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Entrepreneurial skills, challenges and the role of gender and development initiatives among aspiring women entrepreneurs in Cabanatuan city

Arjhel V Domingo [1,*] and Suzette DC Domingo [2]

[1] *College of Management and Business Technology, Nueva Ecija University of Science and Technology, Cabanatuan City, Nueva Ecija, Philippines.*
[2] *Institute of Language and Literature, Nueva Ecija University of Science and Technology, Cabanatuan City, Nueva Ecija, Philippines.*

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Abstract

This study investigated the entrepreneurial skills, challenges, and the role of Gender and Development (GAD) initiatives among aspiring women entrepreneurs in Cabanatuan City. Employing a descriptive quantitative research design, the study surveyed 126 respondents drawn from the Barangay Pastoral Council of Mother of Perpetual Help in clustered barangays. Results showed that most respondents were 36 years and above, high school graduates, and primarily inclined toward food and beverage enterprises. Although the majority had no prior entrepreneurship training, they demonstrated a willingness to participate in GAD-led programs aimed at strengthening entrepreneurial capacity. The findings revealed that respondents exhibited only moderate competence in business planning, financial management, and technical operations, while they demonstrated stronger competencies in marketing, customer service, and product development. GAD initiatives were perceived positively, particularly in promoting skill development, inclusivity, and accessibility; however, notable gaps were identified in advanced training, mentorship, and technology integration. Major challenges encountered by respondents included limited technical knowledge in starting enterprises, insufficient access to capital, and constraints in product innovation and technology adoption. These results underscore the necessity for a gender-responsive extension plan that prioritizes advanced entrepreneurial training, capacity-building, and sustained support mechanisms. Such interventions are essential to empower aspiring women entrepreneurs and contribute to the promotion of inclusive and sustainable community development.

Keywords: Challenges; Entrepreneurial skills; Entrepreneurship development; Gender and Development; Women entrepreneurs

1. Introduction

Entrepreneurship is recognized globally as a vital force in driving economic growth, innovation, and social transformation. It fosters employment opportunities, creates wealth, and stimulates local and national development, making it an essential component of progress in both developed and developing countries (1). Research indicates that developing entrepreneurial skills, fostering an entrepreneurial mindset, and providing access to financial and technical resources are crucial for supporting business ventures, particularly among underrepresented groups (2); (3). In the Philippine context, entrepreneurship is particularly important as it contributes significantly to the economy, with micro, small, and medium enterprises (MSMEs) comprising 99.5% of all businesses and employing the majority of the workforce (4). Within this entrepreneurial landscape, women play a central role as owners, managers, and contributors to enterprise development. Their participation in business ventures not only strengthens household income and community stability but also advances the goals of gender equality and inclusive growth (5).

* Corresponding author: Arjhel V Domingo

The rise of women entrepreneurs has been noted across the globe, but their participation is often mediated by gender-specific factors that distinguish their experiences from their male counterparts. Studies have consistently shown that women entrepreneurs encounter structural, cultural, and institutional barriers that restrict their entrepreneurial growth (6). These include limited access to financing, discriminatory practices, and societal expectations that place women in traditional roles of caregiving and domestic responsibility. In the Philippines, these issues are compounded by social norms and gendered expectations that frequently limit women's economic agency (7). For women in Cabanatuan City, aspiring to establish businesses often requires balancing entrepreneurial ambitions with familial obligations, while simultaneously navigating systemic barriers that restrict resources and opportunities. This context highlights the importance of assessing the entrepreneurial skills of women, the difficulties they face, and the role of supportive initiatives such as Gender and Development (GAD) programs.

Entrepreneurial skills are widely recognized as critical determinants of success in business ventures (8). These include competencies such as opportunity recognition, risk-taking, financial literacy, innovation, decision-making, and leadership, all of which enable entrepreneurs to adapt and thrive in competitive markets. For aspiring women entrepreneurs, developing these skills is not only a means of fostering personal growth but also a necessity for overcoming the economic and social constraints they face. Women who undergo entrepreneurial training and skill enhancement are more likely to sustain and scale their businesses successfully (9). However, evidence suggests that many aspiring women entrepreneurs may lack adequate exposure to entrepreneurial education, mentorship, and networks that could build these competencies (10). Without these skills, women may struggle to manage enterprises efficiently, limiting their ability to compete and contribute effectively to local economic development.

The difficulties faced by women entrepreneurs are not limited to skills alone but extend to structural and institutional challenges. Across developing countries, women entrepreneurs are constrained by limited access to credit, inadequate market linkages, lack of mentorship, and gender bias in business environments (11). Additionally, cultural attitudes that prioritize men as primary breadwinners often undermine women's entrepreneurial initiatives. For aspiring entrepreneurs in Cabanatuan City, these challenges manifest in tangible ways, including limited opportunities for expansion, restricted networks, and difficulty balancing entrepreneurial work with family responsibilities. These constraints underscore the need for interventions that address not only individual skill development but also systemic issues that perpetuate inequality.

Recognizing these barriers, the Philippine government has institutionalized Gender and Development (GAD) initiatives aimed at mainstreaming gender equality in all programs, projects, and activities of local government units and agencies (12). GAD initiatives are designed to promote women's empowerment by ensuring equitable access to resources, capacity-building opportunities, and supportive policy environments. In theory, these initiatives should create enabling conditions for aspiring women entrepreneurs to thrive.

Despite the growing body of literature on women entrepreneurs, a significant research gap remains regarding the interplay between entrepreneurial skills, challenges, and the role of GAD initiatives (13). Additionally, while GAD programs have been widely institutionalized, there is limited empirical evidence evaluating their direct impact on women entrepreneurs at the grassroots level. This lack of localized data hinders the design of gender-responsive interventions that align with the actual needs of women in specific communities. Addressing this gap is crucial, as localized studies can provide actionable insights that inform community-based programs and policy reforms.

