

# A STUDY OF SMALL AND MEDIUM-ENTERPRISES IN GHANA: ENTREPRENEURIAL OUTLOOK

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## ABSTRACT

*This current study examined entrepreneur competencies (EC), entrepreneur skills (ES), and entrepreneur role (ER) as a potential pathway to improving entrepreneurship development (ED) among Small and Medium Enterprises (SMEs) in Ghana. EC, ES, and ER have an effect on ED. This study aims to provide an empirical analysis into EC, ES, and ER and how they affect ED among SMEs in emerging economies like Ghana.*

*The study has utilized hierarchical regression analysis for testing the hypothesis. Data was collected from 650 entrepreneurs in Ghana's informal SMEs using a survey study design approach. In this study, three key variables were selected for EC, which include Opportunity Identification competence (OIC), Personal Entrepreneurial Competencies (PECs), and Technological and Innovation Competency (TIC). ES was also measured with Critical Thinking Skills (CTS), Effective Communication Skills (ECS), and Problem-Solving Skills (PSS), and the entrepreneurial roles were measured with Job Creation Role (JCR) and Role in Economic Development (RED) as a predictor to ED.*

*The findings from the study revealed that the predictors of EC such as OIC, PECs, and TIC are essential for achieving ED. Also, the predictors of ES, including CTS and PSS, have a positive association with ED. However, ECS was found to have a negative relationship with ED. Interestingly ER such as JCR and RED were positively related to ED.*

*The study advocates EC, ES, and ER as valuable tools for developing entrepreneurship and further strengthen the SMEs towards improving innovative strategies and policies in sustaining their business. This research contributes enormously to entrepreneurship literature on EC, ES, and ER and offers an original contribution with implications for theory and practice. This research also provides a roadmap on areas that SME stakeholders such as entrepreneurs, government, and policymakers should consider in making an investment that can lead to ED in emerging economies.*

**Keywords:** Entrepreneurship Development, Entrepreneurship Skills, Entrepreneurship Competence, Role of Entrepreneurs, Small and Medium-Sized Enterprises, Ghana.

## INTRODUCTION

Recent developments in the study of entrepreneurship have seen increased attention given to small and medium-sized enterprises (SMEs), mostly because of the realization that small businesses play a significant role in a country's economy (Hallyyev, 2019). Given the global proliferation of new companies, entrepreneurship is perceived as a solution for socioeconomic development (Worke, 2020). Entrepreneurship is recognized as one of the most critical aspects of both developed and emerging nations. As a result, entrepreneurial businesses actively expand global economic development in all countries (Shobhit, 2021). Since business activities nowadays have changed from the traditional ways of doing things. The industry is rapidly evolving from conventional to innovative model contexts. Therefore, entrepreneurs need to shift their focus to the advanced ways to survive in the 21<sup>st</sup> century rather than relying on traditional business methods.

Entrepreneurship development (ED) is gradually evolving into a major global concern. One of the primary contributors to ED is technological innovation, automation, and artificial intelligence, which has rendered many vocations obsolete in the 21<sup>st</sup> century. As a result, many governments adopt various measures to promote entrepreneurship in their economies (Szerb & Trumbull, 2018; Amjad et al., 2020). ED has become necessary to be researched based on the current challenges and the complex nature of business. ED can be described as a tool for supporting entrepreneurs to grow in their skills through development and training to help entrepreneurs decide their sustainability. According to Li et al. (2020), in entrepreneurship, the ambition to establish a firm is a vital trait that must take hold in every new enterprise. Thus, entrepreneurial intention reflects a person's eagerness to start a new firm. Lapin et al., (2020) noted that a rising number of scholars are interested in exploring ED, EC, ES, and ER, essential for a firm's effective inception and operation.

Entrepreneurship competencies (EC) are characterized as a set of cognitive skills that individuals have or can learn to address specific challenges, or the inspirational, self-regulatory, and social attitude and ability to implement the ideas successfully and responsibly in a range of circumstances (Tittel & Terzidis, 2020). According to Phelan & Sharpley (2012), entrepreneurs require various abilities to develop specific competencies. Entrepreneurial skills (ES) also encourage individuals to acquire competency skills and establish their firm by increasing personal attraction and subjective norms. Entrepreneurs must recognize that their profession entails more than just making a profit and expanding their company. But their professional development has a societal benefit. Entrepreneurship is undoubtedly an essential field that contributes to a community's economic growth in various ways. Entrepreneurship roles (ER) may include; job creation, providing wealth to local societies and adding to local business development (IED, 2021). Entrepreneurship is one of the most effective strategies that developing countries may use to combat poverty. Small and medium-sized businesses (SMEs) have made a substantial contribution to the growth of entrepreneurship in emerging countries (Amaglo, 2019).

As engines of indigenous entrepreneurship, SMEs play an integral role in economic development by boosting technological competency, innovation dissemination, and financial deployment, among other things (Nabiswa & Mukwa, 2017). The definition of a small business differs among organizations in Ghana (Oppong & Owiredu, 2014). Businesses with fewer than 29 employees are classified as micro and small enterprises by Ghana's National Board for Small

Scale Industries (NBSSI). The NBSSI distinguishes SMEs into the following categories: Microbusinesses employ less than five people, small businesses use six to 29 people, medium businesses employ thirty to ninety people, and large businesses employ one hundred or more (Oppong & Owiredo, 2014; Quagrainie et al., 2021). SMEs make up 92 percent of all businesses in Ghana (Amaglo, 2019). Furthermore, SMEs are anticipated to have generated 70% of Ghana's Gross Domestic Product (GDP) in 2018, equating to almost 90% of the country's active enterprises. It is also estimated that the sector employs close to 85% of Ghana's workforce (Amaglo, 2019; Li et al., 2021).

SMEs in Ghana similarly contribute to strengthening industrial integration by producing intermediate products for large-scale manufacturing companies to use as raw materials and selling large-scale manufacturing companies' final products (Amaglo, 2019). The SMEs' contribution to Ghana's economy will only be true if and only if the company is open for business. Despite many SMEs startups in Accra, Ghana, 60% fail within five years (Andrews Osei Mensah, 2016). This high rate of SME failure has had a significant negative impact on Ghana's employment rates (Yeboah, 2015). Other challenges for SMEs in Ghana include a lack of research and development capacity, globalization, and a lack of managerial knowledge and skills (Amaglo, 2019). Entrepreneurial competencies appear to be a suitable technique to deal with SMEs' coping capabilities with these difficulties. Entrepreneurial competencies are the skills entrepreneurs create and instill in their companies' operating cultures to maintain and strengthen their competitive positions in the market (Ibidunni et al., 2021).

Although some investigations conducted by some scholars revealed a link between EC and early-stage entrepreneurial behavior; (Ajayi et al., 2021) reported that there is no general agreement on how to assess these abilities. The study was supported with different proposals covering a wide range of tasks and competencies and defining scales with varying levels of aggregation. Even though entrepreneurial abilities are used as a turning point for corporate success and industrial progress (Al Mamun et al., 2019; Mitchelmore & Rowley, 2013; Al Mamun et al., (2019) emphasized that their fundamental concept, measurement, and correlation with entrepreneurial performance and enterprise success should be investigated. As a result, understanding the primary factors that drive EC and ED is crucial, particularly for people with limited qualifications, skills, and access to working capital and enterprise training (Al Mamun et al., 2019). Also, Bird (2019) reported that EC and ES had not been characterized or tested in representative populations, nor were they empirically linked to outcomes. More systematic research on these aspects would undoubtedly be a good step forward in future entrepreneurship studies. Hence, this study gives an empirical analysis for testing EC, ES, and ER and their impact on ED among Ghanaian SMEs.

