

Empowering Rural Women through Targeted Training: The Role of Business Skills and Digital Tools

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Abstract: The purpose of this study is to examine the impact of targeted training interventions on the entrepreneurial success of rural women. Drawing on a comprehensive literature review and employing a robust methodological framework, the study identifies key variables, including business skills, empowerment, digital enablers and impediments, and social skills. The study is based on mixed methods. Primary survey was conducted amongst rural women business owners from Uttar Pradesh, Gujarat and Maharashtra and confirmatory factor analysis and Structured Equation Modelling was applied to analyse the factors contributing to the training outcomes, particularly the business performance. The findings show that the development of business management skills, empowerment and digital enablers are key contributors to business success, while the impact of digital constraints and social skills on training outcomes was not significant. This research is significant as it stresses the importance of targeted relevant training courses to impart business and digital management skills to strengthen entrepreneurship in rural women.

Keywords: Training, Empowerment, Business Skills, Rural Entrepreneurship

1. Introduction

Empowering women as business owners alleviates poverty, promotes sustainability, and enhances resilience, underscoring their pivotal role in fostering individual and communal progress within rural economies (Ahl et al., 2023). In the realm of entrepreneurship, it is evident that women encounter challenges and obstacles when embarking on their journey. Women in India account for a 17percent of the GDP, which is less than half of the global average (Dixon, A.,2018). Gender-based discrimination, limited access to financial resources, and societal expectations can impede women from pursuing their entrepreneurial ambitions, resulting in a gender gap in entrepreneurship. According to (Megha Chawla et al.,2020) women entrepreneurs might generate 150–170 million jobs in India by 2030. Only seven out of every 100 entrepreneurs in India are women, and over half (49.9 per cent) enter the firm out of necessity rather than aspiration (Fabrizio Valenti et al.,2020). The pandemic of COVID 19 impacted women entrepreneurs the most, with two-thirds of women entrepreneurs reporting business closure (T. Manolova et al.,2020).

Entrepreneurship training programs and initiatives have successfully empowered women in rural areas by equipping them with the tools and support needed to overcome barriers and socio-economic challenges, enabling them to start and sustain businesses (Coleman, S., 2007). Training programs enhance their economic independence and contribute to local development, poverty reduction, and gender equality, making entrepreneurship a valuable avenue for empowering women in rural communities.



By overcoming barriers and acquiring essential knowledge and support, women entrepreneurs can create and sustain thriving businesses, positively impacting their lives and communities (Manuel M. Molina-López et al., 2021). While there is increasing awareness of the need for an enabling ecosystem to encourage and nourish women entrepreneurship, there is less work done on the exact nature of the support that is beneficial. Training women entrepreneurs can be advantageous, as highlighted by (Bullough et al., 2015). Training programmes designed for women mostly focus on specific vocations such as tailoring, embroidery or food processing which help in empowering women (Vaugeois et al, 2013) and increases employability. However, business growth may require training interventions that go beyond honing existing skills. This study aims to delve into identifying specific training initiatives that would enable women entrepreneurs to transform their small micro enterprises into thriving businesses.

The paper is structured as follows: After discussing the introduction in the first section, review of literature has been discussed in second section followed by the theoretical framework in the third section. The fourth section discusses research questions and hypothesis. The fifth section highlights the methodology, of the paper followed by data analysis and findings in sixth section. The last section discusses the conclusion and policy suggestions. (While defining the structure of the paper, Introduction is not mentioned and the paper should be divided in separate sections)

2. Literature Review

Training provides skills, knowledge, and competencies that the entrepreneur requires in the management of the business (Sexton et al. 1997). Training also serves as a means for entrepreneurs to innovate, adapt to changing markets and overcome challenges, thus making their firms more resilient and competitive (Manuel M. Molina-López et al., 2021). Financial literacy is another skill acquired from such training; it is important to manage business finances wisely, raise funds, or make smart investment decisions (Andriamahery et al., 2022). For women entrepreneurs, training is crucial to bridge the gender gap prevalent in entrepreneurship (Cheraghi et al., 2015). Historically, women have encountered multiple obstacles when it came to entrepreneurship which include lack of access to finance, education and networks among other things (Hisrich et al., 1984). Women-tailored training programs can address barriers by providing them with tools and resources that would help them succeed.

Understanding factors that affect training can lead to improvement in training programmes (Cohen et al., 1990). While the need for training has been well researched, this study attempts to identify the kind of training that would help entrepreneurs to grow their business enterprise. This study identifies five factors that influence the business growth, namely, business skills, empowerment, digital enabler, digital impediment, and social skills. We find that business skills followed by empowerment and digital enabler had a significant impact on business growth while social skills were not found to be significant.

