

Educational and Socio-cultural Factors Influencing the Growth of Entrepreneurial Activities in Khartoum State, Sudan

Elfadil Timan (Corresponding author)

Department of Business Administration, University of Gezira, Sudan

E-mail: elfadiltiman@gmail.com

Yusra. H. M. Babiker

Department of Business Administration, University of Gezira, Sudan

E-mail: yusra.h.babiker@gmail.com

Malik Elnaeem Mohammed Ali

Department of Business Administration, University of Gezira, Sudan

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Abstract

The goal of this article is to explore the educational and socio-cultural factors which influence the growth of entrepreneurial activities in Khartoum locality, Khartoum State, Sudan. The research was conducted on a sample of 400 national potential entrepreneurs, and data were

collected using a structured questionnaire and personal interviews. Respondents are asked 43 questions to assess their perception of the main factors influencing the growth of entrepreneurial activities. The study adopted an analytical descriptive methodology whereby the data were processed by the statistical package for social sciences (SPSS). Percentages, frequencies, and hypothesis tests were used to analyze data. The study revealed that it's important for entrepreneurs to have the necessary knowledge, entrepreneurial potential, skills, and creative ideas in turn to contribute to the development of entrepreneurial activities. Also, entrepreneurs must have administrative practical, and technical capabilities in their field. Entrepreneurship culture should be included in the academic curricula of universities. Entrepreneurial activities must be consistent with the values and beliefs of the community members because the spread of entrepreneurial culture among community members contributes to the development of entrepreneurial activities. The study recommends that there must be educational institutions that provide the necessary information the entrepreneurs need and that entrepreneurship should be included in universities' curricula. Spreading the culture of entrepreneurship among community members through training workshops, training courses and the media in general will enhance entrepreneurial activities. When considering entrepreneurship training it is important to put into account the influence of religious beliefs and tribal differences between society components which may affect entrepreneurial activities.

Keywords: educational factor, socio-cultural factor, entrepreneurial activities, Khartoum State, Sudan

1. Introduction

Entrepreneurship is the process of innovation and/or opportunity identification to create new and unique values in the form of products (goods or services) that can satisfy human needs and thus can command profit in exchange. The “entrepreneurial spirit” is something that has long been associated with the driving force behind economic progress and growth (Kreft and Sobel 2005).

The idea of infusing entrepreneurship into education has spurred much enthusiasm in the last few decades. A myriad of effects has started to result from this, such as economic growth, job creation, and increased societal resilience, but also individual growth, increase school engagement, and improved equality. (Lackeus et al., 2016).

The social environment has an impact on how people see things and, as a result, how they make decisions. There are significant regional differences in the prevalence of entrepreneurial behaviors. The features of entrepreneurial initiatives that are most common may be influenced by cultural variety, which would therefore moderate the impact of economic conditions on entrepreneurship (Inmaculada, et al., 2017).

The paper is a contextual study that focuses on educational and socio and cultural values factor within the context of Sudan. Thus, it is expected to contribute significantly to the diagnosis

and characterization of the current situation of entrepreneurial activities in Sudan. By so doing, it should clarify the influence of the educational factor and socio and cultural values factor towards the growth of entrepreneurial activities in Sudan.

In this present paper, we try to get answers to the following questions:

1. To what extent enhancing the education of entrepreneurship can influence the growth of entrepreneurial activities?
2. What is the effect of social and cultural values on entrepreneurial activities?

This paper aims to assess the educational and socio-cultural factors, to see their influences toward the growth of entrepreneurial activities. The methodology adopted in this research involves descriptive statistics for the secondary data which were obtained from research and scientific papers. In addition, primary data on entrepreneur's perceptions of entrepreneurial activities were collected via questionnaire and personal interviews.

2. Literature Review

2.1 Entrepreneurship Definition and Role

Many authors define entrepreneurship in many ways. Risk has been shown as the most striking aspect of entrepreneurship in most of those definitions. Entrepreneurship is not a gamble it is an economic activity. An entrepreneur is an individual who creates a new business, bearing most of the risks and enjoying most of the rewards. The process of setting up a business is known as entrepreneurship. The more modern entrepreneurship definition is also about changing the world by solving big problems. Like bringing about social change or creating an innovative product that challenges the current situation of how we live our lives daily (Akhter, and Sumi, 2014). Entrepreneurship has been pointed out as a key contributor to sustained economic growth and development as it not only creates employment but also increases spending in markets, knowledge transfer, employment, and innovation (Meyer, and de Jongh, 2018). Increasing entrepreneurship has become an objective for many governments, local authorities, business associations, and universities. One of the strategies adopted in Western countries, has been the creation of idea or project or idea competition (Gaspar and Fe de Pinho, 2009).

Entrepreneurship is important for many reasons, from promoting social change to driving innovation. Entrepreneurs are frequently thought of as national assets to be cultivated, motivated, and remunerated to the greatest possible extent. Some of the most developed nations such as the United States are world leaders due to their forward-thinking, innovation, research, and entrepreneurial individuals. Entrepreneurship development is a guarantee for an economic and

social development of a country. However, it is so only if entrepreneurship development goes along with increased enterprising spirit and entrepreneurs skills, which leads to a big number

of startups, their sustainability, and eventually increase also entrepreneurial activities (Kaseorg, et al. 2010).