In filling the gaps created in the academic literature, this study examines the factors (i.e., entrepreneurial competence, entrepreneurial skills, and entrepreneur role) that influenced entrepreneurial development among SMEs in Ghana. The current research makes several contributions to entrepreneur development and entrepreneur competence. Although the impact of an entrepreneur on business success has been well documented, investigating the effects of EC, ES, and ER on ED is intriguing. The contributions of the current study are three folds. Firstly, the study sheds light on entrepreneurship competence, skills and roles by showing how these factors affect entrepreneurship development. There is the necessity of studying key competencies, essential skills, and roles of entrepreneurs in today's field of entrepreneurship studies. This is because various studies on entrepreneurship development are still not clear on

what variables can affect ED. Secondly, there are limited and real literary works based on the factors that can lead to ED among SMEs, especially in developing economies such as Ghana. The limited academic literature available in Ghana and the developing countries makes this study a pioneer to fill a vacuum in the literature and contribute to a theoretical understanding of the EC, ES, ER, and their association with ED. Thirdly, this paper also contributes to the literature on EC, ES, and ER in strategic management and entrepreneurship by revealing how firms in the informal sector might use intrinsic competencies and skills to innovate and sustain development and success in a turbulent and unpredictable environment. In addition, the results of this study provide a theoretical foundation for future research into the informal sector in emerging economies with similar features to the current situation under investigation

This paper consists of six main sections. Section 1 focuses on the research background, objectives, and contribution of the study to entrepreneurship. Section 2 focuses on the theoretical framework and hypothesis development of the study. Section 3 focuses on the material and method of the current study. Section 4 will expound on the findings based on hierarchical regression analysis. Section 5 will present this work's interpretation of the findings, leading to practical and theoretical consequences, and the conclusion and future research.

## **Theoretical Framework and Hypothesis Development of the Study**

### **John Kunkel's Theory of Entrepreneurship Development (ED)**

Entrepreneurship development is a program, strategy, or process aimed at identifying, nurturing, supporting, and growing skills on a larger scale to bring new business leaders into the market and minimize unemployment, health issues, educational issues, and environmental issues. This study employed John Kunkel's theory of entrepreneurship development. This theory was propounded by Kunkel John (1997), which is connected to the behavioral ways of studying entrepreneurship. The theory is based on the premise that social structure is crucial in shaping the behavior of entrepreneurs. The entrepreneurial behavior theory was proposed concerning the growth of entrepreneurship. Kunkel's theory focuses on people's expressive behaviors and ties to their previous and current surroundings, social structures, physical conditions, and behavioral patterns governed by reinforcing and opposing elements in the environment. Kunkel's theory argues that social norms in an entrepreneurial environment define an individual's entrepreneurial skills (Aparna, 2021; Goniri, 2020; Kunkel John, 1997).

Kunkel John (1997) further proposed that the development and supply of an entrepreneur depend upon the four (IV) fundamental structures; i. Demand Structure is economical, and he contends that entrepreneurs should adjust it daily in response to economic progress and government regulations. By influencing the significant parts of demand structure, entrepreneurs' behavior can be more efficient and enterprising. ii. The opportunity structure of the entrepreneurial potential is created by a mix of capital supply, technical skills, managerial skills, labor and market, possibilities for training, and the possibility of setting up a business and executing various activities. iii. Labor structure indicates the quality of the labor force influences the emergence and ED. He further argues that rather than entrepreneurs focusing on capital-intensive approaches, the entrepreneur interests will be better served by focusing on intense development. Wherever business is encouraged, worker immobility can be alleviated by providing infrastructure, such as reliable transportation. iv. Limitation structure comprises the social and cultural limitations that impact the development of an entrepreneur. This theory is

essential in this study due to its connection to ED, which necessitates critical abilities for entrepreneurs to thrive.

### **Creativity and Innovation, and Entrepreneurial Development**

Entrepreneurship development can be better appreciated when entrepreneurs understand and blend creativity and innovation in their business operations. Therefore, this research dwells on Joseph A. Schumpeter's writings on innovation and entrepreneurship theory. Schumpeter, like orthodox economists, initially argued that the power of the small business owner was critical in fostering innovation, new jobs, and growing living standards. Furthermore, the entrepreneur was considered an antidote to massive corporate concentration because established industries are occasionally usurped by upstart enterprises and new technologies that replace older businesses and technologies. According to Schumpeter, "*creative destruction*" is a process in which younger industries replace older industries and their products. The growth of new products arises due to entrepreneurship (Audretsch & Fritsch, 1996; Spencer & Kirchhoff, 2006). This research was motivated by cognition of creativity and innovation and entrepreneurial growth as a framework-specific mindset. The idea is to figure out how the various components of the structure interact. The compositional insight of innovation and creativity was ascertained by developing the relationship between innovation and creativity for ED, which was postulated and explained as a technique for solving entrepreneurship challenges and reach long-term economic growth (Juliana et al., 2021).

### **Entrepreneurship Competency and Entrepreneurship Development**

Competence is defined as the ability to successfully carry out a fully defined activity that is developed through learning experiences and for which three types of knowledge are integrated, depending on the field of knowledge: conceptual (knowing how to know), procedural (knowing how to do), and attitudinal (learning how to think) (Rivera-kempis & Valera, 2021). (Volery et al., 2015) described in their research competencies as combined and interrelated aspects of knowledge, abilities, and dispositions. Competencies can be discovered, changed, and increased due to experience, training, or coaching. According to Behling & Lenzi (2019), EC makes Individuals more aware of their surroundings and improves their capacity to customize internal resources to gain a competitive advantage. Primary characteristics such as basic and particular information, reasons, traits, self-image, positions, and talents are essential for startup, survival, and growth (Bird, 2019). Competencies in spotting opportunities, organizing competencies, formulating plans, developing relationships, and making commitments are among the five categories of EC (Nur Sumawidjaja, 2019).

In this study, EC is defined as the ideal integration of experience, skills, attitudes, and values embodied through implementing a series of contextually relevant behaviors oriented to creating sustainable companies generated by capitalizing on lucrative opportunities for ED. Ahmad et al. (2010) investigated the impact of entrepreneurial skills and the moderating role of the business environment on SME's business success in Malaysia. The findings revealed that entrepreneurship competence was a significant predictor of small and medium business performance in Malaysia. (Zizile 2018) looked into the impact of entrepreneurial skills on the success of female entrepreneurs in South Africa. According to the findings of this study, entrepreneurial skills are critical for the survival and performance of SMEs. In this study three

key variables were selected for EC, which include Opportunity Identification competence (OIC), Personal Entrepreneurial Competencies (PECs), and Technological and Innovation Competency (TIC).

### Opportunity Identification Competency (OIC)

OIC specifically refers to the ability to spot prospects, capture opportunities, understand client demands, and so forth. Individuals develop various business ideas that may become a real opportunity during business idea generation. Those business ideas that have the most potential for success are chosen for review. A study of entrepreneurial opportunity identification has the potential to answer one of our time's most perplexing philosophical questions: how to create new value in society (Puhakka, 2015; Gregori et al., 2021). Davidsson (2015) concluded that because OIC is a primary influencing factor for new value development, it is crucial for competitiveness in today's dynamic and uncertain business climate. Identifying an opportunity for establishing a new business is an essential capability of a successful entrepreneur, and it is a critical topic in entrepreneurship research. A fresh mix of thoughts, awareness, and resources is referred to as opportunity creation. Cai Li et al., (2020) posited that opportunities are created by accumulating entrepreneurial aspirations and activity rather than by entrepreneurs themselves. Based on the nature and features of the prospects, they plan and implement subsequent operations such as the formation of a new enterprise. Thus, the following hypothesis is presented:

*H1: Opportunity Identification Competency (OIC) has a positive relationship with entrepreneurship development*

### Personal Entrepreneurial Competencies (PECs)

Personal competency refers to key personal skills and talents that aid in developing personal power and improve an individual's efficacy in executing difficult jobs such as running one's own business. This can involve self-control and stress tolerance, as well as motivation and self-belief, emotional intelligence and self-awareness, and self-management (Al Mamun et al., 2019; Reis et al., 2021). PECs are attributes that assist and define an entrepreneur's attitude and behavior. Unique traits are hidden under the guise of PECs, including knowledge, abilities, and attitudes (Arafeh, 2016). In this study, Table 1 categorizes some personal entrepreneurial qualities that characterize effective entrepreneur conduct. The risk-taking abilities to practice entrepreneurs were the weakest. Students' abilities often differ significantly by school, age, gender, or year (Duyan, 2019). Thus, the following hypothesis is presented:

*H2: Personal Entrepreneurial Competencies (PEC) Competency has a positive relationship with Entrepreneurship development*

<b>Table 1</b> <b>PERSONAL ENTREPRENEURIAL COMPETENCIES</b>	
Entrepreneur Personal Competencies	Meaning and Strategies
Efficiency	Efficiency: refers to an entrepreneur's and their employee's capacity to operate effectively without making bad decisions or wasting time, money, or energy.
Opportunity Seeking	Actively looking for opportunities in the environment can start a business, create a new market, or improve business operations.
Persistence	Persistence is described as working toward a goal despite others believing you will fail or waste your time and effort.

