

The Role of Entrepreneurship Education in Developing Opportunity Recognition Capability: Evidence from Graduating University Students in Afghanistan

Abdullah Nael^{1*}, Dr.Shafiq Habibi², Naqibullah Raihan³ and Azatullah Zaheer⁴

¹Department of Business Administration, Faculty of Economics, Kabul University, Kabul

²MBA Program, Faculty of Economics, Kabul University, Kabul

³Assistant Professor, Faculty of Economics, Kabul University, Kabul

⁴Department of Business Administration, Faculty of Economics, Salam University Kabul

*Correspondent Author's Email: abdulah.nael@gmail.com

DOI: 10.64505/tijss/v02issue01/0013

Article Info:

Received:

14/06/ 2026

Revised:

01/07 / 2026

Accepted:

05 /07 2026

Published:

20/07 / 2026

ABSTRACT

The importance of entrepreneurship education in assisting university students to become better entrepreneurs is gradually gaining wider recognition. Yet, there is still limited empirical work on its impact on the ability of opportunity recognition, particularly in developing countries such as Afghanistan. The current study seeks to examine the influence of Entrepreneurship Education on opportunity recognition capability of graduating university students in Afghanistan. Considering the three theories, which include Human Capital theory, Social Cognitive Theory, and Opportunity Recognition theory, the research was expected to find out that the entrepreneurship education contributes to the capability of students to recognize entrepreneurial opportunities. The data was collected from 389 graduating students for the quantitative study. Methods of analysis included descriptive statistics, reliability test, Pearson correlation and simple linear regression. The results indicate that entrepreneurship education has a statistically significant influence on opportunity recognition capability ($\beta = 0.585$, $p < 0.001$). It is clear from the findings that entrepreneurship education is essential in terms of enhancing students' perception of entrepreneurship and recognition of viable entrepreneurial opportunities. By providing empirical data regarding Afghanistan, which has not been addressed extensively by other researchers, the research contributes to entrepreneurship education. In addition, the findings will lead to positive implications for educational institutions, teachers, and policy makers in the area of entrepreneurship education. Other areas of future research can be explored in terms of identifying factors affecting recognition of opportunities.

KEYWORDS: Higher education; Human Capital Theory (HCT); Opportunity Recognition Capability (ORC); Entrepreneurship Education (EE); Graduating students; Afghanistan

1. INTRODUCTION

Entrepreneurship is widely regarded as a fundamental driver of innovation, economic development, job creation, and social progress. Entrepreneurs play a pivotal role in establishing new business ventures, commercializing innovative ideas, and fostering market competition in developed and developing economies alike. Entrepreneurship has become an important strategy for generating employment opportunities and fostering sustainable economic development as technology improves and labor markets become more dynamic (Audretsch et al., 2006; OECD, 2023). Accordingly, there have been many efforts by governments, universities, and international agencies to foster entrepreneurship through educational policies and institutional development programs. While entrepreneurship has been gaining prominence in research and policymaking, it should be noted that the entrepreneurial process does not start with the formation of a business. The entrepreneurial process starts with the identification of an opportunity. Before an individual can start his venture, he needs to recognize the customer needs and the gap in the market. He needs to identify the trends and the opportunity that will bring him economic or social value (Kirner, 1973; Shane, 2003). Without the skill of opportunity recognition, knowledge and motivation of entrepreneurship alone might prove inadequate to instill entrepreneurial behavior in people.

Opportunity recognition capability (ORC) has received considerable attention in entrepreneurship research in recent years. It is being increasingly accepted among scholars that entrepreneurs are marked by more than just their propensity for risk-taking; they demonstrate the ability to process information and identify meaningful patterns and pattern recognition that leads to opportunity recognition (Ardichvili et al., 2003; Baron, 2006). This capability enables individuals to transform technological, market, customer, and societal changes into entrepreneurial opportunities. Thus, opportunity recognition has become an important entrepreneurial skill that can have an impact on the future success of entrepreneurship. As the significance of opportunity recognition grows, the perception of EE has also been altered. Earlier, EE curricula were more concerned with the training of students in the area of business plan creation and small business management. The current perception of EE emphasizes the development of entrepreneurial skills, creativity, innovation, problem-solving, and opportunity recognition capabilities. Beyond providing business knowledge, EE should provide the learners with the necessary cognitive skills (Fayolle & Gilly, 2015; Nab et al., 2017; Neck & Greene, 2011).

It is for this reason that the connection between EE and ORC has garnered increasing interest in recent times. Previous studies have shown that EE has enhanced students' entrepreneurial knowledge and exposure to entrepreneurship (Huang et al., 2020; Wei et al., 2019; Zhang et al., 2022). Nevertheless, most studies have been carried out in industrialized or developing nations, where entrepreneurial ecosystems, institutional

environments, as well as education facilities, vary greatly from those in developing and post-conflict nations. Thus, the role of EE in fostering ORC in constrained environments is inadequately studied.

The gap in the existing research literature is especially apparent in the case of Afghanistan. Despite the rising popularity of EE as a measure to address the problem of unemployment among graduates as well as to promote the growth of the private sector, there are no empirical studies on the link between EE and ORC. EE programs have been gradually introduced at the universities of Afghanistan, mainly in disciplines like business and management. However, there are no studies proving the impact of EE on ORC. Considering the economic situation in Afghanistan, the problem of limited employment, and the growing demand for entrepreneurship, it is essential to investigate the matter. This research helps to bridge this gap through investigating EE and its impact on the ORC of graduating students in Afghanistan. With the help of the HCT theory, Opportunity Recognition Theory, and Social Cognitive Theory, this research tries to find out if EE affects students' opportunity recognition and evaluation process. Unlike previous few research studies, that have been conducted on the basis of entrepreneurial intentions, ORC has been taken into account here.

However, there are a number of implications for EE research arising from the study. First, the study contributes to existing literature by considering the ORC as an important outcome rather than as merely a mediating variable of EE. Second, the study draws evidence from Afghanistan, which has remained largely unexplored within entrepreneurship research even though its relevance as an emerging entrepreneurship-driven economy is increasing. Third, the study contributes to Human Capital Theory by exploring the ways through which investment in education may develop entrepreneurial ability in opportunity recognition.

1. Research Problem

Even though entrepreneurship education has been gradually integrated into Afghan universities, empirical literature on whether entrepreneurship education improves students' opportunity recognition ability is lacking. Previous research has mainly looked at entrepreneurial intention and been carried out in developed countries; thus, a gap exists in relation to the case of Afghanistan. The present study attempts to fill the gap by investigating the effect of entrepreneurship education on opportunity recognition ability of graduating university students in Afghanistan.