An entrepreneur is a person who is always looking for change, responds to change, and exploits it as an opportunity. With an adequate requirement of capital, education facilities and own creativity, intelligence, and energetic youth can be turned into decent business people. Many factors influence the growth of entrepreneurial activities, one of which is the educational factor and the other is the social and cultural values factor (Akhter, and Sumi, 2014).

There's a wide diversity of schooling, backgrounds, and upbringings among the successful entrepreneurs, but, there are some common traits and skills that many of these successful entrepreneurs have demonstrated or developed before their success (Babiker et al. 2023).

2.2 Educational Factor

Education has long been regarded as one of the primary components of poverty reduction efforts and overall social development. Lifelong education is a key factor for increasing the level of knowledge and competence, but also to improve the quality of life (Kaseorg, et al. 2010). It appears that entrepreneurship education and training are the driving forces behind the rise of entrepreneurship and small business development that generates the relevant entrepreneurial attitudes, competencies, and skills. It can be said that there are no limits to entrepreneurial knowledge. By combining new tools, technologies, sources, and opportunities, entrepreneurs can constantly create new added value. There is a need for ongoing educational training programs to develop entrepreneurial attitudes beginning from childhood and continuing lifelong learning (Kaseorg, et al. 2010).

The relevant literature suggests important links between education, venture creation, and entrepreneurial performance, as well as between entrepreneurial education and entrepreneurial activity (Raposo and Do Paco, 2011). Entrepreneurship education is believed to provide students with an understanding of the concept of entrepreneurship, train, and motivate them to indulge in entrepreneurial activities in the future. (Mani, 2017).

According to Do Paco et al. (2011) entrepreneurship education can develop skills for entrepreneurship success that entrepreneurs will need in the future. Entrepreneurial skills can encompass a broad range of various skill sets like technical, leadership, and business management skills and creative thinking. To build and maintain successful project teams you might need to improve your leadership and communication skills. Entrepreneurship education is not only building new businesses but most important of all is the development of entrepreneurial competencies that would help young people to be creative and to act in a socially responsible way in any life situation. (Vironika et al., 2014). Entrepreneurship education can play an important role in the promotion of social cohesion through value recognition. Motivation, self-esteem, and the critical thinking, among other personal and social competencies, are important axes for an entrepreneurial attitude that can be stimulated

(Marques & Albuquerque, 2012). The educational factor involves many components including knowledge, skills, innovation, and creativity, among other characteristics.

2.2.1 Knowledge

It appears that entrepreneurship is a rather changeable field of research, closely linked to disciplines such as ‘management studies’ and ‘economics’. Over time, the field has become more formalized with its core knowledge. Schumpeter (1934) noted the importance of knowledge to economies as he made the connection between innovation and entrepreneurial activity. Knowledge produces opportunities for technological change which can result in organizational growth or even startup activity (Shane 2001). This knowledge derives from a variety of resources such as larger organizations, research institutions, R&D activities, and more. New ventures need talent, good ideas and a knowledge-based economy around them to positively impact regional development. Global networks or distant knowledge sources seem to be particularly beneficial to innovation, so organizations should participate in knowledge networks at all spatial levels (Kraus et al., 2021).

Several essential skill sets can be developed to increase entrepreneurial success. Hard skills—like technical and financial skills—can be extremely important to managing a business. Additionally, soft skills—like communication and leadership skills—may ensure people to develop as entrepreneurs.

Small and medium-sized companies (SMEs) greatly contribute to employment and wealth in Europe but there are limited studies into the specific skills required for SMEs in the future. Skills such as problem-solving, critical thinking, and entrepreneurship allow learners to adapt to changes. Communication, digital skills, and teamwork allow learners to collaborate and exploit technology in the changing workplace. (Hamburg et al. (2019).

Lack of expertise is a major factor contributing to business failure. People with work experience and educational backgrounds have a variety of abilities, making them more likely to become entrepreneurs and advance their businesses more quickly than others. (Almahry et al., 2018).

2.2.2 Educational Institutions and Academic Qualifications

Entrepreneurship education is an important way for entrepreneurs to acquire resources, enhance the innovative ability and innovative personality, and build multi-level learning channels for entrepreneurs by integrating various knowledge and value systems, from knowledge learning to skills improvement. (Wei, et al. 2019). Traditional education is supposed to prepare students to enter the labor market. However, many students who finish higher education and other technical and professional courses experience great employability difficulties due to the lack of personal, social, and professional skills; so, professionals need, in addition to traditional skills, a set of skills that allow them to be successful (Jardim, (2021).

According to the European Commission (2008), the aim of entrepreneurship education and training should be to ‘develop entrepreneurial capacities and mindsets’ that benefit economies by fostering creativity, innovation, and self-employment (Cooney, 2012). Educational institutions have a preponderant role in the formation of human capital with entrepreneurial skills and have the possibility to boost a generation of entrepreneurs with the ability to generate actions to achieve objectives for sustainable development (Martinez & Ramírez-Montoya, 2021).