Risk-taking	Taking risks involves doing things that are outside of your comfort zone
	Taking a chance in any of the following ways: risk-taking ranges from high to moderate to low risk-taking.
Setting Achievable goals	Every step is meticulously planned, and judgments are made depending on where he wants to go—setting individually relevant and challenging goals and objectives.
Self-confidence	Believing in his abilities and accepting his flaws. Self-awareness and belief in one's skills make any endeavor or activity easier to complete.
Planning and controlling in a systematic manner	Breaking down giant jobs into time-constrained subtasks is an excellent way to prepare.
	Financial records are kept and used to make business choices.
Information Seeking	The act of acquiring information from appropriate sources is known as information seeking. The knowledge obtained is crucial in the development of various company strategies.
Commitment to work contract	Initiating something with a lot of time and attention because you believe it is proper and vital.

### Technological and Innovation Competency (TIC)

Entrepreneurs should see today's world as the 'technological age' where competition has become knowledge-based. Technological development and innovation have taken the focal point in the growth and development of business. In the twenty-first century, technology and innovation are crucial in the story of an entrepreneur. As a result, instead of adhering to the old business model, a business owner should embrace new business practices. Firms with more robust technological capabilities may have more specialized resources and expertise and indulge in more specialized strategic issues. These elements enable businesses to gain a competitive advantage and increase earnings while also boosting organizational performance (Höflinger et al., 2018; Alnafray et al., 2019; Lin & Lai, 2021). Due to the rapid development of information and communication technologies, notably the internet. Entrepreneurship has been more relevant as a source of long-term economic growth since the “*new economy*” arose when innovative ideas transformed this knowledge into value-generating products and services (Rivera-Kempis & Valera, 2021). Thus, the following hypothesis is presented:

*H3: Technological and Innovation Competency (TIC) Competency has a positive relationship with entrepreneurship development.*

### Entrepreneurial Skills (ES) and Entrepreneurship Development (ED)

Entrepreneurial skill acquisition is critical for societal development because it aids in creating jobs and economic prosperity (Dabo, 2018). Critical thinking, problem-solving, locating and evaluating information, effective communication, and teamwork are examples of skills that can help entrepreneurs stay one step ahead of the game in business. These skills have also played a significant role in human history (Constable, 2021). Shamsudin et al., (2017) observed that ES, market orientation, and networking all positively impact entrepreneurial competency. According to their study results, entrepreneurial competency has a substantial mediating effect on the linkages between entrepreneurial skills, market orientation, networking, and firm performance. Entrepreneurs and entrepreneurial employees can use these skills to initiate and adapt to change. They can be cultivated through entrepreneurship education and training that emphasizes developing an entrepreneurial mentality and habits (Worke, 2020). In this study, three key

variables were selected for ES, which includes; Critical Thinking Skills (CTS), Effective Communication Skills (ECS), and Problem-Solving Skills (PSS).

### **Critical Thinking Skills (CTS)**

Critical Thinking Skills can be defined as the process of deciding on a course of action. Self-directed, self-disciplined, self-monitored, and self-corrective thinking are all aspects of it. Critical thinking is a reflective process aimed at deciding what to believe and what business to pursue. Through conception, observation, analysis, and evaluation, the entrepreneur makes meaningful decisions. According to Figliuolo (2019), entrepreneurs' critical thinking is the ability to think critically and independently and make intelligent judgments to succeed. A study conducted by (Dabo, 2018) demonstrated that essential entrepreneurs continually look for and evaluate new opportunities, manage risk, and learn from their mistakes. Entrepreneurs can use critical thinking to conceptualize, observe, analyze, and assess before product invention. Individuals respond in various dynamic situations with differing degrees of thought diffusion across minds and tools (Guerrero & Wanjiru, 2021). Thus, the following hypothesis is presented:

*H4: Entrepreneur Critical Thinking Skills (CTS) is positively related to entrepreneurial development.*

### **Effective Communication Skills (ECS)**

According to (Lucas et al., 2016) potential entrepreneurs typically have trouble converting their passion for a business or product idea into their strategies, resulting in missed prospects for funding. Even unique ideas can fail if an entrepreneur does not communicate well. The entrepreneur should learn to be a good communicator. A company can be awe-inspiring, well-known, and worth millions of dollars, but everything can go wrong if there is poor communication, regardless of how large the company is. Communication is worthless if it lacks purpose, clarity, and effect. Many experts argue that the most crucial skill for an entrepreneur to develop is communication.

Communication is a crucial element for business success since it facilitates understanding among individuals and groups of organizations. An entrepreneur must be a strong communicator, and no business can create the necessary goodwill without good communication skills. Every business's success is determined by its ability to communicate (Afolabi et al., 2021). Communication is vital in any project involving two or more people since it is the glue that ties a company together. Communication ability is essential for disseminating crucial information and implementing business actions for long-term development (Afolabi et al., 2021). Thus, the following hypothesis is presented:

*H5: Entrepreneur Effective communication skill (ECS) is positively related to Entrepreneurial Skills.*

### **Problem-Solving Skills (PSS)**

Problem-Solving Skills require that entrepreneurs be very creative and come out with ideas that can enable them to solve any problem or challenges encountered in the operation of the business. PSS demand that the entrepreneurs analyze and evaluate issues better, which will increase the opportunity to discover a better solution. Entrepreneurs must improve their



creativity and critical thinking skills. The study provides a list of some problem-solving abilities that entrepreneurs should possess; critical thinking, creativity, evaluate details, initiative, persistence, flexibility, self-discipline, and decisiveness.

Problem-solving abilities refer to a person's capacity to deal effectively with challenging or unexpected problems in their life, workplace, or community. The availability of knowledge, active participation in collaborative activities, and critical thinking are essential factors in developing problem-solving skills. A person with strong problem-solving skills may be more confident in their capacity to meet social needs or resolve social problems. In addition, active participation in society raises social consciousness and, as a result, improves social awareness, which aids in developing social problem-solving abilities (Rashed & Polas, 2020). Thus, the following hypothesis is presented:

*H6: Entrepreneur Problem-Solving Skills (PSS) is positively related to entrepreneurial development.*

## **Roles of Entrepreneurs and Entrepreneurship Development**

Successful entrepreneurs can serve as role models in their communities by offering guidance or acting as stakeholders (partners, investors, suppliers, and consumers) for other businesses (Wyrwich et al., 2019). Entrepreneurship is about social innovation and social entrepreneurship through innovative business models where companies can sustain the business and contribute meaningfully to society through the effort of their employees. Therefore, entrepreneurs should have a vision that aims at the sustainability of humans. There is a lot of evidence that the national economic environment, shaped by economic, institutional, and socio-cultural elements, has a significant impact on entrepreneurship and economic development (Martínez-fierro, 2020). In this studies two key variables were selected for ER; Job Creation Role (JCR) and Role in economic development (RED)

### **Job Creation Role (JCR)**

Entrepreneurship is widely recognized as a crucial driver of job creation and innovation and contributes to national economic progress (Cai Li et al., 2020). Entrepreneurs have a critical role in creating jobs, revenue, and value-added to society, all of which are essential components of economic development and are needed now more than ever, as reported by (Global Entrepreneurship Monitor, 2021). Therefore, it has become crucial for entrepreneurs to create more jobs in recent times. The importance of entrepreneurs in producing jobs in the twenty-first century cannot be overstated. By creating new items or raising competition, new businesses can boost demand, resulting in more jobs and lower unemployment. SMEs in Africa contribute to economic progress by creating jobs in a variety of industries, improving living standards, increasing industrial production and export, social enrichment, and governmental stability, and they are a significant source of revenue in many of these economies, including Ghana (Ibidunni, Ogundana, & Okonkwo, 2021). Thus, the following hypothesis is presented:

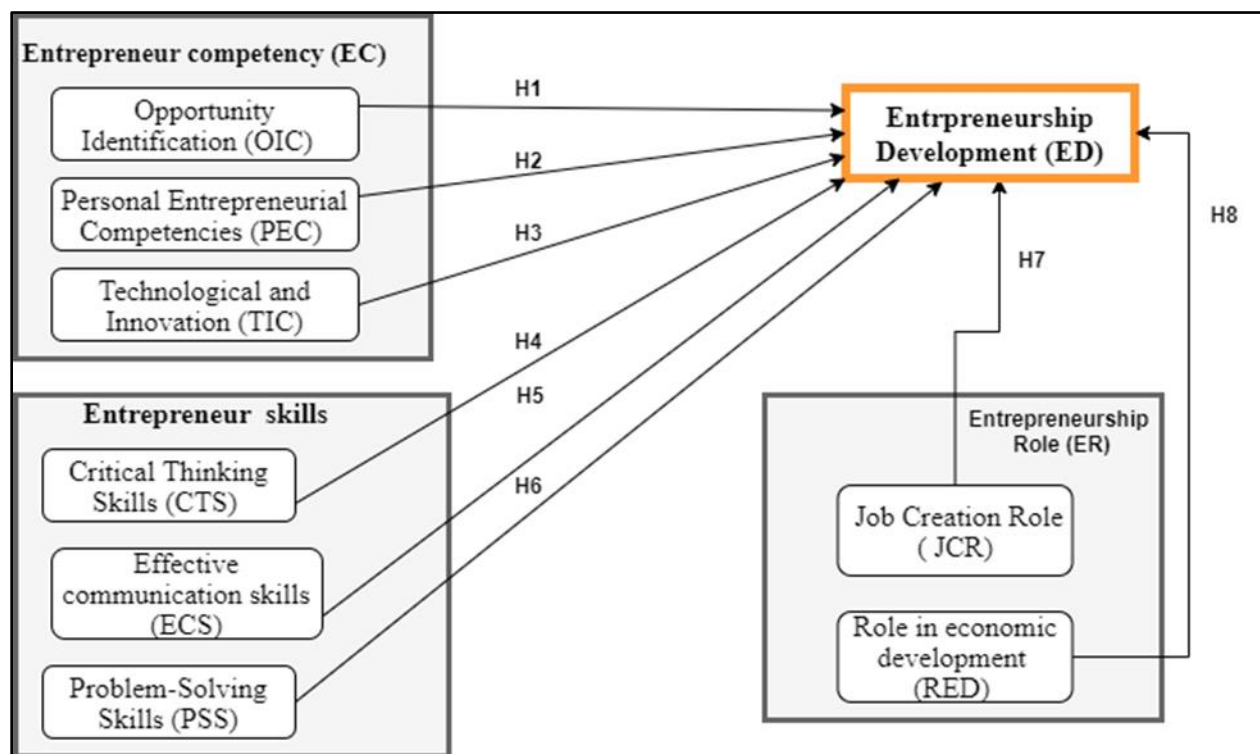
*H7: Entrepreneurship role in job creation is positively related to entrepreneurship development.*

## Role in Economic Development (RED)

Ashrafi et al. (2020) argued that as a human response to social and environmental concerns, social entrepreneurs can be identified as the possible solution to economic, societal, and ecological problems facing the world globally. Thus, the primary goal of social entrepreneurship is to create societal benefit rather than personal or shareholder gains, and this action is distinguished by innovation, or the creation of something new, as opposed to just returning existing enterprises or activities. Entrepreneurs in both the social and economic sectors have similar aspirations and possibilities and the capacity to persuade and empower people to help them realize their goals (Ashrafi et al., 2020).

SMEs contribute significantly to economic growth and citizen participation all around the world. With developing economies, the assumption is as accurate as developed economies (Ibidunni et al., 2021). Entrepreneurial ventures, according to (Shobhit, 2021), contribute to the production of new wealth. Existing companies may be restricted to their current markets and may be approaching a revenue constraint. Entrepreneurs' innovative and improved products, services, or technology enable the growth of new markets and the creation of new riches. Figure 1 shows the theoretical model and proposed relationships of the study. Thus, the following hypothesis is presented:

*H8: Entrepreneurship role in economic development is positively related to entrepreneurship development.*



**FIGURE 1**  
**PROPOSED RESEARCH MODEL**

## METHODS

### Participants and Procedures

Participants in this research stemmed from Ghanaian SMEs that operate in the informal sector. These SMEs are monitored under the auspices of the NBSSI. In collecting the primary data from respondents, a structured questionnaire was used. The data collection process took place between June and September 2021. Permission and approval were taken from the managers and owners of the various SMEs in three regions in Ghana (Greater Accra Region, Ashanti Region, and Central Region); participants were then contacted to fill the questionnaires. A total of (N=740) structured questionnaires were distributed among Managers/Owners, Marketing/Sales Managers, and Supervisors. The researchers used simple random sampling to select the participants for the study. In a simple random sample, all respondents are given an equal probability of being selected. The researchers directly administered the questionnaires; hence there was no need to train any persons during this research. Following a brief encounter, questionnaires were handed and instructions on how to reply to individual items. This mode of administering the questionnaires guaranteed that respondents completely comprehended the work at hand. The response rate was 87% (N=650) at the end of the survey, showing a high response to the study's questionnaire.

### Measures

The study's measuring constructs were all based on a 5-point Likert scale (1, strongly disagree; 2, disagree; 3, neither agree nor disagree; 4, agree; and 5, strongly agree). The following is a breakdown of how each construct was quantified:

#### Entrepreneurship Development (ED)

Five (5) items were utilized to evaluate ED, including innovation, risk mitigation, competitive edge, building capacity, and empowerment which were adapted from (Juliana et al., 2021). ED had a reliability score of  $\alpha=0.895$  of this scale exhibited an acceptable. ED consisted of items which include (e.g., Capacity development is of prior interest to me in my company, I usually utilize innovative ways in the operations of my business).

#### Entrepreneur Competency (EC)

Entrepreneur Competencies were assessed with 12 items measuring three different theoretical dimensions; Opportunity Identification competence (OIC), Personal Entrepreneurial Competencies (PECs), and Technological and Innovation Competency (TIC). OIC consisted of 4 items: (e.g., If there are opportunities, I know how I can be one of the first to take them; I can have the courage to seize opportunities) which was adapted from the (Shekhar, 2007). OIC had a reliability score of  $\alpha=0.866$  of this scale exhibited an acceptable. PECs consisted of 4 items which include (eg I am able to identify my strengths and weaknesses and match them with opportunities and threats; I am able to manage my own career development) which was adapted from (Hallyyev, 2019). PECs had reliability of  $\alpha=0.754$  for the construct variables. TIC also comprised 4 items (e.g., I utilize technological and innovative knowledge relevant to the

business; I take advantage of new technology and innovation in my company) and had a reliability score of  $\alpha=0.823$ .

### **Entrepreneurs Skills (ES)**

Entrepreneur skills were assessed with 12 items measuring three different theoretical dimensions; Critical Thinking Skills (CTS), Effective Communication Skills (ECS), and Problem-Solving Skills (PSS). CTS also comprises four (4) items (e.g., I am able to analyze, evaluate and challenge fallacies and assumptions in my company; I think about one's own thinking through metacognition) and CTS had a reliability score of  $\alpha=0.871$ . ECS had a reliability score of  $\alpha=0.764$  and consisted of 4 items which include (e.g., The ability and skill to listen, read, write, and speak is necessary for business; I am able to establish and disseminate the goals of the enterprise through writing and speaking) which was adapted from (Joy, 2015). PSS had reliability of  $\alpha=0.745$  for the construct variables. PSS consisted of 4 items which include (eg. I am able to recognize, understand and evaluate the cause-and-effect relationships about issues and problems; I am able to evaluate and analogize relationships between pieces and sources of information; I am creative in problem-solving) which was adapted from the (Agboeze & Ugwoke, 2013).

