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ARTICLE

Investigating the Impact of Women Entrepreneurs' Competencies on Firm Performance in an Emerging Economy

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Abstract

The study of female entrepreneurship is picking up steam all around the world with the number of women entrepreneurs increasing. A recent development in the field of women entrepreneurship is research on their entrepreneurial competencies. Entrepreneurial competencies have been studied earlier, however past studies have not considered gender or have not taken women as their focus. To better understand how the competencies of women entrepreneurs affect the performance of their businesses, this study constructs and examines a conceptual framework wherein the impact of competencies (a)Innovativeness and (b)Business and management, on financial and non-financial performance of the firm is examined. Data was obtained from 158 female entrepreneurs operating in India through a survey. The study has utilized PLS-SEM to analyze the data. The findings show that the Innovativeness of women entrepreneurs have a positive significant impact on both financial and non-financial firm performances. Business and management competencies have shown a positive significant impact on the firm's financial performance, However, the impact of Business and management competence on non-financial performance of the firm was not significant. The results of this study will have ramifications for both theory and practice. Theoretically, it will improve our comprehension of the distinctive elements affecting women entrepreneurs' firm performance in developing nations, particularly in the Indian setting. From a practical standpoint, the research's findings will give policymakers, business support groups, and women entrepreneurs themselves insightful information that will help them identify strategies to improve business management skills, foster innovativeness, and ultimately improve firm performance.

Keywords: Women Entrepreneur, Competencies, Innovativeness, Business and Management, Firm Performance.

1 Introduction

It is well acknowledged that an enterprise's performance, development, and success are significantly influenced by the entrepreneur's competencies. Entrepreneurs play a crucial role in the functioning of the company and so their competencies

are important in determining the success of their venture (Kovid et al., 2021). Over the years, significant research on the skills and capacities of entrepreneurs has been conducted, but only a small number of these studies have specifically emphasised businesses run by women. Though, literature suggests that women entrepreneurs may significantly contribute to economic growth and development (Hechavarria et al., 2019), the participation of women in entrepreneurship is less as compared to men (Global Entrepreneurship Monitor, 2023). Women entrepreneurs in developing nations face obstacles based on gender discrimination, raising finances, work-life balance etc. (Panda, 2018) which keeps them from starting their businesses causing a gender gap. Understanding the competencies that might boost their company performance could inspire women to start and run their businesses, resulting in women's empowerment and mitigation of the gender gap. The performance and success of an enterprise highly depend upon the competencies of its owners, therefore understanding women's entrepreneurship from the lens of their entrepreneurial competencies is of utmost importance. Entrepreneurial innovativeness increases a company's propensity to encourage new ideas and processes, increasing the number of business prospects. Only a handful of the studies that have examined women's entrepreneurial abilities have specifically examined their innovativeness (Huang et al.,2022; Zizile and Tendai, 2018). Women entrepreneurs have been shown to differ from their male counterparts in terms of personality traits, primarily due to cultural factors, although they face the same challenges in the workplace, such as the need to adapt and innovate constantly. Surprisingly, so little is known about the innovative methods used by female business owners, particularly those in developing nations. Yet another competence for female entrepreneurs is their Business and Management ability which encompasses finance management, planning, operations etc. are crucial in the success of any business (Mitchelmore and Rowley, 2013) but the existing studies have not given any consensus on its significance. It needs to be further investigated to determine its impact on the success of female-owned ventures. Our research builds on prior studies by studying entrepreneurial competencies with a gender-specific focus aiming to investigate the effects of (a) Women entrepreneurs' innovativeness on the performance of their firms, and (b) Women entrepreneurs' business and management competencies on the performance of their firms. To achieve the research objective the study will provide a comprehensive review of the existing literature and empirical evidence related to women entrepreneurs, their business management competencies, and innovativeness in firm performance followed by a detailed research methodology and results. The findings and implications are discussed in the discussion and implications part giving the theoretical and practical implications of the study along with the limitations and directions for future research.

