancements, which have transformed universities into places not only for acquiring and consuming knowledge and graduating a generation equipped with theoretical knowledge, but also for producing knowledge and applying it in practice to meet graduates' future needs. These graduates aspire to obtain jobs that align with their ambitions and offer a life free of misery and poverty, rather than waiting years for governments to provide suitable employment.

Consequently, Jordanian universities have moved toward supporting the shift to entrepreneurial education and promoting a culture of entrepreneurship among their students. They have established innovation and creativity centers, business incubator units, knowledge stations, and organized seminars, workshops, conferences, and competitions. They have attracted innovators and entrepreneurs; developed outputs from applied research projects for commercialization; managed partnerships to market creative and innovative products; secured support for such products; monitored the progress of companies and projects generated by knowledge stations and technological business incubators; and managed patent registrations and intellectual property follow-ups. All these efforts aim to enhance the culture of entrepreneurship and strengthen the entrepreneurial skills of university graduates.

However, these efforts are insufficient to fully spread entrepreneurial education, adopt an entrepreneurial culture, and develop students' entrepreneurial skills in Jordan. This is confirmed by research studies examining the practical application of entrepreneurial education and the realities of entrepreneurship among students and faculty in Jordanian universities. For example, the study by Al-Tarawneh & Lahali (2019) found a low level of personal and entrepreneurial skills among students at Jordanian public universities, while Al-Hudayat (2019) found that university youth lacked awareness of entrepreneurial culture, which was identified as one of the main obstacles to entrepreneurial education in Jordanian universities. Omar (2023) surveyed 75 final-year and recent graduate students holding intermediate diplomas or bachelor's degrees from nine public universities. The survey found that 82.7% of participants reported that their curricula did not align with the skills employers require, such as communication, decision-making, problem-solving, critical and creative thinking, teamwork, personal responsibility, self-awareness, and other entrepreneurial skills necessary for the Jordanian labor market.

1.2. Research Question

The study aims to answer the following question:

- To what extent do students of Ajloun University College possess entrepreneurial skills in light of the objectives of entrepreneurial education?

1.3. Importance of the study:

The study supports the development plans of the Hashemite Kingdom of Jordan and the National Transformation Programs, and advances Al-Balqa Applied University's vision of spreading the culture of entrepreneurship and developing entrepreneurship and innovation skills among its graduates. It guides students at Al-Balqa Applied University toward an interest in entrepreneurial education, enabling them to develop the entrepreneurial skills needed for the Jordanian labor market and instilling in them a spirit of initiative and the ability to create productive projects grounded in entrepreneurship and innovation. The study benefits those in charge of higher education in Jordan by supporting the transformation of Jordanian universities towards entrepreneurial education and the development of educational programs and courses, ensuring that university graduates possess entrepreneurial skills aligned with the needs of the job market.

2. Literature Review

2.1. Entrepreneurial Education

Entrepreneurial education is an organized process aimed at developing management and entrepreneurial skills among young people and promoting a culture of creativity and innovation under the supervision of universities and other educational institutions. This education aims to equip students with the knowledge, skills, and behaviors needed to meet the demands of the job market.

It also teaches them essential cognitive, behavioral, and labor-market-related skills (Al-Mutairi, 2019, p. 5).

Entrepreneurial education is divided into three main pillars:

- Knowledge: The student learns theoretical information about entrepreneurship.
- Skills: Training on basic entrepreneurial skills such as leadership, marketing, and planning.
- Behaviours: Encouraging entrepreneurial attitudes, such as creativity, enthusiasm, calculated risk-taking, and innovation (Al-Maqabalah et al., 2021, p. 194).

Practically, entrepreneurial education is an organised process aimed at developing students' personal, social, technical, and managerial skills, as well as fostering a culture of creativity and innovation, so that they are capable of creating and managing entrepreneurial projects that meet the demands of the job market. Practically, entrepreneurial education is an organised process aimed at developing students' personal, social, technical, and managerial skills, as well as fostering a culture of creativity and innovation, so that they are capable of creating and managing entrepreneurial projects that meet the demands of the job market.