Business skills (including finance, market and management) serve as the foundation for successful entrepreneurship, especially for rural women entrepreneurs who often encounter unique obstacles due to limited access to resources and markets (Ogundana et al., 2021). Business skills help identify target markets, know what customers really want and formulate attractive value propositions (Huis et al., 2019). Effective business planning involves establishing realistic goals, knowing what happens in the market and coming up with clear timelines for meeting targets (Semkunde et al., 2021). For rural women this skill acts like a roadmap because they use it to navigate through the complex world of entrepreneurship; also, it serves as a yardstick for measuring progress and adapting to changing situations. Studies have shown that women who are trained in strategic business planning will likely continue or even expand their businesses more than others who do not receive such training (M. Bakhtiar et al., 2021).

One of the core concerns of micro-businesses throughout their existence is the need to remain relevant and viable in an ever-changing and unpredictable world. Research indicates that women entrepreneurs who go through the resilience program can cope with some difficulties and remain in business with more vigour and commitment (Acevedo-Duque et al., 2021). Most of the training programs stress communication and relationship skills, which are sufficient but not critical predictors of success. Hence training programs focusing on building business skills are found lacking in the training ecosystem.

Specific forms of empowerment involve not only running businesses well but inspiring and directing others (Haugh, & Talwar. 2016). Customer orientation training teaches customer values that put emphasis on understanding customer needs and preferences. A customer-centred approach, together with appropriate management's performance, helps women entrepreneurs grow their business while improving individual lives and boosting local economies at large.

Furthermore, empowerment manifests in the ability to connect and communicate without inhibitions. In many rural areas societal norms and cultural expectations can hinder women from expressing themselves (Huis et al., 2019). Fearless communication is also crucial in negotiations and partnerships. Enabling entrepreneurs to negotiate effectively with suppliers, partners and other stakeholders enhances their capacity to secure favourable terms, access resources and establish productive collaborations (Agrawal et al., 2021). Training programs should also focus on negotiation skills, customer service and effective management of suppliers to help in business growth.

In addition to basic digital literacy, digital enablers include other aspects such as budgeting, use of crowdfunding platforms, use of other government schemes to raise funds, using computers to keep track of financial records, and using the internet for commercial transactions (Hasan et al., 2016). Knowledge about online platforms helps women get information about government programs and schemes that help businesses raise finance. Awareness about online platforms that act as portals for financial intervention, sponsorship and other services which will assist in business development (Siringi, 2011) is very critical. Digital literacy and awareness will help rural women entrepreneurs to record transactions, manage funds and migrate to a formal economy. While digital literacy has been found to significantly and positively impact digital business transformation (Roharjo et al., 2024), the role of digital enabler in rural business growth needs to be studied in depth.

Digital impediment is the term used to describe the difficulties faced by rural women, especially while trying to harness digital tools. One of the primary challenges is the lack of access to technology in rural areas because of the lack of infrastructure and connectivity, making it difficult for them to progress (Santos et al., 2018). To address this challenge, interventions, such as training programs, need to focus on teaching digital skills and raising awareness on the need for improved technological infrastructures in these areas. Another problem is the lack of knowledge of the digital approaches and tools, which can be quite challenging to certain people with no digital background (Jha et al., 2018). In addition to that, financial constraints would exacerbate these barriers since this would include buying and maintaining devices which is very hard in most rural areas. Training interventions must address these challenges and find ways like sharing equipment through community digital hubs which can help reduce the financial burden (Gavigan et al., 2020). Security issues like fears of fraud, transactions, and data are major issues concerning rural women entrepreneurs. An effective training program should contain strategies to address these problems, making it possible for women entrepreneurs to use digital tools comfortably.

It has been found that social skills mean more than just networks; they include the capacity to create personal relationships, promote community mutual-assistance and navigate through complicated social relationships that come with an entrepreneur (Arenius et al., 2005). When women possess these skills to interact with others, a supportive environment for experience sharing, knowledge exchanges and cooperative efforts is formed. Effective communication and connection abilities among women create a sense of belongingness within themselves while at the same time extending their influence beyond engaging with customers, suppliers and other stakeholders (Buttner et al., 2001). This variable recognizes that entrepreneurship in rural areas is always communal in nature, thus indicating the need for building collaborations beyond geographical constraints. (instead of writing a separate paragraph, the author should write a continuous paragraph mentioning all the factors which looks decent and convenient while reading)

In addition, social skills enable rural women entrepreneurs to articulate their business narratives in the right manner. This means that their capacity to communicate their stories and visions coherently and assertively improves their profile and authority in society and the world at large. Programs aimed at effective storytelling or communication could position women's enterprises not only as economic contributors but also as a crucial element of the society. (Jha et al., 2018). By amplifying their voices, social skills become tools for challenging gender norms and advocating for the recognition of women's roles as entrepreneurs and community leaders.

Besides the organizational environment, social skills apply in the social aspect of the economy, politics, and other societal roles. Female entrepreneurs who are equipped with good communication and collaboration skills can become advocates for social issues in their communities (Cabrera et al., 2017). The implication of this variable is enormous as it goes beyond enterprise levels to influence communities, norms and even fosters a more inclusive and equitable rural entrepreneurship.

