

Assessing Entrepreneurial Skills and Training Needs for Successful Business Performance among Women Food Vendors: Evidence from Ilala, Tanzania

Sunday Isdory Mkama

Department of Gender Studies, Faculty of Leadership and Management Sciences
The Mwalimu Nyerere Memorial Academy, P. O. Box 9193,
Dar es salaam, Tanzania,
email:sundayisdory@gmail.com

Abstract: *The focus of this study was to investigate the entrepreneurial skills and self-reported training requirements of women food vendors in Ilala Municipality Tanzania. Despite their significance in local food systems and urban livelihoods, women food vendors generally work in vulnerable, informal contexts with low levels of financial, management, and strategic skills. This research utilized Training Needs Assessment (TNA) Theory and Human Capital Theory. A cross-sectional mixed-methods research design was employed which consisted of quantitative surveys (n = 159) of women food vendors and semi-structured qualitative interviews with key informants. Data was analyzed with descriptive statistics, importance-performance difference, and by applying a thematic analysis approach. The study findings showed that women food vendors are proficient in making food, storing food, and serving food but lack management, financial, and social skills. All respondents indicated that they needed training in routine planning, marketing, customer care, problem-solving, and identifying opportunities. Many used financial indicators to show business success, such as being profitable and selling more products, but they also mentioned non-financial indicators, such as customer satisfaction and independence. Qualitative findings confirmed the need for training programs with structure, context-specificity, consistent goals, and an emphasis on increasing management and cognitive skills instead of repetitions of technical skills. The study highlights that closing entrepreneurship skills gaps with systematic evidence and competency-based training, can significantly improve the performance and sustainability of women-run enterprises in the informal economy in Tanzania. The study suggests a systematic approach to municipal entrepreneurship programs to include ongoing training needs assessments, thus establishing systematic connections between the education and training contents and market needs. This study contributes generally to the discourse on women's economic empowerment and sustainable urban entrepreneurship.*

Keywords: Entrepreneurial Skills, Training Needs Assessment, Women Food Vendors, Informal Economy, Ilala Municipality, Tanzania

1. INTRODUCTION (Heading 1)

There is an increasing awareness that entrepreneurship leads to economic development, job creation, and poverty alleviation for developed and developing economies (Drakaki, 2025; Soomro et al., 2025). Within this broader global discussion, entrepreneurial skills are widely recognized as important skills to driving increased innovation, productivity, and independence with micro and small scale businesses (Pennetta et al., 2024; Diáñez-González et al., 2025). Entrepreneurial skill development is aligned with the United Nations Sustainable Development Goals (SDG's), particularly Goal 1 (reduce poverty), Goal 5 (achieve gender equality) and Goal 8 (promote inclusive and sustainable economic growth, employment and decent work for all). In a world where economies are moving towards knowledge-based economies, being able to identify, train and foster entrepreneurial competencies is now central to creating sustainable socio-economic changes (Bejinaru, 2018; Tikas, 2025).

In developing nations, most notably in sub-Saharan Africa, entrepreneurship is an important mechanism to address issues

of unemployment, gender inequality, and income inequality (Balraj & Velmurugan, 2017; Mamabolo et al., 2017). Women are disproportionately represented in the informal sector, and often rely on small-scale trading and food vending to provide for themselves and their families (Daudi, 2015; Hamukoto, 2016). Although women play a significant economic role, many women entrepreneurs are challenged by a lack of entrepreneurial skills, limited access to finance, and poor management capacity (Orji & Nwosu, 2016; Raphael & Mrema, 2017). These skill deficiencies tend to limit growth potential and a woman's ability to compete in increasingly dynamic and competitive markets (Muhammad et al., 2015; Magembe, 2019).

The informal food vending industry in Tanzania employs thousands of women who depend on micro-enterprises for daily income (Maingwa, 2015; Daudi, 2015). Ilala Municipality, a suburb of Dar es Salaam, is one of the most thriving urban areas where food vending is an important part of the local economic and food security system (Marobhe & Sabai, 2016). However, women food vendors in this area work under precarious conditions due to poor knowledge of business management, low marketing skills, and inadequate financial

management (Tambwe, 2015; Mayuran, 2016). These unfavorable conditions negatively affect productivity and contribute to unsustainable business development and poverty among women entrepreneurs (Nurhayati & Handayani, 2025).

While there have been several national programs addressing entrepreneurship training, many do not meet the needs and context of informal women-owned business (Cortés-Rodríguez et al., 2024; Raj et al., 2024). Depending on identifying and accounting for genuine skill gaps in the target population through a systematic training needs assessment process and these are what determines the effectiveness of the training intervention that follows (Gaspard & Yang, 2016; Rahmana & Sukaya, 2020). However, Tanzania is lacking in studies identifying entrepreneurial skills and training needs of women food vendors, organizations have not yet systematically used an analytic framework to explore the skills and training needs of women informal vendors selling food. As a result, the entrepreneurial programs implemented have tended to be generic and supply not demand led and do not account for the practical situations and constraints they are facing. (Bewaran & Moris, 2022; Basnet & Gautam, 2022).

Having inadequate entrepreneurial skills as women food vendors has a profound impact locally and at the national level. Without specific capacity-building initiatives, these entrepreneurs will continue to work in low income activities and not contribute significantly to national economic growth, while rendering efforts toward the Sustainable Development Goals ineffective (Wajdi et al., 2019; Egbri & Ogunleye, 2024). Lack of specific training programs not only impacts individuals' livelihoods, but it reduces resilience in the community, food safety and the vibrancy of the local urban economy as a whole. Therefore, it is critical to fill these gaps to foster inclusive economic empowerment, advance gender equality, and support the sustainability of small and micro business enterprises in Tanzania (Akpan et al., 2024; Drakaki, 2025).