2.2. Entrepreneurial Skills

Entrepreneurial skills are the abilities that a person must possess to be considered an entrepreneur. Possessing these skills increases the ability to discover opportunities, avoid risks, and turn challenges into investment opportunities using creativity and innovation (Jalab, 2023, p. 681). Al-Ani (2015) describes entrepreneurial talents as personal characteristics that differentiate people with high abilities, such as self-confidence, a strong drive for success, tenacity, inventiveness, independence, and the capacity to embrace chances with measured risk (p. 256). 256).

Entrepreneurial skills are a collection of personal, social, technical, and management characteristics that enable university students to become self-sufficient entrepreneurs with a desire for success, inventiveness, independence, and the willingness to take risks.

2.3. Entrepreneurship

Entrepreneurship is a deliberate process that aims to provide students with the information, beliefs, behaviours, and abilities necessary to run their projects autonomously and efficiently (Faqihi, 2023, p. 371). Entrepreneurship entails starting new ventures based on original and distinctive ideas, taking calculated risks, and devoting time and effort to assure the project's success. Entrepreneurial ventures promote economic and social progress by capitalising on market possibilities. Furthermore, entrepreneurship is more than just launching ventures; it is about building knowledge and skills that will help students in the job market (Al-Maqabalah et al., 2021, p. 194). Practically, entrepreneurship is an organised and purposeful process implemented by universities to develop students' ability to engage in innovative and creative activities, to exploit opportunities, to manage calculated risks, to achieve profits, and to contribute to economic growth.

Practically, entrepreneurship is an organised and purposeful process implemented by universities to develop students' ability to engage in innovative and creative activities, to exploit opportunities, to manage calculated risks, to achieve profits, and to contribute to economic growth.

2.4. Classification of entrepreneurial skills

Cooney (2012, p. 7) classified entrepreneurial skills into four categories:

- Technical skills: They facilitate the production of products or services.
- Administrative skills: They help in managing business and daily life.
- Entrepreneurial skills: Focus on discovering and exploiting economic opportunities.

- Personal skills: They include emotional intelligence, creativity, and innovation.

Al-Hashwah (2012) classified the essential entrepreneurial skills as follows: communication skills, negotiation, and interpersonal relations; self-confidence and self-awareness; numerical, reading, and writing skills; perseverance and motivation; opportunity discovery and risk-taking; leadership, decision-making, creativity, and innovation; teamwork, independence, analytical thinking, and problem-solving; planning, management, and marketing.

Murad (2010) focused on the importance of technological skills, such as communication, business follow-up, organisation, and teamwork; business management skills, such as goal setting, decision-making, marketing, finance, and negotiation; and personal skills, such as discipline, commitment, risk-taking, creativity, and adaptability.

Ragheb (2023) expanded entrepreneurial skills to include: creative problem-solving, future-oriented thinking, change management, team motivation, time management, crisis management, and digital marketing (p. 9). In the same context, Al-Zubair and Abu Dayf (2018) identified the most important entrepreneurial skills: effective communication and expectations, data analysis and analytical thinking, learning from mistakes and making timely decisions, and resilience and overcoming difficulties (p. 52).

2.5. Objectives of University Entrepreneurial Education

The objectives of entrepreneurial education vary, including the following:

Equipping students with the necessary skills for entrepreneurship and business management, developing their entrepreneurial talents, and fostering a culture of self-employment across various fields (Azzam, 2020, p. 41).

Allowing students to experiment with entrepreneurial theories and ideas results in maturity and awareness via trial and error, a thorough comprehension of entrepreneurial principles, and their practical application (Najmi, 2021, p. 847).