1.2 Research Objective

- To investigate the impact of entrepreneurship education on opportunity recognition capability of graduating university students in Afghanistan.

1.3 Research Question

Is there a significant impact of entrepreneurship education on opportunity recognition capability of graduating university students in Afghanistan?

1.4 Hypothesis

H1: There is a significant and positive impact of entrepreneurship education on opportunity recognition capability of graduating university students in Afghanistan.

1.5 Significance of the Study

This research adds value to the body of entrepreneurship education literature in terms of empirical evidence from Afghanistan regarding the impact of entrepreneurship education on opportunity recognition capability.

2. LITERATURE REVIEW

2.1 Entrepreneurship Education

One of the key areas of research in higher education is EE because of its ability to develop entrepreneurial competences, encourage innovation, and prepare the graduates to operate in the constantly changing labor market. Previously, entrepreneurship was seen as an innate quality of certain people. Nowadays, however, recent studies prove that the skills of entrepreneurs can be learned (Fayolle & Gilly, 2015; Neck & Greene, 2011). As a result, various universities around the world introduced entrepreneurship to their curriculum in order to stimulate innovation, self-employment, and the creation of new ventures. Nevertheless, even though EE becomes more and more popular, it is still perceived differently by various scholars. Initially, EE was seen as the process of providing training for those who would manage new ventures (Drucker, 1985; Gibb, 2002). However, the concept has evolved significantly since then. Nowadays, EE is regarded as an approach in education that enables the development of entrepreneurial skills, such as entrepreneurial knowledge, entrepreneurial opportunity recognition, creativity, problem solving, innovation, and confidence in pursuing opportunities (Fayolle & Gilly, 2015; Kuratko, 2020). Similarly, the European Commission (2015) sees EE as the development of competences to act on ideas through creativity, initiative, innovation, planning, and responsible risk-taking

EE has evolved due to the general trends in educational philosophy where there is a need to inculcate entrepreneurial skills which can be utilized for different jobs and industries. As mentioned by Neck & Greene (2011), entrepreneurship education should include entrepreneurial thinking and behavior and not only entrepreneurship. Such a strategy allows students to recognize opportunities, experiment, learn from their failures, and generate value in different settings. Therefore, EE becomes multidisciplinary and experiential as it goes beyond traditional classroom-based learning strategies. Entrepreneurship education in universities is designed in a way where the learning of theoretical and practical aspects is ensured at once. Universities have

taken different measures apart from classroom-based learning to support entrepreneurship education. Such measures include business plan competitions, incubators, innovation hubs, mentoring, and internships, among others (Nab et al., 2017; Pittaway & Cope, 2007). Earlier studies show that students engaging in experiential entrepreneurial learning activities exhibit higher levels of entrepreneurship competencies as compared to students who get classroom-based entrepreneurship education (Hager & Barraya, 2021).

The significance of EE has become more apparent in developing nations where there are issues of high unemployment among graduates and a lack of job opportunities. In these instances, EE is now considered a means of cultivating entrepreneurial skills, fostering self-employment, and facilitating economic development (OECD, 2023; World Bank, 2024). This concept is of particular significance in the context of Afghanistan because of the capacity of entrepreneurship to contribute to job creation and the development of the private sector. Despite the gradual introduction of entrepreneurial classes at Afghan universities, there is very little empirical data on their effectiveness. It is therefore essential to ascertain whether EE is effective in enhancing the entrepreneurial skills of students.

Indeed, such is the focus of the current research, which perceives EE as a developmental process in which the students develop entrepreneurial skills, cognition and experience that will allow them to identify and assess entrepreneurial opportunities. This research, therefore, does not view EE solely as an avenue that prepares students for entrepreneurship or for setting up a business; rather, it views EE as an avenue for developing opportunity recognition capability – one of the key competencies for entrepreneurship.

2.1 Opportunity Recognition Capability

ORC is one of the most valuable skills in entrepreneurship, since entrepreneurial activities are built around the detection of opportunities rather than business formation. People need to detect opportunities in order to produce any goods or venture into any market and for this reason, the concept of opportunity recognition has grown into the core concept of entrepreneurship. Opportunity recognition has thus been viewed by many researchers as the very cornerstone of entrepreneurship (Kirner, 1973; Shane & Venkataraman, 2000). The notion has developed substantially within the past few decades. Initial research has been characterized by the definition of opportunity recognition as the capacity of an entrepreneur to identify new opportunities that have not been noticed before (Kirzner, 1973). Recent studies suggest that the process of opportunity recognition should be viewed as a capability based on knowledge, cognitive abilities, creativity, previous experience, and the understanding of the environment. Opportunity recognition is the result of learning and interactions with the changing business environment (Ardichvili et al., 2003; Baron, 2006). The point here is that people recognize opportunities to varying degrees since they have different amounts of knowledge and experience. Similarly, scholars have also stated that recognition of opportunity is more than just spotting a good business idea. The process includes data

collection, understanding market requirements, analysis of trends, linking of apparently disconnected pieces of information, and determining if an identified opportunity is realistic and profitable. People with high levels of ORC are more capable of recognizing gaps in the market, predicting market shifts, and transforming their creative ideas into reality (Baron, 2006; Tang et al., 2012). Therefore, opportunity recognition is being seen as a higher-level entrepreneurial skill.

In recent research, the focus has shifted from the availability of opportunities to the development of the capacity to recognize them. Scholars now assert that the identification of entrepreneurial opportunities is a skill that can be developed through training, experience, and exposure in entrepreneurship (Wei et al., 2019; X. Xu et al., 2023; Zhang et al., 2022). EE trains learners in the aspects of entrepreneurial mindset, marketing, business simulation, case studies, and other problem-solving exercises that enhance the identification skills of such opportunities. Through these activities, learners acquire entrepreneurial alertness and confidence in the discovery of business opportunities.

In the sphere of higher education, one of the main outcomes of entrepreneurship education is ORC. Today's universities have a growing responsibility not only to provide theoretical knowledge concerning how businesses work but also to guide students in detecting opportunities for innovations and value creation. The observation of the surroundings, finding market gaps and suggesting ways to fill those gaps with innovations can be achieved through the process of experiential learning, mentoring, networking and communication with entrepreneurs. Such practice allows developing entrepreneurial competencies, which are not limited to business launching but are useful in constantly changing economic conditions (Nab et al., 2017; Neck & Greene, 2011).