Education has a significant positive impact on social inclusion and economic growth. The creation of an entrepreneurial society, starting at school with the younger people, is nowadays essential to promote new ways to act and to think about complex problems. Marques and Albuquerque (2012) studied the contribution of entrepreneurship education to the development of life skills in young people from disadvantaged communities. In developed economies, since academic research had contributed to a significant number of products and processes in market, academic institutions became aware of their ability to exploit research output by promoting and sustaining startups. In developing economies; however, academic institutions did not realize this fact yet (El-Khasawneh, 2008).

University scientists, including faculty, postdoctoral fellows, and graduate students, confront growing expectations to engage in academic entrepreneurship and the commercialization of technologies derived from university research. While studies show that scientists may lack the requisite skills, resources, and social networks, their purposeful engagement is among the most critical factors for successful technology commercialization’ (Hayter et al., 2021). Higher educational institutions are being required to operate more entrepreneurially, commercializing the results of their research and spinning out new, knowledge-based enterprises. “Universities are currently undergoing a ‘second revolution’ these days, incorporating economic and social

development as part of their mission” (Wei, et al., 2019).

2.2.3 Innovation and Creativity

Innovation is seen as an internal driver which relates to an entrepreneurial mindset; thus, the development of new products or entrance to new markets is the result of entrepreneurship. Entrepreneurship education is an important way for entrepreneurs to acquire resources, enhance the innovative ability and innovative personality, and build multi-level learning channels for entrepreneurs by integrating various knowledge and value systems. From knowledge learning to skills improvement, entrepreneurship education includes general ability development and improvement of professional ability. Entrepreneurial competence, which is important for success, mainly refers to the ability to identify opportunities and develop the necessary resources and capital. Innovation and creativity have become critical skills for achieving success in developed economies. While creativity is the ability to produce new and unique ideas, innovation is the implementation of that creativity - that's the introduction of a new idea, solution, process, or product (Dimitriadis, et al., 2018).

Innovation and entrepreneurship policy have caught the attention of policymakers at different governmental levels, e.g. local, regional, and national. They are considered vital for economic growth and industrial renewal and rank high on government policy agendas. In addition, their combination (i.e. innovative entrepreneurship) is a phenomenon that has become increasingly important, especially in the last decade (Dahlstrand and Stevenson, 2010).

According to Elbaz et al. (2013), several models have been developed in the literature suggesting that innovation consists of a variety of different phases: idea generation, research design and development, prototype production, manufacturing, marketing, and sales. New ventures need talent, good ideas, and a knowledge-based economy around them to positively impact regional development (Kraus et al., 2021). The future success of the companies depends on innovation and also becomes more critical for creative people to stay in the competitive market. Creative entrepreneurship is like an overall process of creation, both in front of opportunities and threats. Creativity enables the entrepreneur to act on these opportunities in ways that can result in a competitive advantage for the organization. It can provide the basis for innovation and business growth, as well as impact positively on society (Ireland, et al. 2003).

2.3 Entrepreneurship Education in Sudan

In Sudan, some universities and educational institutions have introduced entrepreneurship modules as compulsory course within their curriculum, for example, the University of Khartoum, Ahfad University for Women and Sudan University for Science and Technology. On the other hand, Alryadah College has developed a leading degree program in entrepreneurship (Khattab et al. 2017). However, Timan and Gangi (2015), who studied the existence of entrepreneurship education in higher education institutions, revealed that there was only one program of entrepreneurship education in Sudanese public universities. Moreover, entrepreneurship courses were very rare and were not commonly offered by those universities. However, many colleges teach entrepreneurship in different courses. Further, there was a shortage of qualified staff in entrepreneurship education as well as a lack of a conducive environment for its development.

Government Agencies offered many initiatives, for example: The ministry of Higher Education and Scientific Research in collaboration with the Ministry of Industry has organized a forum to raise general awareness about entrepreneurship and to attract minister's and policymakers' attention to the value of entrepreneurship in providing economic solutions. The forum took place at the Ministry board (Khattab et al. 2017). Based on this, it is recommended that entrepreneurship education be incorporated into the curricula of higher education institutions in Sudan. The process of its introduction should be gradual, starting with staff qualification and the improvement of the teaching environment.

In 2021, the Sudan University of Science and Technology held a conference that included most of the universities of Sudan, where it recommended the need to spread the culture of

entrepreneurship and increase the number of business incubators to support entrepreneurs and adopt successful research projects by students, support and develop them, and showed the participants the importance of introducing entrepreneurship as one of the basic courses in Sudan universities.