Preparing a new generation of entrepreneurs and innovators by improving their entrepreneurial qualities and abilities, enabling them to establish their own enterprises, and successfully providing job opportunities to generate economic growth (Abdelmawla, 2020, p. 325; Benhkoma et al., 2022, p. 4119).

Raising awareness of the adverse effects of specific analytical methods, which may lead to a risk-averse mindset, and working to change such attitudes by encouraging the establishment of new entrepreneurial ventures (Al-Muqbalaya et al., 2021, p. 196).

Providing students with creative problem-solving abilities and increasing their capacity to overcome obstacles by transitioning from traditional thinking to innovative and renewal-based methods (Azzam, 2020, p. 41; Alsayid, 2021, p. 84).

Developing students' personal characteristics such as independence, self-confidence, risk tolerance, initiative, and understanding of company launch and management methods (Abdelmawla, 2020, p. 325).

Increasing students' understanding of self-employment and entrepreneurship as career options, shifting away from relying on the government for job stability and income (Almutayri, 2019, p. 9).

Increasing university competitiveness by encouraging entrepreneurial spirit, funding patent development, research, feasibility studies, and monitoring graduates' entrepreneurial growth (Najmi, 2021, p. 847).

2.6. Previous Studies

Al-Ani (2015) investigated the degree of entrepreneurial skills among students at Sultan Qaboos University in Oman and how demographic factors influence them. He administered a questionnaire including 65 entrepreneurship abilities to 592 male and female students. As a consequence, their entrepreneurial abilities ranged from high to average, with personal skills at the top and technical skills at the bottom.

Haboush (2017) investigated the role of Palestinian universities in fostering students' entrepreneurial abilities, whether technical, administrative, or personal. They conducted an online survey of 550 students from three institutions (Islamic, Al-Azhar, and Palestine) and interviews with specialists. As a result, universities played a vital role in strengthening entrepreneurial abilities, and students possessed better personal skills than technical and administrative skills.

Al-Zubair and Abu Dayf (2018) investigated how Imam Muhammad bin Saud University's Employment and Entrepreneurship Centre affected students' entrepreneurial, psychological, and economic abilities, as well as the success of their small enterprises. They studied a group of 100 female students, and the results revealed that the center certainly aided the development of entrepreneurial abilities and the success of small ventures.

Alshorman (2019) investigated entrepreneurial education and project views among graduate students at public institutions in Jordan. The conclusion was that there was minimal entrepreneurial activity, particularly in entrepreneurial thinking and project preparation, with students employing few innovative tactics and possessing limited personal and entrepreneurial abilities.

Al-Obaikan (2020) examined entrepreneurial traits among students in the Department of Art Education at King Saud University and their correlations with various factors. They surveyed 215 male and female students, and the results showed that most students possess strong entrepreneurial traits and understand the importance of entrepreneurship.

Alsayid (2020) studied the entrepreneurial readiness of graduates in various fields by assessing their entrepreneurial skills. They took two samples: graduates with work experience and those without. The full sample comprised 302 graduates, and those with experience had an advantage in both personal and technical skills. In contrast, business management skills were lower, especially among engineering and computer science graduates. The most important skills acquired were risk-taking, planning, goal-setting, decision-making, and perseverance.

Abdullah (2020) examined the level of entrepreneurial skills among Al-Azhar University students and explored ways to develop them. He administered a questionnaire to 600 students, and the results showed that entrepreneurial skills were moderate to low. It is suggested that the university offers training courses on the use of information technology in management and workshops for feasibility studies.

Al-Rumaidi (2021) studied entrepreneurship skills among tourism and hotel students at Egyptian universities, distributing 570 questionnaires and analysing 488 of them. The result was that their skills were relatively high, especially in planning and risk-taking, self-control, communication, teamwork, energy, commitment, self-confidence, and motivation.

Al-Zahrani (2021) studied the extent of entrepreneurial traits among students at Umm Al-Qura University and ways to develop them. They used a questionnaire with 1,500 students, and the results showed that students have high levels of entrepreneurial traits and agreed that methods that enhance entrepreneurial traits are effective.