2 Literature Review

A growing body of research indicates that entrepreneurship has the potential to empower and liberate women in developing nations, leading to economic benefits and positive transformations in society (Kamberidou, 2020). Female entrepreneurs are individuals who effectively manage and synchronize various factors related to production, make informed decisions by evaluating risks, and generate employment opportunities for others (Rajeh et al., 2019). In recent years, there has been a notable surge in scholarly interest concerning female entrepreneurs, owing to their remarkable growth as a significant segment of business proprietors worldwide. Women entrepreneurs have a pivotal impact on nurturing the societal and economic welfare of a nation, as they create job opportunities and contribute to its financial prosperity (Bullough et al., 2022). Over the past few years, numerous researchers have extensively explored the realm of female entrepreneurship, focusing particularly on emerging economies and the inherent challenges it entails (Shoma, 2019; Isaga, 2019). It is essential to shed light on emerging nations since they exhibit unique factors contributing to the low involvement of women in entrepreneurial endeavours compared to developed countries. Research findings suggest that women entrepreneurs in these contexts encounter heightened barriers and are often discouraged from initiating business ventures (Panda, 2018) Prejudices and societal expectations affect a woman entrepreneur's ability to build a successful business (Adom & Anambane, 2019). Depending on circumstances like society, location, and cultural variables, female entrepreneurs may require distinct competencies to succeed in business. For instance, women business owners in developing nations confront greater societal challenges than their counterparts in developed nations (Etim & Iwu, 2019). As a result, female entrepreneurs may require different competencies to succeed in these circumstances than they would in more developed nations.

2.1 Entrepreneurial Competencies

The traits and abilities of entrepreneurs widely known as entrepreneurial competencies are the most valuable intangible assets linked to the performance of a firm (Sözüer et al., 2017). They are the abilities of entrepreneurs needed to effectively do a job that includes managing resources and opportunities for their enterprises (Bird, 2019). Given this, various research studies have looked into the qualities and competencies of entrepreneurs that may affect the success of their businesses. Ahmad et al. (2018), found that implementation/enforcement competency and network competency of entrepreneurs have a considerable impact on firm performance. Similarly, other researchers have also emphasized the importance of entrepreneurial competencies in attaining superior firm performance (Grimmer et al.,2017). Some women-oriented research includes a study by Zizile and Tendai (2018) who observed that innovativeness, risk-taking, creativity and opportunity recognition are essential competencies of women entrepreneurs. (Johari et al., 2021) ranked strategic competency as the top for being an essential entrepreneurial competency for women. Similarly, Welsh et al., (2021) revealed that IT skills, technological skills and financial acquisition skills of women entrepreneurs have a favourable impact on firm performance.

Despite all these studies, there are several factors related to entrepreneurial competencies that are yet to be explored as there is no entrepreneurial competencies profile that is deemed to have consensus among researchers as the most important.

2.2 Firm Performance

The motivation for competency-related study and practice typically stems from the desire for improved performance as well as the potential for financial gain or business expansion (Spencer and Spencer, 1993). To conceptualise and evaluate corporate performance, many methodologies have been employed. To evaluate how well a firm has fared throughout the operation, financial metrics are utilised. They comprise profit, net cash flow, sales, sales growth, sales returns, and changes in the number of employees (Lumpkin & Dess, 2001). The firm's economic measures demonstrate that production based on finances is an objective metric. Financial performance goals have generally been used extensively to assess the success of businesses. However, using solely financial measurements to make company choices without taking into account other performance measures is a narrower approach and might have long-term detrimental effects (Venkatraman & Ramanujam, 1986). The study has taken both financial and non-financial results to get a comprehensive understanding of the overall, firm performance.