2.4 Social and Cultural Values Factor

The socio-cultural environment consists of the social system and the culture of a nation. It refers primarily to man-created elements that affect people's behavior, relationships, perception, and way of life. Such elements include beliefs, values, attitudes, habits, forms of behavior and life styles of persons as developed from cultural, religious, educational, and social conditioning (Akhter and Sumi, 2014). Although considerable research has been done, based on psychological and economic approaches to entrepreneurship, the influence of socio-cultural factors on enterprise development remains under studied (Thornton et al., 2011). Scholars have long pointed out the importance of sociocultural factors in the decision to create new businesses, arguing that entrepreneurship is embedded in a social context. While the economic conditions may explain some of the variations, any convincing explanation must take into account the social and cultural aspects of entrepreneurial activity (Akhter and Sumi, 2014).

Culture is defined as “a collective programming of the mind which distinguishes the members of one group or category of people from another”. In other words, culture is a collective phenomenon that is shaped by individuals' social environment, not their genes (Setiawan, 2012). Cultural factors are understood to be the support of the household and close people, institutional support, the consumption habits of the internal market, and the tradition of starting a business. Family system characteristics influence venture creation processes (e.g., opportunity recognition, launch decision, resource mobilization), which in turn influence venture-level outcomes such as survival, firm performance, and subjective perceptions of venture success. Family business research has acknowledged the various resources a family can bestow on a firm, including human, social, and financial capital (Thornton, et al., 2011; Powell, et al, 2013). In many countries examined, men are more involved in entrepreneurship than women. The main reason behind women's decisions to pursue entrepreneurial activity is the lack of other job opportunities. This is especially true in low-income nations. Women who have confidence are more likely to start a new business. These new businesses tend to target existing markets, using known technology, and utilize less start-up capital, which indicates that women are more conservative in their entrepreneurial activity (GEM, 2004).

The social-cultural environment consists of all elements, conditions, and influences which shape the personality of an individual and potentially affect his attitude, disposition, behavior, decisions, and activities. Such elements include beliefs, values, attitudes, habits, forms of behavior and lifestyles of persons as developed from cultural, religious, educational, and social conditioning, (Ojelade, et al., 2022).

Culture, as the underlying system of values peculiar to a specific group or society, shapes the

development of certain personality traits and motivates individuals in the society to engage in behaviors that may not be evident in other societies. Cultural values indicate the degree to which a society considers entrepreneurial behaviors, such as risk-taking and independent thinking, to be desirable (Hayton, et al., 2002). A greater understanding of the relationship between cultural issues and entrepreneurial activity is important because of its implication for national and regional development and growth (Krueger et al., 2013).

3. Methodology

3.1 Population

The appropriate sample size is determined by the following statistical equation: $N = \frac{PQ(Z)^2}{D}$

Where N= sample size, P= rate of prevalence of the phenomenon in society, and when the prevalence of the phenomenon is not clear it is assumed to be = 0.5, Q= complimentary rate of the prevalence of the phenomenon = 0.5

Z= standard value at 95% confidence level, usually = 1.96, D= random error = 0.0025. Using the equation, sample size = 384, but due to possible unreturned samples, 400 samples were used.

400 entrepreneurs from Khartoum locality constituted the respondents to the questionnaire set by the researchers. We have chosen Khartoum Locality because most of the entrepreneurs are found there.

Sampling design: Khartoum Locality has five administrative units from which three were chosen.

Each administrative unit contains several business incubators which include several entrepreneurs.

The questionnaire was distributed according to the number of entrepreneurs in each incubator.

3.2 Sources of Data

Secondary data was sought from the literature and governmental sources, while the primary source of information is the questionnaire and personal interviews with selected male and female entrepreneurs.

Method of analysis: Descriptive statistics using SPSS software to generate means and standard

deviation to use Chi-square and T-test or any appropriate tool to show significant relationships.

3.3 The Boundary of Study

This study was limited to Khartoum's Locality which includes north, south, west, central Khartoum, and Soba because most entrepreneurs are found there besides it is inhabited by a multitude of people from different backgrounds, races, and different geographic areas.

3.4 Statistical Analysis

All collected questionnaires were subjected to statistical analysis as follows:

Table 1 shows the profile of the respondents.

Table 1. Respondents' profile

Age	Frequency	percentage
21-30	266	66.5
31-40	92	23.0
41-50	37	9.2
51-60	5	1.2
Gender		
Male	337	84.2
Female	63	15.8
Academic qualification		
Basic	6	1.5
Secondary	45	11.2
Tec Diploma	42	10.5
BA/B.Sc.	241	60.2
Higher Diploma	25	6.2
Master	38	9.5
Ph.D.	3	8.0

Work experience		
6 mouths-3 years	150	37.5
3-6 years	94	23.5
6-9 years	56	14.0
9 or more years	75	18.8
Work sector		
Agriculture	38	9.5
Industrial	58	14.5
Services	162	40.0
other, specify	142	35.5
Training received?		
Yes	211	52.8
No	189	47.2
Benefit from the training?		
Yes	207	51.8
No	6	1.5

Source: Developed and calculated by authors, (2023).

3.5 Statistical Method

To achieve the study goal, the researchers used the statistical package for the social sciences (SPSS) for manipulating and analyzing the data. The following statistical tests were used to analyze the data and the study hypotheses:

Frequencies, means and percentages to represent the collected data in meaningful figures.