Youssef (2022) studied the principles of entrepreneurial education necessary to prepare students for the job market and surveyed 420 faculty members from various Egyptian universities.

He identified the most important required skills: personal, technical, resource management, and social relations, and also ranked the principles of entrepreneurial education to adapt curricula to the job market.

Ghawanameh (2022) studied the entrepreneurial traits of preparatory-year students at the University of Hail and the challenges they face when starting projects. The study sample consisted of 595 students, and the researchers found that entrepreneurial traits were high, with self-control the highest, while independence and responsibility were moderate.

Abedin (2023) aimed to assess the extent of entrepreneurial traits among students in the Faculty of Humanities at Hebron University. The sample consisted of 222 students out of 4,471, and data were collected using a questionnaire and interviews. The result was that entrepreneurial traits are widely prevalent among the students.

Shaker (2024) studied entrepreneurship skills among students at Yemeni public universities in relation to the job market and the barriers to acquiring them. He used a questionnaire on 400 students from several universities. The result was that students' entrepreneurial skills were average, and the obstacles were significantly high.

2.7. Study Limitations

The study will be limited to the application of the study tool (the questionnaire) on a sample of students from Ajloun University College, affiliated with Al-Balqa Applied University. The study will focus on entrepreneurial skills, specifically personal, social, technical, artistic, and managerial.

3. Methodology

3.1. Study Methodology and Procedures

A descriptive approach was employed, as it best suited the study's aim of assessing students' entrepreneurial skills at Ajloun University in relation to the objectives of entrepreneurial education.

3.2. Study Population and Sample

The study population consisted of all students at Ajloun University College in Al-Balqa Applied University, totaling 4,323 male and female students, according to the statistics obtained by the researcher from the Admissions and Registration Department at Ajloun University College. The researcher used stratified random sampling to select the study sample, comprising 518 male and female students. The following table shows the frequencies and percentages of the study sample by the variables of specialization and academic level.

Table 1. Frequencies and percentages by study variables

Category	Group	Frequency	Percentage
Gender	Male	300	58%
	Female	218	42%
Total		518	100.0%
Academic Level	First Year	132	25%
	Second Year	122	24%
	Third Year	130	25%
	Fourth Year	134	26%
Total		518	100.0%

3.3. Study Tools

The researcher prepared a primary research tool, a questionnaire, to assess the extent to which Ajloun University College students possess the entrepreneurial skills required by the labor market, in light of the goals of entrepreneurial education. The questionnaire was designed with the help of the theoretical literature related to the subject, and the number of questionnaire items reached 34, distributed across the following dimensions:

- The first dimension: (personal entrepreneurial skills) with 11 items
- The second dimension: (social entrepreneurial skills) with 9 items.
- The third dimension (managerial entrepreneurial skills) consists of 9 items.
- The fourth dimension (entrepreneurial, technical, and technological skills) consists of 6 sections.

3.3.1. The validity and Reliability of the Tool

The content validity of the tool was confirmed by presenting it to a group of 8 faculty members in Educational Foundations at Jordanian universities. Their feedback on the questionnaire items was solicited, and all comments were taken into account, which led to the preparation of the questionnaire. To ensure that the tool (the questionnaire) is reliable, we administered it to a random sample of 26 male and female students outside the main study sample and calculated the internal consistency coefficient (Cronbach's alpha). The results showed that the reliability coefficients for the skills ranged from 0.87 to 0.93, while the overall reliability coefficient for the tool was 0.90, indicating the tool is highly reliable and can be relied upon.