However, there still exist some critical research gaps despite the increasing volume of literature. Firstly, most of the empirical research investigating ORC was carried out in developed and developing countries, where entrepreneurial ecosystems and institutions are more developed than in developing countries. There is not much evidence regarding the topic from developing and resource-constrained countries. For example, from Afghanistan, where entrepreneurial ecosystems are developing, and there are still insufficient employment opportunities. Secondly, previous research mainly concentrated on the concept of entrepreneurial intention as the main result of EE, while the development of ORC itself received comparatively less attention from scholars. The importance of investigating ORC comes from its role in the entrepreneurial process.

Thus, the current study defines ORC as an individual's ability to recognize, assess, evaluate, and create entrepreneurial opportunities using the entrepreneurial knowledge and cognitive abilities acquired during entrepreneurship education. The ability to perform all of this is used as the main dependent variable, as it is one of the key competencies that universities aim to develop among future entrepreneurs.

2.2 Theoretical Foundation

2.2.1 Human Capital Theory

The theory of Human Capital Theory (HCT), put forth by Schultz (1961) and later expanded by Becker (1964) It postulates that education is an investment that increases people's competencies and capabilities. The main idea of the theory is not only the acquisition of educational credentials but also the development of the capabilities to perform their tasks better. In other words, education is viewed by the theory as a process of gaining valuable capabilities for performing economically Becker (1964).

In entrepreneurship studies, Human Capital Theory is regarded as one of the most frequently used theoretical approaches because entrepreneurship involves a combination of knowledge, skills, creativity, and problem-solving abilities in an uncertain environment. EE plays an important role in fostering such abilities by giving students the chance to learn about entrepreneurship, business planning, innovations, opportunity assessment, and gaining experience through learning. Through acquiring entrepreneurial knowledge and experience, students build up entrepreneurial human capital and hence enhance their business opportunity recognition and assessment skills (Davidsson & Honig, 2003; Marvel et al., 2016).

Earlier studies further prove that EE equips an individual with cognitive and functional skills that would be essential for entrepreneurship. Those who have been educated through EE have shown to be more entrepreneurial in knowledge, creativity, analytical skills, and opportunity recognition than those who have not gone through such education (Bae et al., 2014; Fayolle & Gailly, 2015; Kuratko, 2020). The reasoning behind this is based on Human Capital Theory in that education increases the level of human capital.

In the current research, Human Capital Theory explains the link between EE and the ability to recognize opportunities. EE is viewed as an investment that develops students' entrepreneurial knowledge, skills, and competencies. These educational investments are expected to strengthen students' ability to identify, evaluate, and pursue entrepreneurial opportunities.

2.2.2 Opportunity Recognition Theory

Opportunity Recognition Theory explains how individuals discover and evaluate opportunities that may lead to entrepreneurial activities. The theory originated from Kirzner, (1973) concept of entrepreneurial alertness, which holds that entrepreneurs differ from other individuals in their ability to identify opportunities that others overlook. Later, Shane & Venkataraman, (2000) expanded this perspective by arguing that opportunities exist in the external environment, but individuals vary in their ability to recognize them because of differences in knowledge, experience, and cognitive capabilities.

More recent research views opportunity recognition as a capability that develops through learning and experience rather than as an innate characteristic. Ardichvili et al., (2003) argued that opportunity recognition

involves discovering, evaluating, and developing business opportunities through the interaction of prior knowledge, creativity, entrepreneurial alertness, and environmental information. Similarly, Baron, (2006) have shown that opportunity recognition occurs through pattern recognition involving changes in markets, technology, and customer needs.

EE also becomes particularly relevant for the development of such skills in higher education. By gaining experience via classroom instruction, simulations, case studies, mentoring, and entrepreneurial projects, students enhance their opportunity recognition skills. Such learning activities help to develop entrepreneurial alertness, market sensitivity, and analysis skills, allowing for better opportunity recognition (Nabi et al., 2017; Wei et al., 2019).

Therefore, Opportunity Recognition Theory offers a straightforward theoretical framework for understanding the dependent variable under study. According to the theory, opportunity recognition competency can be gained through EE.

2.2.3 Social Cognitive Theory

Social Cognitive Theory (SCT), developed by (Bandura, 1986), posits that learning occurs through the interaction of personal factors, behavior, and the environment. The theory emphasizes observational learning, modeling, and self-efficacy, suggesting that individuals develop capabilities through experience and social interaction. In entrepreneurship education, students strengthen their entrepreneurial knowledge, cognitive skills, and confidence by engaging in experiential learning activities such as case studies, business simulations, mentoring, and interactions with entrepreneurial role models (Bandura, 1986). Consequently, SCT explains that entrepreneurship education enhances opportunity recognition capability by improving students' cognitive processes and entrepreneurial self-efficacy, complementing Human Capital Theory in explaining how educational experiences translate into entrepreneurial competencies (Bandura, 1986; Newman et al., 2019; Zhao et al., 2005).

2.2.4 Hypothesis Development

EE has shifted from the conventional business-centered model to entrepreneurship, an educational process designed to develop entrepreneurial competencies, innovation, creativity, and entrepreneurial opportunity recognition. Current EE goes far beyond educating students on how to develop business plans and run businesses. Rather, it is about equipping students with the knowledge, skills, and abilities needed to identify and capitalize on entrepreneurial opportunities in an ever-changing and uncertain environment (Fayolle & Gailly, 2015; Neck & Greene, 2011). EE has shifted from the conventional business-centered model to entrepreneurship, an educational process designed to develop entrepreneurial competencies, innovation,

creativity, and entrepreneurial opportunity recognition. Current EE goes far beyond educating students on how to develop business plans and run businesses. Rather, it is about equipping students with the knowledge, skills, and abilities needed to identify and capitalize on entrepreneurial opportunities in an ever-changing and uncertain environment (Becker, 1964a; Davidsson & Honig, 2003; Marvel et al., 2016). Opportunity Recognition Theory also suggests that people who have more entrepreneurial knowledge and experience are better at identifying opportunities that other people cannot notice because they have better entrepreneurial alertness and cognitive abilities (Kirzner, 1973; Shane & Venkataraman, 2000).

Similarly, Social Cognitive Theory suggests that entrepreneurship education enhances students' opportunity recognition capability through learning, observation, and interaction with the educational environment. By participating in experiential learning activities such as case studies, business simulations, mentoring, and entrepreneurial projects, students strengthen their cognitive skills and entrepreneurial self-efficacy, enabling them to recognize and evaluate entrepreneurial opportunities more effectively (Bandura, 1986; Newman et al., 2019; Zhao et al., 2005).