Pearson correlation coefficient was used to measure the correlation between two variables, where it was applied to test the questionnaire's validity.

T-Test is used to determine if the mean of the item is significantly different from a hypothesized value 3 (Middle value of the Likert scale). If the P-value (SIG) is smaller than or equal to the level of significance, $\alpha = 0.05$ then the mean of an item is significantly different from a hypothesized value 3. The sign of the test value indicates whether the mean is significantly greater or smaller than hypothesized value 3. On the other hand, if the P-value (SIG) is greater than the level of significance, $\alpha = 0.05$, then the mean of an item is insignificantly different from hypothesized value 3.

3.6 Validity and Reliability

To check internal validity, the researchers calculated the correlation between each statement and the corresponding field. Table 2 and Table 3 present the correlation coefficient of each item of a field and the total of corresponding field. The P-values (SIG) are less than 0.05, so the correlation coefficients of all items are significant at $\alpha = 0.05$, so it can be said that all items of each field are consistent and valid to be measuring what it was set for.

Table 2. Correlation coefficients of each item of "The Educational Factor" and the total score of this field

No.	Items	Pearson Correlation	P-Value (SIG)
1	An entrepreneur must have the necessary knowledge to ensure the success of his project	0.597	0.000
2	The presence of entrepreneurs with entrepreneurial potential and skills in turn contributes to the development of entrepreneurial activities	0.566	0.000
3	It is necessary for entrepreneurs to have administrative practical and technical capabilities in his field	0.536	0.000
4	An entrepreneur with creative ideas is apt to develop entrepreneurial activity	0.583	0.000
5	There must be educational institutions that provide the necessary Information the entrepreneurs need.	0.563	0.000

6	Entrepreneurship should be included in the academic curricula of Universities	0.505	0.000
7	The widespread use of modern technological programs in business, such as management information system and IT programs contributed to the development of entrepreneurial activities.	0.485	0.000
8	A person with academic and scientific qualifications may be able to establish a successful business.	0.537	0.000
9	An entrepreneur can be able to manage a successful project even if he doesn't have any academic qualifications.	0.092	0.066

Source: Developed and calculated by authors, (2023).

Table 3. Correlation coefficients of each item of " Social and cultural factor" and the total score of this field

No.	Items	Pearson Correlation	P-Value (SIG)
1	Lack of community acceptance of entrepreneurial projects hinders the development of these activities	0.548	0.000
2	Cooperation of community members with entrepreneurs and their acceptance of the idea of an entrepreneurial business may effectively enhance and develop entrepreneurial activities	0.562	0.000
3	Entrepreneurial activities must be consistent with the values and beliefs of the community members	0.608	0.000
4	The values and beliefs of the entrepreneur influence the type of entrepreneurial activity that he or she chooses	0.616	0.000
5	It is important to familiarize the entrepreneurs with entrepreneurial culture	0.631	0.000
6	The spread of entrepreneurial culture among community members contributes to the development of entrepreneurial activities	0.585	0.000

Source: Developed and calculated by authors, (2023).

The results described in the Tables (2) and (3) show that items of the questionnaire have a strong correlation coefficient and are statistically significant at the level $\alpha = 0.05$. This indicates that the questionnaire has strong validity.

3.7 The Criterion of the Study

To determine the adoption criterion in the study was to determine the length of the columns in the Likert scale by calculating a range between degrees of the scale ($5-1=4$) and then dividing the largest value in the scale to get the column that mean $5/4= 0.80$, (then is added value to the lowest value in the scale) the beginning of the scale 1 to determine the upper column. The following table explains this:

Table 4. Criterion of the study

Mean	Approval level
From 1-1.79	strongly disagree
From 1.80-2.59	Disagree
From 2.60-3.39	Neutral
From 3.40-4.19	Agree
From 4.20-5.00	strongly agree

Source: Developed and calculated by authors, (2023).

To explain the result of the study and judge the level of response, the researchers depended on the arithmetic mean ranking on the level of the field of the questionnaire and the level of items in all dimensions, the researchers have identified the level of approval.

4. Results and Discussion

4.1. The Educational Factor

Table (5) shows the respondent’s opinions about the statements about the educational factor. The last column shows the approval level for each item in this axis.

Table 5. The respondents’ opinions toward the items of the first axis (The Educational Factor)