While a substantial literature base exists on rural entrepreneurship and women's empowerment, a significant research gap remains in the comprehensive understanding of factors influencing the training of rural women entrepreneurs, especially in the context of rapidly evolving socio-economic and technological landscapes. Most of the studies have been conducted separately regarding business skills, empowerment, and digital technology, without adequately exploring their collective impact on training effectiveness. For example, some studies have argued that

business skills should be fostered to improve entrepreneurial outcomes (Panicha Hatthakijphong et al., 2019 & Sarom Tem et al., 2020); however, they rarely examine how these skills are imparted through training programs that consider the unique socio-cultural and educational characteristics of rural women. In a similar vein, empowerment has been studied mainly through a socio-political lens (S. Santos et al., 2019) rather than as a concrete, measurable variable that evolves from focused entrepreneurial training. Further, though digital technology is increasingly recognised as a catalyst to empower entrepreneurial ventures (G. Elia et al., 2020), little evidence exists on how training initiatives related to digital literacy and digital access can affect rural women's business growth. Thus, there is a need for an integrated approach that examines how these factors collectively shape the entrepreneurial trajectories of rural women.

3. Research Questions and Hypotheses

This research aims to investigate the pivotal role of focused training interventions in improving rural women's business acumen. In particular, it examines how different aspects of training—business skills, empowerment, digital enablers and barriers, and interpersonal skills—affect business growth. The research is driven by the need to identify which of these components significantly contribute to improved business performance among rural women entrepreneurs, as measured by increases in revenue and customer base. Accordingly, the primary research questions guiding this study are: Which specific training factors most effectively contribute to the growth of rural women's businesses? Do empowerment and digital capabilities gained through training influence entrepreneurial success and do social skills training play a significant role in business development? These questions try to fill the knowledge gap in understanding the individual effect of such training factors on rural entrepreneurship and aid in formulating the framework for the design of more effective training programs for rural women entrepreneurs.

Hypotheses:

i) Training programs that focus on enhancing business skills aim to provide these women with the tools and knowledge to effectively run and expand their businesses. Financial literacy, marketing and sales techniques and strategic planning are all part of the business skill and plays an important role in ensuring the sustainability and growth of their enterprises. By learning to think strategically rural women entrepreneurs can proactively address anticipate challenges, capitalize on opportunities and guide their businesses towards growth and profitability. We thus propose that:

H1 – Training in business management skills positively influences business growth

ii) In the case of rural women entrepreneurs, empowerment is more than just financial progress, it includes emotional, social and cultural aspects which enable women to assert their authority over themselves, think rationally while making choices as well as lead change within their community. The training programs that are available to promote empowerment in rural woman entrepreneurs seek to help them gain confidence in themselves and their abilities, improve their leadership qualities, become customer-centric and learn how to communicate without fear. We thus propose that:

H2 - Training in empowerment skills positively influences business growth

iii) Through training in digital literacy, women entrepreneurs in rural areas can use online platforms, basic office applications and get the ideas about digital communication tools. E-commerce is one of the most important chances that rural women entrepreneurs can have for reaching out to the markets beyond their local areas. E-commerce skills training will help them establish and run online shops, learn how to apply different digital marketing techniques as well as make secure online payments. We thus propose that:

H3 - Training in digital enablement positively influences business growth

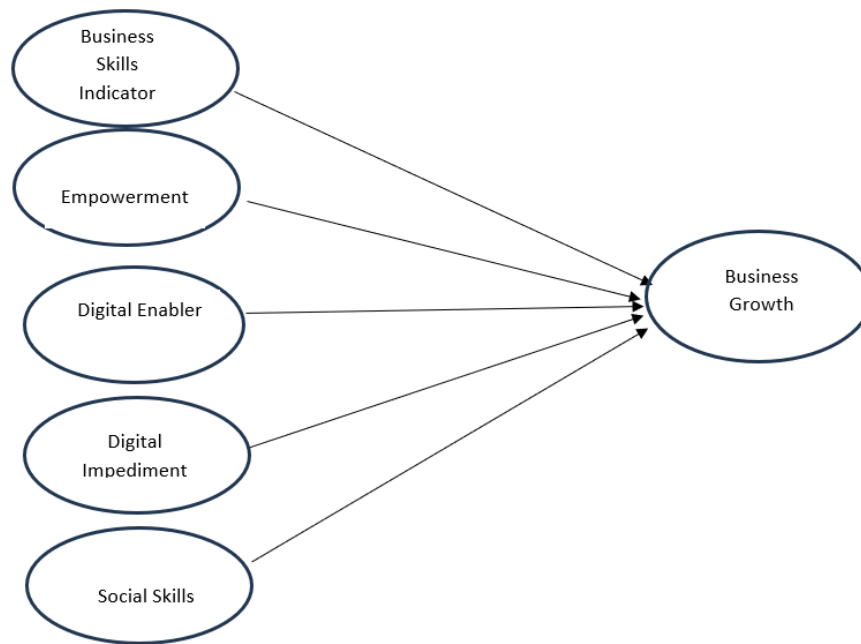
iv) Digital impediments refer to the barriers and challenges experienced by rural women entrepreneurs when adopting and effectively using digital technologies (Ughetto et al., 2019). The cost of buying digital devices maintaining internet subscription or even acquiring software may prohibit many rural women from starting a business with expansion prospects hereafter. Training programs can provide solutions by giving information regarding low-cost alternatives for technology acquisition and making available microfinance programs or grants referring to the ones intended to facilitate technological innovation uptake especially among those who have little or no idea about such matters in our society. We thus propose that:

H4 – Training in reducing perception of digital impediment positively influences business growth

iv) Entrepreneurial social skills are essential for successful women who work in the rural areas because they facilitate co-existence amidst difficult business scenarios as well as establishing connections and networks which support them in their quests to succeed. These include communication, negotiation, empathy and leadership. Through training on social skills development, rural women entrepreneurs are equipped with the ability to confidently engage in diverse business contexts thereby promoting strong relationships creation, opportunity generation and sustenance of their businesses (Dimitriadis et al., 2022). We thus propose that:

H5 - Training in social skills positively influences business growth

Figure 1 – Proposed Conceptual Model by Authors



4. Methodology

This paper is based on mixed method of analysis. The authors created a structured questionnaire which utilised the Likert scale. The Likert scale provided a standardized framework for participants to express their opinions, attitudes, and experiences, ensuring consistency in responses. The Likert scale, ranging from strongly disagree to strongly agree, enabled nuanced and quantifiable responses. The questionnaire was divided into three sections – first section captured demographic details, the second section focused on various factors that influenced the performance of women entrepreneurs including the impact of training programs on business skills, empowerment, digital proficiency, and social skills and the third section focused on type of training programs attended. The questionnaire was shared with subject matter experts, mainly Directors and Managers of RSETIs for feedback on completeness of the survey and wordings and comprehension of the items. Five respondents (2 at the Director level and 3 at the area manager level) shared their feedback which served as a crucial validation mechanism for the questionnaire. The involvement of the RSETI directors and managers in the validation process ensured that the items effectively captured the pertinent factors that influenced the training of rural women entrepreneurs given their extensive experience and expertise in implementing training programs for rural entrepreneurs. The authors conducted a pilot survey among 15 participants. Different aspects of the questionnaire like the content of the questions, the sequence of the questions, the language, the layout of the form, the level of difficulty and clarity of the instructions were assessed. The respondents who participated in the pre-test had similar demographics and background characteristics and attitudes of interest as the target audience. Participants who participated in the pilot study were excluded from the final survey. The questionnaire was modified based on the feedback given by the respondents during the pre-test. Data screening was initiated with univariate analysis to profile the demographics, followed subsequently by reliability analysis and confirmatory factor analysis (CFA) for validating the measurement model. Structural equation modelling (SEM) was conducted subsequently to determine the hypothesized relationships between the constructs with business growth as the dependent variable. The CFA enabled construct validity to be established through factor loadings, average variance

extracted (AVE), and composite reliability (CR), while SEM provided information on the strength and significance of the effect of each training factor on business growth. The model fitted well and demonstrated that training in business management, empowerment, and digital enablement had a significant positive effect on business growth. SPSS 26 was used to conduct univariate (frequency tables on demographics and mean scores of the constructs), bivariate analysis (correlation) and multivariate analysis (reliability analysis).

As of January 8, 2024, 2.21 crore MSMEs were registered under the MSME Ministry, India. Of these, 38.09 lakh, or 17.2 percent of the total, were registered in Maharashtra and 20.95 lakh, or 9.4 percent, in Uttar Pradesh. The other two most popular states in the nation for registered units were Gujarat (15.96 lakh MSMEs) and Rajasthan (16 lakh). Hence, the authors identified the RSETIs (Rural Self Employment Training Institutes) located at Lucknow and Sitapur in Uttar Pradesh (State in North India), Surat and Vadodara in Gujarat (State on Western part of India) and Aurangabad in Maharashtra (state in Western Part of India) for collecting the data. The total sample size was 165. Since the authors selected RSETIs and states based on specific criteria related to the presence of rural women entrepreneurs, the data collection method is a combination of judgment and convenience sampling.

Limitations

Although an adequate sample size for exploratory studies, the chosen sample might not be truly representative of all rural woman entrepreneurs, hence limiting its generalizability. Secondly, since the research design is cross-sectional in nature; thus, the cause-effect relationships among variables cannot be stated unequivocally. Longitudinal studies would be needed to comprehend the enduring impacts of training programs on business progress. Finally, results might be influenced by the cultural context of the study area and in other regions or countries where socio-economic and cultural features are dissimilar, outcomes could vary. Future research should seek to overcome these limitations by incorporating larger and more varied samples, employing longitudinal designs as well as examining a wider range of influencing factors.