### **Entrepreneur Roles (ER)**

Entrepreneur roles were assessed with eight (8) items measuring two different theoretical dimensions; (Job Creation Role (JCR), Role in Economic Development (RED)). JCR had a reliability score of  $\alpha=0.758$ , of this scale, exhibited an acceptable. JCR consisted of 4 items: (e.g., Job creation is among the reasons for starting my entrepreneur business; I plan to expand my business to employ more people). RED consisted of 4 items which include (eg. I pay my taxes regularly; I participate in community development in the setting of business. RED had reliability of  $\alpha=0.854$  for the construct variables.

### **Data Analyses**

A descriptive statistical analysis was carried out. Pearson's correlations were used as a starting point. Four hierarchical regressions were used to investigate the EC, ES, ER, and ED correlations. In four blocks, predictor variables were entered into the regression equation. The researchers incorporated socio-demographic factors (gender, age, position, and business size) (Model 1). In the second step, opportunity identification competence (OIC), personal entrepreneurial competencies (PECs), and technological and innovation competence were added in (Model 2). In the third step (Model 3) the researchers added (Critical Thinking Skills (CTS), Effective Communication Skills (ECS) and Problem-solving Skills (PSS) as a predictor of ED. Finally, in the fourth step (Model 4), the researchers added entrepreneur roles (Job Creation Role (JCR) and Role in Economic Development (RED)) as a predictor to ED. In evaluating the data in this study, the SPSS-23.0 version was employed. In this study, hierarchical multiple regression was used to determine the predictive impact of independent variables on the dependent variable.

## RESULTS

### Profile of Participants

The socio-demographic information of the participants includes; 435 males (67%) and 215 (33%) females. The age range of the participants was from 20 to 60+ years ( $M=3.56$ ,  $SD=1.40$ ). Educational background indicated that: 13%  $n=78$  had no formal education, while 38%  $n=245$  Senior High School educations, 33%  $n=220$  had technical or vocational training, 9%  $n=63$  had Higher National Diploma or Bachelor's degree and 7%  $n=44$  had a postgraduate degree. Concerning the business size: 63%  $n=410$  indicated that their business could be categorized as a small business while 37%  $n=240$  can be classified as a medium enterprise. Participants' position from the survey shows that: 76%  $n=496$  were owners or managers, 16%  $n=102$  were sales/marketing managers and 8%  $n=52$  were supervisors.

### Pearson's Correlation Analysis among variables

Results of Pearson's correlation between several predictive and the outcome variables has been indicated in Table 2. Opportunity Identification competence (OIC) is significantly correlated with ED ( $r=0.107$ ,  $p<0.05$ ). Personal Entrepreneurial Competencies (PECs) is correlated to ED ( $r=0.178$ ,  $p<0.05$ ). Technological and Innovation Competency (TIC) is also correlated to ED ( $r=0.123$ ,  $p<0.05$ ). Critical Thinking Skills (CTS) had a correlated of ( $r=0.508$ ,  $p<0.05$ ). Effective Communication skills (ECS) was also correlated with ED ( $r=0.502$ ,  $p<0.05$ ). Problem-Solving Skills (PSS) is highly correlated to ED ( $r=0.0421$   $p<0.05$ ). Job Creation Role (JCR) ( $r=0.333$ ,  $p<0.05$ ) and Role in Economic Development (RED) ( $r=0.490$ ,  $p<0.05$ ) were also correlated with ED.

**Table 2**  
**CORRELATIONS BETWEEN VARIABLES**

Variables	1	2	3	4	5	6	7	8	9	M	SD
ED	1									3.83	0.848
OIC	0.107**	1								4.39	0.73
PEC	-0.028	0.178**	1							4.59	0.705
TIC	0.111	0.445	0.123**	1						4.55	0.614
CTS	0.094	0.301	0.022	0.451**	1					4.51	0.676
ECS	0.067	0.222	0.035	0.387	0.502**	1				4.62	0.682
PSS	0.168	-0.067	0.038	-0.062	-0.029	0.0421**	1			4.33	0.864
JCR	0.471	0.001	-0.073	0.017	0.036	0.023	0.333**	1		3.84	0.92
RED	0.732	0.124	-0.083	0.108	0.115	0.031	0.212	0.490**	1	4.01	0.785

*Note: Pearson correlations (r); \*  $p<0.05$  (2-tailed); \*\*  $p<0.01$  (2-tailed); ED= Entrepreneurship Development, OIC=Opportunity Identification Competence, PEC= Personal Entrepreneurial Competencies, TIC= Technological and Innovation Competency, CTS= Critical Thinking Skills, ECS= Effective Communication skills, PSS= Problem-Solving Skills, JCR = Job Creation Role, RED= Role in Economic Development*

**Table 3**  
**HIERARCHICAL MULTIPLE REGRESSION ANALYSIS**

Model	Variable	Adjusted R2	R2 change	F change	Unstandardized Coefficients (B)	Standardized Coefficients (β)	t	VIF
	Step 1	0.005	0.011	1.897**				
	Gender				-0.069	-0.039	-.981**	1.068
Model 1	Age				0.021	0.019	.461**	1.118
	Position				-0.032	-0.04	-1.026	1.011
	Business Size				0.201	0.091	2.291**	1.064
	Step 2	0.019	0.018	4.137**				
	Gender				-0.057	-0.032	-0.814	1.074
	Age				0.015	0.013	0.324	1.123
	Position				-0.019	-0.023	-0.593	1.031
	Business Size				0.214	0.097	2.441	1.075
Model 2	OIC				0.083	0.071	1.631**	1.295
	PECs				-0.069	-0.057	-1.461**	1.04
	TIC				0.12	0.086	1.999**	1.277
	Step 3	0.05	0.035	8.227**				
	Gender				-0.066	-0.037	-0.955	1.076
	Age				0.009	0.008	0.197	1.125
	Position				-0.007	-0.009	-0.23	1.039
	Business Size				0.222	0.101	2.572	1.076
	OIC				0.091	0.078	1.801	1.322
	PEC				-0.079	0.065	-1.695	1.047
	TIC				0.114	0.082	1.761	1.535
	CTS				0.062	0.049	1.058**	1.521
Model 3	ECS				-0.023	-0.018	-.409**	1.426
	PSS				0.183	0.186	4.861**	1.033
	Step 4	0.558	0.502	379.736**				
	Gender				0.028	0.016	0.583	1.092
	Age				0.015	0.014	0.505	1.126
	Position				-0.025	-0.031	-1.177	1.042
	Business Size				0.203	0.092	3.451	1.077
	OIC				-0.01	-0.009	-0.291	1.34
	PECs				0.036	0.03	1.131	1.066
	TIC				0.046	0.033	1.044	1.542
	CTS				-0.024	-0.019	-0.603	1.533
	ECS				0.045	0.036	1.163	1.442
	PSS				-0.029	-0.029	-1.045	1.181
	JCR				0.145	0.157	5.070**	1.456
Model 4	RED				0.717	0.663	21.917**	1.386

Note: \* $p < 0.10$ ; \*\* $p < 0.05$ , \*\*\* $p < 0.001$ ; ED= Entrepreneurship Development, OI=Opportunity Identification competence, PEC= Personal Entrepreneurial Competencies, TIC= Technological and Innovation Competency, CTS= Critical Thinking Skills, ECS= Effective Communication skills, PSS= Problem-

### Predictive Variables' effects on ED

As shown in Table 3, the effects of predictive variables on entrepreneurial development (ED) were explored in this study using hierarchical multiple regression. The Durbin-Watson score of 2.026, is within the acceptable range of 1.5 to 2.5, making the hierarchical regression model a good fitness test for the study. All variables have tolerance values ranging from 0.1 to 1.0, with a VIF value of less than 5, indicating that the model is free of multicollinearity.

