



## Entrepreneurial Skills and Competencies of Small and Medium Enterprises (SMEs): Basis for the Development of an Entrepreneurial Training Program

### Article History:

Initial submission:	23 February 2026
First decision:	28 February 2026
Revision received:	13 April 2026
Accepted for publication:	18 April 2026
Online release:	22 April 2026

Glen L. Galvez<sup>1</sup>, ORCID No. 0009-0009-5969-1583  
Sheena Mae B. Badal<sup>2</sup>, ORCID No. 0009-0006-6778-5297  
Ma. Ruffa L. Palmares<sup>2</sup>, ORCID No. 0009-0002-7632-2420

<sup>1</sup>Instructor 3, Iloilo State University of Fisheries Science & Technology, San Enrique, Iloilo, Philippines

<sup>2</sup>Master in Hospitality Management, Iloilo State University of Fisheries Science & Technology, Barotac Nuevo, Iloilo, Philippines

### Abstract

This study assessed the entrepreneurial skills and competencies of small and medium enterprise (SME) owners/managers in Passi City, Iloilo, and examined the relationships between their demographic and business profiles and entrepreneurial capabilities. Using a correlational research design, this study examined the relationship between entrepreneurial skills and entrepreneurial competencies of SME owners/managers. A total of 50 respondents were included in the study, selected using purposive sampling. Data were collected through a structured questionnaire, which measured demographic variables, entrepreneurial skills, and entrepreneurial competencies. Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to describe the respondents' profile, as well as to assess their level of entrepreneurial skills and competencies. To determine the significant relationship between entrepreneurial skills and competencies, Pearson product-moment correlation was employed, provided that the assumptions for correlation analysis were met. Findings revealed that respondents generally demonstrated high to very high levels of entrepreneurial skills and competencies, with technical competency, opportunity recognition, and problem-solving skills rated highest. Age, educational attainment, and length of business operation were significantly positively correlated with both entrepreneurial skills and competencies, while sex and type of enterprise were not. Based on the findings, a comprehensive entrepreneurial training program was proposed to further enhance SME owners' managerial, technical, financial, and marketing capabilities. The study highlights the importance of demographic and experiential factors in entrepreneurial development and provides empirical guidance for targeted capacity-building initiatives.

**Keywords:** small and medium enterprise (SME), entrepreneurial skills, entrepreneurial competencies, demographic profile, capacity building



Copyright © 2026. The Author/s. Published by VMC Analytikis Multidisciplinary Journal News Publishing Services. Entrepreneurial Skills and Competencies of Small and Medium Enterprises (SMEs): Basis for the Development of an Entrepreneurial Training Program © 2026 by Glen L. Galvez, Sheena Mae B. Badal and Ma. Ruffa L. Palmares is an open access article licensed under [Creative Commons Attribution \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/). This permits the copying, redistribution, remixing, transforming, and building upon the material in any medium or format for any purpose, even commercially, provided that appropriate credit is given to the copyright owner/s through proper and standard citation.

## INTRODUCTION

Small and Medium Enterprises (SMEs) are widely recognized as key drivers of economic development, employment generation, and poverty reduction. In many developing economies, SMEs serve as the backbone of economic activity by stimulating local production, encouraging innovation, and creating livelihood opportunities. In the Philippines, SMEs account for more than 99 percent of all registered business establishments and significantly contribute to employment and economic growth across regions and local communities (Department of

Trade and Industry, 2020). Because of their widespread presence, SMEs play a critical role in sustaining local economies, particularly in cities and municipalities outside major urban centers.

At the local level, SMEs function as engines of economic growth by generating employment, strengthening local trade networks, and fostering entrepreneurial activities. In Passi City, Iloilo, SMEs comprise a substantial proportion of business establishments, particularly in sectors such as retail trade, food services, manufacturing, and agribusiness-related enterprises. As a component city with a

developing commercial environment, Passi City relies heavily on the performance and sustainability of SMEs to support local economic development and community progress. Despite their importance, SMEs in provincial settings often encounter challenges such as limited access to financial resources, increasing market competition, technological advancements, and insufficient managerial and entrepreneurial capabilities.

Entrepreneurial skills and competencies are widely acknowledged as essential determinants of SME performance and sustainability. Entrepreneurial skills typically include opportunity recognition, creativity and innovation, risk-taking, decision-making, and problem-solving, while entrepreneurial competencies encompass a combination of knowledge, abilities, attitudes, and behaviors that enable entrepreneurs to effectively manage and grow their enterprises. According to Man et. al. (2002), entrepreneurial competencies significantly influence the strategic capabilities and performance outcomes of small business enterprises, particularly in dynamic and competitive environments.

Similarly, studies have shown that entrepreneurs who possess strong competencies are better able to identify market opportunities, adapt to environmental changes, and sustain long-term business growth (Mitchelmore & Rowley, 2010). However, many SME owners develop these competencies primarily through practical experience rather than through formal entrepreneurial education or structured training programs. Although experiential learning contributes to skill development, it may not sufficiently address critical areas such as financial management, strategic planning, marketing strategies, and innovation, which are essential for maintaining competitiveness in an increasingly dynamic business environment (OECD, 2019).