The goal of the study is to offer policy-relevant insights to design contextually relevant training programs which address the needs of informal women entrepreneurs. Findings add to the broader body of knowledge on entrepreneurship development and women's economic empowerment within the informal sector in Tanzania. On this basis, the study examines the entrepreneurial skills and training needs of women food vendors in Ilala Municipality (Tanzania). Specifically it aims to

(i) Identify the key skills required for successful business performance among women food vendors in Ilala Municipality

(ii) Determine the entrepreneurial skills training needs successful business performance among women food vendors in Ilala municipality

(iii) Assess the Measurement of successful Operation among women food vendors in Ilala municipality

2. LITERATURE REVIEW

2.1 Theoretical Review

The Training Needs Assessment Theory is based on the work of McGehee and Thayer's (1961) seminal theoretical framework that provides a basis for determining gaps in knowledge and skill at the organizational, task, and individual level. It is relevant to this study, since it allows for the systematic examination of training needs of women entrepreneurs though a comparison of current, desired performance and desired performance, along the way examining "performance gaps" which directly draws attention to the assessment of deficiency in entrepreneurial skills such as managerial, marketing and financial literacy which inhibit business performance of women food vendors in Ilala Municipality (Rahmana & Sukaya, 2020; Daudi, 2015). Kaufman and English's (1978) expanded framework, known as the Organizational Elements Model (OEM), strengthens the use of TNA theory in community-based entrepreneurship by relating individual capacity development to benefits for broader society. Within this context, the TNA framework will not only identify training needs, but also locate training needs in relation to the potential for women to achieve socioeconomic empowerment, which makes it an appropriate framework for establishing training interventions for inclusive entrepreneurship (Gaspard & Yang, 2016; Raj et al., 2024).

Although TNA theory is well established in identifying performance and training gaps, its primary focus in formal organizational settings creates challenges for informal sector work where women entrepreneurs typically work with limited resources and in nonstandardized work (Hamukoto, 2016). As such, the present research extends the use of TNA by situating it in informal microenterprises, providing for the assessment of both formal and implicit skills needed for sustainable growth in the business cycle.

Complementing TNA, Becker's Theory of Human Capital (HCT), provides the theoretical linkage between training needs and entrepreneurial performance (1964). Specifically, HCT suggests that investment in human capital (through education, training, and experience) leads to greater productivity in the individual and the business (Amadi, 2014; Balraj & Velmurugan, 2017). With this study, HCT describes how structured entrepreneurial training, provides incremental improvements to women entrepreneurs' skillsets in areas like innovation, keeping of records, and customer management, all of which are implicated in improving enterprise performance (Mamabolo et al., 2017; Bejinaru, 2018). In this way, although TNA determines what skills are undertaken, HCT provides evidence based reasoning for how it leads to improvement in measurable aspects of success in the business context. Evidence from empirical studies conducted in

developing countries indicates that improvement in entrepreneurial skills, particularly improved managerial skills and financial literacy, lead to improved performance in businesses and improved income stability over time (Mayuran, 2016; Soomro et al., 2025).

The Competency-Based Training (CBT) model puts both TNA and HCT in action by focusing on the development of competencies that are specific and observable/measurable and that connect to anticipate performance-related outcomes (Ökmen et al., 2019). In this particular study, CBT has the potential to provide the essence of turning training needs identified into planned skill development programs to improve women's entrepreneurial skills. For example, a CBT trained program may focus on developing certain competencies such as problem-solving, innovation, and adaptability, which are linked to entrepreneurial resilience and growth (Pennetta et al., 2024; Drakaki, 2025). Yet with the model's expectation of structured learning approaches, it will need to be modified to fit the framework of informal women entrepreneurs in Tanzania, who have relied more upon experiential and peer-to-peer learning (Magembe, 2019; Maingwa, 2015).

The Entrepreneurial Skills Development Model (ESDM) and updated training needs assessment (TNA) frameworks (Basnet & Gautam, 2022; Cortés-Rodríguez et al., 2024) epitomize these knowledge theories in that they specifically connect training needs assessment, skills development and enhancement, and business-related outcomes. Together, these models support a contextualized understanding of how entrepreneurs develop their skills through ongoing learning and adaptation. The ESDM will serve as an assessment lens for this study to understand how women food vendors learn, adopt, and utilize entrepreneurial skills to enhance their business performance, despite structural barriers of limited access to capital, gendered norms, and additional expected shifts (Bewaran & Moris, 2024; Nurhayati & Handayani, 2025). Additionally, it is important to recognize that effective training has to be contextually relevant, participatory and inclusive in order to address the specific challenges experienced by informal women entrepreneurs in Tanzania (Egbri & Ogunleye, 2024).

Thus the TNA Theory, Human Capital Theory, CBT Model, and ESDM collectively create a congruent theoretical framework which links training needs (what skills are absent), skill development (how skills are developed), and business performance (how skills impact business success). Thus this study contributes theoretically to adding the knowledge of existing theories in the informal economy and providing of contextual framework for understanding the potential of skills based, targeted training to support women entrepreneurs to improve their business outcomes in Ilala Municipality.

2.2 Skills Required for Entrepreneurial Success

Success in entrepreneurship relies on a constellation of technical, managerial, and soft skills that allow entrepreneurs to recognize entrepreneurial opportunities, obtain resources,

and continue to operate in profit. In the academic literature, financial management literacy, marketing literacy, managerial decision-making, and interpersonal communication are consistently identified among the aspects instrumental to business operation, growth, and survival (Pennetta, Anglani, & Mathews, 2024; Steira, Wigger, & Rasmussen, 2024). However, not all studies work with the same conceptualization, or measurement of skills, or contextualize the skills in the same setting. For example, in studies set in developed economies, scholars emphasize skills focused on innovation and strategic management (Botella-Carrubi, Ulrich-Berenguer, & Soriano, 2024) versus studies focused on developing economies emphasizing skills focused on management operations and relational skills (e.g., bookkeeping, customer care, negotiation, etc.). This suggests that the skills, and competencies are not always transferable between contexts, and that contextual environments such as institutions, market characteristics, and socio-cultural elements shape entrepreneurial skillsets.