Items	Strongly agree	agree	neutral	Disagree	strongly disagree	mean	rank	Approval level
An entrepreneur must have the necessary knowledge to ensure the success of his project	296 74.0%	79 19.8%	15 3.8%	5 1.2%	5 1.2%	4.64	1	Strongly agree
The presence of entrepreneurs with entrepreneurial potential and skills in turn contributes to the development of entrepreneurial activities	242 60.5%	126 31.5%	27 6.8%	1 .2%	4 1.0%	4.50	2	Strongly agree
the entrepreneurs must have administrative practical and technical capabilities in his field	217 54.2%	129 32.2%	41 10.2%	7 1.8%	6 1.5%	4.36	4	Strongly agree
An entrepreneur with creative ideas is apt to develop entrepreneurial activity	224 56.0%	125 31.2%	37 9.2%	8 2.0%	6 1.5%	4.38	3	Strongly agree
There must be educational institutions that provide the necessary information the Entrepreneurs need.	220 55.0%	125 31.2%	35 8.8%	15 3.8%	5 1.2%	4.35	5	Strongly agree
Entrepreneurship should be included in the academic curricula of universities	212 53.0%	119 29.8%	46 11.5%	17 4.2%	6 1.5%	4.29	8	Strongly agree
The widespread use of modern technological programs in business, such as management information system and IT programs contributed to the development of entrepreneurial activities.	214 53.5%	132 33.0%	34 8.5%	15 3.8%	5 1.2%	4.34	6	Strongly agree
A person with academic and scientific qualifications may be able to establish a successful business.	224 56.0%	105 26.2%	41 10.2%	26 6.5%	4 1.0%	4.30	7	Strongly agree
An entrepreneur can be able to manage a successful project	129	131	71	46	23	3.74	9	Agree

even if he doesn't have any academic Qualifications.	32.2%	32.8%	17.8%	11.5%	5.8%			
Mean						4.39	Strongly agree	

Source: Developed and calculated by authors, (2023).

The statistics from Table (5) show that 74% of the respondents strongly agree that an entrepreneur must have the necessary knowledge to ensure the success of his/her project which represent 296 of the respondents. Those of the respondents who agree with this item represent 79 of the respondents (19.8%). Only 3.8% of the respondent have neutral opinions towards this item. Just 2.4% of the respondents disagree and strongly disagree with this item. This indicates that there is high agreement about the necessity of knowledge to ensure the entrepreneur's project success. As early as 1934, Schumpeter noted the importance of knowledge to economies as he made the connection between innovation and entrepreneurial activity. Knowledge produces opportunities for technological change which can result in venture growth or even startup activity (Shane 2001). New ventures need talent, good ideas, and a knowledge-based economy around them (Kraus et al., 2021).

The presence of entrepreneurs with entrepreneurial potential and skills in turn contributes to the development of entrepreneurial activities. Again, a high number of the respondents strongly agree with this (242), i.e. 60.5% of the respondents. 31.5% of the respondents agree with this item represent 126 of the respondents. Those who agree and strongly agree make up a total of 91%. Those with neutral opinions and those who disagree and strongly disagree make up only 9%. This indicates a high agreement about the presence of entrepreneurs who have entrepreneurial potential and skills who contribute to the development of entrepreneurial activities. The main reason behind business failures mainly comes from the lack of skills. Individuals who have work experience and educational backgrounds, have got various skills and are more likely better entrepreneurs than others (Almahry et al., 2018).

Entrepreneurs must have administrative practical and technical capabilities in his /her field. In response to that, 54.2% of the respondents strongly agree, and 32.2% agree. A total of 12% represent those with neutral opinions or those who disagree or strongly disagree. We notice that there is agreement about the necessity of administrative practical and technical capabilities of the entrepreneur in his field.

An entrepreneur with creative ideas is apt to develop entrepreneurial activity. The statistic shows that 56% of the respondents strongly agree with this item and 31.2% of the respondents agree. 9.2% of the respondents have neutral opinions towards this and only 3.5% of the respondents disagree and strongly disagree with this item. This indicates that there is high agreement that creative ideas apt to develop entrepreneurial activities. Creativity is the ability to produce new and unique ideas, innovation is the implementation of that creativity - that's the introduction of a new idea, solution, process, or product (Dimitriadis, et al., 2018) and that is important in developing entrepreneurial activities. Furthermore, Dahlstrand and Stevenson, (2010) stated that innovative entrepreneurship is a phenomenon that has become

increasingly important, especially in the last decade.

When we take a look at the item “There must be educational institutions that provide the necessary information the entrepreneurs need”, 55% of the respondents strongly agree and 31.2% of the respondents agree. 12.6% of the respondents have either neutral opinions disagree or strongly disagree. This indicates that there is agreement about providing educational institutions which give the entrepreneurs the necessary information they need. Researchers stress the importance of incorporating entrepreneurship education in the curricula of higher education in Sudan. (Timan and Gangi, 2015; Gangi and Mohamed, 2017). The importance of entrepreneurship education is well documented in the literature and its possible role in achieving MDGs is well recognized. Furthermore, it is found that entrepreneurship education does not exist at secondary school levels in Sudan and is very limited at the university level.

Entrepreneurship should be included in the academic curricula of universities, there is 53% of the respondents strongly agree and 29.8% agree with this item. 11.5% have neutral opinions, 3.85 respondents disagree and 1.5% strongly disagree. This indicates the agreement about entering entrepreneurship into the academic curricula of universities. Timan and Gangi (2015) recommended that entrepreneurship should be included in university curricula. Their study showed that a few academic institutions offered entrepreneurship courses. Hence, because of the growing number of entrepreneurs it becomes important to pay attention to this matter.