In local contexts such as Passi City, Iloilo, SMEs remain central to economic development by providing employment opportunities,

supporting local production, and stimulating entrepreneurial activities. Despite their significant role, many SME owners face challenges in strengthening their entrepreneurial capabilities due to limited access to targeted training programs and capacity-building initiatives. Assessing the entrepreneurial skills and competencies of SME owners can therefore provide valuable insights into their strengths and developmental needs.

Thus, this study aims to assess the entrepreneurial skills and competencies of SME owners and managers in Passi City, Iloilo. The findings are expected to provide an empirical basis for developing relevant and responsive entrepreneurial training programs that can enhance the managerial and technical capabilities of SME owners. Ultimately, strengthening these competencies may contribute to the sustainable growth, competitiveness, and resilience of SMEs within the local economy.

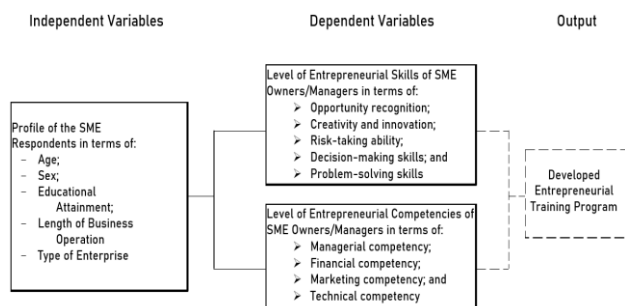
**Research Objective.** Small and Medium Enterprises (SMEs) are vital to economic growth, employment, and innovation, yet their sustainability depends on the entrepreneurial capacity of owners and managers. Skills such as opportunity recognition, creativity, risk-taking, decision-making, and problem-solving underpin enterprise success, while competencies in management, finance, marketing, and technical areas translate these skills into practice.

Thus, the general objective of this study is to examine the relationship between entrepreneurial skills and entrepreneurial competencies of SME owners/managers, and it further aims to determine answers to the following questions:

1. What is the profile of the SME respondents in terms of:
  - 1.1 age;
  - 1.2 sex;
  - 1.3 educational attainment;
  - 1.4 length of business operation; and,
  - 1.5 type of enterprise?

2. What is the level of entrepreneurial skills of SME owners/managers in terms of:
  - 2.1 opportunity recognition;
  - 2.2 creativity and innovation;
  - 2.3 risk-taking ability;
  - 2.4 decision-making skills; and,
  - 2.5 problem-solving skills?
3. What is the level of entrepreneurial competencies of SME owners/managers in terms of:
  - 3.1 managerial competency;
  - 3.2 financial competency;
  - 3.3 marketing competency; and,
  - 3.4 technical competency?
4. Is there a significant relationship between the profile of the respondents and their entrepreneurial skills and entrepreneurial competencies?
5. Based on the findings of the study, what entrepreneurial training program can be developed to enhance the skills and competencies of SME owners/managers?

**Conceptual Framework.** The conceptual framework of the study illustrates the relationship between the profile of SME respondents and their level of entrepreneurial skills and competencies, with the end goal of developing a responsive entrepreneurial training program (Figure 1).



**Figure 1**  
*The Conceptual Design Depicting the Relationship Between Variables*

The independent variables included the respondents' profile in terms of age, sex, educational attainment, length of business operation, and type of enterprise, while the

dependent variables comprised the level of entrepreneurial skills namely opportunity recognition, creativity and innovation, risk-taking ability, decision-making skills, and problem-solving skills and entrepreneurial competencies, including managerial, financial, marketing, and technical competencies. The framework posited that demographic, and business-related characteristics influenced the development and variation of entrepreneurial capabilities among SME owners and managers.

## LITERATURE REVIEW

Entrepreneurship plays a crucial role in economic development, particularly in the growth and sustainability of small and medium enterprises (SMEs). The Organization for Economic Co-operation and Development (2020) emphasized that SMEs significantly contribute to employment generation, innovation, and economic resilience. This underscores the importance of examining the characteristics of SME owners/managers as determinants of entrepreneurial success. The relationship between individual characteristics and entrepreneurial capability is anchored in Human Capital Theory proposed by Becker (1993), which posits that education and experience enhance individuals' knowledge, skills, and productivity. Similarly, McClelland (1961), through the Theory of Achievement Motivation, argued that personal traits such as initiative, risk-taking, and persistence influence entrepreneurial behavior and performance.