3.2. Data analysis

We conducted the survey based on previous studies on entrepreneurial skills and the goals of entrepreneurial education, and it contained 34 items measuring different entrepreneurial skills. We confirmed the questionnaire's validity by having eight faculty members from education fields at Jordanian institutions evaluate and approve it. We utilised Cronbach's alpha to assess reliability, and the findings varied from 0.87 to 0.93 for the abilities, with an overall reliability coefficient of 0.90, indicating that the questionnaire is robust and dependable. We used a 5-point Likert scale (1-5) to measure the amount of skill development and classified it as follows:

- Very high (4.50 – 5.00)
- High (3.50 – 4.49)
- Moderate (2.50 – 3.49)
- Low (1.50 – 2.49)
- Very low (1.00 – 1.49)

To answer the research questions on the degree of entrepreneurial skills among Ajloun University students, means and standard deviations were calculated.

4. Results

The descriptive findings of the research demonstrate that the participants exhibit a high proficiency across all assessed entrepreneurial skill domains. To provide a comprehensive overview of the baseline tendencies, mean scores, standard deviations, and relative rankings were computed for each investigated dimension.

Table 2. Means and Standard Deviations for Study Domains

Domain	Mean	Std. Dev.	Rank	Skill Level
Personal Entrepreneurial Skills	4.2617	0.45099	1	High
Social Entrepreneurial Skills	4.0062	0.57524	2	High
Managerial Entrepreneurial Skills	3.9955	0.60231	3	High
Technical Entrepreneurial Skills	3.6084	0.73416	4	High
Overall Mean	4.0156	0.48842		High

The findings indicate that Ajloun University College students possess entrepreneurial skills at a high level, with personal skills ranking highest, followed by social, managerial, and technical skills. Table 1 shows that the overall mean score for the study domains was 4.0156 with a standard deviation of 0.48842, indicating that Ajloun University College students possess the necessary entrepreneurial skills for the labor market at a high level, according to the research standard. The highest mean score was recorded for personal entrepreneurial skills, followed by social entrepreneurial skills, then managerial entrepreneurial skills, while technical and technological entrepreneurial skills ranked last, though still at a high level.

Results of the study are discussed according to the research domains as follows:

Results of Domain One: Personal Entrepreneurial Skills

Table 3. Mean scores and standard deviations for the sample's ratings on the personal entrepreneurial skills domain and overall total.

M	Item	Mean	Std. Devi.	Rank	Skill Possession Level
1	I have a strong desire to succeed.	4.62	0.586	1	High
2	I have high confidence in myself.	4.49	0.678	2	High
9	I take responsibility for the decisions I make.	4.43	0.724	3	High
8	I rely on myself to complete my tasks.	4.42	0.668	4	High
3	I constantly think about issues related to my professional future.	4.35	0.748	5	High
7	I possess motivation for change.	4.34	0.760	6	High
6	I make sure to complete the tasks assigned to me successfully.	4.27	0.749	7	High
4	I review my mistakes to learn from them.	4.22	0.813	8	High
10	I can adapt to the work circumstances and pressures I face.	4.15	0.835	9	High
5	I set clear and precise goals for my work.	3.99	0.782	10	High
11	I have the ability to control my emotions.	3.60	1.052	11	High
Overall Mean	4.2617	0.45099		High	

It is evident from Table 3 that the overall mean score for the personal entrepreneurial skills domain was 4.2617, with a standard deviation of 0.45099, indicating that students at Ajloun University College possess the personal entrepreneurial skills necessary for the labor market at a high level, according to the criteria set by the researcher. The highest mean score was recorded for item 1, "I have a strong desire to succeed," while item 11, "I have the ability to control my emotions," recorded the lowest mean.

Results of Domain Two: Social Entrepreneurial Skills

Table 4. Mean scores, standard deviations, rankings, and skill possession levels for the social entrepreneurial skills domain.