When considering, the widespread use of modern technological programs in business, such as management information system and IT programs, and their contribution to the development of entrepreneurial activities, 53.5% of the respondents strongly agree with this item and 33% of the respondents agree with it. The rest have neutral opinions or disagree. This indicates a general agreement about the benefits of using modern technological programs in business and their contribution to the development of entrepreneurial activities. In today’s world, it is clear that computer literacy and competence in technological programs increase the chances of success of an entrepreneur’s business.

When asked if a person with academic and scientific qualifications may be able to establish a successful business, 56% strongly agree and 26.2% agree with this item. 10.2% of the respondents have neutral opinions. 6.5% disagree and 1% strongly disagree. This indicates an agreement towards the importance of qualifications and their contribution to establishing a successful business. However, many entrepreneurs with no academic qualifications established successful businesses.

Can an entrepreneur be able to manage a successful project even if he doesn’t have any academic qualifications? 32.2% of the respondents strongly agree with this and 32.8% of the respondents agree. On the other hand, 17.8% of the respondents have a neutral opinion and 11.5% disagree 5.8% strongly disagree. When we compare with those who thought that academic qualification is important for a successful business (strongly agree on approval

level), we notice that far fewer respondents strongly agree (i.e. the level of approval is “agree”). Still, quite a number of the respondents agree that the entrepreneur could manage a successful project even if he doesn’t have any academic qualifications. Some individuals without academic qualification, are self-taught, learning various skills, hence they can make successful entrepreneurs.

4.2 The Social and Cultural Factor

Table (6) shows the respondent’s opinions about the statements about the social and cultural factors of the last column shows the approval level to each item in this axis.

Table 6. The respondent’s opinions toward items of the second axis (Social and cultural factor)

Items	strongly agree	Agree	neutral	disagree	Strongly disagree	mean	rank	Approval level
Lack of community acceptance of entrepreneurial projects hinders the development of these activities	30.0%	40.2%	14.8%	11.5%	3.5%	3.82	3	Agree
Cooperation of community members with entrepreneurs and their acceptance of the idea of an entrepreneurial business may effectively enhance and develop entrepreneurial activities	50.0%	39.8%	8.0%	1.5%	.8%	4.37	1	Strongly agree
Entrepreneurial activities must be consistent with the values and beliefs of the community members	40.5%	36.8%	15.0%	5.0%	2.8%	4.07	4	Agree
The values and beliefs of the entrepreneur influence the type of entrepreneurial activity that he or she chooses	28.5%	40.0%	17.0%	11.2%	3.2%	3.79	6	Agree

It is important to familiarize the entrepreneurs with entrepreneurial culture	156	167	35	30	12	4.06	5	Agree
	39.0%	41.8%	8.8%	7.5%	3.0%			
The spread of entrepreneurial culture among community members contributes to the development of entrepreneurial activities	166	176	44	8	6	4.22	2	Strongly agree
	41.5%	44.0%	11.0%	2.0%	1.5%			
Mean						4.05		Agree

Source: Developed and calculated by authors, (2023).

The lack of community acceptance of entrepreneurial projects hinders the development of these activities. 30% of the respondents strongly agree with this, 40.2% of the respondents agree and 14.8% have neutral opinions towards this item. 11.5% disagree 3.5% strongly disagree. Over 70% of the respondents thought that community approval is important for the success of the business. It is the community members who need and buy the entrepreneur’s products and services. While the economic factor may explain some of the influences, any convincing explanation must take into account the social and cultural aspects of entrepreneurial activity (Akhter and Sumi, 2014).

Cooperation of community members with entrepreneurs and their acceptance of the idea of an entrepreneurial business may effectively enhance and develop entrepreneurial activities. 50% strongly agree with this notion, 39% agree with it, 8% have neutral opinions, 1.5% disagree and 0.8% strongly disagree. almost 90% of the respondents thought that cooperation and acceptance of the community of entrepreneurial activities enhance them.

Entrepreneurial activities must be consistent with the values and beliefs of the community members. 40.5% strongly agree represented by 162 respondents. 36.8% agree (147 respondents), 15% have neutral opinions (60 of the respondents), 5% disagree and 2.8% strongly disagree with this item. Values and beliefs guard and control community members’ business activities and behavior.

The values and beliefs of the entrepreneur influence the type of entrepreneurial activity that he or she chooses. 28.5% strongly agree, and 40% of the respondents agree. 17% have neutral opinions, while 11.2% disagree and 3.2% strongly disagree. We notice that less than a third of the respondents strongly agree with this, perhaps because their need to start their own business makes them more lenient about their beliefs.

It is important to familiarize entrepreneurs with an entrepreneurial culture. 39% strongly agree (156 respondents). 41.8% agree (167 respondents). 8.8% neutral (35 of the

respondents). 7.5% disagree and only 3%strongly disagree. Cultural values indicate the degree to which a society considers entrepreneurial behaviors, such as risk-taking and independent thinking to be desirable (Hayton et al., 2002). The spread of entrepreneurial culture among community members contributes to the development of entrepreneurial activities. 41.5% strongly agree with this item which represent166 of the respondents. 44% agree which represents 176. 11% have a neutral opinion which represents 44 of the respondents. Only 2% disagree and 1.5% strongly disagree. More than 85% of the respondents consider the spread of entrepreneurial culture to be desirable and enhance entrepreneurship.