Demographic variables such as age, sex, educational attainment, length of business operation, and type of enterprise have been widely examined in entrepreneurship research. According to Minniti and Bygrave (2001), these variables significantly influence variations in entrepreneurial capability rather than merely describing entrepreneurs. Age has been associated with differences in entrepreneurial behavior. Lévesque and Minniti (2006) found that older entrepreneurs tend to demonstrate stronger decision-making and managerial skills due to accumulated experience, whereas younger entrepreneurs are more innovative and

open to new ideas. Sex has also been examined as a factor in entrepreneurship. Minniti (2010) reported that while there are generally no significant inherent differences in overall entrepreneurial capability, variations may arise due to differences in access to resources, training, and social roles. Educational attainment plays a significant role in developing entrepreneurial capability. Marvel et. al. (2016) found that higher levels of education enhance opportunity recognition, analytical thinking, and strategic decision-making. Length of business operation reflects experiential learning. Minniti and Bygrave (2001) emphasized that longer business experience strengthens risk-taking ability, problem-solving skills, and managerial competencies. The type of enterprise also influences competency requirements. Man et. al. (2002) explained that service-oriented businesses require stronger interpersonal and marketing competencies, while product-based enterprises demand higher technical and operational skills.

Entrepreneurial skills are essential for business success and sustainability. Kirzner (1973) emphasized opportunity recognition as a critical skill that enables entrepreneurs to identify and exploit market opportunities. Meanwhile, Schumpeter (1934) highlighted creativity and innovation as key drivers of competitive advantage and economic development. In addition, risk-taking ability, decision-making skills, and problem-solving skills are crucial in managing uncertainty and ensuring business continuity. These skills enable entrepreneurs to respond effectively to dynamic market conditions and operational challenges.

Entrepreneurial competencies, including managerial, financial, marketing, and technical competencies, are directly linked to firm performance. Managerial competency supports effective planning, organizing, and controlling business operations. Financial competency enhances budgeting, financial analysis, and resource allocation. According to Lusardi and Mitchell (2014), financial literacy plays a crucial role in improving financial decision-making and

business sustainability. Marketing competencies contribute to customer acquisition and retention, while technical competencies support product development and service delivery.

Existing literature suggests a strong relationship between entrepreneurial skills and competencies. Skills such as creativity, opportunity recognition, and problem-solving serve as foundational abilities that enhance the development of managerial, financial, marketing, and technical competencies. Studies have shown that entrepreneurs who possess higher levels of skills are more likely to demonstrate stronger competencies, leading to improved business performance and sustainability. This supports the assumption that entrepreneurial skills significantly influence the development of entrepreneurial competencies.

The reviewed literature provides strong theoretical and empirical support for the relationship between the profile of SME owners/managers and their entrepreneurial skills and competencies. The findings indicate that demographic and business characteristics significantly influence entrepreneurial capability, while entrepreneurial skills contribute to the development of competencies. These insights justify the present study and support the need to examine these relationships empirically, which may serve as a basis for developing a data-driven entrepreneurial training program.

## METHODOLOGY

**Design.** The study employed a correlational research design, which is appropriate for determining the degree and direction of relationships among variables without manipulating them. According to Creswell (2014), correlational research is used to identify associations among variables and to generate predictions about outcomes. In this study, the design enabled the researcher to analyze how the independent variables (profile characteristics) were related to the dependent

variables, namely entrepreneurial skills opportunity recognition, creativity and innovation, risk-taking ability, decision-making skills, and problem-solving skills and entrepreneurial competencies, including managerial, financial, marketing, and technical competencies.

**Samples.** The respondents of the study consisted of 50 selected SME owners and managers who were actively involved in the day-to-day operations of their enterprises. They were considered appropriate participants because of their direct knowledge, experience, and decision-making roles in business management. Purposive sampling was utilized to ensure that only qualified individuals who met the inclusion criteria were selected, thereby enhancing the relevance and reliability of the data collected.

**Instrumentation.** The primary instrument used in this study was a researcher-made questionnaire designed to gather data on the profile of SME owners/managers and to assess their level of entrepreneurial skills and competencies. The questionnaire was developed based on an extensive review of related literature and studies on entrepreneurship, entrepreneurial skills, and core business competencies relevant to SMEs.

The research instrument consisted of three major parts designed to capture the necessary data for the study. Part I gathered information on the respondents' profile, including age, sex, educational attainment, length of business operation, and type of enterprise; Part II measured the level of entrepreneurial skills of SME owners/managers in terms of opportunity recognition, creativity and innovation, risk-taking ability, decision-making skills, and problem-solving skills; and Part III assessed their level of entrepreneurial competencies in terms of managerial, financial, marketing, and technical competencies. A five-point Likert-type scale was utilized to measure the respondents' level of agreement with each statement, as it allowed for the quantification of perceptions and self-assessed capabilities,

making it appropriate for analyzing entrepreneurial skills and competencies.

**Table 1**

*The response was interpreted using the following scale.*

Scale	Range	Interpretation
5	4.21 – 5.00	Very High Level
4	3.41 – 4.20	High Level
3	2.61 – 3.40	Moderate Level
2	1.81 – 2.60	Low Level
1	1.00 – 1.80	Very Low Level

To ensure the validity of the instrument, the questionnaire underwent content validation by a panel of experts in entrepreneurship, business management, and research. Their comments and suggestions regarding clarity, relevance, and alignment with the study objectives were incorporated into the final version of the instrument. This process ensured that the items adequately represented the variables being measured.