Research using survey and mixed-methods approaches has demonstrated which skills are most important across different business contexts. For example, Bewaran and Moris (2024) found managerial and marketing skills were the most lacking for small-business operators in Nigeria, while, Basnet and Gautam (2022) showed motivation to learn mediated the effectiveness of skills-based interventions in Nepal. Methodological differences are also notable, with studies from South Asia often employing structured survey instruments that draw on larger sample sizes (Raj, Muniapan, & Indiran, 2024), and studies from Africa often using qualitative approaches to understand the lived experiences of informal entrepreneurs (Tambwe, 2015; Magembe, 2019). These methodological differences are important and diversity of research approaches highlights the need for a triangulated approach, measuring competencies quantitatively and gaining qualitative insights into contextual constraints.

Local and regional research offers more nuance. In Tanzania, Daudi (2015) and Magembe (2019) ascertained that women business owners have a strong technical understanding, but they do not have the skills for strategic and financial management that are important for scaling their operations. Likewise, Maingwa (2015) and Marobhe and Sabai (2016) suggested that interpersonal and customer service skill areas are vital for maintaining market relationships amongst women food sellers, but training preventing these areas are rarely conducted systematically. Related evidence from Kenya and Uganda reported that entrepreneurial performance greatly increases when training considered local literacy levels, time limitations, and responsibility for households (Raphael & Mrema, 2017; Muhammad et al., 2015).

Informed by this research, the current study understands entrepreneurial skills as four interconnected domains, business management, marketing/customer care, financial literacy or bookkeeping, and interpersonal or personal skills, and examines their relationship to the business performance

of women food sellers in Ilala Municipality. This study lends itself to analysis of situativity which addresses methodological and substantive limitations of prior research, particularly research examining informal urban enterprises in East Africa.

2.3 Entrepreneurial Skills Training Needs

Entrepreneurial skills training needs exist as tangible divides in competencies of the entrepreneur and skills needed for effective management and growth of their enterprises. To determine those training needs is central to the design of training that is responsive and founded in the local context (Cortés-Rodríguez et al., 2024). Although research across Latin America and Asia has tended to link systematic Training Needs Analysis (TNA) heavily with productivity gains (Basnet and Gautam, 2022; Raj et al., 2024), there is more complexity on the African evidence base due to contextual barriers that may include low levels of literacy, informal practices, and lack of institutional supported work (Bewaran and Moris, 2024).

Comparative evidence demonstrates that training needs differ between sectors and contexts. Mfam et al. (2024) found that business students in Nigeria had critical literacy and innovation gaps; while OBIABI and Akpomedaye (2024) found technical and managerial gaps in agricultural entrepreneurs. Conversely, studies in Tanzania (Tambwe, 2015; Daudi, 2015) have suggested women in informal markets are faced with purposeful, context-specific, challenges due to lack of access to financial management focused trainings and lack of exposure to different structured business development processes. These examples of contextual variation in training needs will further emphasize the need for training designs that are contextual and consider social and psychological aspects of entrepreneurship as factors contributing to entrepreneurial success.

In terms of methodology, the majority of studies use cross-sectional surveys and importance-performance analyses to quantify skill gaps, while very few studies have included longitudinal or mixed-methods designs to assess the post-training effects (Mayuran, 2016; Mamabolo, Kerrin, & Kele, 2017). The use of descriptive survey methods constrains causal inference and the understanding of how training needs change over time. Thus, using the mixed-methods TNA framework, utilized in this study, provides a greater level of understanding of both perceived training gaps and observed gaps. These training gaps can then inform targeted policy and program interventions.

In Tanzania, there is little empirical literature on training needs of informal women entrepreneurs. The majority of evaluations highlight microfinance or technical capacity (Raphael & Mrema, 2017; Magembe, 2019), while soft and managerial competencies receive little attention, yet they are just as important in maintaining growth for enterprises. This study has aimed to balance these considerations by systematically identifying and rank-ordering managerial, financial and interpersonal training needs among women food

vendors in Ilala Municipality, expanding the empirical literature base for inclusive entrepreneurship development.

2.4 Measures of Successful Business Performance

Successful business practices refer to how organizations succeed with profitability, customer satisfaction, and sustainability (Muhammad et al., 2015). In general, literature creates an overall distinction between financial indicators (e.g., income, profit margins, sales growth) and non-financial indicators (e.g., customer retention, innovation, market expansion) as measures of success (Magembe, 2019; Tambwe, 2015). However, there is comparative evidence that these indicators vary in meaning across various contexts and industry sectors. For example, Mayuran (2016) found a significant sales and productivity improvement post-training among SMEs in Sri Lanka, while Mamabolo et al. (2017) found that in South Africa's rapidly changing markets, innovation and adaptability were cornerstones of entrepreneurial success.

In the Tanzanian context, Daudi (2015) showed that women entrepreneurs who obtained better managerial and financial skills had better operational outcomes than women that faced structural barriers (e.g., limited access to capital and market information). Similarly, Magembe (2019) found that in Dar es Salaam, successful SMEs exhibited better record-keeping and better customer relationships than unsuccessful SMEs. This evidence suggests that operating successfully in the informal enterprise context was often the result, more often than not, of how those businesses leveraged skills that could be learned rather than strictly on resources that embody formality.

Methodologically, previous studies mostly employed cross-sectional or descriptive designs, which, albeit illustrative, stop short of understanding longitudinal performance dynamics. Moreover, they provide little explicit examination of how entrepreneurial skills translate into observable performance in informal settings. To address these issues, the present study applied a mixed-methods design that encompassed profitability, customer retention, and business growth as multiple dimensions of success, fully acknowledging both local realities and international measurement standards.

2.5 Research Gap

While there are several literatures about the nature of entrepreneurial skills and training needs, there remain notable gaps, particularly in the Tanzanian informal sector. Existing studies have primarily focused on formal SMEs or education, or on women vendors who work in highly constrained environments with little to no institutional support (Daudi, 2015; Magembe, 2019). Moreover, the majority of regional studies have been grounded in a cross-sectional design and have not considered the interaction of the different skill domains of managerial, financial, and interpersonal, in relation to business outcomes.