Hierarchical regression surprisingly indicates that in model 1, gender ( $\beta = -0.039$ ,  $p < 0.10$ ) and position of participants ( $\beta = -0.040$ ,  $p < 0.10$ ) have a negative relation with ED. However, age of respondents ( $\beta = 0.019$ ,  $p < 0.10$ ) and business size ( $\beta = 0.091$ ,  $p < 0.10$ ) has a positive relationship with ED. Moreover, model 1 used in this study was determined to be statistically relevant at [ $F = 1.897$ ;  $p < 0.05$ ], and it explains 1.1 percent of the variance.

Model 2 shows that three independent variables: Opportunity Identification competence ( $\beta = 0.078$ ,  $p < 0.05$ ), Personal Entrepreneurial Competencies ( $\beta = 0.065$ ,  $p < 0.05$ ) and Technological and Innovation Competency ( $\beta = 0.082$ ,  $p < 0.05$ ) have predictive impact on entrepreneurial development (ED). This model was similarly shown to be statistically significant in explaining ED, with [ $F = 4.137$ ;  $p < 0.001$ ] and a variance of 1.8 percent.

Model 3 was found to be statistically significant [ $F = 8.227$ ;  $p < 0.001$ ] and explained a 3.5 percent overall variance in determining ED. This model comprised two independent variables, Critical Thinking Skills ( $\beta = 0.049$ ,  $p < 0.05$ ) and Problem-Solving Skills ( $\beta = 0.186$ ,  $p < 0.05$ ), which were significant and predictive factors of ED. The coefficient of effective communicating skills ( $\beta = -0.018$ ,  $p > 0.10$ ) was a non-significant variable to ED.

Model 4 reveals that two independent variables, Job Creation Role ( $\beta = 0.157$ ,  $p < 0.05$ ) and Economic Development Role ( $\beta = 0.663$ ,  $p < 0.05$ ), have a predictive impact on entrepreneurial development (ED). [ $F = 379.736$ ;  $p < 0.001$ ] was also determined to be statistically significant for this model. Table 4 contains a summary of the hypothesis and the outcomes.

Table 4 SUMMARY OF HYPOTHESIS TESTING RESULTS		
Hypothesis	Hypothesis Contents	Decision
H1	Opportunity Identification (OIC) Competency has a positive relationship with Entrepreneurship development	Supported
H2	Personal Entrepreneurial Competencies (PECs) Competency has a positive relationship with Entrepreneurship development.	Supported
H3	Technological and Innovation Competency (TIC) Competency has a positive relationship with Entrepreneurship development	Supported
H4	Entrepreneur Critical Thinking Skills (CTS) is positively related to Entrepreneurial development	Supported
H5	Entrepreneur Effective communication skill (ECS) is positively related to Entrepreneurial development.	Not Supported
H6	Entrepreneur Problem-Solving Skills (PSS) is positively related to Entrepreneurial development.	Supported
H7	Entrepreneurship role in job creation is positively related to entrepreneurship development	Supported

H8	Entrepreneurship role in economic development is positively related to entrepreneurship development	Supported
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## DISCUSSION

This research aimed to study the relationship between entrepreneurial competency, entrepreneurial skills, and the entrepreneur's role in influencing the growth and development of SMEs in Ghana. In particular, the researchers examined the relations between entrepreneur competencies like Opportunity Identification competence (OIC), Personal Entrepreneurial Competencies (PECs) and Technological and Innovation Competency (TIC), some entrepreneur skills like (Critical Thinking Skills (CTS), Effective Communication Skills (ECS)), and Problem-Solving Skills (PSS) and some entrepreneur roles like Job Creation Role (JCR) and Role in Economic Development (RED) as a predictor of ED. Hierarchical regression was used to test eight hypotheses developed for this study through an extensive literature review. Gender, business, size, the position of respondents were the control variables for this study.

The study results supported the researchers' first hypothesis, which stated that Opportunity Identification (OI) Competency has a positive relationship with ED. The implication is that entrepreneurs with higher OIC tendencies showed an increased degree of ED. This result is consistent with the study of (Cai Li et al., 2020; Foss & Klein, 2016), who found that opportunity discovery aids individuals in identifying and exploiting opportunities because identification is based on previous understanding. Similarly, exploitation is based on cognitive abilities, leading to the discovery of new opportunities and the formation of innovativeness. As entrepreneurial efforts develop entrepreneurial opportunities, opportunity discovery will aid in identifying and exploiting those opportunities which can lead to ED.

This study's second hypothesis stated that personal entrepreneurial competencies (PECs) have a positive relationship with entrepreneurship development. The hierarchical regression results provided statistical proof to support this hypothesis. PECs have proved to be an essential element of ED. A study by (Jamie & Oliver, 2020) indicated that entrepreneurial core competencies like personal traits are positively related to business success. Also, a survey conducted by Al Mamun et al., (2019) revealed that the role of entrepreneur PECs such as risk-taking propensity and entrepreneur self-efficacy has a significant effect on SMEs performance in Malaysia.

This study's third hypothesis was supported, which stated that technology and innovation competency (TIC) has a positive relationship with entrepreneurship development. The hierarchical regression results indicated that TIC has a positive relation with ED. Thus, entrepreneurs with high knowledge in technological advancement and innovation are expected to develop their business operations. (Lin & Lai, 2021) indicated that firms' technical ability is a vital resource and distinctive competency that helps them produce value. Firms with more robust technology capabilities may attract more specialized resources and people and engage in more specialized strategic initiatives. Businesses can use these qualities to gain a competitive advantage, increase profitability, and improve organizational performance (Höflinger et al., 2018).

This study's fourth hypothesis, which stated that entrepreneur critical thinking Skills (CTS) are positively related to entrepreneurial development, was supported. The results indicate that there is a significant relation between CTS and ED. This finding is in unison with the studies by (Dabo, 2018), who noted that critical thinking among entrepreneurs substantially impacts



young people's attitudes toward acquiring entrepreneurial abilities. The researcher's studies also demonstrated that essential thinking entrepreneurs are continually looking for and evaluating new opportunities, managing risk, and learning from their mistakes. Entrepreneurs can use critical thinking to conceptualize, observe, analyze, and assess before product invention.

Hypothesis five of this study examined the effect of entrepreneur effective communication skills (ECS) on entrepreneurial development. Interestingly our hypothesis was not supported. The implication is that entrepreneurs with a high level of ECS do not necessarily mean that his or entrepreneurial development is guaranteed. Afolabi et al. Fawale (2021) argued that despite the importance of communication skills in society and business, entrepreneurs face several obstacles, including a lack of strategic consistency, a lack of marketing budget, ambiguity on a business issue, a lack of creativity and innovation, and a complex set of cultural and social values. Good business communication, which promotes trust and teamwork among employees, is a need for successful leadership. As a result, business success is only possible when entrepreneurs have adequate business communication abilities. Therefore, it has become critical to examine the acquisition of business communication skills by entrepreneurs to ensure long-term development (Afolabi et al., 2021).

Referring to hypothesis six, which stated that entrepreneur problem-solving skills (PSS) is positively related to entrepreneurial development, was supported in this study. Thus, PSS is positively associated with ED. This means that entrepreneurs with high PSS are expected to understand how to deal with and confront problems in their business operation, which will improve their entrepreneurial development. This study is congruent with a recent survey conducted by Rashed & Polas (2020), which found a positive relation between PSS, networking ability, and entrepreneurial knowledge with social entrepreneurial intention.

This study's hypothesis seven, which states that entrepreneurship role in job creation is positively related to entrepreneurship development, was supported. Thus, JCR has a positive impact on ED. Momani (2017) discussed the relevance of JCR of an entrepreneur in the economy. Their research observed that for past decades SMEs had provided job possibilities for many individuals in an economy. Lingering unemployment scenarios, which have become a global phenomenon, are a significant motivator for creating small enterprises worldwide. As a result, several small firms are founded, either by choice or by necessity. In any case, the existence of small enterprises creates job options for the unemployed who want to earn a living legally. Small enterprises also provide alternative sources of income for the employed, which eventually leads to more excellent job options (Momani, 2017).