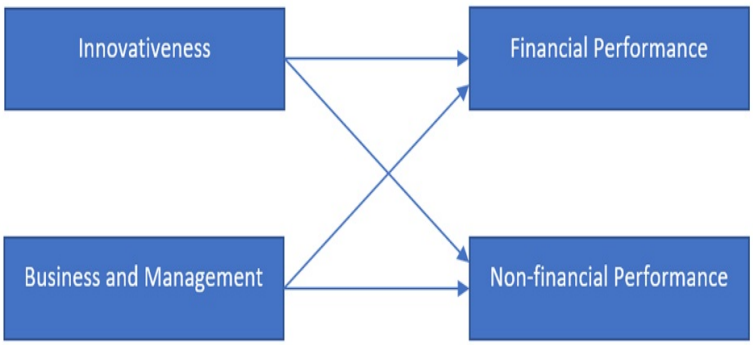
2.3 Theoretical Background

Using resource-based view theory as a foundation, the goal of the current study is to ascertain, the impact of various competencies on women's entrepreneurial success. According to Barney (2001), a firm's internal resources are a valuable tool for responding to threats and external hazards like fierce competition and seizing opportunities in the business environment. Entrepreneurial competencies are the internal resources that an entrepreneur possesses that boost a company's success and provide it with a persistent competitive advantage (Zainol and Al Mamun, 2018). Numerous research in this area has stated the significance of entrepreneurial competencies on business performance (Al Mamun et al., 2019; Sumawidjaja et al., 2019,). One of the most prominent works in the area of entrepreneurial competencies was done by Man et al. (2002) proposed six entrepreneurial competencies namely "opportunity recognition, relationship, conceptual, organizing, strategic, and commitment". These competencies have been utilised and tested in several other studies (Johari et al., 2021). In the field of women entrepreneurship, Mitchelmore and Rowley (2013) grouped entrepreneurial competencies into four areas-"Personal and relationship, business and Management, Entrepreneurial competencies, and human relations". Personal and relational competencies involve networking, communication, motivation, perseverance and others. Business-related duties such as, such as handling finances and budget, business plan writing, managing operations, planning and related tasks are included in business and management abilities. Human relations abilities cover hiring and development of employees, staff relations leadership, motivation and Entrepreneurial skills are connected to the entrepreneur's capacity for creativity, innovativeness, creativity, risk-taking and opportunity identification. Mitchelmore and Rowley (2013) further suggested examining these competencies through the development of research frameworks which examine the relationship between these entrepreneurial competencies and business success.

2.4 Research Framework and Hypothesis

A research framework has been created based on the goals of our study, as shown in Figure 1. In our study framework, 'Innovativeness' and Business and Management are the competencies under study to find their impact on financial and non-financial firm Performances

Figure 1: Research framework
Source: Author's Contribution



In the dynamic and rapidly evolving world of business, the ability to innovate is critical for organizations to stay abreast and thrive (Chege et al., 2020). As a result, entrepreneurial innovativeness emerges as a vital competency, enabling

businesses to not only survive but also excel. Vaghely and Julien (2010) suggest that innovation is an intellectual capability essential for assessing potential opportunities and is intricately linked to their identification and cultivation. Innovativeness encourages the creation of new goods and services, facilitating easy entry into the market (Covin & Wales, 2019). Weber and Heidenreich (2018) defined innovation capability as the capacity to learn and integrate new knowledge and ideas and to apply this knowledge to new goods or services. Several studies have suggested the importance of innovativeness on organisational and individual levels (Pranowo et al.,2020; Ferreira et al., 2018) and therefore entrepreneurial innovativeness has been a subject of many studies lately (Nguyen et al., 2023; Pindado et al., 2023). However, the existing studies were conducted without considering gender and there aren't enough empirical findings to demonstrate a link between female entrepreneurial innovativeness and corporate performance. Even though women are still more motivated by the necessity to launch a business, women business owners demonstrate a higher propensity for innovation than males (Kelley et al., 2017). Some female-based studies also identified the importance of innovativeness for their entrepreneurial success (Nair, 2020; Huang et al., 2022). The capacity to spur innovation is the hallmark of a successful enterprise in this era of perpetual change (Hogan and Coote, 2014). It is for this reason that every company has to keep innovating to stay ahead of its competitors and to survive in the market. Because of this, every organisation today seeks to foster innovation at work to advance its operations. A greater knowledge of innovativeness will enable women to concentrate on and develop this ability, and ensure business success, therefore, we propose to advance the current literature and suggest the following hypothesis:

H1 (a): *The innovativeness of women entrepreneurs has a positive significant impact on the financial performance of the firm*.
H1 (b): *The innovativeness of women entrepreneurs has a positive significant impact on the non-financial performance of the firm*.

The importance of an entrepreneur's business and management abilities has been emphasised by Mitchelmore and Rowley (2013). Calvo et al. (2017) discovered a noteworthy correlation between an entrepreneur's deficient management skills and the detrimental impact it had on the creative performance of organizations. In high-tech sectors, despite the abundance of business prospects, entrepreneurs who lack essential management abilities may face failure due to their inability to foster collaboration, develop appealing business models, and align their products with market demands. Hwang et al. (2019) also pointed out the link between the managerial skills of entrepreneurs and competitive advantage. Few research has been done on women entrepreneurs' Business and management skills and firm performance, but the findings have not all been unanimous. Batool(2021) show women business owners in developing nations have a competitive edge and increase the performance of their companies when they learn the necessary managerial skills. However, operational capability in the Middle East has not had a substantial influence on the performance of female entrepreneurs' businesses (Khizindar and Darley, 2017). Similar to this, Welsh et al. (2021) discovered insignificant effects of managerial skills on business. Furthermore, research on female directors from Indonesia shows that the performance of a firm is unaffected by the business skills of female directors, proving that having business expertise is not required to successfully run a corporation (Suherman et al., 2021). So, based on the disagreements in the prior research, we hypothesise that women entrepreneurs' Business and management skills have some effects on a company's performance:

H2 (a): *Business and management competencies of women entrepreneurs have a positive significant impact on the financial performance of the firm*.
H2 (b): *Business and management competencies of women entrepreneurs have a positive significant impact on non- financial performance of the firm*.

3 Research Methodology

3.1 Sampling

The study used a cross-sectional design. Data was collected from 158 women entrepreneurs through a structured questionnaire using judgemental and snowball sampling through offline and online modes. different online platforms, primarily, LinkedIn and Facebook data were used to collect data Additionally, a printed questionnaire was employed to collect information through traditional pen-and-paper methods. A minimum sample size obtained using the G*power calculator gave a sample requirement of 68 with two predictors, a medium effect size (0.15), a power of 0.80 and a 95% confidence level (Faul et al., 2009). As a result, our sample size of 158 is sufficient to yield insightful results.

The majority of respondents have their business in the education sector (21%), followed by the beauty and skincare sector (20%), which accounts for up to 41% of the overall data set. The remaining respondents are active in a variety of different fields, including telecommunications (14.5%), food and beverage (17%), and the remaining in other fields. In addition, 42% of respondents fall under the age bracket of 31-40 years, and 40% in the age bracket of 41-50 years, while just 13% and 5% of respondents are between the ages of 18 to 30 and above 50 years, respectively. The majority of respondents, 68%, had up to 10 years of experience in their present line of work, while 32% had more than 10 years of experience.

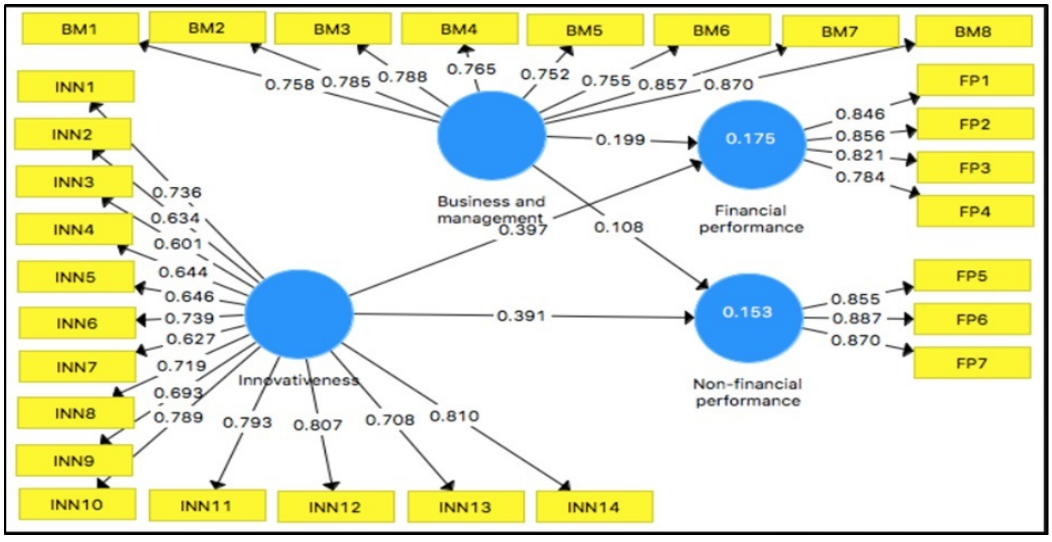
3.2 Measurement scales

In this study, a 14-item scale developed by Kleysen and Street (2001) was employed to evaluate the level of innovativeness. To assess business and management skills, a set of eight items provided by Mitchelmore and Rowley (2013) was utilized. To maintain the confidentiality of the firm's data, we have used the owners' perceptions of their performance. Perceived firm performance was measured using a combination of financial and non-financial measures. To assess perceived financial performance, four questions were adapted from Tehseen et al. (2019). Additionally, three questions were employed to gauge perceived non-financial performance (Tehseen et al., 2019). The assessment tool initially evaluates firm performance across four aspects: "perceived financial performance, perceived non-financial performance, business growth, and performance relative to competitors". The individual dimensions of the scale have also been utilized in other studies as well (Sajilan & Tehseen, 2019; Tehseen & Anderson, 2020). Similarly, for our research, we focused solely on the perceived financial and perceived non-financial metrics, omitting the other dimensions from our study. This adaptation of measures ensured a comprehensive evaluation of perceived firm performance in the study. All the measures employed in this study are reflective.