There have been limited empirical assessments in Tanzania that have deliberately used a Training Needs Analysis (TNA) approach to systematically identify and evaluate the extent of entrepreneurial skill gaps for informal women entrepreneurs. There has also been limited attention on the relationship of those skills to operate performance in urban informal markets. Thus, this research fills an important gap by employing mixed-method TNA procedures and performance assessments, focused on women food vendors operating in Ilala Municipality. In doing so, this study adds to our contextual understanding of the entrepreneurial skills development process in relation to sustainable business performance in the East African informal economy.

3. MATERIALS AND METHODS

3.1 Study Area

The research was performed in the Ilala Municipality of Dar es Salaam and specifically looked at three large markets, namely Kisutu, Buguruni, and Ferry. The three markets were selected purposefully because of the significant population of women food vendors, variation of business activities, and market infrastructure that support food vending activities. These markets also represent different urban socio-economic realities within Ilala which are valuable when considering women's entrepreneurial skills and training needs in the informal food vending sector. Such considerations provide contextual and practical relevance to the urban food vending scene in Tanzania (Magembe, 2019).

3.2 Research Design and Approach

The research employed a mixed-methods cross-sectional design incorporating both qualitative and quantitative methods. The choice of a cross-sectional design was beneficial because it allowed for the capture of data from a representative sample of vendors at a single time point to provide a real-world snapshot of the food vendors' entrepreneurial skills and training needs (Orji, 2016; Hemedi, 2015).

The mixed-methods approach allowed for quantitative data collected from the questionnaires, as well as a qualitative element collected from interviews, to provide a holistic and contextual knowledge of the phenomenon. While the quantitative analysis identified measurable skill gaps, the qualitative data offered explanatory accounts in relation to the training challenges and motivations. The methodological complementarity that resulted enhanced the validity, reliability, and richness of the findings, providing cohesion between numerical trends and the lived experience of respondents in relation to their entrepreneurial skills and training needs.

3.3 Study Population and Sample Size

The study population was made up of the 264 registered women food vendors, in the Kisutu, Buguruni, and Ferry markets. Utilizing Yamane's (1967) formula, the sample was calculated to be 159 at the 95% confidence interval at + 5% precision. This sample was sufficient to provide statistical representativeness and analytical power while remaining

feasible for logistical planning. The population was an exact representation of the target population of benefactors of entrepreneurial training interventions, ensuring that the study had applied significance.

3.4 Sampling Procedures and Representativeness

To achieve representativeness and reduce selection bias, the study utilized a combination of simple random sampling and purposive sampling. Each market represented a stratum in order to achieve proportional representation based on the total number of registered women vendors. At the market-level, quotas were determined by considering the vendor population in each market to ensure that no market was either over- or underrepresented.

A simple random procedure was used to select women vendors within each market stratum from updated vendor registration lists supplied by market leaders. This random procedure allowed each vendor to have the same chance of being included in the study (Parsons, 2007). The researchers selected eight key informants (A leader of women food vendors, municipal business officers, entrepreneurship trainers, and health inspectors) purposively and qualitatively to conduct interviews based on their professional expertise and operational knowledge of women's entrepreneurial activities. Their input enhanced the understanding of training needs, support offered by institutions, and market-level issues. Using a combination of stratified random sampling and purposive sampling enhanced both the representativeness of the study and the depth of information obtained.

3.5 Data Collection Instruments

Data were gathered through structured questionnaires and semi-structured interview guides. The questionnaires consisted of 16 items modified from the adapted Hennessy-Hicks Training Needs Analysis (TNA) tool. Adjustments were made to fit food vending and the informal economy in Tanzania, primarily in financial management, customer management, hygiene, and compliance.

In an effort to check for psychometric robustness after modifications, the review step of the process involved three experts in entrepreneurship and two municipal business development officers reviewing it for content validity. A pilot test conducted with 15 women food vendors from a market that was not sampled (Kariakoo) was completed to check for indications of reliability and clarity. After this testing phase, the Cronbach's alpha for the importance and performance subscales were .87 and .85, which are acceptable indicators of internal consistency.

Interviews also were semi-structured to gather qualitative data from key informants about contextual barriers, training needs, and training and capacity-building that exists. Using diverse data sources in research situation increases construct validity, and allowed for methodological triangulation of data to produce credible results that are grounded in the context.

3.6 Data Analysis

Quantitative data sets were coded, cleaned and analyzed with SPSS (Version 20). Descriptive statistics were used to summarize the skill levels, including means, frequencies and standard deviations. The importance–performance difference (IPD) method determined priority training gaps by calculating difference scores between perceived importance and performance to each skill item.

Qualitative data gathered from interviews was transcribed and analyzed using thematic content analysis. This involved coding recurring patterns into themes according to the objectives of the study. Quantitative findings and qualitative findings were integrated at the interpretive stage to provide additional analytical triangulation, validity and explanatory power.

4. FINDINGS

4.1 Socio-Demographic Characteristics of Respondents

The socio-demographic information of respondents, outlined in Table 1, indicates that most respondents (61%) fell under the age category of 20–39 years, indicating that the working-population engaged in entrepreneurship in the study areas are predominantly young people. Concerning education, the data indicates that many (74%) had completed primary education and only a small portion of the total (6%) graduated from postsecondary degree programs; suggesting that there was limited educational access to post-secondary level for entrepreneurs in the marketplaces in Ilala District. In terms of levels of experience in the area of entrepreneurial practice, 72% of respondents reported being in business for less than five years, and only 8% recorded being in business for more than eleven years, therefore indicating that most individuals were relative inexperienced entrepreneurs in the marketplace. However, on the contrary, findings indicated that 78% of all respondents previously participated in some form of training or work-related training, indicating an engaged workforce concerning capacity building and skill upgrading. This study therefore illustrates, firstly that the overall entrepreneurial population is predominantly young, female and of modest educational achievement and experience in business, but engaged in training activities; suggestive of an active working population with significant potential to engage in targeted skill enhancement programs to influence improvement in business performance within Ilala District.