The present study therefore aims to describe the socio-demographic profile of aspiring women entrepreneurs in Cabanatuan City, examine the perceived role of GAD initiatives in supporting their entrepreneurial endeavors, assess their entrepreneurial skills and practices, and identify the difficulties they encounter in pursuing entrepreneurship. Based on these findings, the study seeks to design a gender-responsive community extension program that addresses the identified gaps and supports the empowerment of aspiring women entrepreneurs in the city. Ultimately, the research underscores the importance of equipping women with entrepreneurial skills, addressing their challenges, and ensuring that gender-responsive initiatives are effectively implemented to foster inclusive economic growth and sustainable development in the local community.

2. Material and methods

The study employed a descriptive quantitative research design to systematically examine the entrepreneurial skills, challenges, and the role of Gender and Development (GAD) initiatives among aspiring women entrepreneurs. Descriptive quantitative research is well-suited for this investigation as it allows the collection of measurable data, enabling the researcher to describe the characteristics of the respondents and quantify their perceptions and experiences using statistical tools (26). This design provides a structured approach to presenting factual information

such as socio-demographic profiles, entrepreneurial skills, and difficulties encountered, while also evaluating how respondents perceive the role of GAD initiatives. By applying this approach, the study ensures objectivity and precision, which are essential for generating reliable and generalizable results.

The population of the study consisted of 187 members of the Barangay Pastoral Council Mother of Perpetual Help in clustered barangays of Cabanatuan City, Nueva Ecija. Using Raosoft Software, a sample size of 126 respondents was determined based on a 95% confidence level and a 5% margin of error, ensuring that the findings would be statistically representative of the target population. The primary data collection tool was a research-made questionnaire, which underwent validation by a panel of experts in research, community development, and gender and development to ensure its accuracy and content validity. The instrument was designed to capture essential information about the respondents' entrepreneurial skills, challenges, and perceptions of GAD initiatives, thus aligning closely with the objectives of the study.

To establish the reliability of the instrument, a pilot test was conducted, resulting in a Cronbach's alpha coefficient of 0.904, which falls under the "excellent" category for internal consistency. This high reliability score indicated that the items in the questionnaire consistently measured the intended variables. Furthermore, the study strictly adhered to ethical standards in data collection. Informed consent was obtained from all respondents, and they were assured of confidentiality, anonymity, and the voluntary nature of their participation. These safeguards not only protected the rights and well-being of the participants but also reinforced the credibility and integrity of the research process, ensuring that the results generated were both trustworthy and ethically sound.

Table 1 presents the verbal descriptions used in interpreting the respondents' answers based on the established scale ranges. These descriptive equivalents were utilized to provide a clearer understanding of the numerical data gathered from the survey, particularly in assessing the role of Gender and Development (GAD) initiatives, the level of entrepreneurial skills and practices, and the extent of difficulties encountered in pursuing entrepreneurship.

Table 1 Verbal description used

Range	**Verbal Description**		
	Role of Gender and Development (GAD) Initiatives	**Entrepreneurial Skills and Practices**	**Difficulties Encountered in Pursuing Entrepreneurship**
3.25 - 4.00	Strongly Agree	Highly competent	Always encountered
2.50 - 3.24	Agree	Competent	Often encountered
1.75 - 2.49	Disagree	Somewhat competent	Rarely encountered
1.00 - 1.74	Strongly Disagree	Not competent	Never encountered

3. Results and discussion

3.1. Profile of the respondents

This section presents the demographic characteristics of the respondents to provide context for understanding the study's findings.

Table 2 Profile of the respondents in terms of age

Age	**Frequency**	**Percentage**
25 years old and below	28	22.22%
26–35 years	18	14.29%
36 years and above	80	63.49%
Total	126	100.00%

As shown in Table 2, the age profile of the respondents reveals that the majority of aspiring women entrepreneurs in Cabanatuan City belong to the 36 years old and above age group, with 80 respondents accounting for 63.49% of the total sample. This finding suggests that a significant number of women tend to engage in or aspire toward entrepreneurship at a later stage in life, possibly when they have gained more life experience, developed financial stability, or fulfilled certain family responsibilities. Older women may also perceive entrepreneurship as a viable means of supplementing household income, achieving financial independence, or securing long-term stability (14).

Meanwhile, 22.22% of the respondents, or 28 individuals, are 25 years old and below. This proportion indicates that younger women are beginning to explore entrepreneurial ventures, though their representation remains lower compared to older respondents.

Lastly, only 14.29% or 18 respondents fall within the 26–35 years old category. This relatively smaller proportion may suggest that women in this age bracket are often preoccupied with balancing family responsibilities, career-building, or childcare, which could limit their active involvement in entrepreneurial activities.

Table 3 Profile of the respondents in terms of highest educational attainment

Highest Educational Attainment	Frequency	Percentage
Elementary graduate	26	20.63%
High school graduate	72	57.14%
College level/graduate	28	22.22%
Total	126	100.00%

As presented in Table 3, the highest educational attainment of the respondents shows that the majority are high school graduates, with 72 individuals or 57.14% of the total sample. This indicates that most aspiring women entrepreneurs in Cabanatuan City have completed basic education, which provides them with foundational literacy and numeracy skills that can be applied in managing small businesses. However, the predominance of high school graduates may also suggest limited access to higher education opportunities, which could affect their exposure to advanced entrepreneurial knowledge, management practices, and technical skills needed for business growth (15).