4 Data Analysis and Results

To analyse the data, we employed partial least square-structural equation modelling (SEM-PLS) using the Smart PLS version 3. Ringle et al. (2015) emphasized the growing significance of PLS-SEM in the field of entrepreneurship research, highlighting its increasing relevance and application. PLS-SEM offers notable benefits, including its ability to mitigate challenges associated with small sample sizes. This approach enables the estimation of intricate models while accommodating multiple constructs simultaneously. Another advantage lies in its flexibility to handle both reflective and formative measurement models, and avoiding overly restrictive assumptions regarding data distribution (Hair et al., 2019). In essence, PLS-SEM empowers researchers by providing a versatile and accommodating framework that overcomes limitations in sample size, complexity, and measurement assumptions. Following the recommendations by Hair et al. (2019), we have evaluated the measurement model and then hypothesis testing using the structural model analysis. The factor loadings of the construct items are shown in Table 1. The reliability and validity analysis of the variables is done in the measurement model which is verified utilising the internal consistency approach using the Cronbach alpha and composite reliability. The composite reliability and Cronbach Alpha are both above 0.7, suggesting strong reliability and the Average Variance Extracted (AVE) value is higher than 0.5, suggesting acceptable convergence validity (Hair et al., 2019). Results for the scale items' convergent validity and reliability are shown in Table 1 below. Also, the discriminant validity indicating that the constructs are statistically different from each other was assessed using the heterotrait-monotrait (HTMT) ratio, with all values falling under 0.85 establishing good discriminant validity (Henseler et al., 2015) shown in Table 2. In addition, all VIF (Variance Inflation Factor) values as shown in Table 1 fall under 5 indicating no multicollinearity among variables (Hair et al., 2019). Also, the given VIF values fall below 3.3 which indicates that the model is free from common method bias as per the full collinearity test (Kock and Lynn, 2012). A diagrammatic representation of the measurement model is given in Figure 2.

Figure 2: Measurement Model
Source: Author's Contribution



The structural model is measured, through evaluation, R square (coefficient of determination) the significance of path coefficients and Q square. As stated by Cohen (1988), R square values above 0.13 are considered moderate, hence the R

square values for financial and non-financial performance are both moderate. Q square values in our model are greater than zero, confirming the study's predictive applicability (Geisser, 1974; Stone, 1974). A standardised Root Mean Squared Residual (SRMR) value of 0.07, which indicates an adequate model fit, was used to measure model fit (Hu and Bentler, 1999). Figure 3 provides a diagrammatic illustration of the structural model.

Table 1: Results of Confirmatory factor analysis, Multicollinearity and R square
Source: Author's data analysis.

Constructs	Items	Factor loadings	Cronbach's Alpha	Composite Reliability	AVE	VIF (outer)	R square
Business and management	BM1	0.758	0.919	0.931	0.628	2.256	
	BM2	0.785				2.162	
	BM3	0.788				2.605	
	BM4	0.765				2.359	
	BM5	0.752				2.217	
	BM6	0.755				2.104	
	BM7	0.857				2.707	
	BM8	0.870				2.361	
Financial performance	FP1	0.846	0.846	0.896	0.684	2.772	0.175
	FP2	0.856				3.022	
	FP3	0.821				2.02	
	FP4	0.784				1.695	
Innovativeness	INN1	0.736	0.926	0.935	0.509	2.026	
	INN2	0.634				1.746	
	INN3	0.601				1.612	
	INN4	0.644				1.852	
	INN5	0.646				1.82	
	INN6	0.739				2.166	
	INN7	0.627				1.952	
	INN8	0.719				2.617	
	INN9	0.693				1.894	
	INN10	0.789				2.747	
	INN11	0.793				2.763	
	INN12	0.807				2.653	
	INN13	0.708				1.994	
	INN14	0.810				2.58	
Non-financial performance	FP5	0.855	0.847	0.904	0.758	2.74	0.153
	FP6	0.887				3.074	
	FP7	0.870				1.611	