After content validation, the instrument was pilot tested to determine its reliability and clarity. The reliability test yielded a .998 Cronbach's alpha coefficient indicating excellent internal consistency, confirming that the items were reliable for final data collection.

**Data Analyses.** The data gathered were systematically organized, coded, and analyzed using the Statistical Package for the Social Sciences (SPSS) to ensure accuracy and consistency in data processing and interpretation.

Descriptive statistics were employed to analyze the respondents' profile and to determine the level of entrepreneurial skills and competencies. Frequency count and percentage were used to present the distribution of respondents according to age, sex, educational attainment, length of business operation, and type of enterprise. Meanwhile, the mean and standard deviation were computed to determine the level and variability of entrepreneurial skills, specifically opportunity recognition, creativity and innovation, risk-taking ability, decision-making skills, and problem-solving

skills, as well as entrepreneurial competencies, including managerial, financial, marketing, and technical competencies.

To determine the relationship between the independent and dependent variables, Pearson product-moment correlation was used to determine the significant relationship between entrepreneurial skills and entrepreneurial competencies. This statistical technique was used to assess the extent to which the profile variables age, sex, educational attainment, length of business operation, and type of enterprise significantly influenced the level of entrepreneurial skills and competencies of SME owners/managers. The use of multiple regression analysis allowed for the examination of both the combined and individual effects of the independent variables on the dependent variables.

The results of the statistical analyses served as the basis for identifying significant predictors of entrepreneurial capability. These findings were used to determine areas that required improvement and provided empirical support for the development of a data-driven entrepreneurial training program for SME owners and managers.

## RESULTS AND DISCUSSION

**Demographic Profile of the Respondent.** Table 2 presents the demographic profile of the 50 SME respondents in terms of age, sex, educational attainment, length of business operation, and type of enterprise. The data presented the demographic and business profile of the respondents, providing a general description of SME owners/managers included in the study. In terms of age, respondents were distributed across four groups, with the largest proportion belonging to the 31–40 years category (30%), followed by 41–50 years (28%), 51 years and above (26%), and 21–30 years (16%). With respect to sex, female respondents comprised 56% while male respondents accounted for 44%. In terms of educational attainment, the majority were college graduates (56%), followed by vocational or technical graduates (18%),

postgraduates (14%), and high school graduates (12%). These characteristics align with the assumptions of Gary Becker's Human Capital Theory, which posits that education and experience contribute to the development of knowledge and skills.

**Table 2**  
*Demographic profile of the respondents*

Variable	Category	Frequency (f)	Percentage
Age	21–30 years	8	16
	31–40 years	15	30
	41–50 years	14	28
	51 years and above	13	26
Sex	Male	22	44
	Female	28	56
Educational Attainment	High School Graduate	6	12
	Vocational/Technical	9	18
	College Graduate	28	56
	Postgraduate	7	14
Length of Business Operation	1–3 years	10	20
	4–6 years	12	24
	7–10 years	15	30
	More than 10 years	13	26
Type of Enterprise	Trading	14	28
	Service	18	36
	Manufacturing	8	16
	Agri-business	10	20

Regarding business-related characteristics, respondents were categorized according to length of business operation and type of enterprise. In terms of business experience, 30% had been operating for 7–10 years, 26% for more than 10 years, 24% for 4–6 years, and 20% for 1–3 years. As to the type of enterprise, most were engaged in service-oriented businesses (36%), followed by trading (28%), agri-business (20%), and manufacturing (16%). These findings are consistent with the framework of David McClelland, which emphasizes that individual characteristics and experiences shape entrepreneurial behavior. Overall, the profile indicates a diverse group of respondents in terms of both personal and business characteristics.

**Level of Entrepreneurial Skills of SME Owners/Managers.** Table 3 shows the level of entrepreneurial skills of SME

owners/managers across five dimensions: opportunity recognition, creativity and innovation, risk-taking ability, decision-making skills, and problem-solving skills. The findings show that respondents demonstrated high to very high levels of entrepreneurial skills, indicating their capability to effectively manage and sustain their enterprises.

**Table 3**  
*Level of Entrepreneurial Skills of SME Owners/Managers*

Entrepreneurial Skill	Weighted Mean	Standard Deviation	Interpretation
Opportunity Recognition	4.28	0.52	Very High
Creativity and Innovation	4.12	0.61	High
Risk-Taking Ability	3.94	0.69	High
Decision-Making Skills	4.06	0.58	High
Problem-Solving Skills	4.18	0.55	Very High

*Legend: 4.21 – 5.00 (Very High Level); 3.41 – 4.20 (High Level); 2.61 – 3.40 (Moderate Level); 1.81 – 2.60 (Low Level); 1.00 – 1.80 (Very Low Level)*

Variations across dimensions, however, suggest differences in how these skills are developed and applied in business operations. Opportunity recognition (M = 4.28, SD = 0.52) and problem-solving skills (M = 4.18, SD = 0.55) were rated very high, reflecting strong abilities in identifying business opportunities and addressing challenges effectively. These results support Kirzner's (1973) theory of entrepreneurial alertness and Mitchelmore and Rowley's (2010) competency framework. Meanwhile, creativity and innovation (M = 4.12, SD = 0.61), decision-making skills (M = 4.06, SD = 0.58), and risk-taking ability (M = 3.94, SD = 0.69) were rated high, indicating that respondents frequently apply innovative approaches, make informed decisions, and engage in calculated risks.