The table also shows that 22.22% of the respondents, or 28 individuals, reached or completed college education. This group of respondents is likely to have acquired more formal training and exposure to entrepreneurial concepts, financial management, and business operations. Their higher educational background could give them an advantage in adopting innovative practices, accessing wider networks, and utilizing technology in their entrepreneurial pursuits.

Meanwhile, 20.63% or 26 respondents reported that their highest educational attainment is elementary level. This reflects that a portion of aspiring women entrepreneurs entered the business field despite having minimal formal education.

Table 4 Profile of the respondents in terms of intended type of business

Intended Type of Business	Frequency	Percentage
Food and beverage	88	69.84%
Retail/Trading	20	15.87%
Services (e.g., salon, laundry, consultancy)	14	11.11%
Manufacturing/Processing	4	3.17%
Total	126	100.00%

As shown in Table 4, the majority of respondents, or 69.84% (88 individuals), expressed an intention to engage in food and beverage businesses. This result reflects the popularity and accessibility of the food sector as an entrepreneurial venture, as it often requires relatively lower capital compared to other industries and responds to a consistent demand for basic needs. The dominance of this intended business type also suggests that aspiring women entrepreneurs in Cabanatuan City see food-related enterprises as both manageable and profitable within the local market.

Meanwhile, 15.87% of the respondents, or 20 individuals, intend to pursue retail or trading businesses. This includes small-scale buy-and-sell activities, sari-sari stores, or other forms of merchandise sales. The interest in retail is likely influenced by its accessibility, as it usually requires less technical expertise and allows flexibility in operations. Retail trading also fits within community-based entrepreneurship, where local demand can sustain small businesses (16).

Additionally, 11.11% of respondents (14 individuals) plan to venture into service-oriented businesses such as salons, laundries, or consultancy services. This indicates that some aspiring entrepreneurs recognize the potential in providing specialized services that address everyday needs. On the other hand, only 3.17% (4 respondents) expressed interest in manufacturing or processing businesses, which typically require higher capital, technical knowledge, and more complex operations.

Table 5 Profile of the respondents in terms of prior participation in entrepreneurial training

Prior Participation in Entrepreneurship Training	Frequency	Percentage
With Prior Participation in Entrepreneurship Training	34	26.98%
Without Prior Participation in Entrepreneurship Training	92	73.02%
Total	126	100.00%

Table 5 shows the respondents' profile regarding prior participation in entrepreneurial training. Out of the 126 respondents, 34 or 26.98% indicated that they had already attended entrepreneurial training, while a larger proportion of 92 or 73.02% reported that they had not participated in any such training before. This finding suggests that the majority of aspiring entrepreneurs in the study area have limited exposure to structured entrepreneurship programs or workshops. The lack of training participation could influence their preparedness, knowledge, and confidence in starting and managing a business (17).

3.2. Perceived Role of Gender and Development (GAD) Initiatives

This section examines the respondents' perceptions regarding the role and impact of Gender and Development (GAD) initiatives in entrepreneurship.

Table 6 Perceived role of Gender and Development initiatives in terms of participation in GAD-led trainings

Indicators	Mean	Std	Verbal Description
1. I have personally attended GAD-led trainings or seminars.	2.38	0.87	Disagree
2. GAD trainings provide practical knowledge useful for entrepreneurship.	3.10	0.82	Agree
3. Participation in GAD activities encourages women to pursue business opportunities.	3.22	0.73	Agree
4. I have learned new entrepreneurial skills through GAD-led programs.	2.75	0.80	Agree
5. I am willing to attend more GAD programs to enhance my entrepreneurial journey.	3.14	0.76	Agree
Grand Mean	2.92	0.63	Agree

Table 6 presents the respondents' perceptions of the role of Gender and Development (GAD) initiatives of NEUST in relation to participation in GAD-led trainings. The grand mean of 2.92 with a standard deviation of 0.63 corresponds to an overall verbal description of Agree, which suggests that respondents generally acknowledge the importance and contribution of GAD initiatives to entrepreneurship.

Among the indicators, the highest mean score of 3.22 was recorded for the statement *"Participation in GAD activities encourages women to pursue business opportunities"*, indicating that respondents strongly recognize the empowering effect of GAD programs in motivating women to explore entrepreneurial ventures. This is closely followed by the item *"I am willing to attend more GAD programs to enhance my entrepreneurial journey"* with a mean of 3.14, reflecting respondents' openness to further participation in such initiatives. Similarly, they agreed that *"GAD trainings provide*

practical knowledge useful for entrepreneurship" (M = 3.10), and that *"I have learned new entrepreneurial skills through GAD-led programs"* (M = 2.75), underscoring the practical and skill-based value of these interventions. However, the lowest mean score of 2.38 was observed in the statement *"I have personally attended GAD-led trainings or seminars"*, with a corresponding description of Disagree. This indicates that although respondents see the benefits of GAD initiatives, their actual participation remains limited. However, greater efforts to increase actual attendance and participation could further strengthen the effectiveness and impact of these programs, consistent with studies highlighting the importance of gender-focused training in fostering entrepreneurial development (18).

Table 7 Perceived role of Gender and Development initiatives in terms of effectiveness of GAD initiatives in skill development

Indicators	**Mean**	**Std**	**Verbal Description**
1. GAD programs improve one's entrepreneurial knowledge and competencies.	3.08	0.75	Agree
2. The trainings provided by GAD are effective in preparing aspiring entrepreneurs for business operations.	3.24	0.64	Agree
3. GAD initiatives have helped me develop self-confidence in pursuing entrepreneurship.	3.05	0.75	Agree
4. The programs provide adequate knowledge on financial management and record-keeping.	3.14	0.64	Agree
5. GAD skill development programs contribute to long-term success of aspiring entrepreneurs.	3.22	0.63	Agree
Grand Mean	3.15	0.57	Agree

Table 7 shows the respondents' assessment of the effectiveness of GAD initiatives in developing entrepreneurial skills. The computed grand mean of 3.15 with a standard deviation of 0.57 yields an overall interpretation of Agree, indicating that respondents generally perceive GAD programs as effective in enhancing entrepreneurial knowledge, competencies, and confidence.

