

Self-Reliance as a Pathway to Success: An Integrated SEM Study of Women Entrepreneurs

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Abstract

Self-reliance has become a crucial component affecting women's entrepreneurial journeys in today's dynamic and competitive business environment, especially in the service industry. Women entrepreneurs can create robust and sustainable businesses because of their capacity for autonomous decision-making, resource management, market adaptation, and fearlessly overcoming obstacles. As service-based organisations rely steadily on innovation, client interaction, and managerial skills rather than physical assets, self-reliance becomes a powerful engine of entrepreneurial growth and long-term success. The purpose of the study is to determine the factors that affect women entrepreneurs' self reliance and business success. The investigator executed the survey with 190 individuals who operate businesses in the Virudhunagar area's service sector. The researcher implemented reliability analysis, confirmatory factor analysis, exploratory factor analysis, and structural equation modeling to evaluate the data. The results indicate that in service-based businesses, self-reliance enhances management competencies, innovation capabilities, and digital literacy, all of which directly lead to entrepreneurial success.

Keywords: Digital literacy, Innovation, Problem-solving, Self-reliance and Success.

Introduction

In the current era of economic transformation, women entrepreneurs have emerged as key drivers of innovation, employment generation, and sustainable economic growth, particularly within the rapidly expanding service sector. Women-owned service companies in Virudhunagar have diversified to include education, healthcare, hotel, beauty and wellness, digital services, and professional consultancy. These enterprises have made significant contributions to the creation of jobs and the local economy. A trend toward entrepreneurship as a way to achieve financial independence, social empowerment, and professional respect is reflected in the growing number of women working in these fields. However, the ability of the entrepreneurs to make independent judgments, make efficient use of the resources at their disposal, and adjust to quickly shifting market conditions is crucial to the viability and expansion of these businesses.

A key entrepreneurial skill that helps women turn obstacles into opportunities and create strong companies is self-reliance. It includes self-assurance in making decisions, financial independence, problem-solving abilities, technological flexibility, and strategic thinking—all of which are critical for succeeding as an entrepreneur in a tough service field. These attributes put female entrepreneurs in a stronger position to innovate, uphold consumer relationships, control risks, and guarantee the long-term viability of their businesses. Self-reliance is a vital resource that boosts entrepreneurial talents and improves business performance as the service industry continues to change due to digitisation and shifting client preferences. Researchers can capture the diverse nature of self-

reliance and the way it interacts with achieving success by using an integrated Structural Equation Modeling (SEM) approach. This provides empirical evidence that can direct policy interventions, capacity-building initiatives, and strategic business practices targeted at improving the performance and sustainability of women-owned service enterprises.

Review of Literature

The increasing number of female entrepreneurs in the service industry has highlighted the value of creativity, entrepreneurial abilities, and digital literacy as essential tools for attaining business sustainability and success. Johan et al. (2024) Innovation strengthens women entrepreneurs' capacity to make independent business decisions and adjust to changing market conditions by helping them find new market opportunities, create customer-focused services, and improve competitive advantage. By increasing company competence and operational efficiency, entrepreneurial abilities like problem-solving, communication, financial management, leadership, and strategic planning further boost self-reliance. Yadav and Unni (2016) highlighted that entrepreneurial competencies and innovation capabilities are fundamental determinants of sustainable business growth among women entrepreneurs, while Cardella et al. (2020) emphasised that self-confidence, resilience, and entrepreneurial orientation enable women to overcome socio-economic barriers and establish successful enterprises. Similarly, Franzke et al. (2022) observed that women entrepreneurs possessing innovative capabilities and entrepreneurial competencies exhibit greater adaptability, business resilience, and long-term performance, reinforcing the significance of self-reliance as a strategic capability for entrepreneurial success.