The above theoretical framework is empirically supported. Literature reveals that EE positively affects students' ORC through entrepreneurship knowledge, market awareness, creativity, and analysis (Hoang et al., 2020; Wei et al., 2019; J. Xu et al., 2023; Zhang et al., 2022). The educational programs including case studies, project-based learning, mentoring, and simulation of businesses provide exposure to entrepreneurial situations for students to analyze the market needs and develop innovative solutions. With such experience, students build the competence to identify entrepreneurial opportunities.

While literature is unanimous in its findings concerning the positive relationship between EE and opportunity recognition capability, there are limited studies on the issue conducted in underdeveloped or post-conflict nations. Little information is available on the issue for countries with developing EE and entrepreneurial ecosystems, such as Afghanistan. Considering the economic environment of Afghanistan and the increasing significance of entrepreneurship to graduates' employment and private sector development, studying the issue is important both theoretically and practically.

Based on the theoretical arguments presented by Human Capital Theory, Social Cognitive Theory, and Opportunity Recognition Theory, together with the existing empirical evidence, this study proposes that EE contributes to the development of ORC among graduating students:

H1: EE has a positive and significant effect on opportunity recognition capability among graduating students in Afghanistan.

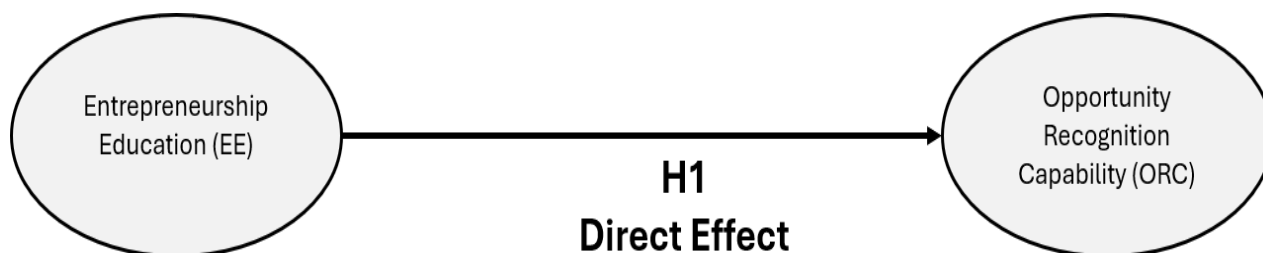


Figure 1: Proposed Research Model

Source: Developed by the authors based on Human Capital Theory, Social Cognitive Theory, and Opportunity Recognition Theory.

3. METHODOLOGY

3.1 Research Design

This study employed a quantitative research design to examine the influence of EE on ORC among graduating students in Afghanistan. A quantitative approach was considered appropriate because it enables researchers to test theoretical relationships among variables using statistical techniques and to draw objective conclusions from numerical data (Creswell, 2023).

The study adopted a cross-sectional survey design, whereby data were collected from respondents at a single point in time. Cross-sectional surveys are widely used in entrepreneurship research because they provide an efficient means of examining relationships among latent constructs within a defined population (Saunders, 2023). Since the purpose of the current research was to find out if EE has an effect on the ORC of students, rather than to observe any change over time, the survey methodology was found to be appropriate.

The deductive methodology of research was used in this case. In accordance with Human Capital Theory, Social Cognitive Theory, and Opportunity Recognition Theory, a theoretical model was developed and empirically tested using data collected from graduating from university students. According to the deductive methodological approach, the existing theory can be evaluated in another context by testing the hypothesis formulated based on previous literature (Bryan, 2016; Saunders, 2023). Using such an approach will make a contribution to furthering EE research in the context of Afghanistan, which does not have much empirical evidence. As is evident from the title of the study, the purpose of the study is to explore the relationship between variables, not to establish causation through experimental interventions. Thus, a non-experimental correlational research design is appropriate (Hair et al., 2022).

In general, the chosen research design gives a proper methodology framework for analyzing whether EE leads to the development of ORC among graduating students, maintaining the reliability and validity of the empirical data.

3.2 Research Setting

The target population in this research included graduating students studying in both public and private universities in Afghanistan. In particular, the study focused on students in their final years of study who were enrolled in the specified semester in which entrepreneurship courses had either been taken or were being offered. The chosen respondents were deemed as suitable as they had been taught entrepreneurship subjects and hence were capable of analyzing their impact on their ability to recognize opportunities. Respondents in the sample were selected from both public and private universities to enhance its representativeness.

3.3 Sampling Technique and Sample Size

In the current study, a non-random purposive sampling method was used in selecting respondents from the target population. This sampling method was deemed the most appropriate because the study specifically sought respondents who had either taken entrepreneurship courses during the specified semester or had completed them. These students had adequate exposure to EE and were thus able to measure its contributions to ORC.

Data were collected from students at graduation levels from both public and private universities in Afghanistan. The inclusion of data from various institutions of higher education has enhanced the diversity of the sample and representativeness of the findings in the context of higher education in Afghanistan.

The minimum number of respondents was established using the guidelines provided by Hair et al., (2022) and Kline, (2023). According to their recommendation, the appropriate sample size should be used for accurate statistical testing. After reviewing the responses for consistency and validity, 389 were found to be suitable for analysis. This number was considered sufficient to establish a connection between EE and ORC.

3.4 Instrument Development

Data were gathered using a self-administered questionnaire that has two sections. The first section included data on demographic characteristics of the respondents, which included gender, age, kind of university attended and major studied and other aspects. The second section included variables of the study measured using scales that have been used and validated in previous entrepreneurship studies.

The questionnaire was designed using previous scales in such a way that they will be suitable for this study and for the context of Afghan higher education. Minor changes have been done in the design for the better comprehension of the questions, but the content of the questions was not changed at all. The questionnaire has been written in English but translated into the local language to enhance the comprehension of the questions.

The five point Likert scale from 1(Strongly Disagree) to 5 (Strongly Agree) was used to measure the variables. The rationale behind the use of this scale is that it is common in entrepreneurship and management researches and is effective in measuring perceptions (Hair et al., 2022).

Before administering the survey, the questionnaire was validated by entrepreneurs and researchers who are experts in entrepreneurship and research methods for clarity, relevance, and content validity. Their comments were taken into account to further refine the questionnaire. Use of proven scales, in addition to the expert evaluation, ensured high validity and reliability of the research tool.