The highest-rated indicator is *"The trainings provided by GAD are effective in preparing aspiring entrepreneurs for business operations"* with a mean score of 3.24, closely followed by *"GAD skill development programs contribute to long-term success of aspiring entrepreneurs"* (M = 3.22). These results highlight the respondents' recognition of the value of GAD trainings as practical, future-oriented tools that equip them for business endeavors. Similarly, the item *"The programs provide adequate knowledge on financial management and record-keeping"* received a mean of 3.14, reflecting the usefulness of GAD-led sessions in strengthening vital entrepreneurial competencies.

Meanwhile, the lowest but still positively rated indicator is *"GAD initiatives have helped me develop self-confidence in pursuing entrepreneurship"* with a mean of 3.05, suggesting that while respondents appreciate the skill-building aspect of GAD, its impact on boosting entrepreneurial confidence could be further strengthened. The findings emphasize that GAD initiatives of NEUST are perceived as effective platforms for skill development, particularly in preparing participants for operational aspects of entrepreneurship and fostering long-term business readiness, aligning with prior research on gender-focused entrepreneurial capacity-building programs (19).

Table 8 presents the respondents' perception of the accessibility and inclusivity of GAD training opportunities provided by NEUST. The overall grand mean of 3.16 with a standard deviation of 0.56 corresponds to the verbal interpretation of Agree, suggesting that aspiring women entrepreneurs generally view GAD programs as accessible and inclusive platforms that cater to diverse participants.

Among the indicators, the highest rating was obtained by *"GAD training opportunities are accessible to women regardless of their age or background"* with a mean of 3.22, followed closely by *"The programs are conducted at venues and schedules convenient for participants"* (M = 3.21). These findings highlight that respondents value the openness of GAD initiatives to women from various demographics and their effort to design schedules and venues that encourage participation. Likewise, the indicator *"GAD initiatives are inclusive of women from both rural and urban communities"* (M = 3.14) reinforces the perception that these programs aim to bridge geographical divides by extending opportunities across different contexts.

Table 8 Perceived role of Gender and Development initiatives in terms of accessibility and inclusivity of training opportunities

Indicators	Mean	Std	Verbal Description
1. GAD training opportunities are accessible to women regardless of their age or background.	3.22	0.71	Agree
2. The programs are conducted at venues and schedules convenient for participants.	3.21	0.63	Agree
3. GAD initiatives are inclusive of women from both rural and urban communities.	3.14	0.64	Agree
4. Information about training opportunities is easily available to women entrepreneurs.	3.16	0.68	Agree
5. The training sessions are designed to be inclusive and considerate of women's needs.	3.08	0.63	Agree
Grand Mean	3.16	0.56	Agree

The lowest-rated but still positively assessed indicator is *"The training sessions are designed to be inclusive and considerate of women's needs"* with a mean of 3.08. While this score remains within the "Agree" category, it suggests a need to further strengthen the gender-responsive design of training sessions to ensure they holistically address the unique challenges faced by women entrepreneurs. The findings affirm that GAD initiatives are perceived as widely accessible and inclusive, thereby supporting equitable participation of women in entrepreneurship-related capacity-building efforts (20).

Table 9 Perceived role of Gender and Development initiatives in terms of identified gaps and needs in GAD programs

Indicators	Mean	Std	Verbal Description
1. Some GAD programs address the challenges of aspiring women entrepreneurs.	2.52	0.76	Agree
2. There is a need for more advanced training on product development and marketing.	3.02	0.68	Agree
3. GAD programs should improve in providing mentorship and consultancy services.	3.06	0.59	Agree
4. The scope of training is sometimes limited and does not cover modern business practices.	2.70	0.69	Agree
5. There is a gap between the knowledge taught in trainings and its actual application in business.	2.95	0.68	Agree
Grand Mean	2.85	0.53	Agree

Table 9 illustrates the respondents' perceptions regarding the gaps and needs in the GAD programs of NEUST. The computed grand mean of 2.85 with a standard deviation of 0.53 falls under the verbal interpretation of Agree, indicating that while respondents acknowledge the value of GAD initiatives, they also recognize areas for improvement that must be addressed to better support aspiring women entrepreneurs.

The highest-rated indicator is *"GAD programs should improve in providing mentorship and consultancy services"* (M = 3.06), reflecting the demand for more personalized and sustained guidance that goes beyond generic training. Similarly, *"There is a need for more advanced training on product development and marketing"* (M = 3.02) underscores the necessity of equipping women entrepreneurs with specialized skills that are crucial in navigating competitive markets. Respondents also agreed with the statement *"There is a gap between the knowledge taught in trainings and its actual*

application in business" (M = 2.95), highlighting a concern that existing GAD initiatives may not always translate into practical entrepreneurial outcomes.

Meanwhile, the lowest-rated indicator, though still within the *Agree* range, is "Some GAD programs address the challenges of aspiring women entrepreneurs" with a mean of 2.52, suggesting that respondents perceive current GAD programs as only partially responsive to their unique entrepreneurial struggles. Additionally, the item "The scope of training is sometimes limited and does not cover modern business practices" (M = 2.70) further emphasizes the need to expand training content to include contemporary approaches such as digital entrepreneurship, online marketing, and innovative business models. These findings are consistent with prior studies that highlight the importance of tailored mentorship and applied skills training in enhancing entrepreneurial outcomes for women (9).