5. Data analysis and findings

The initial analysis phase consisted of using statistical software SPSS to identify errors, missing values and run univariate analysis on frequency tables. The data collection process involved gathering information from 350 rural women entrepreneurs who initiated micro-businesses like tailoring, boutique parlours, and street food stalls. The sample size was narrowed down to 165 entrepreneurs from rural areas after a review of the data collected. This modification was vital to uphold the data reliability, ensuring that valid and complete responses were taken into consideration for the study. The participants were carefully chosen based on their participation in small-scale businesses within rural settings. This criteria for selection were important as it guaranteed that the information gathered was pertinent to the setting of rural entrepreneurship and enabled a targeted and insightful examination of the elements shaping the entrepreneurial paths of the respondents.

Rigorous ethical considerations were observed to safeguard the confidentiality and privacy of participants. The data collection methodology, rooted in the Likert scale questionnaire, facilitated a systematic and quantitative analysis of the impact of training programs on rural women entrepreneurs, offering valuable insights into their experiences and perspectives.

The demographic profile of the respondents has been reported in Table 1.

Table 1 – Sample Characteristics

Variables	Number	Percentage
Age		
21-25 years	84	50.90 %
26-35 years	37	22.42 %
36-45 years	29	17.57 %
46-55 years	15	9.09 %
Occupation		

Tailoring	89	53.93 %
Boutique	51	30.90 %
Food stall	25	15.15 %
Income		
25000-30000 per month	93	56.36 %
30000-35000 per month	57	34.54 %
35000-40000 per month	15	9.09 %
Marital Status		
Married	97	58.78 %
Single	68	41.21 %
Separated	0	
No of Children		
None	22	13.33 %
0-1	79	47.87 %
2-4	64	38.78 %
5 and more	0	
No of training programs attended		
None	-	
1-2	163	98.78 %
3-4	2	1.22 %
5 and more	0	

Source: Primary Data

The mean rating of the 16 items that were part of the multi-construct framework revealed the scores as displayed in Table 2.

Table 2 – Mean Rating

Construct	Item	Mean Rating
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Business Management	My knowledge of accounting, record keeping, and financial management has improved	4.13
	I feel more prepared to face unexpected problems and challenges	4.11
	I listen to customer requirements more closely and pitch the right products	4.09
	I now set goals and timelines for my business growth	4.17
Empowerment	I am able to train and guide my employees to work more effectively	4.48
	I am able to express myself without fear to my customers, vendors and employees	4.42
	I am able to negotiate more effectively with my vendors	4.55
	I am able to talk to people who are connected with my business to identify new opportunities	4.43
Social Skills	I have better mobility and social network than before	3.88
	I am able to talk to people with confidence since I run my own enterprise	3.95
Digital Enablement	Learning to operate digital payment services has helped me smoothen my business operations	3.97
	Digital payments has helped me in remote transactions	4
Digital Impediment	Sometimes I face network issues	4.02
	Some of my customers are not comfortable with digital payment services	4
Business Growth	Attending regular training has resulted in increase in number of customers	4.05
	Attending regular training has resulted in increase in revenue in my business	4.13

Source: Primary Data Analysis

The mean scores revealed that consumers have a higher level of agreement regarding training improving their empowerment skills (mean score above 4.4) and business management (mean score around 4.1) and moderately high levels of agreement for digital enablement, digital impediment and social skills. The mean scores indicated higher level of agreement on most of the items however failed to reveal which construct had the most impact on business growth.

Since the objective of the study was to assess the influence of the training intervention on business, training conducted by RSETI focused on imparting the following skills – Business skills, Social skills, Digital Enablement, overcoming Digital Impediments and Empowerment. Training was considered impactful if it resulted in business growth. Hence impact of the training on business growth was examined by two variables – increase in number of customers and increase in revenue (David McKenzie et al.,2021). The total number of items that were part of the survey were 16 (4 items – Business Management, 4 items Empowerment, 2 items Digital enablement, 2 items Digital impediment, 2 items social skills and 2 items business growth). To quantify the relationship among the multiple constructs a confirmatory factor analysis (CFA) followed by structural equation modelling (SEM) using AMOS 24 was conducted (H. Marsh et al.,2014). CFA was used to estimate the six latent dimensions: Business Management,

Social skills, Digital Enablement, Digital Impediments and Empowerment and business growth. CFA examined whether different constructs are distinct from each other, establishing that each of the constructs are not overly correlated with each other. Further, CFA examined whether the observed variables measure the intended latent constructs. The overall fit of the model was improved by dropping variables with low factor loadings. The process that was followed was that the item with the lowest factor loading was identified and removed from the overall model. Hair et al. (2014) identified loadings above .6 as “high” and those below .4 as “low”. Post deletion of the item, the measurement model was run and the fit of the model was checked. The details of the retained and dropped items are listed in Table 3.