The results imply that strong entrepreneurial competencies enable SME owners/managers to respond effectively to changing market conditions, address business challenges, and support enterprise growth. At the same time, the relatively lower ratings in risk-taking ability and creativity highlight areas where targeted interventions may further enhance and strengthen entrepreneurial skill development.

Schumpeter (1934) emphasized that innovation and creativity drive entrepreneurial success by creating competitive advantage and fostering economic growth. McClelland (1961) highlighted the role of achievement motivation and moderate risk-taking in entrepreneurship, while Man et al. (2002) focused on decision-making and managerial competencies as critical factors for effective business performance.

**Level of Entrepreneurial Competencies of SME Owners/Managers.** Table 4 presents the level of entrepreneurial competencies of SME owners/managers across four dimensions: managerial, financial, marketing, and technical competencies. The findings show that respondents demonstrated generally high levels of entrepreneurial competencies, indicating their capability to effectively manage and sustain business operations. Variations across competency areas, however, suggest differences in how these capabilities are developed and applied.

**Table 4**  
*Level of Entrepreneurial Competencies of SME Owners/Managers*

Entrepreneurial Skill	Weighted Mean	Standard Deviation	Interpretation
Managerial Competency	4.10	0.57	High
Financial Competency	3.88	0.62	High
Marketing Competency	4.05	0.59	High
Technical Competency	4.18	0.55	Very High

*Legend: 4.21 – 5.00 (Very High Level); 3.41 – 4.20 (High Level); 2.61 – 3.40 (Moderate Level); 1.81 – 2.60 (Low Level); 1.00 – 1.80 (Very Low Level)*

Technical competency (M = 4.18, SD = 0.55) was rated very high, reflecting strong technical knowledge and skills in business operations, while managerial (M = 4.10, SD = 0.57), marketing (M = 4.05, SD = 0.59), and financial competencies (M = 3.88, SD = 0.62) were rated high. These results indicate that SME owners/managers are generally effective in planning, marketing, and managing resources, as well as making informed financial decisions. The results imply that strong entrepreneurial competencies enable SME owners/managers to

effectively manage resources, respond to market demands, and sustain business growth. At the same time, the relatively lower rating in financial competency highlights an area where targeted interventions may further enhance and strengthen overall entrepreneurial capability.

The findings support the competency framework of Man et al. (2002), including the importance of financial literacy highlighted by Lusardi and Mitchell (2014), and the role of marketing competency in achieving competitive advantage by Kotler and Keller (2016). These theories collectively highlight that a combination of managerial, financial, and market-oriented skills is essential for improving firm performance and sustaining competitive advantage. They further suggest that strengthening these competencies enables entrepreneurs to adapt more effectively to dynamic business environments and enhance overall organizational efficiency.

**Significant Relationship Between the Profile of the Respondents and their Entrepreneurial Skills and Entrepreneurial Competencies.** The results in Table 5 reveals that age ( $r = .412, p = .003$ ), educational attainment ( $r = .536, p = .001$ ), and length of business operation ( $r = .478, p = .002$ ) were significantly and positively correlated with entrepreneurial skills among SME owners and managers. Among these variables, educational attainment showed the strongest relationship, followed by length of business operation and age, all indicating moderate positive associations.

**Table 5**  
*Relationship Between Profile of Respondents and their Entrepreneurial Skills*

Profile Variable	Correlation Coefficient (r)	p-value	Interpretation
Age	0.412	0.003	Significant Positive Relationship
Sex	0.098	0.488	Not Significant
Educational Attainment	0.536	0.001	Significant Positive Relationship
Length of Business Operation	0.478	0.002	Significant Positive Relationship
Type of Enterprise	0.226	0.112	Not Significant

*p-value < 0.05*

These findings suggest that individuals who are older, more educated, and have longer experience in managing a business tend to demonstrate higher levels of entrepreneurial skills, particularly in opportunity recognition, creativity, decision making, and problem solving. This implies that entrepreneurial competence is not static but develops through continuous learning and accumulated experience, allowing business owners to respond more effectively to challenges and opportunities.

The findings carry important implications for entrepreneurial development initiatives. Given that education and experience significantly contribute to entrepreneurial skills, there is a need for targeted interventions such as training programs, skills development workshops, and mentorship opportunities that can enhance these competencies among SME owners. Programs that support continuing education and practical learning may be particularly beneficial for younger and less experienced entrepreneurs. On the other hand, the results showed that sex ( $r = .098, p = .488$ ) and type of enterprise ( $r = .226, p = .112$ ) were not significantly correlated with entrepreneurial skills, indicating that these factors do not influence the level of competence of entrepreneurs. This suggests that entrepreneurial development programs should remain inclusive and focus on strengthening knowledge and experience-based skills rather than demographic or industry specific characteristics.