3.3. Entrepreneurial Skills and Practices

This section discusses the level of entrepreneurial skills and practices demonstrated by the respondents.

Table 10 Entrepreneurial skills and practices among respondents in terms of business planning and goal-setting

Indicators	Mean	Std	Verbal Description
1. I can develop clear goals and objectives for a business venture.	2.37	0.70	Somewhat competent
2. I am able to prepare a simple business plan.	2.30	0.77	Somewhat competent
3. I know how to set realistic targets for business growth.	2.38	0.67	Somewhat competent
4. I can analyze possible risks when planning a business.	2.43	0.68	Somewhat competent
5. I consider long-term sustainability when setting business goals.	2.54	0.71	Competent
Grand Mean	2.40	0.55	Somewhat competent

Table 10 presents the respondents' self-assessment of their entrepreneurial skills and practices in relation to business planning and goal-setting. The computed grand mean of 2.40 with a standard deviation of 0.55 corresponds to the verbal description of Somewhat Competent, indicating that while the respondents possess a basic understanding of business planning, their skills remain limited and in need of further development.

Among the indicators, the highest-rated item is *"I consider long-term sustainability when setting business goals"* with a mean of 2.54, described as Competent. This shows that respondents demonstrate awareness of the importance of sustainability in business operations, reflecting a forward-looking perspective despite their overall modest competence in planning. Other indicators such as the ability to analyze risks (M = 2.43) and setting realistic growth targets (M = 2.38) fall under the Somewhat Competent category, suggesting that respondents have an emerging but incomplete grasp of these critical entrepreneurial practices.

Table 11 Entrepreneurial skills and practices among respondents in terms of financial management and record-keeping

Indicators	Mean	Std	Verbal Description
1. I know how to properly manage business income and expenses.	2.32	0.74	Somewhat competent
2. I can prepare simple financial records for business tracking.	2.37	0.76	Somewhat competent
3. I understand the importance of keeping accurate financial records.	2.65	0.69	Competent
4. I can allocate business funds wisely for operations.	2.38	0.72	Somewhat competent
5. I am capable of preparing a simple budget for business activities.	2.49	0.66	Somewhat competent
Grand Mean	2.44	0.60	Somewhat competent

The lowest-rated indicators include the preparation of a simple business plan (M = 2.30) and the development of clear goals and objectives (M = 2.37), which are both essential foundations in entrepreneurship. These findings imply that while the respondents have general awareness of planning processes, they struggle with practical application, particularly in drafting structured business plans and articulating measurable objectives.

These results support existing literature emphasizing that many grassroots-level entrepreneurs often demonstrate strong intentions but lack adequate technical competencies in formal business planning and execution (21).

Table 11 presents the respondents' level of competence in financial management and record-keeping, which are vital skills in sustaining a business venture. The computed grand mean of 2.44 with a standard deviation of 0.60 is interpreted as Somewhat Competent, suggesting that respondents have a basic understanding of financial practices but still lack strong proficiency in applying these skills effectively in business contexts.

The highest-rated indicator is *"I understand the importance of keeping accurate financial records"* with a mean of 2.65, described as Competent. This indicates that respondents are aware of the critical role that financial documentation plays in business sustainability, even if their ability to perform such tasks remains limited. Other indicators, such as preparing a simple budget (M = 2.49) and allocating business funds wisely (M = 2.38), fall under the Somewhat Competent category, reflecting partial ability but with room for improvement in decision-making regarding resource allocation and budgeting.

The lowest-rated indicator, *"I know how to properly manage business income and expenses"* with a mean of 2.32, reveals a significant gap in respondents' financial management practices. Similarly, *"I can prepare simple financial records for business tracking"* (M = 2.37) suggests that while respondents value record-keeping, their practical skills in maintaining systematic and accurate financial documents remain underdeveloped.

These findings align with prior studies highlighting that small-scale entrepreneurs often struggle with financial literacy and documentation, which directly hinders their capacity to manage resources effectively and sustain growth (22).

Table 12 Entrepreneurial skills and practices among respondents in terms of marketing, sales, and customer service

Indicators	Mean	Std	Verbal Description
1. I know how to promote products or services to target customers.	2.49	0.76	Somewhat competent
2. I am able to use basic marketing strategies to attract customers.	2.59	0.69	Competent
3. I can provide good customer service to maintain customer loyalty.	2.56	0.74	Competent
4. I understand how to handle customer feedback or complaints.	2.68	0.67	Competent
5. I am aware of the importance of building relationships with customers.	2.75	0.67	Competent
Grand Mean	2.61	0.57	Competent

Table 12 shows the respondents' entrepreneurial skills and practices in the area of marketing, sales, and customer service. The computed grand mean of 2.61 with a standard deviation of 0.57 falls under the verbal description Competent, which indicates that compared to other entrepreneurial dimensions, respondents demonstrate relatively stronger skills in customer relations and marketing-related practices.

The highest-rated indicator is *"I am aware of the importance of building relationships with customers"* with a mean score of 2.75, suggesting that respondents value customer loyalty and recognize the long-term benefits of strong customer relationships. This is supported by *"I understand how to handle customer feedback or complaints"* (M = 2.68) and *"I can provide good customer service to maintain customer loyalty"* (M = 2.56), both rated Competent, reflecting the respondents' awareness of service quality as a crucial element in sustaining business success.