Finally, our hypothesis eight, which stated that entrepreneurship's role in economic development is positively related to entrepreneurship development, was supported. This indicated that entrepreneur RED is positively associated with ED. Entrepreneurship expands financial options by providing information on capacity building and skill development, access to finance, and entrepreneurial development. By enhancing their expertise, entrepreneurs can become more competitive in the market. A prosperous economy is marked by the growth of ancillary firms that supply essential commodities, such as energy, and related industrial services, such as packaging, advertising, insurance, banking, and finance, including microfinance, transportation, and communication (Adenutsi, 2009). Doran et al. (2018) list several mechanisms for entrepreneurship to boost economic growth. Entrepreneurs can

- (i) Force efficiency on existing businesses by competing for existing market positions,

- (ii) Accelerate the rate of creative destruction, in which new firms drive industrial change by displacing existing firms,
- (iii) Stimulate the rate of innovation in industries, resulting in the opening of new markets, and
- (iv) Provide a more comprehensive range of new products, services, and processes, and
- (v) Provide a more comprehensive range of new products, services, and processes (Doran et al., 2018).

## CONCLUSION

This research extends the idea and concept of entrepreneur development among SMEs in developing economies like Ghana. The main research objectives of this research were to evaluate entrepreneur competence, entrepreneurial skills, and entrepreneur role that influenced entrepreneurial development among SMEs in Ghana. This research employed a sample size of 650; the research used the hierarchical regression technique to analyze and establish the relation between EC, ES, ER, and ED. Analysis from the study has shown that EC such as OIC, PECs, and TIC positively and significantly relates to ED. Secondly, the results from this study show that ES such as CTS and PSS have a positive relationship with ED. However, in this study, we found a negative association between ECS and ED. Thirdly, our findings also revealed that ER such as JCR and RED are positively associated with ED among SMEs in Ghana. The study's findings represent the necessary EC, ES, and ER for aspiring, emerging, and existing entrepreneurs in the informal sector to attain greater levels of innovation performance and development in a changing and highly competitive business environment. As a result, the curriculum design and training modules should provide suitable capacity building for entrepreneurs in Ghana.

## PRACTICAL AND THEORETICAL IMPLICATION

The study recommends that EC, ES, and ER tools be useful for developing entrepreneurship, driving SMEs to improve innovative strategies and policy changes in sustaining their business. This study also contributes to the literature on EC, ES, and ER by highlighting the most critical competencies and roles that can lead to ED. This is vital, mainly because entrepreneurs work in a resource-constrained setting. As a result, this research offers practical guidance for entrepreneurship stakeholders, such as entrepreneurs and governments, to identify critical skill areas for investment. The present research further contributes to the current literature and theory on entrepreneurial competencies by studying the role of EC in the context of a rising economy's informal sector. Thus, it is a critical contribution to the researchers' opinion because an understanding of entrepreneurial abilities has been mainly limited to explaining entrepreneurial success inside economies well regulated by government policies and laws.

Nevertheless, in the literature on the informal sector economies of developing economies like Ghana, awareness of the interventionist viewpoint of EC, ES, and ES in increasing SMEs' innovation performance and development has been limited. As a result, the use of hierarchical regression analysis to determine what specific EC, ES, and ER can help entrepreneurs' growth in a novel and essential dimension that supports the innovation performance of SMEs in Ghana. In

the researchers' opinion, this is the first study to look at EC, ES, and ER as predictors of ED in Ghanaian SMEs.

The paper also contributes to the literature on EC, ES, and ER in strategic management and entrepreneurship by revealing how firms in the informal sector might use intrinsic competencies and skills to innovate and sustain development and success in a turbulent and unpredictable environment. In addition, the results of this study provide a theoretical foundation for future research into the informal sector in rising economies with similar features to the current situation under investigation.

## LIMITATIONS AND FUTURE STUDIES

This study gives some preliminary information on aspects that may influence entrepreneurship development among SMEs. This study, however, has numerous limitations. The sample is undoubtedly small and unrepresentative, failing to consider the various features of the companies (size, sector, years of activity, etc.). As a result, the findings may be limited in their generalizability, which must be considered when interpreting the results. Notwithstanding, the valuable contributions call for additional research attention that can extend the entrepreneurial competencies and skills theory by investigating a cross-country perspective of developing economies to understand the macro-level impact of entrepreneurial competencies and skills on the sustainability of SMEs.

## REFERENCES

- Adenutsi, D.E. (2009). Entrepreneurship, job creation, income empowerment and poverty reduction in low-income economies. *MPRA Paper*, 29569.
- Afolabi, O.A., Segun, S.S., & Adebayo, F.A. (2021). Business Communication Skills Required by Entrepreneurs for Sustainable Development in Oyo State, Nigeria. *The Journal of Management Theory and Practice (JMTP)*, 2(1), 38–43.
- Agboeze, M.U., & Ugwoke, E.O. (2013). Enhancement of Critical Thinking Skills of Vocational and Adult Education Students for Entrepreneurship Development in Nigeria. *Journal of Education*, 4(17), 116–124.
- Ahmad, N.H., Ramayah, T., Wilson, C., & Kummerow, L. (2010). Is entrepreneurial competency and business success relationship contingent upon business environment? A study of Malaysian SMEs. *International Journal of Entrepreneurial Behaviour & Research*, 16(3), 182–203.
- Ajayi, Paul, O., & Gomna, G.G. (2021). *Entrepreneurial Marketing as a Panacea to the Growth of the Nigerian Informal Sector*. 13(9), 119–133.
- Al Mamun, A., Malaysia Kelantan, U., Bharu, K., Syed Ali Fazal, M., & Muniady, R. (2019). Entrepreneurial knowledge, skills, competencies and performance A study of micro-enterprises in Kelantan, Malaysia. *Asia Pacific Journal of Innovation and Entrepreneurship*, 13(1), 2398–7812.
- Alnafrh, I., Bogdanova, E., & Maximova, T. (2019). Text mining as a facilitating tool for deploying blockchain technology in the intellectual property rights system. *International Journal of Intellectual Property Management*, 9(2), 120–135.
- Amaglo, J.K. (2019). *Strategies for Sustainability of Small and Medium- Sized Enterprises in Ghana*.
- Amjad, T., Abdul Rani, S.H.B., & Sa'atar, S.B. (2020). Entrepreneurship development and pedagogical gaps in entrepreneurial marketing education. *The International Journal of Management Education*, 18(2), 100379.
- Aparna. (2021). *Theories of Entrepreneurship: 12+ Theories of Entrepreneurship*.
- Arafteh, L. (2016). An entrepreneurial key competencies' model. *Journal of Innovation and Entrepreneurship*, 5(1), 1–26.
- Ashrafi, D.M., Sarker, A.R., & Hashim, J.B. (2020). *An exploration of the youth's perception toward social entrepreneurship development : Evidence from*. 17(1), 88–104.
- Audretsch, D.B., & Fritsch, M. (1996). Creative destruction: Turbulence and economic growth in Germany.