These findings are supported by established theories and previous studies on entrepreneurship. Human Capital Theory proposed by Becker (1993) explains that investments in education and experience enhance individual capability and productivity, which are essential for effective entrepreneurial behavior. The significant relationship between age and entrepreneurial skills aligns with Lévesque and Minniti (2006), who emphasized that accumulated experience contributes to stronger managerial and problem-solving abilities. Similarly, the strong

correlation between educational attainment and entrepreneurial skills supports the findings of Marvel, Davis, and Sproul (2016), who highlighted the role of education in improving opportunity recognition and analytical competence. Furthermore, the absence of a significant relationship between sex and entrepreneurial skills is consistent with Man, Lau, and Chan (2002), who argued that entrepreneurial competence is shaped more by learning and experience than by gender differences.

**Table 6**  
*Relationship Between Profile of Respondents and their Entrepreneurial Competencies*

Profile Variable	Correlation with Entrepreneurial Competencies (r)	p-value	Interpretation
Age	0.438	0.002	Significant Positive Relationship
Sex	0.105	0.452	Not Significant
Educational Attainment	0.521	0.001	Significant Positive Relationship
Length of Business Operation	0.492	0.001	Significant Positive Relationship
Type of Enterprise	0.218	0.123	Not Significant

*p-value < 0.05*

The results of Table 6 revealed that age ( $r = .438$ ,  $p = .002$ ), educational attainment ( $r = .521$ ,  $p = .001$ ), and length of business operation ( $r = .492$ ,  $p = .001$ ) were significantly and positively correlated with entrepreneurial competencies among SME respondents. All three variables demonstrated moderate positive relationships, with educational attainment showing the strongest association, followed by length of business operation and age. These findings indicate that respondents who are older, more educated, and have longer experience in managing a business tend to exhibit stronger competencies in managerial, financial, marketing, and technical aspects. This suggests that entrepreneurial competencies are enhanced through both formal education and accumulated experience, enabling SME owners and managers to better manage operations and respond to business demands.

The findings imply that strengthening human capital is essential in developing

entrepreneurial competencies among SME owners. Training programs, continuous education, and mentorship initiatives may serve as effective strategies in enhancing these competencies, particularly for less experienced entrepreneurs. The significant role of business experience highlights the importance of practical exposure in building managerial and technical capabilities over time. On the other hand, sex ( $r = .105$ ,  $p = .452$ ) and type of enterprise ( $r = .218$ ,  $p = .123$ ) were found to have no significant relationship with entrepreneurial competencies. This indicates that competencies are not determined by gender or the nature of the business, suggesting that development programs should be inclusive and focused on enhancing knowledge and experience-based skills rather than demographic characteristics or industry type.

These findings are supported by Human Capital Theory proposed by Becker (1993), which explains that education and experience improve individual capability and performance. The significant relationship between age and entrepreneurial competencies supports the findings of Lévesque and Minniti (2006), who emphasized that accumulated experience contributes to stronger managerial and operational competencies. Similarly, the strong association between educational attainment and competencies aligns with Marvel, Davis, and Sproul (2016), who highlighted the role of education in enhancing analytical thinking, decision making, and opportunity recognition. Furthermore, the absence of a significant relationship between sex and entrepreneurial competencies supports the argument of Man, Lau, and Chan (2002) that competencies are shaped primarily by knowledge, skills, and experience rather than gender or business type.

### **Entrepreneurial Training Program Developed to Enhance the Skills and Competencies of SME Owners/Managers**

**Title of the Project:** Entrepreneurial Training Program for Enhancing Skills and Competencies of SME Owners/Managers in Passi City, Iloilo

**Rationale.** Small and Medium Enterprises (SMEs) are essential drivers of local economic growth, employment generation, and community development. The present study assessed the entrepreneurial skills and competencies of 50 SME owners/managers in Passi City, Iloilo. Results showed generally high levels of skills and competencies across opportunity recognition, creativity and innovation, risk-taking ability, decision-making, problem-solving, managerial, financial, marketing, and technical domains. However, variability in responses, as reflected by standard deviations, indicated that some participants required reinforcement to achieve consistency in skill application.

Specifically, younger SME owners exhibited lower decision-making and problem-solving proficiency, while some respondents demonstrated moderate variability in financial, managerial, and marketing competencies. Drawing on Human Capital Theory (Becker, 1993) and entrepreneurship literature (Man, Lau, & Chan, 2002; Mitchelmore & Rowley, 2010), structured training can enhance experiential knowledge, bridge skill gaps, and strengthen competencies necessary for sustainable enterprise growth. Hence, the proposed program was designed to provide targeted, practice-oriented training aligned with the specific needs identified in the study.

**General Objective of the Training Program.** To enhance the entrepreneurial skills and competencies of SME owners/managers in Passi City, Iloilo to support sustainable business growth. The training framework is shown in Table 7.