Hypothesis testing: Innovativeness has a positive significant impact on financial firm performance ($\beta = 0.397, t = 5.696, p = 0.00$) and non-financial firm performance ($\beta = 0.389, t = 5.565, p = 0.00$) supporting H1(a) and H1(b). Business and management have a positive significant relationship with financial firm performance ($\beta = 0.199, t = 2.162, p = 0.031$) supporting H2(a) but the relationship is non-significant with non-financial performance ($\beta = 0.111, t = 1.221, p = 0.222$), therefore H2(b) is rejected. See Table 3.

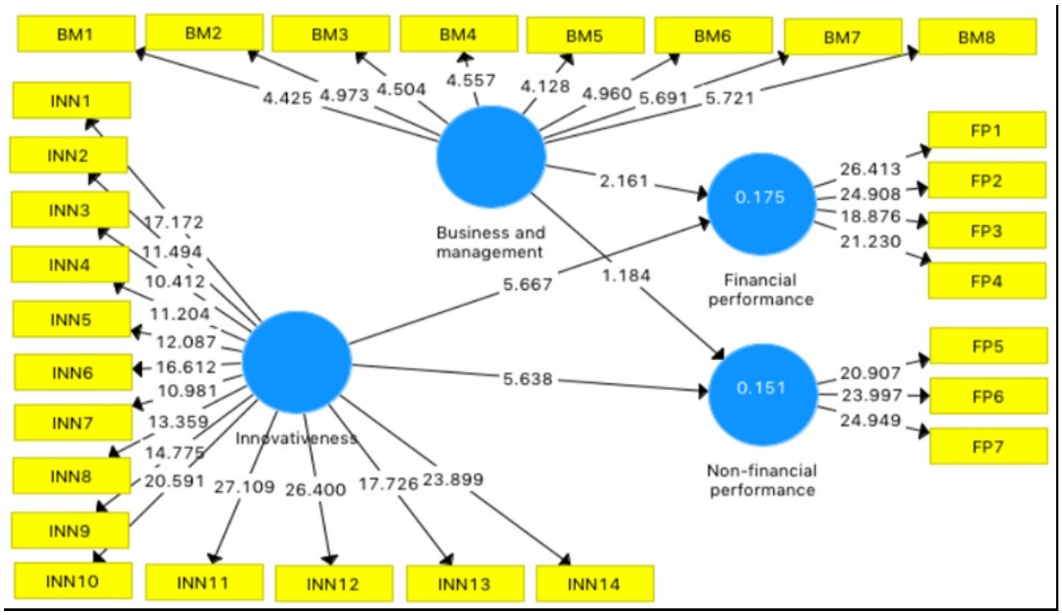
Table 2: Results of discriminant validity
Source: Author's data analysis.

	Business and management	Financial performance	Innovativeness
Financial performance	0.137		
Innovativeness	0.185	0.395	
Non-financial performance	0.105	0.296	0.373

Table 3: Results of hypothesis testing (Significance at 5 %)
Source: Author's data analysis.

Hypothesis	β - value	Standard Deviation	T value	P-Value	Decision
Innovativeness -> Financial performance [H1 (a)]	0.397	0.07	5.696	0.00	Supported
Innovativeness -> Non-financial performance [H1 (b)]	0.389	0.07	5.565	0.00	Supported
Business and management -> Financial performance [H2 (a)]	0.199	0.092	2.162	0.031	Supported
Business and management -> Non-financial performance [H2 (b)]	0.111	0.091	1.221	0.222	Not Supported

Figure 3: Structural Model
Source: Author's contribution.