Table 3 – Details of Items

Construct	Final Items	Items dropped
Business Management	My knowledge of accounting, record keeping, and financial management has improved	I engage with a group of women regularly to discuss business issues
	I feel more prepared to face unexpected problems and challenges	I have changed some of the business process to make it more customer friendly
	I listen to customer requirements more closely and pitch the right products	
	I now set goals and timelines for my business growth	
Social Skills	I have better mobility and social network than before	
	I am able to talk to people with confidence since I run my own enterprise	
Empowerment Skills	I am able to train and guide my employees to work more effectively	I am able to help others with their problems
	I am able to express myself without fear to my customers, vendors and employees	
	I am able to negotiate more effectively with my vendors	
	I am able to talk to people who are connected with my business to identify new opportunities	
Digital Enablement	Learning to operate digital payment services has helped me smoothen my business operations	I receive timely payments because of digital services
	Digital payments have helped me in remote transactions	
Digital Impediment	Sometimes I face network issues	I am scared of using Digital payment services

	Some of my customers are not comfortable with digital payment services	
Training Impact	Attending regular training has resulted in increase in number of customers	
	Attending regular training has resulted in increase in revenue in my business	

Source: Primary Data

The measurement model was assessed for convergent validity by examining the factor loading, average variance extracted (AVE) and composite reliability (CR). Internal reliability of the latent constructs was tested using Cronbach alpha. (Malhotra et al., 2012) state that a value of 0.6 or less is an indicator of unsatisfactory internal consistency reliability. The internal reliability for all the constructs was above 0.7 except social skills. However, since the AVE was above 0.5 and the composite reliability was above 0.7, the construct was taken ahead for further analysis.

Table 4 - Reliability and Validity Measures

Construct	AVE	Composite Reliability (CR)	Cronbach Alpha
Business Management	0.76	0.93	0.88
Empowerment	0.6	0.85	0.77
Digital Enabler	0.88	0.94	0.93
Digital Impediment	0.92	0.96	0.96
Social Skills	0.59	0.74	0.47

Source: Primary Data Analysis

The Reliability and Validity Measures table in the research paper demonstrates the internal consistency and validity of the constructs used in the study. Each construct—Business Management, Empowerment, Digital Enabler, Digital Impediment, and Social Skills—was evaluated using Average Variance Extracted (AVE), Composite Reliability (CR), and Cronbach's Alpha. AVE values above 0.5 indicate adequate convergent validity, meaning the constructs explain a significant portion of the variance in their indicators. CR values above 0.7 suggest good internal consistency, and Cronbach's Alpha values above 0.7 confirm the reliability of the constructs, except for Social Skills which has a lower Cronbach's Alpha of 0.47. Despite this, its AVE and CR values meet the acceptable thresholds, allowing its inclusion in further analysis. The overall assessment indicates that the constructs are generally reliable and valid for measuring the intended variables in the study.

The final CFA model demonstrated an acceptable overall fit, with the following indices (Byrne, 1998; Hair et al., 2014; Schumacker & Lomax, 2004)

Table 5 – CFA Model Fit

Index	Value	Range
χ^2/df	1.464	$\chi^2/df \leq 2.0$ (or 3.0 or even 5.0) considered acceptable
CFI	0.954	CFI > 0.90 considered average, > 0.95 considered good
GFI	0.85	GFI > 0.90 considered good
TLI	0.94	TLI > 0.90 good, > 0.95 = very good
NFI	0.88	NFI > 0.90 considered good
RMSEA	0.07	RMSEA $\leq$ 0.08 considered good

Source: Primary Data Analysis

The Confirmatory Factor Analysis (CFA) Model Fit table in the attached research paper demonstrates the adequacy of the model using several key fit indices. The chi-square to degrees of freedom ratio (χ^2/df) is 1.464, which is within the acceptable range (≤ 2.0 , and up to 5.0), indicating a good fit. The Comparative Fit Index (CFI) is 0.954, surpassing the threshold of 0.90, suggesting a good model fit. The Goodness of Fit Index (GFI) is 0.85, slightly below the preferred 0.90 but still considered acceptable in many contexts. The Tucker-Lewis Index (TLI) is 0.94, indicating a very good fit as it exceeds the 0.90 mark. The Normed Fit Index (NFI) is 0.88, which is marginally below the desired 0.90, yet close enough to suggest an adequate fit. Finally, the Root Mean Square Error of Approximation (RMSEA) is 0.07, within the good fit range (≤ 0.08). Overall, these indices collectively suggest that the model fits the data well, with minor deviations in a few areas.

Deletion of the redundant items ensured discriminant validity was attained (Hair et al., 2014; Holmes-Smith et al., 2006). Structural equation modelling (SEM) was used to examine both the measurement and structural components of the theoretical model. Figure 2 shows the final model examining the relationship between the exogenous constructs - Business Indicator, Empowerment, Digital Enabler, Digital Impediment and Social skills with the endogenous construct - Business Growth.