The necessity of digital literacy in boosting self-reliance and fostering entrepreneurial success has increased due to the quick digital transformation that occurs in business contexts. Through the utilization of digital platforms, e-commerce tools, traditional marketing, and internet-based financial services, women entrepreneurs may widen their market reach and enhance business productivity. In light of Newman et al. (2019) findings, entrepreneurial self-efficacy is a strong predictor of entrepreneurial success, indicating that people deemed more competent and confident are better equipped to handle business issues on their own. Similarly, Sharma et al. (2024) proved that entrepreneurial self-efficacy reinforces the connection between entrepreneurial intentions and business performance, while Sreejith and Sreejith (2023) concluded that ICT skills and entrepreneurial self-efficacy positively influence women's entrepreneurial readiness and business capabilities. Additionally, Feng et al. (2023) eventually came to the conclusion that women's entrepreneurial performance is greatly influenced by institutional support, technological aptitude, and entrepreneurial motivation. Datta et al. (2024) Collectively, these studies indicate that innovation, managerial skills, and digital literacy function as complementary drivers of self-reliance, empowering women entrepreneurs to achieve sustainable business success and gain a competitive advantage in the service sector.

Statement of the Problem

Women's entrepreneurship in the service industry has grown significantly in recent times, especially in rural and semi-urban areas like Virudhunagar. Women entrepreneurs are actively involved in a wide range of service-related fields, such as small-scale business consulting, digital marketing, food services, education, and beauty and wellness. However, in reality, a lot of female entrepreneurs still struggle with issues of self-assurance, commercial independence, and strategic aptitude, which limit their total success. While previous studies have investigated various determinants of women's entrepreneurship, limited comprehensive empirical evidence exists to explain how self-reliance, as a multidimensional construct, influences entrepreneurial success in an integrated manner. In order to fill a research gap that exists in the literature, this study adopts an integrated Structural Equation Modeling (SEM) technique to investigate the association between self-reliance and entrepreneurial success among women entrepreneurs in Virudhunagar's service sector.

Objectives of the study

- To study the socioeconomic characteristics of Virudhunagar's female entrepreneurs in the service industry.
- To comprehend the manner in which Virudhunagar's female entrepreneurs understand self reliance and business success.
- To investigate whether self-reliance affects Virudhunagar's female entrepreneurs' success.

Hypotheses of the Study

Ha1: There is a substantial difference between women entrepreneurs' success and their managerial competencies.

Ha2: Innovation capability has a significant influence on the success of women entrepreneurs.

Ha3: Digital literacy has a significant impact on entrepreneurial success.

Research Methodology

Research incorporates convenience sampling in addition to other non-probability sampling techniques like simple random sampling. The researcher will utilize her experience in identifying a sample from the female community because the study's target audience is entrepreneurs who manage in the service sector. The sample is not consistently distributed geographically. An appropriate sampling procedure will be adopted to select the sample from the target population. Approximately, 190 participants were in the study's sample.

Analysis

Table 1: Socio-Economic Status of the women entrepreneurs

S.No	Demographic factors	No. of women entrepreneurs	Percentage
Age Group			
1.	Below 18 years	67	35.26
2.	19- 29 years	32	16.84
3.	30 – 39 years	66	34.74
4.	Above 40 years	25	13.16
Educational background			
1.	Upto HSC	61	32.11
2.	Graduate	86	45.26
3.	Post Graduate	19	10.00
4.	Diploma	24	12.63
Marital Status			
1.	Married	102	53.68
2.	Unmarried	88	46.32
Business Ownership			
1.	Sole proprietorship	123	64.74

2.	Partnership	67	35.26
Type of services			
1.	Professional services	40	21.05
2.	Food services	69	36.32
3.	Educational services	45	23.68
4.	Personal services	36	18.95
Monthly Business Turnover (in Rs.)			
1.	Below Rs. 10000	39	20.53
2.	Rs.10001- Rs.30000	51	26.84
3.	Rs.30001 - Rs.50000	86	45.26
4.	Rs.50001 & above	14	7.37
Total		190	100.00

Source: Primary data

Table 1 reveals that out of the 190 female entrepreneurs, 35.26 per cent are under the age of 18, 45.26 per cent have a graduate degree, 53.68 per cent are married, 64.74 per cent operate their own sole proprietorships, 36.32 per cent supervise food service businesses, and 45.26 percent earn an income between Rs. 30,001 and Rs. 50,000.