Table 1. Socio-Demographic Characteristics of Respondents

Demographic	Characteristics	N	%
Age	20–39	97	61
	40–59	48	30
	>60	14	9
Education	Never gone to school	8	5
	Standard Seven	118	74
	Secondary	23	15
	Certificate	7	4

	Diploma	3	2
Experience in business	0–5 years	115	72
	6–11 years	32	20
	>11 years	12	8
Previous training	Yes	117	74
	No	42	26

Source: Survey Data (2025).

4.2 Skills Training Needs for Running Food Vending Business

According to the findings shown in Table 2, there are considerable differences between the skills the respondents consider important in running a business and their performance levels in those skills. For example, routine planning (M = 4.32), marketing (M = 4.27), customer care (M = 4.20), problem solving (M = 4.02), and opportunity recognition (M = 3.93) represent the highest level of training need, indicating these are the most crucial skills required by entrepreneurs. Overall, these participants are aware that these skills are important in running a business; however, they acknowledge they do not have the level of performance they feel is appropriate in using those skills to run their business.

In contrast, operational skills, such as food storage (M = 0.09), cooking (M = 0.18), food preparation (M = 0.35), and food serving (M = 0.48), have the least training needs, suggesting that the majority of respondents already have some level of performance in these skills. In essence, participants are verifying the following pattern: strong technical skills yet weak managerial and cognitive abilities. The awareness of disparagement denotes the need for organized programming to enhance business management, planning, and customer relationship skills that will improve the women food vendors' competitiveness and sustainability in business.

Qualitative findings confirmed these tenets. For example, an entrepreneurship trainer said:

“.....Most women vendors can cook well, but they don't plan, market, don't have financial skills or a business management skills. They need help converting their skills into a sustainable business.” (Entrepreneurship Trainer, Ilala District, June 2025).

The quoted statements depict a similar belief expressed by a leader of women food vendors' participant:

“.....I know how to prepare and sell food, but I don't know how to keep records or to plan for profit. I just sell everyday without knowing if I am gaining or losing.” (A leader of women vendors', Buguruni Market, June, 2025).

Similarly, Environmental Health Officers observed:

“.....Before any training, we must first assess what are the actual needs of vendors, particularly hygiene and food safety skills, because otherwise, the training may not be targeting the specified needs.” (Environmental Health Officer, Kisutu Market, June, 2025).

These quotes request the shared view that the need for a structured and participatory training needs assessment is important in designing responsive capacity building programming that supports skill development in both technical and managerial capacity building among women food vendors.

Table 2. Average Skills Training Needs

Skills	Relevance (A)	Performance (B)	Training Need (A–B)
Cooking	6.03	5.85	0.18
Food storage	6.26	6.17	0.09
Food preparation	6.20	5.85	0.35
Food serving	6.40	5.92	0.48
Record keeping	6.32	3.24	3.08
Marketing	6.24	1.97	4.27
Routine planning	5.95	1.63	4.32
Financial skills	6.10	2.42	3.68
Bookkeeping	6.18	2.35	3.83
Opportunity recognition	6.43	2.50	3.93
Problem-solving	6.29	2.27	4.02
Innovation & creativity	6.10	2.85	3.25
Risk-taking	6.13	2.67	3.46
Customer care	6.01	1.81	4.20
Communication	6.11	2.53	3.58
Negotiation	6.12	2.57	3.55

Source: Survey Data (2025)

Notes: N = 159 respondents,

- Scale: 1 = Very Low, 7 = Very High (Likert scale for both Relevance and Performance).
- Training Need = Relevance – Performance; higher scores indicate greater skill gaps requiring training.

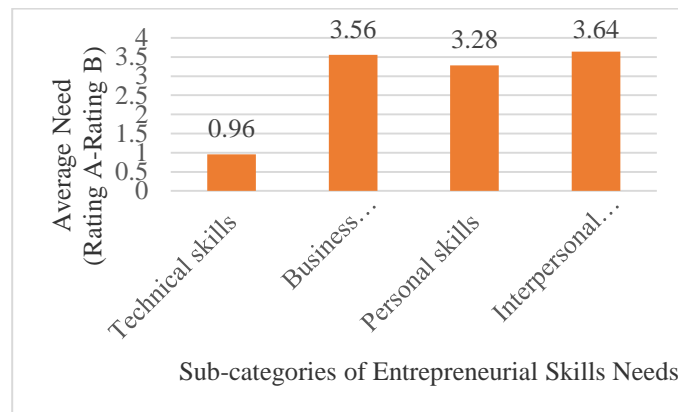
4.3 Sub-Categories of Entrepreneurial Skills Training Needs

The results presented in Figure 1 reveals the subcategories of entrepreneurial skills training needs revealed by respondents. Most respondents reported the highest demand in their training needs was for interpersonal skills (M=3.64), business management (M=3.56), and personal skills (M=3.28). These three skills were valued as important for sustaining enterprise growth and the report of training lowest demand for technical skills (M=0.96). The interpersonal skills, personal skills, and business management were indicated as the key skill area of need, indicative of the emerging realisation of the relevance of entrepreneurial skills in entrepreneurship.

Qualitative evidence corroborated this point. For instance, trainers in the field of entrepreneurship suggested that

“.....interpersonal skills training is important to the customer satisfaction and retention,” while “technical skills are entrenched into the daily work programmes” (Entrepreneurship Trainers, Ilala Municipal, June 2025).

This concordance reinforces the significance of a contextualized survey of entrepreneurial training skill needs to develop effective training programs.



Source: Survey Data (2025)

Note: Figure illustrates average skill gaps (A–B) across thematic areas—managerial, technical, and social. Higher bars represent stronger training needs.

Figure 1: The sub-category of Entrepreneurial Skills Training Needs

4.4 Measures of Successful Performance of Food Vending Business

The results reported in Table 3 indicate that the respondents tended to assess their business as successful as it relates to a high mean composite score (M = 4.44, SD = 0.50, CV = 0.114) that suggests agreement amongst respondents. The highest rated indicators were increase in customer base (M = 4.57) and customer satisfaction (M = 4.55), confirming the notion that outcomes associated with customers were the primary indicators of success.