5 Discussion and Implications

The findings of this study provide valuable insights into the impact of women entrepreneurs' innovativeness and business management competencies on firm performance in an emerging economy like India. Results show that Innovativeness influences both types of firm performances proving H1(a) and H1(b). The results are in line with previous research by Zizile and Tendai (2018) and Huang et al. (2022). The results emphasise the need to encourage an innovative culture among female company owners since it can enhance the financial and non-financial success of their enterprises. Innovative businesses can adapt to the requirements of their buyers. So, consumers who are content with the product or service will repurchase goods and services from the company whose creative methods have met their requirements and expectations. As a result, it is possible to assert that innovation results in achieving non-financial performance through customer retention and satisfaction. Additionally, when a company is effective in meeting long-term client retention as a result of its innovative business methods leads to greater financial results. Also, businesses can set themselves apart from rivals through innovativeness by creating distinctive goods, services, or procedures. Businesses can expand market share, draw in more customers, and gain a competitive advantage over rivals by launching innovative goods. Additionally, the innovativeness of an entrepreneur results in the introduction of improved methods and technological advancements, which raise productivity and efficiency, enhancing business performance. H2(a) is supported as business and management competence shows a relationship with financial performance whereas the rejection of H2 (b) indicates business and management abilities have no significance on non-financial performance. However, these skills are not effective in attaining the non-financial outcomes. The results are partially similar to Welsh et al. (2018), wherein management abilities are related to business income and sales growth. The results are also consistent with other research that suggests management competencies influence a variety of company performance benefits (Batool(2021); Ting et al., 2021). Better financial results for the company may be attained by integrating a sound planning and operational system with effective budgeting. This emphasises the need to have great business acumen, the capacity for strategic decision-making, and excellent managerial talents for attaining financial success in women-led firms. Entrepreneurs who are adept at business and management skills can effectively and efficiently manage business operations, utilize resources and cut costs without sacrificing quality. Thus they can raise production, cut waste, increase profitability, and improve financial performance. The study couldn't find any evidence of a major influence of business and management skills on non-financial success. Various external factors such as market dynamics, shifting consumer preferences, economic turbulence, alterations in legal and regulatory frameworks, and technological breakthroughs are outside of the control of entrepreneurs. These factors can hinder the non-financial performance outcomes. This suggests that while business and management abilities are crucial for financial results, factors other than business management skills are also significant in determining non-financial components of firm performance. In the domain of women entrepreneurs, further investigation is required to determine the precise variables that influence non-financial performance.

5.1 Implications of the study

The findings of this study hold practical implications for women entrepreneurs, policymakers, and support organizations. The current study provides a better understanding of the elements that may enhance the performance of a company. By incorporating the results, women entrepreneurs should work in the direction of enhancing their innovativeness and Business and management competencies through workshops and training programmes. This can also be done by fostering an inclusive workplace environment that values various viewpoints and ideas. They should provide their employees a chance to share ideas and take part in the innovation process. The study also confirms the previous work of Mitchelmore and Rowley (2013) on business and management competence as an antecedent to firm performance as well as Huang et al. (2022) for innovativeness increasing firm performance, thereby increasing the generalizability of the results for women entrepreneurs. These findings may be used by policymakers and support organisations to create targeted programmes and interventions that assist the innovativeness and management competency development of female entrepreneurs. Giving women business owners access to resources, mentorship programmes, and networking opportunities may empower them and help them make the most of their abilities.

The study's conclusions can be used by managers and business leaders to improve their decision-making procedures. Improved business outcomes can result from encouraging staff members to develop and implement new ideas. Managers may also find areas for improvement and invest money in developing the necessary abilities by understanding how business management competencies affect financial performance. This can lead to the organisation making better strategic decisions, allocating resources more effectively, and producing better financial outcomes.

By utilising the resource-based view theory to investigate the link between innovativeness, business and management skills, and firm performance in a gender-specific context in India, the study adds to the body of current literature. The findings offer empirical support for the theoretical claim that the competencies of female entrepreneurs have a favourable impact on business success. The study addresses a gap in the literature by undertaking a gender-specific study in an emerging country and offers insights into the particular difficulties and possibilities experienced by women entrepreneurs in such settings. This expands our theoretical understanding of entrepreneurship and highlights the need for context-specific approaches and interventions to support women entrepreneurs. By examining the influence of women entrepreneurs' abilities on both financial and non-financial success, the research also adds to the body of knowledge. This multidimensional approach deepens the theoretical comprehension of the variables affecting company performance and opens up new

directions for future study of the complex mechanisms and dynamics at play. Overall, this study provides managerial insights for business leaders, practical advice for women entrepreneurs, policymakers, and support organisations, as well as a theoretical understanding of entrepreneurship within the resource-based view framework, gender-specific studies, and the Indian context.