Table 2: Reliability Analysis

Cronbach's Alpha	No. of Items	Mean	Variance	Std. Deviation
0.796	24	88.8842	10.88940	118.579

Source: Computed Primary data

The reliability values for all 24 items were 0.796, which is greater than the recommended value by Hair et al. (2014). The mean and standard deviation of the 24 items that comprise the research study are actually 88.8842 and 118.579, respectively.

Exploratory Factor Analysis

The research paper's sample adequacy is evaluated via the Bartlett test of sphericity and the KMO.

Table 3: KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.836
Bartlett's Test of Sphericity	Approx. Chi-Square	3504.016
	Df	276
	Sig.	.000

Source: Computed Primary Data

Table 3 above illustrates the validity of the KMO and Bartlett test of sphericity. The significance of the relationship between the variables is indicated by the KMO value of 0.836, which corresponds to greater than 0.50.

Table 4: Rotated Component Matrix

Statements	Component			
	1	2	3	4
Factor 1: Managerial Competencies				
I confidently oversee the operations of my firm.	.830			
I often evaluate my company's success.	.823			
I have the abilities necessary to run and monitor my business.	.803			
I establish good relationships by communicating well.	.776			
I successfully manage my time to finish tasks associated with my job.	.775			
I keep accurate paperwork and records of my business's operations.	.723			
I approach business difficulties systematically.	.720			
Factor 2: Innovation Capability				
I urge employees and teammates to contribute creative suggestions.		.962		
I'm always looking for innovative ways to optimise operational effectiveness.		.956		
I rapidly adjust to shifting consumer demands and market trends.		.952		
I actively search for innovative solutions to business problems.		.870		
I have specific goals for my business.		.706		
Factor 3: Digital Literacy				
To run my business, I employ digital tools.			.838	
Social media is a tool, I use to advertise my goods.			.789	
I search the internet for fresh business prospects.			.774	
In my company, I accept digital payments.			.735	
Factor 4: Entrepreneurial Success (DV)				
My firm regularly makes respectable profits.				.955
My self-assurance and independence have grown as a result of running my business.				.943
Despite obstacles and rivalry, my business's success has remained steady.				.905
Over the years, my business has grown successfully.				.905

I can attain financial security and cover my business expenses.				.727
In contrast to prior years, my business's market position has risen.				.720
Customers have steadily increased for my business.				.693

Source: Computed Primary Data

As illustrated in Table 4, the EFA performed using all research variables revealed two unique factors with eigenvalues larger than 1. The variations in the questionnaire data have been evaluated by applying a Maximum Likelihood with Varimax rotation. Four constructs are found: the first factor, **Managerial Competencies**, contains seven components with eigen values ranging from 0.720 to 0.830; the second factor, **Innovation Capability**, has five items with eigenvalues varying from 0.706 to 0.962, **Digital literacy** is designated as the third factor of the three independent variables, with eigen values encompassing 0.735 to 0.838 and **Entrepreneurial success** is commonly referred to merely as the dependent variable.

Structural Equation Modelling

Structural Equation Modeling (SEM) is a type of multivariate approach that integrates multiple regression (a method that investigates dependence relationships) and factor analysis (which depicts unmeasured concepts—factors with multiple variables) to predict several interconnected dependence relationships at once. The model fit of self-reliance as an approach toward business success was made abundantly evident in Figure 1.