Additionally, being their own boss (M = 4.45) and profitability (M = 4.32) were also major motivational and assessment indicators of performance. Furthermore, the low CVs (CV < 0.12) indicates there was a high consensus of agreement among respondents. In summary, the findings demonstrate that food vendors evaluate success performance by considering both economic (profit, sales, income) and non-economics (independence and customer satisfaction) values, demonstrating that food vendors have a more comprehensive understanding of entrepreneurial success.

Table 3. Measures of Successful Performance of Food Vending Business

Statement	Mean	SD	CV
Measure success by profit	4.32	0.53	0.124
Measure success by customer satisfaction	4.55	0.50	0.110
Measure success by being own boss	4.45	0.50	0.112
Measure success by increase in customer base	4.57	0.50	0.110
Measure success by increase in business income	4.39	0.50	0.115
Measure success by increase in business sales	4.37	0.48	0.111
Aggregate score	4.44	0.50	0.114

Source: Survey Data (2025).

Note: $N = 159$ respondents. Scale: 1 = Strongly Disagree, 5 = Strongly Agree. Higher mean scores indicate stronger agreement with success indicators.

5. DISCUSSION OF FINDINGS

The research showed that the food vending business in Ilala District is primarily female, with a majority of the respondents being, (20-39 years), only reached primary education, and less than five years of business experience. Despite these limitations, more than half reported having received some kind of work-related training, highlighting the increasing importance placed on developing entrepreneurial capacity for youths. While recognizing the importance of entrepreneurial skills, for example; planning, marketing, customer service, problem-solving, and identifying opportunities, the research found a significant gap between these skills and the performing of these skills. These findings confirm a need for developed capacity building programs. In contrast, technical and operational skills, for example; cooking, food storage, and service had little need for training. This indicated proficiency in those skills as they relate to everyday practices for business. Respondents defined their business success, mainly in terms of satisfying their customers, ability to grow their customer base, and achieve profit, thus demonstrating a multi-dimensional view of performance outcomes. The qualitative interview process supported these findings, noting the potential effects of formal training programs and systematic training needs assessment in business efficiency and sustainability.

When seen in the context of Training Needs Assessment (TNA) Theory, the implications of the findings suggest that the lack of managerial and cognitive skills of food vendors represent significant skill gaps that limits their businesses to grow. TNA theory emphasizes the systemic identification of a gap between how an individual performs in their current role and how they are expected to perform, in order to inform the design of training that is relevant to the context (Basnet & Gautam, 2022; Raj, Muniapan, & Indiran, 2024). In the case of Ilala District, the contrast between a high level of technical ability and limited strategic or managerial skills indicates a mis-match between the training content and the actual needs

of informal food vendors to act as entrepreneurs. This mis-match signals that most training has been more operational than strategic, for example, market assessment, finance and business planning skills. Hence the majority of vendors are stuck in subsistence modes of operation, despite even multiple trainings. This aligns with TNA theory in that it indicates the importance of evidence-based and diagnostic training design to ensure learning objectives respond to the performance improvement need.

In a similar vein, these findings are consistent with studies in non-Western contexts in other developing countries and in informal urban economies. For example, Muhammad et. al (2015) study in Uganda and Bewaran and Moris (2024) study in Nigeria identified strong technical competency, yet a notable lack of both marketing and managerial capability was evident among micro-entrepreneurs. Similarly, studies undertaken by Tambwe (2015) in Tanzania and Mayuran (2016) in Sri Lanka establish that the effectiveness of entrepreneurship training at improving small enterprise performance occurs only if training includes aspects related to strategic management and financial planning. Relatedly, Mamabolo, Kerrin and Kele (2017) describe the integration of mentorship and strategic business modules within entrepreneurship programs in South Africa as promoting greater business sustainability. Comparative insights from this small body of literature revealed common patterns to the training needs of developing local contexts, and yet there is considerable variation in the degree of integration between operational and cognitive competency. Findings in Ilala District thus highlight the importance of context-appropriate and competency-based training which includes experiential learning and continuous support and mentorship particular to the local reality of informal women entrepreneurs.

An unanticipated result was the expressed low need for technical training, which is contrary to previous work in Tanzania that reported continuing difficulties with food safety and hygiene practices (Marobhe & Sabai, 2016). This discrepancy could indicate an overestimation of self-evaluated abilities or inadequate knowledge of the changing industry environment, both of which can distort training needs assessment results. In terms of TNA, these perceptual biases can hamstring practitioners from identifying true training needs, leading to an inefficient use of training resources.

In interpreting the results, we need to be aware of other possible confounders that affect both training needs and entrepreneurial performance. Market competition in urban areas like Ilala creates difficulties in profitability, irrespective of improved skill level, around food vending with the extent of the informal food vending community here. Regulatory barriers, including unethical apparatus like potential fines, arbitrary enforcing of laws, and licensing costs, create barriers to formalizing and growing businesses. In addition, for female entrepreneurs family and care responsibilities often limit time and access to mobility, and as a result, voluntary associations with training and networking (Daudi, 2015; Maingwa, 2015).

Because of these contextual constraints, even well-designed technical training will only lead to limited transformation without larger structural change, in other words, without affordable child care services, flexible training schedules, and simplified compliance or regulatory processes, to allow women access to employing the technical training.

6. IMPLICATIONS

These findings have both practical and policy implications that can be helpful in shaping interventions aimed at improving women's entrepreneurial capabilities in the informal economy. For practitioners and development agencies, the findings suggest that, rather than concentrating on operational skills, trainings should focus on managerial, financial and strategic skills - all of which are types of skills that vendors would not ordinarily have. Trainings can and should be multi-modal and competency-based to enable self-paced progress, ongoing coaching and skills that are put into practice. Local NGOs, micro-finance institutions and women's business groups can potentially be partners in delivery by reaching into existing community networks to expand the reach and promote sustainability.

For policy makers, systematic Training Needs Assessments (TNA) can be included as part of the local government entrepreneurship support framework to ensure that the training is aligned with skill gaps. Municipal councils and vocational training could implement TNA protocols through their entrepreneurship support units, thereby providing data-driven and locally relevant program design. Policy frameworks should support cooperation and coordination of teaching and curriculum between government public sector and civil society partners by promoting partnerships and sharing resources, develop common curriculum and appropriate monitoring and evaluation.