M	Item	Mean	Std. Devi.	Rank	Skill Possession Level
19	I listen to others when they talk about their experiences in order to benefit from their knowledge.	4.37	0.779	1	High
13	I rely on myself to perform my tasks and do not accept dependence on others.	4.26	0.783	2	High
15	I have the ability to negotiate with others and engage in discussions.	4.15	0.807	3	High
17	I am keen to build outstanding social relationships with others.	4.04	0.973	4	High
18	I set goals before undertaking any task.	4.04	0.848	5	High
13	I work as part of a team.	4.03	0.866	6	High
14	I have the ability to judge others' ideas and actions	3.91	0.840	7	High
16	I am able to deal with social problems and contribute to solving them.	3.82	0.912	8	High
12	I participate in volunteer work that serves the community.	3.43	1.103	9	High
Overall Mean	4.0062	0.57524		High	

It is clear from Table 4 that the overall mean score for the social entrepreneurial skills domain was 4.0062, with a standard deviation of 0.57524, indicating that students at Ajloun University College possess the social entrepreneurial skills necessary for the labor market at a high level, according to the criteria set by the researcher. The highest mean score was recorded for item 19, "I listen to others when they talk about their experiences in order to benefit from their knowledge," while item 12, "I participate in volunteer work that serves the community," recorded the lowest mean score.

Results of Domain Three: Managerial Entrepreneurial Skills

Table 5. Mean scores, standard deviations, rankings, and skill possession levels for the managerial entrepreneurial skills domain.

	Item	Mean	Std. Devi.	Rank	Skill Possession Level
22	I have the ability to take responsibility for my decisions.	4.35	0.733	1	High
25	I have the ability to prioritize in my work.	4.12	0.772	2	High
28	I constantly evaluate my work to identify strengths and weaknesses in my performance.	4.07	0.822	3	High
26	I have the ability to find alternatives to complete my tasks.	4.02	0.790	4	High
24	I have the ability to manage crises and risks that I face in my work.	3.98	0.806	5	High
21	I make sure to familiarize myself with work regulations and rules before starting any project.	3.96	0.855	6	High
20	I have the ability to plan to complete any project I intend to undertake.	3.92	0.835	7	High
23	I have the ability to implement production projects according to required standards.	3.84	0.840	8	High
27	I have the ability to turn ideas into real production projects.	3.70	0.908	9	High
Overall Mean	3.9955	0.60231		High	

It is evident from Table 5 that the overall mean score for the managerial entrepreneurial skills domain was 3.9955, with a standard deviation of 0.60231, indicating that students at Ajloun University College possess the managerial entrepreneurial skills necessary for the labor market at a high level, according to the criteria set by the researcher. The highest mean score was recorded for item 22, "I have the ability to take responsibility for my decisions," while item 27, "I have the ability to turn ideas into real production projects," recorded the lowest mean.

Results of Domain Four: Technical and Technological Entrepreneurial Skills

Table 6. Mean scores, standard deviations, rankings, and skill possession levels for the technical and technological entrepreneurial skills domain.

M	Item	Mean	Std. Devi.	Rank	Skill Possession Level
30	I have the ability to deal with information technology in its various forms to obtain the necessary information for the success of my project.	4.02	0.850	1	High
29	I have the ability to communicate with others electronically to complete my tasks and work.	4.01	0.930	2	High
31	I have the ability to keep up with new developments in information technology to enhance my technical skills.	3.82	0.944	3	High
34	I have the ability to write official correspondence.	3.37	1.040	4	High
33	I have the ability to market products electronically.	3.28	1.102	5	High
32	I have the ability to design websites for business purposes.	3.15	1.156	6	High
Overall Mean	3.6084	0.73416		High	

It is evident from Table 6 that the overall mean score for the technical and technological entrepreneurial skills domain was 3.6084, with a standard deviation of 0.73416, indicating that

students at Ajloun University College possess the technical and technological entrepreneurial skills necessary for the labor market at a high level, according to the criteria set by the researcher. The highest mean score was recorded for item 30, "I have the ability to deal with information technology in its various forms to obtain the necessary information for the success of my project," while item (32), "I have the ability to design websites for business purposes," recorded the lowest mean score.