Meanwhile, the lowest-rated item, *"I know how to promote products or services to target customers"* (M = 2.49), indicates that while respondents understand the importance of promotion, their skills in implementing effective strategies remain limited. Nonetheless, the indicator *"I am able to use basic marketing strategies to attract customers"* (M = 2.59) shows that they have foundational knowledge in applying simple approaches to reach potential buyers.

These findings reinforce the notion that effective marketing and customer service are among the most accessible entrepreneurial skills for beginners, as they rely heavily on interpersonal abilities and practical engagement with customers rather than advanced technical expertise. However, gaps in strategic promotion and market targeting highlight the need for specialized training to enhance competitiveness. Prior studies affirm that small business growth is strongly associated with entrepreneurs' capacity to adopt innovative marketing strategies and maintain quality customer service (23).

Table 13 Entrepreneurial skills and practices among respondents in terms of technical skills related to production and operations

Indicators	Mean	Std	Verbal Description
1. I have basic technical skills needed for production of goods or services.	2.41	0.78	Somewhat competent
2. I can operate basic tools or equipment related to the business I want to pursue.	2.37	0.72	Somewhat competent
3. I understand standard operating procedures in production.	2.49	0.71	Somewhat competent
4. I know how to ensure quality in the products or services I produce.	2.48	0.73	Somewhat competent
5. I am able to adapt to new techniques or technologies in production.	2.59	0.66	Competent
Grand Mean	2.47	0.62	Somewhat competent

Table 13 presents the respondents' entrepreneurial competence in relation to technical skills needed for production and operations. The computed grand mean of 2.47 with a standard deviation of 0.62 corresponds to the description Somewhat Competent, indicating that while respondents possess basic technical skills, their overall ability to perform production and operational tasks remains limited.

The highest-rated indicator is *"I am able to adapt to new techniques or technologies in production"* with a mean of 2.59, described as Competent, showing that respondents are open and flexible in adopting innovations that can improve efficiency and productivity. This adaptability reflects their willingness to learn and evolve with changing business environments, which is a positive trait for entrepreneurship. Meanwhile, indicators such as *"I understand standard operating procedures in production"* (M = 2.49) and *"I know how to ensure quality in the products or services I produce"* (M = 2.48) demonstrate partial competence, suggesting a basic but underdeveloped grasp of operational standards and quality control.

The lowest-rated items include *"I can operate basic tools or equipment related to the business I want to pursue"* (M = 2.37) and *"I have basic technical skills needed for production of goods or services"* (M = 2.41), which highlight significant gaps in the respondents' technical preparedness. These findings suggest that while respondents show potential in adopting new techniques, they require more extensive training and hands-on practice in core production and operational skills.

These results are consistent with existing literature, which emphasizes that technical competence is a critical foundation for successful entrepreneurship, as it directly influences production efficiency, product quality, and market competitiveness. Studies have shown that while entrepreneurs may initially rely on creativity and adaptability, sustained business growth requires mastery of operational and technical processes to ensure consistent output and customer satisfaction (24).

Table 14 Entrepreneurial skills and practices among respondents in terms of product development and innovation skills

Indicators	Mean	Std	Verbal Description
1. I can create or design new products based on customer needs.	2.43	0.69	Somewhat competent
2. I am able to improve an existing product to make it more competitive.	2.49	0.66	Somewhat competent
3. I am creative in thinking of new ways to present products.	2.41	0.73	Somewhat competent
4. I can adapt products to fit current market demands and trends.	2.54	0.71	Competent
5. I recognize the importance of continuous product improvement.	2.70	0.65	Competent
Grand Mean	2.51	0.58	Competent

Table 14 highlights the respondents' entrepreneurial skills in product development and innovation. The computed grand mean of 2.51 with a standard deviation of 0.58 is interpreted as Competent, suggesting that respondents possess a moderate level of ability in developing and improving products, though their skills still lean toward basic rather than advanced application.

The highest-rated indicator is *"I recognize the importance of continuous product improvement"* with a mean score of 2.70, reflecting respondents' awareness that innovation is crucial for sustaining competitiveness in the market. This is supported by *"I can adapt products to fit current market demands and trends"* (M = 2.54, Competent), showing that respondents are somewhat able to align their products with changing consumer preferences. These findings point to a forward-looking mindset among respondents, even if their practical skills in innovation are still emerging.

On the other hand, the lowest-rated indicator is *"I am creative in thinking of new ways to present products"* with a mean of 2.41, along with *"I can create or design new products based on customer needs"* (M = 2.43), both described as Somewhat Competent. This suggests that while respondents value innovation, their ability to originate fresh ideas and apply creativity to product design and presentation remains underdeveloped. The item *"I am able to improve an existing product to make it more competitive"* (M = 2.49) reinforces this point, showing only partial competence in refining products for greater market appeal.

These results align with the perspective that innovation and product development are central to entrepreneurial success, yet they require more than awareness—they demand creativity, technical expertise, and strategic execution. According to (25), innovation is not merely about invention but about purposeful and systematic practice in improving products and processes to meet evolving market needs.

3.4. Difficulties Encountered in Pursuing Entrepreneurship

This section identifies and analyzes the common challenges faced by the respondents in pursuing entrepreneurial activities.

Table 15 Difficulties encountered by respondents in pursuing entrepreneurship in terms of access to training opportunities

Indicators	Mean	Std	Verbal Description
1. I find it difficult to access entrepreneurship-related trainings.	2.33	0.78	Rarely encountered
2. The location and schedule of training programs are often not convenient.	2.25	0.80	Rarely encountered
3. Training opportunities are limited in Cabanatuan City.	2.43	0.80	Rarely encountered
4. Information about upcoming trainings is not easily available.	2.32	0.82	Rarely encountered
5. Some training sessions are not relevant for aspiring entrepreneurs.	2.21	0.79	Rarely encountered
Grand Mean	2.31	0.60	Rarely encountered

Table 15 presents the difficulties encountered by respondents in pursuing entrepreneurship in terms of access to training opportunities. The overall grand mean of 2.31 with a verbal description of *"Rarely encountered"* indicates that respondents do not frequently experience significant barriers related to training accessibility.