The Structural Equation Modelling (SEM) depicted in Figure 2 provides a visual representation of the relationships between various constructs and the impact of training on business growth. The model includes five exogenous constructs: Business Indicator, Empowerment, Digital Enabler, Digital Impediment, and Social Skills, and one endogenous construct: Business Growth.

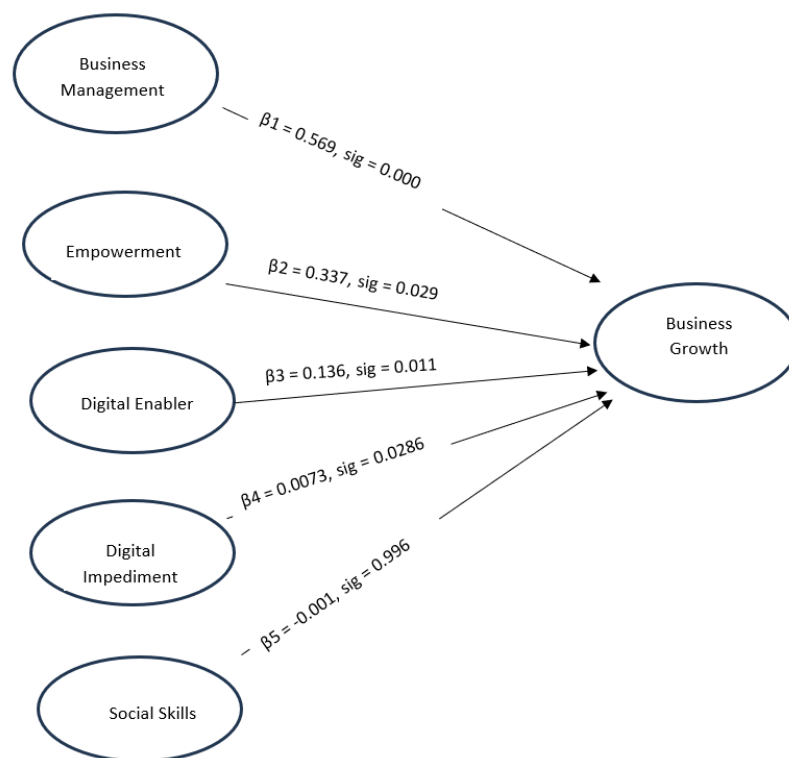


Figure 2 – Structural Equation Modelling

The model shows standardized regression coefficients (β) and their significance levels (p-values). Key findings include a significant positive impact of Business Indicator ($\beta = 0.569$, $p < 0.001$), Empowerment ($\beta = 0.337$, $p = 0.029$), and Digital Enabler ($\beta = 0.136$, $p = 0.011$) on the business growth. However, Digital Impediment ($\beta = 0.073$, $p = 0.286$) and Social Skills ($\beta = -0.001$, $p = 0.996$) did not show significant effects. These results suggest that business skills (Dammert et al., 2019), empowerment (MacPhee et al., 2014), and digital enablement (Orser et al., 2019) are crucial factors in enhancing the effectiveness of training programs, while reducing digital impediments and improving social skills did not have a significant impact. However (Dimitriadis et al., 2022) observed that social skill training led

entrepreneurs to increase their profits by approximately 20 percent. The overall R-square for the model is 0.55, indicating that 55% of the variance in the business growth is explained by these factors.

Table 6 - Regression Weights

			Estimate	S.E.	C.R.	P
IMP	<---	BI	.569	.105	5.438	***
IMP	<---	E	.337	.155	2.179	.029
IMP	<---	DE	.136	.053	2.555	.011
IMP	<---	DI	.073	.069	1.067	.286
IMP	<---	SS	-.001	.152	-.006	.996

Source: Primary Data Analysis

The Regression Weights table illustrates the strength and significance of the relationships between the independent variables (Business Indicator (BI), Empowerment (E), Digital Enabler (DE), Digital Impediment (DI), and Social Skills (SS) and the dependent variable (Business Growth). The table provides estimates, standard errors (S.E.), critical ratios (C.R.), and p-values for each path in the model. The path from Business Indicator to Business Growth has a significant positive effect (Estimate = 0.569, $p < 0.001$), indicating that business management training substantially influences business growth. Empowerment also shows a positive effect (Estimate = 0.337, $p = 0.029$), though the impact is less robust. Digital Enabler has a moderate positive effect (Estimate = 0.136, $p = 0.011$), suggesting the importance of digital skills. However, Digital Impediment (Estimate = 0.073, $p = 0.286$) and Social Skills (Estimate = -0.001, $p = 0.996$) do not show significant effects, implying that reducing digital impediments and enhancing social skills may not directly impact business growth. These results underscore the critical roles of business management and digital enablement in driving the success of training programs for rural women entrepreneurs.

Model analysis

The maximum likelihood algorithm with AMOS 24 was used to estimate the measurement and structural models (Moser 2015). Testing of the hypotheses was based on standardized regression coefficients, p-values, and the squared multiple correlation, representing the proportion of the variance of the dependent variable that can be explained by the explanatory factors (Byrne 2016).