In terms of cost-effectiveness and feasibility, the research suggests that utilizing existing community designs, such as women's cooperatives and trade associations, can eliminate the pressure for high-cost infrastructure and improve access points to the programming. Working with nearby universities or technical colleges to develop the curriculum and provide mentorship can also incentivize a reduced expenditures. Funding options may include public-private partnerships, international development grants, and/or microfinance institutions that will provide low-interest loans or a grant to capacity-building activities. Pilot programs will have a monitoring and evaluation design to improve how to appropriately scale, while still being cognizant to all participants' economic/financial implications and expecting some measurable change in women's enterprise performance.

Ultimately, addressing skill gaps not only supports individual women entrepreneurs, but also builds local economic strength and employment capacity, which is necessary for economic empowerment, and informed into other development objectives. The research also provides

empirical evidence for the use of TNA Theory in entrepreneurship in informal sector industries by demonstrating the potential for designing relevant, valuable, and cost-sensitive intervention for participants.

7. Limitations

There are some limitations to consider. First, the cross-sectional study design precludes causal inferences between skills gaps and business performance. Second, the use of self-reported data may have introduced bias in responses as participants may either overestimate or underestimate their skills. Third, the study was conducted exclusively in Ilala District which may limit generalizability to other areas or sectors. Despite these limitations, the combination of qualitative and quantitative methods reinforced validity of findings through triangulation.

8. Conclusion and Recommendations

The study demonstrates that women food vendors in Ilala District possess strong operational skills but limited managerial and entrepreneurial competencies, constraining business growth. The application of the TNA framework highlights that targeted, evidence-based training interventions are essential to bridging these skill gaps. By aligning training programs with actual business needs, stakeholders can enhance entrepreneurial capacity, improve performance, and contribute to inclusive local economic development.

Future studies should adopt longitudinal designs to evaluate the long-term effects of targeted entrepreneurial training on business performance. Investigations could also explore the integration of digital and financial literacy modules within training programs to enhance adaptability and competitiveness. Comparative studies across regions and sectors would provide broader insights into contextual variations in skills gaps and training effectiveness. Moreover, research should examine how the systematic application of TNA Theory in entrepreneurship policies can strengthen informal sector performance and sustainability.

Acknowledgement: The author wishes to sincerely thank the women food vendors in Ilala, Tanzania, for their support and cooperation, which made the study on entrepreneurial skills and training needs possible.

Conflict of interest: There are no declared conflicts of interest regarding the publication of the current study.

9. REFERENCES

- [1] Akpan, E. E., Fcicn, A., Ppgdca, P. H. D. C. D. P. M., & Clark, J. (2024). Entrepreneurial skills: A Panacea for economic development of Nigeria in the 21st century.

- Shared Seasoned International Journal of Topical Issues, 10(1).
- [2] Amadi, E. J. (2014). The effect of training and development on Employees' performance; at Safaricom limited Call centre. Unpublished (MBA) project, University of Nairobi.
- [3] Balraj, K. P., & Velmurugan, R. (2017). Skill Sets of Successful Rural Entrepreneurs in Central Districts Tamilnadu. *International Journal of Pure and Applied Mathematics*, 116(22), 447-457.
- [4] Basnet, D., & Gautam, D. K. (2022). The mediating role of Motivation to learn in the Training needs analysis and Training reaction relationship. *The international research journal of Management Science*, 7(1), 17-27.
- [5] Backer G. S. (1964) *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*. Columbia University Press, New York.
- [6] Bejinaru, R. (2018). Factorial analysis perspectives upon students' skills in the knowledge economy. *Management Dynamics in the Knowledge Economy*, 6(2), 265-284.
- [7] Bewaran, Y. S., & Moris, P. W. (2024). Entrepreneurial Skills Training Needs of Internally Displaced Persons (IDPs) in Plateau State. *African Journal of Management and Business Research*, 17(1), 96-124.
- [8] Botella-Carrubi, D., Ulrich-Berenguer, K., & Ribeiro Soriano, D. E. (2025). What entrepreneurial skills are the key to startup finance performance?. *Venture capital*, 27(1), 21-41.
- [9] Cortés-Rodríguez, C. A., Martínez-Gómez, G., Romo-Lozano, J. L., Schwentesius Rindermann, R., & Sangerman-Jarquín, D. M. (2024). Training needs to develop entrepreneurial skills in small-scale farmers. The case of the community of San Pablo Huixtepec, Oaxaca. *Acta universitaria*, 34.
- [10] Daudi, Z. A. (2015). *Challenges Facing Women Informal Sector Operators in Balancing Child Caring and Productive Roles: A Case of Women Food Vendors in Ilala Municipality* (Doctoral dissertation, The Open University of Tanzania).
- [11] Parsons, C. (2007). Web-based surveys: Best practices based on the research literature. *Visitor Studies*, 10(1), 13-33.
- [12] Diáñez-González, J. P., Franco-Leal, N., Díaz-Carrión, R., & Soto-Cantero, F. M. (2025). Entrepreneurial Skills. In *International Managerial Skills in Higher Education Institutions* (pp. 293-320). IGI Global Scientific Publishing.
- [13] Drakaki, E. (2025). Entrepreneurial Skills as a Factor of Growth and Resilience for SMEs in Knowledge-Intensive Industries. In *The Economic Impact of Small and Medium-Sized Enterprises: Analytical Approaches to Growth and Innovation Challenges Amid Crises in Europe* (pp. 109-131). Cham: Springer Nature Switzerland.
- [14] Egbri, J. N., & Ogunleye, F. M. (2024). Entrepreneurial Skills Possessed by Business Education Students for Sustainable Enterprise in Ekiti State. *Journal of Educational Research on Children, Parents & Teachers*, 5(1), 23-37.
- [15] Gaspard, J., & Yang, C. M. (2016). Training needs assessment of health care professionals in a developing country: the example of Saint Lucia. *BMC medical education*, 16(1), 1-6.
- [16] Hamukoto, M. K. (2016). *Informal food vending in Okuryangava, Windhoek: entrepreneurial knowledge enhancement strategies and aspirations of the self-employed* (Doctoral dissertation, University of Namibia).
- [17] Liwanag, B. A., Padohinog, E. C., & Balsicas, N. W. (2023). Training Needs Assessment on the Teachers' Functional and Research Competencies: Basis for Competency Training Plan. *Online Submission*, 5(1), 18-26.
- [18] Magembe, Y. K. (2019). Growth of SMEs in Dar es Salaam City in Tanzania: Factors influencing their growth and the challenges they face in the course. *Global Journal of Human-Social Science: E Economics* 19 (2): 45 – 55.
- [19] Maingwa, S. S. (2015). *Empowering Women Food Vendors in Alleviation to Poverty: A Case Study of Mzizima Ward in Tanga* (Doctoral dissertation, The Open University Of Tanzania).
- [20] Mamabolo, M. A., Kerrin, M., & Kele, T. (2017). Entrepreneurship management skills requirements in an emerging economy: A South African outlook. *The Southern African Journal of Entrepreneurship and Small Business Management*, 9(1), 1-10.
- [21] Marobhe, N. J., & Sabai, S. M. (2016). Assessment of Food Safety Practices and Microbiological Quality of Street Vended Rice and Beans in Mlalakuwa Ward, Dar es Salaam. *Journal of Chemical, Biological and Physical Sciences (JCBPS)*, 6(2), 297.
- [22] Mayuran, L. (2016). Impact of entrepreneurship training on performance of small enterprises in Jaffna district. *Global Journal of Commerce and Management Perspective*, 5(2), 1-6.
- [23] MFAM, E. E., Akpan, N. A., Udo, S. D., & UMANA, S. A. (2025). Entrepreneurial Skills Need of Business Education Students for Small Scale Enterprise Development in Cross River State, Nigeria. *International Journal of Vocational Studies and Library Science*, 6(1).
- [24] Muhammad, K., Sumil, N., Mpora, B. E., Kazibwe, S., Sumil, M., Ssemugenyi, F., & Wilberforce, T. (2015). Managerial skills and success of small-scale entrepreneurs in Kampala Uganda. *Canadian International Journal of Social Science and Education*, 3, 546-552.
- [25] Nurhayati, S., & Handayani, F. A. (2025). Project-Based Business Management Training for Women's