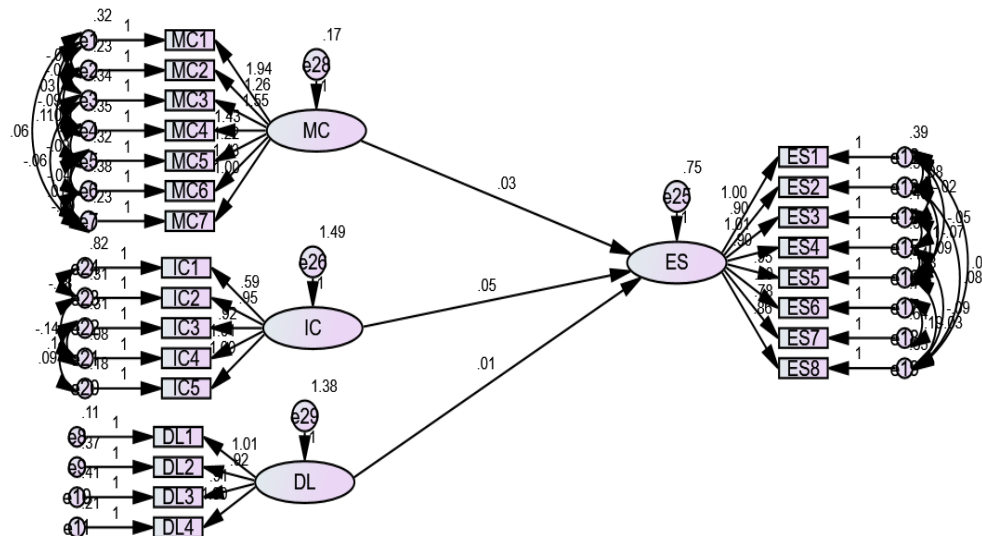


Figure 1: Model fit of self reliance as a pathway for business success

Testing Significance - Findings

The outcomes of hypotheses evaluated using structural equation modeling are listed below. Innovation Capability (IC) has a substantial impact on Entrepreneurial Success (ES). The alternative hypothesis is rejected if $P \leq 0.05$. Entrepreneurial Success (ES) is significantly influenced by Managerial Competencies (MC). The alternative hypothesis is accepted if $P = 0.03$. Entrepreneurial success (ES) is greatly impacted by digital literacy (DL). The alternative hypothesis is accepted if $P = 0.01$. Overall, the findings reveal that self reliance is not significantly impacted by the other Managerial Competencies (MC) and Digital Literacy (DL), but it significantly impacts

Innovation capability (IC). Since the P value is greater than 0.05, the alternative hypothesis that "there is any significant influence of Innovation capacities factor of self reliance over Entrepreneurial success" is thus rejected.

Table 5: Results of SEM Model Fit Indices – Self reliance for Business Success

Name of Category	Name of Index	Obtained Value	Suggested Value	Result
Absolute Fit	P Value	0.407	P>0.05	Achieved
	RMSEA	0.010	RMSEA<0.08	Achieved
	GFI	0.912	GFI>0.90	Achieved
Incremental Fit	CFI	0.999	CFI>0.90	Achieved
	TLI	0.998	TLI>0.90	Achieved
	NFI	0.939	NFI>0.90	Achieved
Parsimonious Fit	CMIN/DF	1.019	Chi-square/df<5.0	Achieved

Source: Computed data

Table 5 demonstrates that the p-value, RMSEA, and GFI of the absolute fit indices meet the suggested standards for a suitable CFA model fit. Moreover, the CFI, TLI, and NFI incremental fit indices also satisfy the recommended threshold values. Lastly, the acceptable range is reached by the parsimonious fit index (CMIN/DF). As a result, every model fit index shows a good fit, indicating that the measurement model is appropriate for additional analysis.

Conclusion

An understanding of the study's conclusion can be gained from the data and comments from the prior finding. According to the survey, women in the service industry are more likely to succeed as entrepreneurs when they are self-sufficient. Self-reliance has a beneficial impact on managerial competencies, innovative capability, and digital literacy, according to the SEM results. Business performance and competitiveness can be enhanced by improving self-reliance through capacity-building initiatives and entrepreneurial support systems. Overall, it reveals that supporting women entrepreneurs' self reliance is essential to fostering sustainable business models and promoting equitable economic development in the service sector.

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