**Specific Objectives**

1. To improve participants' ability to identify and evaluate emerging business opportunities.
2. To foster creative thinking and innovative approaches in business operations.
3. To strengthen calculated risk-taking and informed decision-making skills.
4. To reinforce managerial and leadership capabilities for effective business oversight.
5. To enhance financial literacy and strategic business planning.
6. To improve marketing strategies and customer engagement skills.
7. To develop technical competency for operational efficiency and quality control.
8. To cultivate analytical thinking and problem-solving abilities in business contexts.

**Table 7**  
*Training Framework and Delivery Structure*

Training Area	Objective	Targeted Skills/Competencies	Mode of Delivery
Opportunity Recognition Workshop	To enhance ability to identify and evaluate business opportunities	Opportunity recognition, market analysis, opportunity evaluation	Lecture, case studies, market simulation
Creativity and Innovation Seminar	To develop creative thinking and innovative approaches	Creativity, innovation, problem-solving	Brainstorming sessions, business innovation challenges
Risk Management and Decision-Making Training	To strengthen calculated risk-taking and strategic decision-making	Risk-taking ability, decision-making, strategic thinking	Risk assessment exercises, scenario analysis
Managerial and Leadership Development	To reinforce managerial and leadership capabilities	Managerial competency, team supervision, organizational skills	Role-play, team management exercises
Financial Management and Planning	To enhance financial literacy and business planning	Financial competency, budgeting, investment analysis	Financial statement workshops, budgeting exercises
Marketing Strategies and Customer Engagement	To improve marketing and client relationship management	Marketing competency, customer engagement, market research	Marketing plan exercises, client engagement simulations
Technical Skills Enhancement	To develop operational and technical competencies	Technical competency, quality control, operational efficiency	Technical demonstrations, process optimization exercises
Problem-Solving and Critical Thinking Workshop	To cultivate analytical and problem-solving abilities	Problem-solving skills, critical thinking, decision-making	Case studies, structured problem-solving exercises

**Participants.** The training program targeted 50 SME owners/managers who participated in the initial assessment study. Participants were selected based on active involvement in business operations and willingness to participate in capacity-building activities.

**Training Design.** A modular, interactive training design was adopted. Each module integrated lectures, hands-on workshops, case studies, group discussions, and simulation exercises to maximize skill acquisition and application.

**Duration and Schedule.** The training program was designed as a five-day intensive workshop, with each module lasting three to four hours. The modules were developed by the research team in consultation with experienced entrepreneurship practitioners to ensure relevance and applicability to the needs of SME owners and managers in Passi City.

**Table 8**  
*The project timetable*

Day	Module/Activity	Time
Day 1	Introduction to Entrepreneurship & Opportunity Recognition	3 hours
Day 2	Creativity, Innovation, and Problem-Solving Skills	4 hours
Day 3	Decision-Making and Risk-Taking in Business	3 hours
Day 4	Managerial and Financial Competencies	4 hours
Day 5	Marketing and Technical Competencies	3 hours
1 Month After	Follow-up Mentoring & Coaching Session	2 hours

A follow up mentoring and coaching session was conducted one month after the completion of the workshop to reinforce learning outcomes and provide guidance on applying skills and competencies in real business operations.

This timetable ensured a balanced delivery of theoretical knowledge and practical application, allowing participants to progressively develop entrepreneurial skills and competencies throughout the program.

**Budgetary Requirements.** The following table presents the detailed budgetary requirements for the implementation of the proposed

entrepreneurial training program. The budget includes costs for venue, training materials, facilitators, meals, and other logistical expenses necessary for the successful execution of the program.

**Table 9**  
*Estimated Budget*

Item	Description	Quantity /Unit	Unit Cost (₱)	Total Cost (₱)
Venue Rental	Training venue for 2 days	1	5,000	5,000
Training Materials	Handouts, modules, and worksheets	50 sets	200	10,000
Facilitator Fees	Professional resource persons	2	7,500	15,000
Meals and Snacks	Morning/afternoon snacks and lunch	50 pax × 2 days	500	50,000
Transportation	For facilitators and materials	2 trips	2,500	5,000
Certificates	Printing and materials	50	100	5,000
Contingency	Miscellaneous expenses	-	-	5,000
<b>Total</b>				<b>95,000</b>

**Evaluation.** Participants' progress was evaluated using pre- and post-training assessments, practical exercises, and self-reported confidence in applying skills. Success was measured in terms of improved consistency, enhanced decision-making, and application of entrepreneurial competencies in real business contexts.

**Expected Outcomes**

1. Enhanced entrepreneurial skills in opportunity recognition, creativity, risk-taking, decision-making, and problem-solving.
2. Improved managerial, financial, marketing, and technical competencies among SME owners/managers.
3. Greater confidence in handling business challenges and implementing strategic decisions.
4. Increased capacity for sustainable growth and competitiveness of SMEs in Passi City.