4.3 The "T" Test Analysis

Table 7. Mean, and T-Test value for “The Educational Factor”

Items	Mean	S.D	T-Test	P-value
An entrepreneur must have the necessary knowledge to ensure the success of his project	4.64	0.729	44.981	0.000
The presence of entrepreneurs with entrepreneurial potential and skills in turn contributes to the Development of entrepreneurial activities	4.50	0.722	41.620	0.000
The entrepreneurs must have administrative practical and technical capabilities in his field	4.36	0.850	32.007	0.000
An entrepreneur with creative ideas is apt to develop entrepreneurial activity	4.38	0.850	32.518	0.362
There must be educational institutions that provide the necessary information the entrepreneurs’ need.	4.35	0.883	30.582	0.000
Entrepreneurship should be included in the academic curricula of universities	4.28	0.933	27.538	0.000
The widespread use of modern technological programs in business, such as management information systems and IT programs contributed to the development of entrepreneurial activities.	4.34	0.878	30.474	0.000
A person with academic and scientific qualifications may be able to establish a successful business.	4.30	0.962	26.962	0.000

An entrepreneur can be able to manage a successful project even if he doesn't have any academic qualifications.	3.74	1.189	12.485	0.000
All items of axis	4.39	0.463	60.209	0.000

Source: Developed and calculated by authors, (2023).

Table (7) shows a comparison between hypothesized value (3) and the mean of the educational factor which equals 4.39, the sign of the test is positive, so the mean of the educational factor is significantly greater than the hypothesized value 3. In conclusion, the respondents agreed to this axis.

Table 8. Mean, and T-Test value for "Social and cultural factor"

Items	Mean	S.D	T-Test	P-value
Lack of community acceptance of entrepreneurial projects hinders the development of these Activities	3.82	1.092	14.974	0.000
Cooperation of community members with entrepreneurs and their acceptance of the idea of an entrepreneurial business may effectively enhance and develop entrepreneurial activities	4.37	0.758	36.103	0.000
The entrepreneurial activities must be consistent with the values and beliefs of the community members	4.07	1.000	21.453	0.148
The values and beliefs of the entrepreneur influence the type of entrepreneurial activity that he or she chooses	3.79	1.076	14.733	0.000
It is important to familiarize the entrepreneurs with entrepreneurial culture	4.06	1.023	20.775	0.000
The spread of entrepreneurial culture among community members contributes to the development of entrepreneurial activities	4.22	0.833	29.303	0.000
All items of axis	4.06	0.571	36.953	0.000

Source: Developed and calculated by authors, (2023).

Table (8) shows a comparison between hypothesized value (3) and the mean of societal and cultural factors which is equal to 4.06, the sign of the test is positive, so the mean of societal and cultural factors is significantly greater than the hypothesized value 3. In conclusion, the respondents agreed to this axis.

5. Conclusions

1. It is important for the entrepreneur to have the necessary knowledge to ensure the success of his /her project. Also, entrepreneurs with entrepreneurial potential, skills, and creative ideas in turn contribute to the development of entrepreneurial activities. On the other hand, entrepreneurs must have administrative practical, and technical capabilities in their field.
2. The widespread use of modern technological programs in business, such as management information systems and IT programs contributed to the development of entrepreneurial activities. Young entrepreneurs, especially university graduates are eager to learn and practice such programs.
3. Most of the respondents to the questionnaire thought that entrepreneurship should be included in the academic curricula of universities. This is because most colleges and academic institutions lack such programs.
4. Cooperation of community members with entrepreneurs and their acceptance of the idea of an entrepreneurial business may effectively enhance and develop entrepreneurial activities. Individuals of a community cannot separate themselves from their society.
5. Entrepreneurial activities must be consistent with the values and beliefs of community members. Again, it is obvious that values and beliefs of the society affect the entrepreneur's way of thinking and behavior entrepreneurial activities.
6. The spread of entrepreneurial culture among community members contributes to the development of entrepreneurship.
7. The influence of culture on entrepreneurs' actions, thoughts, and behavior cannot be Overemphasized.

Recommendations

1. There must be educational institutions that provide the necessary information the entrepreneurs need. Entrepreneurship should be included in the academic curricula of universities.
2. The entrepreneur must constantly strive to develop his/her abilities and skills, and also obtain all new information that can benefit him/her in their field.
3. The community must accept the existence of entrepreneurial activities, and be aware of the importance of the entrepreneurship in the community.
4. Sudanese communities must be educated about the importance of entrepreneurship and spreading the culture of entrepreneurship through training workshops, training courses, and the media in general.

5. Putting the religion of the entrepreneur under consideration as one of the variables that affect his/her choice of the field or the business he/she wants to establish.
6. Because of the tribal diversity of Sudan, it is important to put that into consideration because it may influence the choices and behavior of the entrepreneurs.
7. More studies are needed especially in the area of the influence of socio-cultural factors on entrepreneurial activities.

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