Among the indicators, the highest mean was obtained in the statement *"Training opportunities are limited in Cabanatuan City"* (M = 2.43, SD = 0.80), suggesting that while respondents rarely face this difficulty, limited training availability is a slightly more common concern compared to other issues. On the other hand, the lowest mean was recorded in *"Some training sessions are not relevant for aspiring entrepreneurs"* (M = 2.21, SD = 0.79), implying that the relevance of training content poses the least difficulty for the respondents. The findings suggest that while challenges in accessing training opportunities exist, they are not major barriers for most respondents. However, the slightly higher concern about the limited number of training programs highlights a potential area for improvement in enhancing entrepreneurial support in Cabanatuan City.

These results reinforce the idea that accessibility to entrepreneurial training remains an important factor in fostering competence and sustainability in small business ventures. Studies emphasize that localized and frequent training

opportunities allow aspiring entrepreneurs to bridge gaps in knowledge and skills, thereby increasing their chances of success (26).

Table 16 Difficulties encountered by respondents in pursuing entrepreneurship in terms of product development challenges

Indicators	Mean	Std	Verbal Description
1. I find it difficult to develop new products for the market.	2.41	0.80	Rarely encountered
2. Lack of technical knowledge makes it hard to innovate products.	2.79	0.85	Often encountered
3. I struggle with designing packaging or branding that attracts customers.	2.52	0.74	Often encountered
4. There are limited resources available to test or improve products.	2.56	0.74	Often encountered
5. Product development takes too much time and financial resources.	2.79	0.85	Often encountered
Grand Mean	2.62	0.64	Often encountered

Table 16 presents the difficulties encountered by respondents in pursuing entrepreneurship in terms of product development challenges. The grand mean of 2.62, verbally described as *"Often encountered"*, reveals that respondents frequently experience challenges related to product development.

The highest mean was recorded in the statements *"Lack of technical knowledge makes it hard to innovate products"* (M = 2.79, SD = 0.85) and *"Product development takes too much time and financial resources"* (M = 2.79, SD = 0.85). This indicates that limited technical expertise and resource-intensive product development are the most pressing issues for the respondents. Similarly, difficulties such as *"limited resources to test or improve products"* (M = 2.56, SD = 0.74) and *"struggles with designing packaging or branding"* (M = 2.52, SD = 0.74) were also often encountered, highlighting constraints in both creativity and resources.

On the other hand, the lowest mean was obtained in *"I find it difficult to develop new products for the market"* (M = 2.41, SD = 0.80), which, though only *"rarely encountered"*, still points to a challenge faced by some respondents. The findings suggest that product development is a critical hurdle for aspiring entrepreneurs, particularly in terms of technical knowledge, financial demands, and resource availability. These issues can limit their ability to innovate, compete, and sustain entrepreneurial ventures effectively. Scholars argue that product development plays a pivotal role in entrepreneurial competitiveness, yet it is often constrained by inadequate technical expertise, limited funding, and lack of access to innovation support systems (27).

Table 17 Difficulties encountered by respondents in pursuing entrepreneurship in terms of adoption and use of technology

Indicators	Mean	Std	Verbal Description
1. I face challenges in using technology for business operations.	2.49	0.78	Rarely encountered
2. I lack knowledge in digital tools for marketing or sales.	2.54	0.80	Often encountered
3. Internet connectivity is sometimes a barrier to using technology.	2.79	0.83	Often encountered
4. I find it difficult to manage online platforms for business.	2.46	0.82	Rarely encountered
5. I need more training to maximize technology in entrepreneurship.	2.97	0.80	Often encountered
Grand Mean	2.65	0.59	Often encountered

Table 17 presents the difficulties encountered by respondents in pursuing entrepreneurship in terms of adoption and use of technology. The grand mean of 2.65, verbally described as *"Often encountered"*, indicates that respondents frequently face challenges in integrating technology into their entrepreneurial activities.

The most significant concern was expressed in the statement *"I need more training to maximize technology in entrepreneurship"* (M = 2.97, SD = 0.80), which suggests that a majority of respondents recognize the need for capacity-building to effectively utilize digital tools. Similarly, *"Internet connectivity is sometimes a barrier to using technology"* (M

= 2.79, SD = 0.83) and *"I lack knowledge in digital tools for marketing or sales"* (M = 2.54, SD = 0.80) were both rated as *"often encountered"*, underscoring gaps in technical skills and external infrastructure.

On the other hand, statements such as *"I face challenges in using technology for business operations"* (M = 2.49, SD = 0.78) and *"I find it difficult to manage online platforms for business"* (M = 2.46, SD = 0.82) received lower mean scores, described as *"rarely encountered"*. This shows that while respondents can generally handle basic business operations and online platform management, they still struggle when it comes to more advanced and strategic uses of technology. The findings imply that while basic technological use is manageable for most respondents, there are persistent challenges related to digital literacy, internet accessibility, and training needs. These limitations hinder their ability to fully harness technology for entrepreneurial growth and competitiveness. Existing literature emphasizes that technological capability is a key driver of entrepreneurial success, especially in enhancing marketing, operational efficiency, and customer engagement (28). However, barriers such as limited digital literacy, infrastructure deficits, and lack of training remain significant obstacles for small and emerging entrepreneurs in developing economies.