Table 1 provides the operational definitions, measurement scales, and sources of all the constructs used in the study.

Table 1: Operationalization and Measurement of the Study Variables

Construct	Operational Definition	Instrument	No. of Items	Scale	Sources
EE (EE)	EE includes the educational experiences of the students that help them gain entrepreneurial knowledge and skills through entrepreneurship education courses and curriculum activities.	EE-EKSD & EE-ECLA	8	Likert scale with five points (1 being strongly disagree and 5 being strongly agree).	Wardana et al. (2020); Haque et al. (2025); Shahab et al. (2018); Thomas (2023); Gao and Qin (2022); Tian et al. (2022)
Opportunity Recognition Capability (ORC)	The opportunity recognition capability means the capacity of the individual to discover and evaluate the opportunities for business or entrepreneurship.	ORC	5	Likert scale with five points (1 being strongly disagree and 5 being strongly agree).	Wiranibardja et al. (2022); Tian et al. (2022); Özgen and Baron (2007)

EE was measured using eight items adapted from previously validated scales. These items capture students' perceptions of entrepreneurial knowledge, skills development, and entrepreneurship-related learning experiences and were combined to represent EE as a single construct for this study. ORC was measured using

five items assessing students' ability to identify, recognize, and evaluate entrepreneurial opportunities. All variables were rated on a five-point Likert scale varying from 1 (Strongly Disagree) to 5 (Strongly Agree).

3.5 Data Collection Procedure

Data were collected from graduating students at selected public and private universities in Afghanistan using a structured questionnaire. Before data collection, consent was sought from the concerned authorities of the institutions. Information about the study was provided to the participants, and it was made clear to them that their participation was voluntary, and their data would be anonymous and confidential.

Both paper-based and online versions of the questionnaire were distributed to the participants to facilitate the process and improve the response rate. All completed questionnaires were checked for validity and consistency. Any incomplete or invalid questionnaire was excluded from the analysis. The valid ones were coded, entered into the statistical software, and verified for missing or inconsistent values before analysis.

3.6 Data Analysis

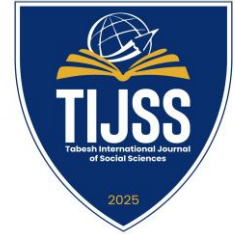
Coding, entry, cleaning, and analysis of data were done using the statistical package IBM SPSS Statistics, version 27. Missing data, outliers, and entry errors were checked before performing any major analyses to assure the quality of the data set. The demographics of the respondents and the study variables were described using descriptive statistics.

Measurement scales reliability was evaluated using Cronbach's Alpha. Then, Pearson correlation was used to check for the association between EE and ORC. Finally, a simple linear regression analysis was conducted to test the research hypothesis and assess the effect of EE on ORC.

4. RESULTS AND DISCUSSION

Table 2: Respondents Profile

		Bach elor	Mast er	PhD	Tota l
Gender	Male	290	98	1	389
Age	25–30	44	69	0	113
	31–35	3	29	0	32
	Above 35	1	0	1	2
	Below 25	242	0	0	242



Field of Study	Business	290	98	1	389
	Administration				
What type of university are you graduating from?	Private	84	38	0	122
	Public	206	60	1	267

Note. Values are frequencies (n).

According to Table 2, a total of 389 valid answers were analyzed. Most of the respondents were at the Bachelor's degree stage (74.6%) and the Master's degree stage (25.2%), while only one person (0.3%) was at the PhD stage. With regard to age, most respondents were younger than 25 years (62.2%), followed by 25-30 years (29.0%), and 31-35 years (8.2%). There were only two people older than 35 years (0.5%). It can be concluded that the sample mainly included young university students who were about to graduate and enter the labor force. All respondents were studying Business Administration; thus, the sample can be considered a representative sample for analysis of EE and opportunity recognition capability. Regarding the university types, 267 respondents (68.6%) graduated from public universities, while 122 respondents (31.4%) were from private universities.

Table 3: Descriptive Statistics of the Study Variables

Variable	N	Minimum	Maximum	Mean	Standard Deviation
Entrepreneurship Education	389	1.50	5.00	3.76	0.78
Opportunity Recognition Capability	389	1.40	5.00	4.00	0.77

As shown in Table 3, perceptions of the two study variables were generally positive. The value of EE was 3.76 (SD = 0.78), indicating that students felt their universities offered educational experiences that developed their entrepreneurial knowledge and skills. ORC also had a slightly higher mean value of 4.00 (SD = 0.77), indicating that respondents considered themselves able to recognize and evaluate entrepreneurial opportunities. The relatively low SD values for both constructs indicate moderate agreement among the respondents.

Table 4: Internal Consistency Reliability of the Measurement Scales

Construct	Number of Items	Cronbach's Alpha	Reliability Level
Entrepreneurship Education	8	0.859	Good

Opportunity Recognition 5 0.864 Good
Capability

Note. Values of 0.70 or higher on Cronbach's alpha are considered an acceptable level of internal consistency, whereas values of 0.80 or higher are considered good internal consistency (Hair et al., 2022).

As presented in Table 4, both constructs showed good internal consistency. EE attained a Cronbach's alpha of 0.859, while ORC recorded a Cronbach's alpha of 0.864. Both these values were above the minimum acceptable value of 0.70, meaning that the measures were reliable enough and appropriate for any form of statistical analyses (Hair et al., 2022). Therefore, all measurement questions were retained.

Table 5. Pearson Correlation Analysis

Variables	1	2
1. Entrepreneurship Education	1	
2. Opportunity Recognition Capability	0.585**	1

Note. N = 389. Correlation is significant at the 0.01 level (2-tailed).

Table 5 reveals a statistically significant positive relationship between EE and ORC ($r = 0.585$, $p < 0.001$). As indicated by (Cohen, 1988) As indicated by Cohen (1988), a correlation value ranging from 0.50 to 0.69 implies a moderate to strong positive relationship. In this regard, the study findings reveal that the students who rated themselves highly on the EE also rated their ORC high. This positive relationship suggests that EE might be vital in shaping students' ORC. Nevertheless, it is important to note that the correlation approach does not establish a causal relationship. Regression analysis was thus conducted to evaluate whether EE significantly influences ORC.