- Entrepreneurial Skills Development. *Jurnal Visi Ilmu Pendidikan*, 17(1), 28-39.
- [26] Obiebi, I., & Akpomedaye, J. (2024). Assessment of Technical and Entrepreneurial Skills Needed by Snail Farmers For Food Security in Delta State, Nigeria. *Journal of Science, Vocational and Technical Education*, 11(1), 101-110.
- [27] Ökmen, B., Şahin, Ş., Kiliç, A., & Adigüzel, A. (2019). A needs analysis on the competences that students should have for curriculum and instruction graduate programs: A Delphi study. *Yükseköğretim Dergisi*, 9(2), 149-158.
- [28] Orji, A. & Nwosu, E. O (2016). Access to formal credit and enterprise performance in Nigeria: A gender perspective. *Argumenta Oeconomica*, 36(1), 191-224.
- [29] Pennetta, S., Anglani, F., & Mathews, S. (2024). Navigating through entrepreneurial skills, competencies and capabilities: A systematic literature review and the development of the entrepreneurial ability model. *Journal of Entrepreneurship in Emerging Economies*, 16(4), 1144-1182.
- [30] Rahmana, A., & Sukaya, Y. (2020). Training Needs Analysis: Suggested Framework for Identifying Training Need. *International Journal of Psychosocial Rehabilitation*, 24(2).
- [31] Raj, J., Muniapan, B., & Indiran, L. (2024). Assessing the Effectiveness of Training Needs Analysis (TNA) in MSME Manufacturing Sectors: A Business and Workforce Development Perspective. *Global Journal of Business Social Sciences Review (GATR-GJBSSR)*, 12(4).
- [32] Raphael, G., & Mrema, G. I. (2017). Assessing the Role of Microfinance on Women Empowerment: A case of PRIDE (T)-Shinyanga. *Business and Economic Research*, 7(2), 35-54.
- [33] Reyad, S., Badawi, S., & Hamdan, A. (2020). Assessing the impact of entrepreneurial skills development on self-employment practices amongst Egyptian and Bahraini accounting students in public and private universities. *Journal of Islamic Accounting and Business Research*.
- [34] Soomro, R. B., Memon, S. G., & Soomro, M. (2025). Impact of entrepreneurial knowledge, skills, and competencies on MSME performance: an evidence from a developing country. *Asia Pacific Journal of Innovation and Entrepreneurship*, 19(1), 42-72.
- [35] Steira, I. M., Wigger, K., & Rasmussen, E. (2024). Variety of entrepreneurial skills measured in the entrepreneurship education literature. *Education+ Training*, 66(7), 755-776.
- [36] Tambwe, M. (2015). The impact of entrepreneurship training on micro and small enterprises' (MSES) performance in Tanzania. *Business Education Journal*, 1(1).1(3), 28-46.
- [37] Theraiyan, E. (2024). A Thoughtful Analysis of the Entrepreneurial Skills Required for Startup's-In the Modern Era. A Thoughtful Analysis of the Entrepreneurial Skills Required for Startup's-In the Modern Era (April 18, 2024). *European Economic Letters*, 0 [10.52783/eeel.v13i5.893].
- [38] Tikas, G. (2025). Developing entrepreneurship skills in scientific academia: best practices from India and Japan. *Journal of Science and Technology Policy Management*, 16(4), 598-612.
- [39] Wajdi, M. F., Mangifera, L., Wahyuddin, M., and Isa, M. (2019). Exploration of Entrepreneurial Skills for SMEs Development. In 2018 International Conference on Islamic Economics and Business (ICONIES 2018). Atlantis Press.
-