Table 18 Difficulties encountered by respondents in pursuing entrepreneurship in terms of technical know-how in starting an enterprise

Indicators	**Mean**	**Std**	**Verbal Description**
1. Limited access to capital is a major concern when starting an enterprise.	2.94	0.91	Often encountered
2. Government requirements and business permits create barriers to starting an enterprise.	2.92	0.92	Often encountered
3. Inadequate business knowledge and training affect the ability to start an enterprise.	3.00	0.78	Often encountered
4. Identifying a profitable and sustainable business opportunity is a concern when starting an enterprise.	3.06	0.78	Often encountered
5. Family obligations and social expectations influence the ability to start an enterprise.	2.95	0.87	Often encountered
Grand Mean	2.97	0.72	Often encountered

Table 18 shows the difficulties encountered by respondents in pursuing entrepreneurship in terms of technical know-how in starting an enterprise. The results reveal a grand mean of 2.97, verbally described as *"Often encountered"*, indicating that respondents face consistent challenges when transitioning from entrepreneurial intention to actual business startup.

Among the indicators, the highest-rated difficulty was *"Identifying a profitable and sustainable business opportunity is a concern when starting an enterprise"* (M = 3.06, SD = 0.78), which suggests that opportunity recognition remains a critical barrier for many aspiring entrepreneurs. Closely related is *"Inadequate business knowledge and training affect the ability to start an enterprise"* (M = 3.00, SD = 0.78), highlighting the need for capacity-building and entrepreneurship education.

Other challenges that were frequently encountered include *"Limited access to capital"* (M = 2.94, SD = 0.91) and *"Government requirements and business permits create barriers to starting an enterprise"* (M = 2.92, SD = 0.92). These results emphasize that both financial and regulatory constraints pose substantial difficulties during the startup phase. Additionally, *"Family obligations and social expectations influence the ability to start an enterprise"* (M = 2.95, SD = 0.87) suggests that socio-cultural factors also affect entrepreneurial pursuits. The findings suggest that respondents face multi-dimensional barriers—financial, regulatory, educational, and socio-cultural—in their entrepreneurial journey.

3.5. Proposed Extension Program

The proposed plan is an initiative of the Gender and Development Office, designed to address the identified gaps in training accessibility, entrepreneurial skills, and overall community empowerment through a structured and sustainable approach. It integrates gender sensitivity, entrepreneurial capacity-building, and continuous support

mechanisms to strengthen local communities in their pursuit of socio-economic progress. Educational programs and capacity-building initiatives play a significant role in equipping aspiring entrepreneurs with the knowledge, skills, and confidence needed to pursue sustainable enterprises (29). Additionally, inclusive and gender-responsive interventions have been shown to enhance participation, empowerment, and the equitable distribution of opportunities in entrepreneurial activities (30). Beyond individual benefits, entrepreneurship contributes to broader community development by stimulating economic activity, promoting innovation, and improving overall quality of life (31).

The plan is composed of five major components that build on each other to ensure holistic capacity-building:

3.5.1. Component I: Asset-Based Community Development Assessment

This phase focuses on identifying and mobilizing the existing resources, talents, and strengths of target communities. Rather than emphasizing deficits, it highlights what communities already have and can build upon to create opportunities for livelihood and business ventures.

3.5.2. Component II: Gender & Development Course

This component seeks to deepen awareness and understanding of gender issues, ensuring that empowerment initiatives remain inclusive. It promotes gender sensitivity and inclusivity, preparing participants to recognize and address gender-based barriers in entrepreneurship and community participation.

3.5.3. Component III: Advanced Entrepreneurial Skills Training

Responding to the gaps in technical know-how and entrepreneurial competencies revealed in previous assessments, this training enhances participants' knowledge in areas such as business planning, financial management, marketing, customer service, and product development. The aim is to strengthen entrepreneurial capacity for sustainable enterprises.

3.5.4. Component IV: Capacity-Building, Technical Assistance, and Consultancy Services

Beyond formal training, this component provides continuous support to entrepreneurs and community members. It includes mentorship, consultancy, and technical assistance, ensuring that participants can effectively apply their learning in real-life business situations and adapt to evolving market trends.

3.5.5. Component V: Monitoring and Evaluation

To ensure effectiveness and sustainability, a structured monitoring and evaluation system will track progress, outcomes, and areas for improvement. This component allows for accountability, impact measurement, and iterative adjustments to maximize project success.

4. Conclusion

The findings of the study highlight the dynamic yet challenging landscape faced by aspiring women entrepreneurs in Cabanatuan City. While respondents demonstrated some level of competence in entrepreneurial practices such as marketing, customer service, and product development, their skills in financial management, business planning, and technical operations were generally rated as only "somewhat competent." Furthermore, the majority had not previously attended entrepreneurship-related training, which explains the gaps in essential competencies. The study also revealed that although Gender and Development (GAD) initiatives play an important role in skill development, inclusivity, and accessibility, certain gaps remain, particularly in advanced training on product development, financial literacy, mentorship, and technology adoption. These findings emphasize the need for continuous and more targeted support that bridges the gap between theoretical learning and practical application.

Moreover, the difficulties encountered by the respondents—ranging from product development and technology adoption to technical know-how in starting an enterprise—reflect the structural and contextual challenges that aspiring entrepreneurs continue to face. Limited access to capital, government requirements, and balancing family obligations were among the most common barriers identified. These results underscore the importance of designing gender-responsive and community-based interventions that strengthen entrepreneurial competencies while addressing systemic constraints.

Compliance with ethical standards

Disclosure of conflict of interest

The authors declare no conflicts of interest.

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