Table 6: Model Summary of the Effect of EE on Opportunity Recognition Capability

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	0.585	0.343	0.341	0.624

Table 6 summarizes the results of the regression analysis model. The correlation coefficient ($R = 0.585$) implies a strong positive association between EE and opportunity recognition capability. : The coefficient of Determination ($R^2=0.343$) indicates that EE accounts for 34.3% of the variability in ORC among graduating students, while the remaining 65.7% is attributed to other variables not included in this research. Adjusted Coefficient of Determination ($\text{Adjusted } R^2 = 0.341$) is close to R^2 , thus proving that the model is stable. In general, these results prove that EE has a considerable effect on increasing students' opportunity recognition capability.

Table 7: ANOVA Results for the Regression Model

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	78.673	1	78.673	201.843	<0.001
Residual	150.843	387	0.390		
Total	229.516	388			

Results from Table 7 show that ANOVA indicates statistical significance in the regression model ($F=201.843$, $p<0.001$). This shows that EE significantly predicts ORC and that the regression model fits well compared with a model without any predictors. Therefore, EE has a statistically significant influence on students' opportunity recognition capability.

Table 8: Regression Coefficients

Predictor	B	Std. Error	Beta	t	Sig.
Constant	1.826	0.157	—	11.665	<0.001
Entrepreneurship Education	0.579	0.041	0.585	14.207	<0.001

As shown in Table 8, the regression coefficients indicate that EE has a positive and statistically significant effect on ORC ($\beta = 0.585$, $t = 14.207$, $p < 0.001$). The positive standardized coefficient indicates that increases in EE are associated with higher ORC among graduating students. The unstandardized coefficient ($B = 0.579$) indicates that a one-unit increase in EE is associated with an expected 0.579-unit increase in opportunity recognition capability.

Overall, the findings provide strong empirical support for the proposed hypothesis, demonstrating that EE plays an important role in enhancing students' ability to identify and recognize entrepreneurial opportunities.

4.2 DISCUSSION

The present study examined the influence of EE on ORC among graduating students in Afghanistan. Results show a significant positive impact of EE on students' ability to recognize entrepreneurial opportunities. In other words, the regression analysis found that EE accounts for 34.3% of the variation in opportunity recognition capabilities. This suggests that educational experience plays an important role in cultivating the entrepreneurship mindset and skills among students, which enables them to recognize business opportunities. These results support the Human Capital Theory, which asserts that educational investments enhance individuals' skills and productive capacity (Becker, 1964a; Schultz, 1961). EE equips students with knowledge of entrepreneurship development, opportunity identification, innovation, and problem-solving, which

contributes to increasing their human capital in entrepreneurship. With enhanced abilities to recognize and analyze opportunities in entrepreneurship, it can be said that EE is a means through which students' entrepreneurial capabilities are improved. Additionally, the findings reinforce the theoretical assumptions of Social Cognitive Theory (Bandura, 1986, 1997). This theory assumes that people acquire competencies as a result of learning, observations, experience, and interactions with the environment. EE enables students to be involved in entrepreneurial activities, to examine business cases, to interact with entrepreneurs and to deal with business issues. Such experiences enhance students' cognitive capacities and make them more confident in identifying entrepreneurial opportunities. The findings thus imply that EE helps develop opportunity recognition by enhancing students' learning experiences and cognitive skills. Furthermore, the assumption of the significance of capability development in achieving success is supported by other research findings from Afghanistan, which suggest that the development of human and psychological capabilities can considerably enhance performance (Zaheer & Barakzai, 2026).

Likewise, the results conform to Opportunity Recognition Theory, since this theory stresses the importance of the ability of entrepreneurs to recognize opportunities as one of their key features (Kirner, 1973; Shane & Venkataraman, 2000). EE seems to develop this ability by offering students entrepreneurial knowledge, market analysis, and innovation-focused learning activities. In effect, the students' ability to identify market gaps and entrepreneurial opportunities is enhanced. This finding underscores the broader importance of the knowledge creation process in developing individual and organizational performance and is consistent with previous studies in Afghanistan on the positive effects of organizational technology and knowledge-based resources on employees' performance and productivity (Zaheer & Sadiq, 2024).

The findings of this study are also corroborated by prior empirical literature. According to the study by Wei et al., (2019) EE positively affects ORC by developing entrepreneurial learning skills and cognitive capabilities of university students. Similarly, the study by Hong et al., (2020) revealed that EE plays an instrumental role in improving entrepreneurial competency and business opportunity recognition capabilities of students. In a more recent study by J. Xu et al., (2023), it was found that EE helps in recognizing opportunities through improved entrepreneurial knowledge and cognitive capabilities.

While these findings clearly indicate the beneficial effect of entrepreneurship education, the model explains only 34.3% of the variance in opportunity recognition capabilities. In other words, while entrepreneurship education is indeed an important determinant, there are other determinants that could explain opportunity recognition capability as well. These determinants may include variables such as entrepreneurial self-efficacy, creativity, prior entrepreneurial experience, family and social network support, institutional support, and personality traits. Thus, further research needs to investigate the effects of other potential determinants to

increase the model's explanatory power. These findings are especially relevant to the context of higher education in Afghanistan. The country continues to suffer from graduate unemployment, limited formal job opportunities, and a growing need for self-employment and entrepreneurship. Under such circumstances, the task of universities is to make sure that graduates possess skills necessary to recognize and exploit entrepreneurial opportunities. This study shows that through entrepreneurship education, universities can help in achieving this objective.

Generally, the results show that EE is not merely an acquisition of business-related information but also contributes to the development of cognitive abilities, an entrepreneurial mindset, and the skills to recognize opportunities in students, which are vital for entrepreneurial success. The results emphasize the importance of fostering EE at Afghan universities in the context of broader innovation, graduate employment, and sustainable development initiatives.

4.2.1 Theoretical Implications

The present paper contributes to the entrepreneurship education (EE) literature by empirically demonstrating the positive impact of EE on the ORC of graduating university students. In prior literature, the relationship between entrepreneurship education and entrepreneurial intention or self-efficacy has been extensively studied; however, few scholars have empirically tested the direct impact of EE on ORC, particularly in developing nations. The study of ORC as the main dependent variable further develops knowledge of how entrepreneurship education builds entrepreneurial capabilities. The results offer empirical validation of Human Capital Theory (Becker, 1964a; Schultz, 1961). As mentioned above, the positive correlation between EE and ORC indicates that EE can be considered an investment in human capital, through which students' entrepreneurial abilities and skills increase. As it is seen from the analysis of the educational investments and their effect on entrepreneurs' success in finding opportunities, education can play a role in developing entrepreneurial capabilities. Similar correlations have been observed in the Afghan organizations (Zaheer & Sadiq, 2025).