- Behavioral Norms, Technological Progress, and Economic Dynamics*, 137–150.
- Behling, G., & Lenzi, F.C. (2019). Entrepreneurial competencies and strategic behavior: A study of micro entrepreneurs in an emerging country. *Brazilian Business Review*, 16(3), 255–272.
- Bird, B. (2019). Toward a theory of entrepreneurial competency. *Advances in Entrepreneurship, Firm Emergence and Growth*, 21, 115–131.
- Cai Li, Murad, M., Ashraf, S.F., Syed, N., & Riaz, M. (2020). *Entrepreneurial nascent behaviour: The role of causa-tion process in opportunity discovery and creation*. 8(4).
- Constable, A. (2021). *Wayfair's 4th Of July Sale Is Already Live—Here's What To Buy*.
- Dabo, S.A. (2018). Critical Thinking in Entrepreneurship and Youth Attitudes towards Entrepreneurial Skill Acquisition in Plateau State, Nigeria. *International Journal of Science and Research*, 9(1), 87-94.
- Davidsson, P. (2015). Entrepreneurial opportunities and the entrepreneurship nexus: A re-conceptualization. *Journal of business venturing*, 30(5), 674–695.
- Doran, J., McCarthy, N., & O'Connor, M. (2018). The role of entrepreneurship in stimulating economic growth in developed and developing countries. *Cogent Economics & Finance*, 6(1), 1442093.
- Duyan, K.R.M. (2019). Personal Entrepreneurial Competencies of the Business Students at Kalinga State University: A Basis for Enhancement of Teaching Strategies and Development of Program Structure. *Indian Journal of Science and Technology*, 12(44), 01–07.
- Figliuolo, M. (2019). *The Importance of Critical Thinking – thoughtLEADERS, LLC: Leadership Training for the Real World*.
- Foss, N.J., & Klein, P.G. (2016). *Entrepreneurial Discovery or Creation ? In Search of the Middle Ground in search of the middle ground*.
- Global Entrepreneurship Monitor. (2021). *GEM 2020/2021 Global Report*.
- Goniri, A. (2020). *Effect of Entrepreneurship Education on Poverty Alleviation among Graduates of Ramat Polytechnic Maiduguri Amina Goniri*. 19(8), 221–240.
- Gregori, P., Holzmam, P., & Wdowiak, M.A. (2021). For the sake of nature: Identity work and meaningful experiences in environmental entrepreneurship. *Journal of Business Research*, 122, 488–501.
- Guerrero, M., & Wanjiru, R. (2021). Entrepreneurial migrants from/in emerging economies: Breaking taboos and stereotypes. *International Entrepreneurship and Management Journal*, 17(2), 477–506.
- Hallyyev, B. (2019). *Entrepreneurial competencies as Indicators of business success : Case from Turkey*.
- Höflinger, P.J., Nagel, C., & Sandner, P. (2018). Reputation for technological innovation: Does it actually cohere with innovative activity? *Suma de Negocios*, 3(1), 26–39.
- Ibidunni, A.S., Ogundana, O.M., & Okonkwo, A. (2021). Entrepreneurial Competencies and the Performance of Informal SMEs : The Contingent Role of Business Environment Entrepreneurial Competencies and the Performance of Informal SMEs : The Contingent Role of Business Environment ABSTRACT. *Journal of African Business*, 00(00), 1–23.
- IED. (2021). *The role of Entrepreneurship in Economic Development | IED*.
- Jamie, G., & Oliver, R. (2020). Entrepreneurial Competencies: A Required Skill for Business Performance. *European Journal of Business and Innovation Research*, 8(3), 50–61.
- Joy, A. (2015). *Entrepreneurship business and communication ability of female entrepreneurs in Rivers State*.
- Juliana, N.O., Hui, H.J., Clement, M., Solomon, E.N., & Elvis, O.K. (2021). The Impact of Creativity and Innovation on Entrepreneurship Development: Evidence from Nigeria. *Open Journal of Business and Management*, 9(4), 1743–1770.
- Kunkel John, H. (1997). *Theory of entrepreneurship development*. 1(McGraw Hill. New York. U.S.A.).
- Lapin, I., Ozolin, M., Irbe, M.M., & Priem, M. (2020). *Competences for Strengthening Entrepreneurial Capabilities in Europe*. 1–19.
- Li, C., Ahmed, N., Qalati, S.A., Khan, A., & Naz, S. (2020). Role of business incubators as a tool for entrepreneurship development: The mediating and moderating role of business start-up and government regulations. *Sustainability (Switzerland)*, 12(5), 1–23.
- Li, Z., Anaba, O.A., Ma, Z., & Li, M. (2021). Ghanaian smes amidst the covid-19 pandemic: Evaluating the influence of entrepreneurial orientation. *Sustainability (Switzerland)*, 13(3), 1–27.
- Lin, F.J., & Lai, C. (2021). Key factors affecting technological capabilities in small and medium-sized Enterprises in Taiwan. *International Entrepreneurship and Management Journal*, 17, 131–143.
- Martínez-fierro, S. (2020). *Impact of high-growth start-ups on entrepreneurial environment based on the level of national economic development*. July 2019, 1007–1020.

- Mitchellmore, S., & Rowley, J. (2013). Entrepreneurial competencies of women entrepreneurs pursuing business growth. *Journal of Small Business and Enterprise Development*.
- Momani, B. (2017). *Entrepreneurship: An Engine for job Creation and inclusive growth in the Arab World*.
- Nabiswa, F., & Mukwa, J.S. (2017). *Impact of credit financing on human resource development among Micro And Small Enterprises : A Case study of Kimilili Sub County, Kenya*. 4(1), 43–53.
- Nur Sumawidjaja, R. (2019). The impact of entrepreneurial competencies on creative industry performance in Indonesia. In *Journal of Entrepreneurship Education*, 22(6).
- Oppong, M., & Owiredo, A. (2014). *Micro and Small Scale Enterprises Development in Ghana*. 2(6), 84–97.
- Peprah, J.A. (2016). Small and medium sized enterprises (SMES) accessibility to public procurement: SMES entity perspective in Ghana. *European Law Review*, 8(3), 01–01.
- Phelan, C., & Sharples, R. (2012). Exploring entrepreneurial skills and competencies in farm tourism. *Local Economy*, 27(2), 103–118.
- Puhakka, V. (2015). *Entrepreneurial Creativity as Discovery and Exploitation of Business Opportunities*.
- Quagrainie, F.A., Adams, S., Kaban, A.A.M., & Dankwa, A.D. (2021). Micro-entrepreneurship, sustainable development goal one and cultural expectations of Ghanaian women. *Journal of Entrepreneurship in Emerging Economies*, 13(1), 86–106.
- Rashed, M., & Polas, H. (2020). *The effects of individual characteristics on women intention to become social entrepreneurs ? January*.
- Reis, D.A., Fleury, A.L., & Carvalho, M.M. (2021). Consolidating core entrepreneurial competences: toward a meta-competence framework. *International Journal of Entrepreneurial Behaviour and Research*, 27(1), 179–204.
- Rivera-kempis, C., & Valera, L. (2021). *Entrepreneurial Competence : Using Machine Learning to Classify Entrepreneurs*. 1–24.
- Shamsudin, S.F.F.B., Al Mamun, A., Nawi, N.B.C., Nasir, N.A.B.M., & Zakaria, M.N.Bin. (2017). Factors affecting entrepreneurial intention among the Malaysian university students. *The Journal of Developing Areas*, 51(4), 423–431.
- Shekhar, S. (2007). *Influence of personal characteristics, attention and perception on entrepreneurial opportunity identification Author:*
- Shobhit, S. (2021). *Why Entrepreneurship Is Important to the Economy*.
- Spencer, A.S., & Kirchoff, B.A. (2006). Schumpeter and new technology based firms: Towards a framework for how NTBFs cause creative destruction. *International Entrepreneurship and Management Journal*, 2(2), 145–156.
- Szerb, L., & Trumbull, W. N. (2018). Entrepreneurship development in Russia: is Russia a normal country? An empirical analysis. *Journal of Small Business and Enterprise Development*, 25(6), 902–929.
- Tittel, A., & Terzidis, O. (2020). Entrepreneurial competences revised : developing a consolidated and categorized list of entrepreneurial. In *Entrepreneurship Education*, 3(1).
- Volery, T., Mueller, S., & von Siemens, B. (2015). Entrepreneur ambidexterity: A study of entrepreneur behaviours and competencies in growth-oriented small and medium-sized enterprises. *International Small Business Journal: Researching Entrepreneurship*, 33(2), 109–129.
- Worke, G. (2020). The Effectsof Entrepreneurial competencies on Start-up Success of Graduate Business Owners : The Case of Entrepreneurship Development Centre Trainees. 2016, 49–58.
- Wyrwich, M., Sternberg, R., & Stuetzer, M. (2019). Failing role models and the formation of fear of entrepreneurial failure: A study of regional peer effects in German regions. *Journal of Economic Geography*, 19(3), 567–588.
- Yeboah, M.A. (2015). Determinants Of SMEs Growth : An Empirical Perspective of SMEs in the Cape Coast Metropolis, Ghana.
- Zizile, T., & Tendai, C. (2018). The importance of entrepreneurial competencies on the performance of women entrepreneurs in South Africa. *Journal of Applied Business Research (JABR)*, 34(2), 223–236.