**Conclusion.** In conclusion, the study found that SME owners and managers in Passi City

possess generally high to very high levels of entrepreneurial skills and competencies, particularly in opportunity recognition, problem solving, and technical skills. The respondents varied in terms of age, educational attainment, business experience, and type of enterprise, reflecting a diverse group of entrepreneurs. The results showed that age, education, and length of business operation are significantly related to both entrepreneurial skills and competencies. This indicates that individuals who are older, more educated, and have more experience in business tend to perform better. Meanwhile, sex and type of enterprise were not found to have a significant relationship, suggesting that these factors do not affect the ability of entrepreneurs to apply their skills.

The study also concludes that continuous learning and practical experience play an important role in strengthening entrepreneurial capabilities. Although the respondents already demonstrated strong skills and competencies, areas such as financial skills, risk taking, and creativity still need further improvement. Based on these findings, a training program was developed to address the identified needs and support the continuous development of SME owners and managers. The program focuses on practical application and real business situations to help improve performance. Overall, the study shows that providing proper training and support can help enhance entrepreneurial skills and competencies, leading to better business performance and long-term sustainability.

**Recommendations.** Based on the findings of the study, SME owners and managers may consider strengthening their entrepreneurial skills and competencies through participation in training programs, workshops, and mentoring activities. Greater attention can be given to improving financial management, risk taking, and creativity, as these areas showed relatively lower ratings. Younger and less experienced entrepreneurs may benefit from guided learning opportunities and hands on activities that can help build confidence in decision making and problem solving. In addition, SME

support organizations and local government units can provide accessible and continuous capacity building programs that focus on practical skills and real business applications.

The proposed entrepreneurial training program may also be implemented to support the ongoing development of SME owners and managers in Passi City. Including follow up sessions, coaching, and evaluation can help reinforce the application of skills in actual business operations. Future researchers may explore other factors that influence entrepreneurial success, such as access to resources, technology adoption, and market conditions. Expanding the study to a larger group of respondents or to different locations may also provide a deeper understanding of entrepreneurial development and contribute to the improvement of existing support programs for SMEs.

**Author contributions.** Glen L. Galvez: Conceptualization; Introduction; Methods | Sheena Mae B. Badal: Data gathering; Statistical analysis; Results | Ma. Ruffa L. Palmares: Discussion; References.

**Conflict of interest.** The authors declare no conflict of interest.

**Funding source.** This research received no external funding.

**Artificial intelligence use.** AI tools supported initial drafting of text; final revisions and accountability rest with the authors.

**Ethics approval statement.** This study involved human respondents; however, formal ethical approval was not sought from the authors' institution. The authors affirm that participation was voluntary, informed consent was obtained, and confidentiality of responses was strictly maintained. No procedures were undertaken that posed risk or harm to the participants.

**Data availability statement.** All data supporting the findings of this study are included within the manuscript and its supplementary materials.

**Acknowledgement.** (Not available)

*Practice*, 40(3), 599–626.  
<https://doi.org/10.1111/etap.12140>

**Publisher's disclaimer.** The views expressed in this article are those of the authors and do not necessarily reflect the views of the publisher. The publisher disclaims any responsibility for errors or omissions.

McClelland, D. C. (1961). *The achieving society. Van Nostrand.*

## REFERENCES

Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education* (3rd ed.). *University of Chicago Press.*

Mitchelmore, S., & Rowley, J. (2010). Entrepreneurial competencies: A literature review and development agenda. *International Journal of Entrepreneurial Behavior & Research*, 16(2), 92–111.  
<https://doi.org/10.1108/13552551011026995>

Department of Trade and Industry. (2020). *MSME statistics*. <https://www.dti.gov.ph>

Minniti, M., & Bygrave, W. (2001). A dynamic model of entrepreneurial learning. *Entrepreneurship Theory and Practice*, 25(3), 5–16.  
<https://doi.org/10.1177/104225870102500301>

Kirzner, I. M. (1973). *Competition and entrepreneurship*. *University of Chicago Press.*

Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson Education Limited.

Organization for Economic Co-operation and Development [OECD]. (2019). *SME and entrepreneurship outlook 2019*. *OECD Publishing*.  
<https://doi.org/10.1787/34907e9c-en>

Lévesque, M., & Minniti, M. (2006). The effect of aging on entrepreneurial behavior. *Journal of Business Venturing*, 21(2), 177–194.  
<https://doi.org/10.1016/j.jbusvent.2005.04.003>

Schumpeter, J. A. (1934). *The theory of economic development*. *Harvard University Press.*

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy. *Journal of Economic Literature*, 52(1), 5–44.

Man, T. W. Y., Lau, T., & Chan, K. F. (2002). The competitiveness of small and medium enterprises: A conceptualization with focus on entrepreneurial competencies. *Journal of Business Venturing*, 17(2), 123–142. [https://doi.org/10.1016/S0883-9026\(00\)00058-6](https://doi.org/10.1016/S0883-9026(00)00058-6)

Marvel, M. R., Davis, J. L., & Sproul, C. R. (2016). Human capital and entrepreneurship research: A critical review and future directions. *Entrepreneurship Theory and*