The findings are also in line with the Opportunity Recognition Theory (Kirzner, 1973; Shane & Venkataraman, 2000) That underscores the importance of recognizing entrepreneurial opportunities in the context of the process of entrepreneurship. The strong impact of EE on ORC demonstrates that opportunity recognition is not merely an innate skill but can be improved through proper education. This study provides additional evidence for the literature that treats opportunity recognition as a skill that can be acquired via entrepreneurship education.

Last but not least, this paper contributes to the sparse existing literature on entrepreneurship education in developing and post-conflict nations. So far, most empirical studies have been conducted in developed countries, while evidence from Afghanistan remains quite limited. This study contributes to expanding the

geographical coverage of such studies by investigating entrepreneurship education among graduating students at Afghan universities.

4.2.2 Practical Implications

The findings of this study are crucial for universities, entrepreneurship educators, and policymakers. Given the positive link between entrepreneurship education and ORC, universities must develop strong EE programs that not only incorporate theoretical aspects but also employ practical learning techniques to enable the identification and evaluation of business opportunities.

For educators, the results emphasize the need to adopt an experiential approach that incorporates techniques such as case studies, business simulation games, entrepreneurial projects, and interactions with entrepreneurs. This would enable them to build entrepreneurial capabilities in graduates who are likely to encounter business opportunities in dynamic settings.

For policymakers, the results show the need to facilitate entrepreneurship education within institutions of higher learning. Improving entrepreneurship education programs and collaborating with universities could play a significant role in fostering entrepreneurial capabilities in graduates. For Afghanistan, EE will foster self-employment, innovation, and the growth of the private sector.

5. CONCLUSIONS

This research was conducted to determine how EE affects the ORC of graduating students in Afghanistan. In this regard, concepts from the Human Capital theory, Social Cognitive theory, and Opportunity Recognition theory have been used to hypothesize that EE helps students to recognize and evaluate entrepreneurial opportunities. Data obtained from the graduates were analyzed using descriptive statistics, reliability analysis, Pearson correlation, and simple linear regression to test the above hypothesis. It was found that EE has a positive and statistically significant effect on students' ORC. The higher the EE level, the greater the ORC among students. Regression analysis indicated that EE has been able to explain a large percentage of the variance in the ORC which shows that EE is an important factor in developing one of the important competencies for entrepreneurship.

In terms of its contribution to the EE literature, this study offers empirical findings on Afghanistan, a setting that has been underexplored in entrepreneurship research. While many studies in this field have been conducted in more economically developed countries, current research indicates that EE is equally relevant to promoting entrepreneurial capabilities, even in less economically developed and post-conflict environments. In this way, the present study contributes to extending the applicability of current entrepreneurship theory to Afghanistan's higher education system.

In practical terms, the results suggest the significance of promoting EE within Afghan universities. Educational institutions should provide students with learning experiences that promote creativity, innovation, opportunity recognition, and entrepreneurial problem-solving. Policymakers and university administrators should also continue to support EE initiatives that prepare graduates for entrepreneurial careers and contribute to job creation and economic development.

Overall, the findings suggest that EE is more than a means of transferring business knowledge. It serves as an important mechanism for developing students' entrepreneurial competencies and enhancing their ability to recognize entrepreneurial opportunities. Strengthening EE within higher education institutions may therefore contribute to the development of future entrepreneurs who are capable of identifying opportunities, creating value, and supporting sustainable economic development in Afghanistan.

5.1 Recommendations

Based on the findings of the study, the following recommendations are proposed:

- Universities should strengthen entrepreneurship education through practical and experiential learning activities that enhance opportunity recognition capability.
- Policymakers and higher education institutions should support the integration of entrepreneurship education into university curricula to foster entrepreneurial competencies.
- Future studies should investigate additional factors influencing opportunity recognition capability and examine this relationship in different contexts and populations.

5.2 Limitations and Future Research

This study has several limitations that should be considered when interpreting the findings. First, the cross-sectional research design limits the ability to draw causal conclusions over time. Second, the study focused on graduating students from Afghan universities, which may limit the generalizability of the findings to other educational settings or countries. Furthermore, the present study considered only the direct impact of entrepreneurship education (EE) on opportunity recognition capability (ORC), but other variables may also affect students' entrepreneurial capability. In the future, researchers can apply longitudinal research designs to the study, use students from other disciplines and countries in the research, as well as take into account some additional variables such as entrepreneurial self-efficacy, creativity, entrepreneurial mind-set, or even institutional support.

5.3 Conflict of Interest

The authors have declared that there is no conflict of interest regarding this work.

5.4 Availability of Data and Materials

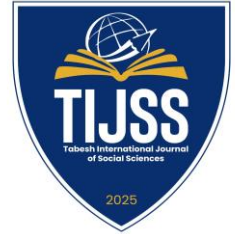
The data set that supports the conclusions of this article is available on request from the corresponding author.

6. REFERENCES

- Ardichvili, A., Cardozo, R., & Ray, S. (2003). A theory of entrepreneurial opportunity identification and development. *Journal of Business Venturing*, 18(1), 105–123.
- Audretsch, D., Keilbach, M., & Lehmann, E. (2006). Entrepreneurship and Economic Growth. In *Entrepreneurship and Economic Growth*. <https://doi.org/10.1093/acprof:oso/9780195183511.001.0001>
- Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The Relationship between Entrepreneurship Education and Entrepreneurial Intentions: A Meta-Analytic Review. *Entrepreneurship Theory and Practice*, 38(2), 217–254. <https://doi.org/10.1111/etap.12095>
- Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*. Prentice-Hall.
- Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. W. H. Freeman.
- Baron, R. A. (2006). Opportunity Recognition as Pattern Recognition: How Entrepreneurs “Connect the Dots” to Identify New Business Opportunities. *Academy of Management Perspectives*. <https://doi.org/10.5465/amp.2006.19873412>
- Becker, G. S. (1964a). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. University of Chicago Press.
- Becker, G. S. (1964b). *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education, First Edition*. NBER. <https://www.nber.org/books-and-chapters/human-capital-theoretical-and-empirical-analysis-special-reference-education-first-edition>
- Bryman, A. (2016). *Social Research Methods*. Oxford University Press.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Lawrence Erlbaum Associates.
- Creswell, C. (2023). *Research Design*. <https://collegepublishing.sagepub.com/products/research-design-6-270550>
- Davidsson, P., & Honig, B. (2003). The Role of Social and Human Capital Among Nascent Entrepreneurs. *Journal of Business Venturing*, 18(3), 301–331. [https://doi.org/10.1016/S0883-9026\(02\)00097-6](https://doi.org/10.1016/S0883-9026(02)00097-6)
- Drucker, P. F. (1985). *Innovation and Entrepreneurship: Practice and Principles*. Harper & Row.
- Fayolle, A., & Gailly, B. (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. *Journal of Small Business Management*, 53(1), 75–93. <https://doi.org/10.1111/jsbm.12065>