5.2 Limitations and future research directions

Our study has limitations that advise using caution when interpreting our results. The use of non-random sampling, which restricts the generalizability of the findings, is one of the study's limitations. Another limitation is that the study adopted a cross-sectional design, capturing data at a specific point in time. This limits the ability to establish causal relationships and observe changes over time. It would be insightful to do longitudinal research to investigate the long-term impacts of female entrepreneurs' business management abilities and inventiveness on firm success. Such investigations might chart the development and evolution of women-owned enterprises across time, reflecting the dynamics and adjustments that take place. The study's small sample size may have limited the findings' statistical power and representativeness. A greater sample size would enable a more thorough examination and improve the results' generalizability. This study might be expanded to gather samples from varied domains such as rural women entrepreneurs with an emphasis on the difficulties and barriers faced by them and evaluate alternative combinations of competencies needed to overcome these difficulties when starting a business or enhancing firm performance. Industry-specific insights might be gained by conducting sector-specific research to examine how the abilities and innovativeness of women entrepreneurs affect business performance in various industries within India's developing economy. This could help identify industry-specific challenges, opportunities, and strategies for women entrepreneurs. In-depth qualitative research, including case studies and interviews, may be able to shed more light on the struggles faced and strategies utilised by women business owners in India's developing economy. The quantitative findings would be enhanced by these qualitative insights, which would provide a broader and more intricate viewpoint. The current research focussed on the financial and non-financial measures of firm performance. Future research may also incorporate measuring firm performance based on business growth and performance relative to competitors (Tehseen et al., 2019).

6 Conclusion

In the setting of a growing economy, this study investigated the link between the innovativeness of women entrepreneurs, business and management competencies, and firm performance. The results showed that innovativeness had a favourable effect on both financial and non-financial performance, underscoring its significance for women company owners in fostering business success. Additionally, it was shown that Business and Management competencies had a conclusive impact on the company's financial performance. These results highlight the necessity of encouraging innovation and helping women entrepreneurs build strong business management skills to improve their overall performance and support the economic development of emerging nations. Since Business and management competencies did not influence non-financial performance, additional factors and competencies that may affect non-financial performance results for women entrepreneurs need to be explored in future studies.

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Appendix-1

Full test battery of the measurement scales
Business and Management Competency

i. I am able to prepare a good budget for my firm.
ii. I am able to manage day to day operations of my business.
iii. I am able to integrate a good management system necessary for the long-term functioning of the business.
iv. I can formulate and implement strategies for exploring new business opportunities.
v. I am able to prepare and write a good business plan.
vi. I am able to develop an operational system for the smooth day-to-day functioning of the business.
vii. I am able to plan the strategies for my business.
viii. I am able to manage my finances well such as accounting and cash control.

(Strongly disagree=1, Disagree=2, Neutral= 3, Agree= 4, Strongly agree=5)

Innovativeness Competency

i. I look for opportunities to improve an existing process, technology, product, service or work relationship.
ii. I recognize opportunities to make a positive difference in my work, department, organization or with customers.
iii. I pay attention to non-routine issues in my work, department, organization or the marketplace.
iv. I generate ideas, and solutions to address problems.
v. I define problems more broadly to gain greater insight into them.
vi. I experiment with new ideas and solutions.
vii. I test out ideas and solutions to address unmet needs.
viii. I evaluate the strengths and weaknesses of new ideas.
ix. I try to persuade others of the importance of new ideas or solutions.
x. I push ideas forward so they have a chance to be implemented.
xi. I take the risk to support new ideas.
xii. I implement changes that seem to be beneficial.
xiii. I work the bug out of new approaches when applying them to an existing process, technology, product or service.
xiv. I incorporate new ideas for improving an existing process, technology, product or service into daily routines.

(Never=1, Occasionally=2, Sometimes=3, Often =4, Always=5)

Financial Firm Performance

i. I am satisfied with the growth in profitability of the firm.
ii. I am satisfied with the firm's sales turnover growth.
iii. I am satisfied with the growth in return on investment of the firm.
iv. I am satisfied with the growth in market share of the firm.

(Strongly disagree=1, Disagree=2, Neutral= 3, Agree= 4, Strongly agree=5)

Non-Financial Firm Performance

i. I am satisfied with the increase in customer retention of the firm.
ii. I am satisfied with the increase in the customer satisfaction level of the firm.
iii. I am satisfied with my work and life balance.

(Strongly disagree=1, Disagree=2, Neutral= 3, Agree= 4, Strongly agree=5)