With reference to Figure 2 and Table 7, the regression weights reveal the following.

Table 7: Hypothesis and its Effect

Hypothesis	Hypothesized Effect	Standardized Regression Coefficient	p-value	Decision
H1	Training in business management positively influences business growth	0.968	0.000	Supported
H2	Training in empowerment skills positively influences business growth	0.291	0.029	Supported
H3	Training in digital enablement positively influences business growth	0.321	0.011	Supported
H4	Training in reducing perception of digital impediment positively influences business growth	0.108	0.286	Not supported

H5	Training in social skills positively influences business growth	-.012	0.996	Not Supported
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The overall regression for the model was 0.55(Source: Primary Data Analysis)

The results of the SEM analysis suggest that business skills indicator followed by empowerment and digital enabler were key factors that had a positive relation with the impact of training. The impact of training was assessed by increase in the number of customers and increase in sales. Perception of reduced digital impediment and social skills were found to be insignificant. The overall R square for the model was 55 per cent.

6. Conclusion and Policy Implications:

In conclusion, this study establishes the essential role that targeted training programs play in enhancing business capabilities as well as success for women entrepreneurs in rural areas. Training programs for rural women should address capability building of rural women treating them as entrepreneurs. Technical know-how is essential but business expansion, growth strategies, and customer acquisition are equally important skills. The findings indicated that training had significant effects on business growth through three important channels: business skills, empowerment, and digital enablement. These constructs were found to have statistically significant positive correlations with business performance metrics, such as increased revenue and increased customer base. In contrast, although digital impediments and social skills are theoretically significant, they failed to show a statistically significant impact in the model. These findings highlight the significance of context-specific and focused training interventions. These insights also provide the foundation for actionable policy recommendations. The study suggests that policy efforts should focus on strengthening training in business and digital skills while also supporting empowerment initiatives. By addressing the challenges faced by rural women entrepreneurs, training programmes can be designed to enhance the growth of entrepreneurship and contribute to economic advancement. Although there are limitations to be cautious about when interpreting these findings; they also present possible pathways for future research on how to enhance entrepreneurial skills among women living in rural settings through various forms of training and education.

The following policy implications are suggested in this study

1. Support for Skill Development

Policy initiatives that have an impact on skill development interventions are critical for improving training outcomes for entrepreneurs, particularly in business management. Among them are business planning, financial management and strategic decision making which are some of the business skills to be acquired by all entrepreneurs for their success (Chwolka et al.,2012 & Weerasekara et al.,2022). While most training programs are focused on imparting the skills required to conduct the business, targeted training programmes could be more impactful. For example, workshops on business planning would help entrepreneurs in developing strong plans such as market analysis, competitive strategy and financial projections. Financial management training could cover areas such as budgeting, cash flow management or even preparing financial reports which would enable them to understand how they should deal with money.

2. Enhancing Digital Competence

Digital literacy encompasses a variety of skills, from basic digital competencies such as the use of information communication technologies to complex digital competencies such as mastering the fundamentals of digital marketing to the knowledge of how to run an online business (Ughetto et al.,2019). There are several ways in which non-technical people can acquire these types of skills. One way is through providing outright funding or aid towards acquiring digital tools and equipments. Furthermore, training sessions offered free of charge or at low costs can provide entrepreneurs with knowledge on digital platforms that facilitate their growth. Also, collaborating with tech companies facilitates access to new innovations and training materials on digital equipment. For example, tech firms could offer lessons such as how to sell things online via their platforms, carry out online adverts, and manage client relationships effectively.

3. Empowerment through Targeted Initiatives

Targeted initiatives aimed at promoting empowerment involve building networks and creating platforms to facilitate sharing of experiences, resources and providing mutual assistance among the enterprise owners (Ellison et al.,2015). These initiatives must also advocate for gender equality and inclusivity in the business world while at the same time ensuring that women as well as other groups considered disadvantaged get equal opportunities in accessing funds, training programs as well as market spaces. A possible empowerment scheme is forming entrepreneurial

supportive networks. Such networks could serve as venues for entrepreneurs to connect, collaborate and learn from one another. For instance, by having women business networks, a protected and secure atmosphere will be guaranteed where women discuss their issues regarding achievements, challenges and methodologies.

4. Encouraging Social Skills Development

In the business world, a good network and customer relationship is very essential for entrepreneurs. Even though this study shows that social skills is not significantly related with training outcomes, it is important for the overall success of a business as well as its long-term sustainability. One way to boost social skills development would be incorporating customer service into existing entrepreneurship programs. Good customer service plays a major role in retaining customers and repeat business (Dimitriadis et al.,2022). For example, training programs may focus on communication techniques, complaint resolution and building customer loyalty. These exercises may include role plays and real-life scenarios which would help entrepreneurs practice these skills thus giving them more insight into managing client interactions.

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