-
- Gibb, A. (2002). In pursuit of a new ‘enterprise’ and ‘entrepreneurship’ paradigm for learning: Creative destruction, new values, new ways of doing things and new combinations of knowledge. *International Journal of Management Reviews*, 4(3), 233–269. <https://doi.org/10.1111/1468-2370.00086>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2022). *Multivariate Data Analysis* (9th ed.). Cengage Learning.
- Hajer, C. B. H. K., & Jarraya, H. (2021). Combining teaching “about” and “through” entrepreneurship: A practice to develop students’ entrepreneurial competencies. *Industry and Higher Education*, 35. <https://doi.org/10.1177/0950422221991005>
- Hoang, G., Thi Le, T. T., Thi Tran, A. K., & Du, T. (2020). Entrepreneurship Education and Entrepreneurial Intentions of University Students in Vietnam: The Mediating Roles of Self-Efficacy and Learning Orientation. *Education + Training*. <https://doi.org/10.1108/et-05-2020-0142>
- Kirzner, I. M. (1973). *Competition and Entrepreneurship*. University of Chicago Press.
- Kline, R. B. (2023). Structural equation modeling in neuropsychology research. In *APA handbook of neuropsychology: Neuroscience and neuromethods*, Vol. 2 (pp. 681–698). American Psychological Association. <https://doi.org/10.1037/0000308-034>
- Kuratko, D. F. (2020). *Entrepreneurship: Theory, Process, and Practice* (11th ed.). Cengage Learning.
- Marvel, M. R., Davis, J. L., & Sproul, C. R. (2016). Human Capital and Entrepreneurship Research: A Critical Review and Future Directions. *Entrepreneurship Theory and Practice*, 40(3), 599–626. <https://doi.org/10.1111/etap.12136>
- Nabi, G., Liñán, F., Fayolle, A., Krueger, N., & Walmsley, A. (2017). The Impact of Entrepreneurship Education in Higher Education: A Systematic Review and Research Agenda. *Academy of Management Learning & Education*, 16(2), 277–299. <https://doi.org/10.5465/amle.2015.0026>
- Neck, H. M., & Greene, P. G. (2011). Entrepreneurship education: Known worlds and new frontiers. *Journal of Small Business Management*, 49(1), 55–70. <https://doi.org/10.1111/j.1540-627X.2010.00314.x>
- Newman, A., Obschonka, M., Schwarz, S., Cohen, M., & Nielsen, I. (2019). Entrepreneurial self-efficacy: A systematic review of the literature on its theoretical foundations, measurement, antecedents, and outcomes, and an agenda for future research. *Journal of Vocational Behavior*, Review Issue 2017/18 (Annual Issue), 110, 403–419. <https://doi.org/10.1016/j.jvb.2018.05.012>
- OECD. (2023). *The Missing Entrepreneurs 2023: Policies for Inclusive Entrepreneurship and Self-Employment*. OECD Publishing.
- Pittaway, L., & Cope, J. (2007). Entrepreneurship Education: A Systematic Review of the Evidence. *International Small Business Journal*, 25(5), 479–510. <https://doi.org/10.1177/0266242607080656>

-
- Saunders, L. (2023). (PDF) Research Methods for Business Students. ResearchGate. https://www.researchgate.net/publication/240218229_Research_Methods_for_Business_Students
- Schultz, T. W. (1961). Investment in Human Capital. *American Economic Review*, 51(1), 1–17.
- Shane, S. (2003). *A General Theory of Entrepreneurship: The Individual-Opportunity Nexus*. Edward Elgar.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217–226.
- Tang, J., Kacmar, K. M., & Busenitz, L. W. (2012). Entrepreneurial Alertness in the Pursuit of New Opportunities. *Journal of Business Venturing*, 27(1), 77–94.
- Wei, X., Liu, X., & Jian, S. (2019). How Does the Entrepreneurship Education Influence the Students' Innovation? Testing on the Multiple Mediation Model. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2019.01557>
- World Bank. (2024). *World Development Report 2024: The Middle-Income Trap*. World Bank.
- Xu, J., Fu, Y., & Zhang, X. (2023). Does Entrepreneurship Education in China Develop Entrepreneurial Intention? The Role of Self-Efficacy and Experience. *Plos One*. <https://doi.org/10.1371/journal.pone.0286090>
- Xu, X., Zhang, L., & Li, Y. (2023). Entrepreneurship Education and Entrepreneurial Intention: The Mediating Role of Opportunity Recognition Capability. *Education + Training*, 65(8/9), 1094–1112.
- Zhang, H., Regmi, R., Zhang, Z., & Pan, C.-C. (2022). The Relationship Between Entrepreneurship Education and Entrepreneurial Intentions of College Students in China: Focus on Mediating Effect of Entrepreneurial Opportunity Recognition and Entrepreneurial Self-Efficacy. *Open Journal of Social Sciences*. <https://doi.org/10.4236/jss.2022.1013028>
- Zhao, H., Seibert, S. E., & Hills, G. E. (2005). The Mediating Role of Self-Efficacy in the Development of Entrepreneurial Intentions. *Journal of Applied Psychology*, 90(6), 1265–1272. <https://doi.org/10.1037/0021-9010.90.6.1265>
- Zaheer, A., & Sadiq, A. (2024). The Impact of IT Integration in Human Resource Management on Employee Productivity: A Study of Afghanistan's NGOs. *Salam International Academic Journal*, 9(16), 7-24. <https://doi.org/10.64104/v9.SecondRound.Issue.6.n6.2024>
- Zaheer, A., & Sadiq, A. (2025). The Influence of Traditional Management Practices on Employee Satisfaction, Turnover Intention, and Perceived Organizational Profitability. *Khurasan University Business Administration Journal*, 2(1).



Zaheer, A., & Barakzai, A. (2026). Effect of Transformational and Transactional Leadership and Emotional Intelligence on Employee Productivity: The Mediating Role of Employee Motivation. *Journal of Social Sciences and Humanities*, 3(2), 358-383. <https://doi.org/10.62810/jssh.v3i2.269>