5. Discussion

The study found that Ajloun College students have a very high level of entrepreneurial, technical, and technological skills that are needed in the job market. This high level of technical and technological skills is attributed to the interest of Al-Balqa Applied University, in general, and the efforts of Ajloun College, in particular, in developing these skills through the establishment of knowledge stations and technological business incubators, as well as conducting various training workshops to enhance entrepreneurial and technical skills. Among these workshops, they included sessions on sales entrepreneurship, strategic entrepreneurship, technology entrepreneurship, entrepreneurship in engineering fields, developing entrepreneurial skills, talent management, online freelancing, and enhancing entrepreneurial education and innovation in technical, vocational, and higher education in Jordan.

Moreover, 20% of the study sample were computer science students, and their curriculum includes many courses that help them develop their entrepreneurial, technical, and technological skills, such as computer skills, programming, artificial intelligence, software engineering, database design and management, computer graphics, cloud computing, and robotics and automated systems. These courses have greatly strengthened their entrepreneurial and technical skills.

The high level of skill acquisition is also attributed to the practical training that Ajloun College students receive at government and private institutions, which enhances their competence in entrepreneurship.

These results are consistent with Abdullah's study (2020), which showed that Al-Azhar University students have a high level of entrepreneurial, technical, and vocational skills. They are also consistent with Haboush's study (2017), which found that the study sample agreed on the availability of these entrepreneurial, technical, and vocational skills.

6. Conclusion

The results showed that Al-Balqa Applied University students had a high level of entrepreneurial ability. Personal entrepreneurial skills include a strong desire for success, self-confidence, taking responsibility for decision-making, relying on oneself to complete tasks, considering future careers, having a drive for change, learning from professional experiences, adapting to work conditions and pressures, setting clear and accurate goals, and emotional regulation. Students also have several social entrepreneurial skills, such as listening to others and learning from their experiences, not relying on others, negotiating and engaging with others, developing exceptional social relationships, working as part of a team, judging others' ideas and actions, dealing with community issues and contributing to their solutions, and participating in volunteer work.

7. Suggestion

Based on the findings, the report advises building entrepreneurship and innovation centres at Al-Balqa Applied University to foster an entrepreneurial culture among university students through training workshops, awareness seminars, and scientific forums. It also suggests. Creating business incubators at Al-Balqa Applied University to nurture students' creative ideas and transform them into entrepreneurial projects; developing training programs for university students to focus on technical and technological entrepreneurial skills, especially skills related to managing information

technologies necessary for electronic product marketing and website design for businesses that meet market needs; developing university curricula and courses to include entrepreneurial skills and characteristics, ensuring that these skills are continuously acquired; introducing a bachelor's degree program in entrepreneurship and innovation, and attracting experts and instructors in the field of entrepreneurship and innovation; reviewing international experiences in entrepreneurial education and benefiting from their expertise in spreading the culture of entrepreneurship; and activating partnerships and cooperation with

The study proposes that future studies include:

- Conducting a study on entrepreneurial skills and characteristics at the level of Al-Balqa Applied University and its affiliated colleges across all governorates of the Hashemite Kingdom of Jordan.
- Conducting a study on the degree of availability of entrepreneurial university requirements from the perspective of faculty members at Al-Balqa Applied University.

Furthermore, students at Ajloun University College demonstrate several managerial entrepreneurial skills, most notably: setting work priorities, constantly evaluating tasks to identify strengths and weaknesses, finding alternatives to complete tasks, managing crises and risks, familiarizing themselves with work regulations before starting any project, planning to complete entrepreneurial projects, implementing production projects according to required standards, and turning ideas into real production projects. Finally, students possess a range of technical and technological entrepreneurial skills, such as: working with information technology in various forms to obtain necessary information for entrepreneurial projects, communicating electronically with others, staying up to date with technological advancements, writing official correspondence, marketing products electronically, and designing websites for business purposes.

Declarations

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