

Open Minds, Bold Futures: Linking Readiness for Uncertainty and Optimism to Business Performance among Woman Entrepreneurs

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Abstrak

Ketidakpastian ekonomi global menyebabkan tantangan bisnis, khususnya di kalangan pengusaha perempuan. Di Indonesia, lebih dari separuh pemilik UMKM adalah perempuan, sehingga kapasitas psikologis seperti keterbukaan pikiran, kesiapan menghadapi ketidakpastian, dan optimisme menjadi penentu penting dalam kinerja bisnis. Penelitian sebelumnya melaporkan temuan yang tidak konsisten, sehingga menyoroti adanya urgensi untuk memahami kapasitas psikologis yang mendukung kinerja bisnis. Penelitian ini bertujuan untuk menganalisis pengaruh keterbukaan pikiran, kesiapan menghadapi ketidakpastian, dan optimisme terhadap kinerja bisnis pengusaha perempuan, serta menganalisis peran moderasi optimisme dalam hubungan tersebut. Penelitian ini menggunakan pendekatan kuantitatif, mengumpulkan data dari 153 pengusaha perempuan Indonesia yang telah menjalankan bisnis mereka setidaknya selama satu tahun, yang dipilih melalui purposive sampling. Data dikumpulkan melalui kuesioner online dan dianalisis menggunakan PLS-SEM. Hasil penelitian menunjukkan bahwa keterbukaan pikiran, kesiapan menghadapi ketidakpastian, dan optimisme memberikan pengaruh positif terhadap kinerja bisnis, tetapi optimisme tidak berperan sebagai moderator dalam hubungan tersebut.

Kata Kunci: Keterbukaan Pikiran; Kesiapan Menghadapi Ketidakpastian; Optimisme; Kinerja Bisnis; Pengusaha Perempuan

Abstract

Global economic uncertainty lead to business challenges, particularly among women entrepreneurs. In Indonesia, more than half of MSME owners are women, making psychological capacities such as open-mindedness, uncertainty readiness, and optimism crucial determinants of business performance. The Previous studies report inconsistent findings, highlighting the urgency to understand the psychological capacities that support business performance. This study aims to analyze the effect of open-mindedness, uncertainty readiness, and optimism on women entrepreneurs business performance, and also analyzes the moderating role of optimism in these relationships. This research use quantitative approach, collecting data from 153 Indonesian women entrepreneurs who operated their businesses for at least one year, chosen via purposive sampling. Data were collected through an online questionnaire and analyzed using PLS-SEM. The findings show that open-mindedness, uncertainty readiness, and optimism contribute positive effects to business performance, but optimism does not act as a moderator between the relationships.

Keyword: Open-Minded Entrepreneur; Uncertainty Readiness; Optimism; Business Performance; Women Entrepreneurs.

1. Introduction

In the era of rapid globalization and digitalization, technological changes transformed the dynamics of the global economy, marked by an increase in environmental uncertainty and shifting patterns of consumer behavior worldwide. The business environment is facing disruption, and entrepreneurs must constantly face new challenges to compete and survive (Do *et al.*, 2022). Uncertainty readiness and an open mindset are important factors that determine business resilience and adaptive capacity in response to environmental changes. This phenomenon raises issues regarding how businesses can survive and maintain good performance amidst uncertainty, and how the psychological capabilities and attitudes of business owners can affect their business performance. The number of MSMEs in Indonesia currently exceeds 64 million and contributes approximately 61% to the national GDP (Kementerian Keuangan, 2024). Women entrepreneurs are currently a strategic asset supporting national economic growth, as approximately 64.5% of the total MSME actors in Indonesia are women entrepreneurs (Good Stats, 2025). This condition indicates that Indonesian women entrepreneurs need to improve their psychological capacity, adapt to open-mindedness, uncertainty readiness, and entrepreneurial optimism. Therefore, this research is highly relevant and urgent to investigate to understand the relationship between business performance and psychological factors such as open-mindedness, optimism, and uncertainty readiness. Based on Psychological Capital Theory (Luthans *et al.*, 2006), positive psychological factors such as optimism and readiness to face uncertainty are key assets that influence an individual's ability to survive through challenges and determine business success. Empirical evidence shows that market uncertainty negatively affects business performance (Sharfaei *et al.*, 2023). The readiness of business owners to deal with uncertainty affects employee performance, which will indirectly impact overall business performance (Ratnawati & Sugiharti, 2023). Furthermore, entrepreneurial optimism plays an essential role in fostering motivation and improving business outcomes (Shetty G *et al.*, 2024). Entrepreneurial optimism is not merely a positive attitude but a construct related to beliefs about control over business outcomes to perceive opportunities, linked to strategic decision-making that will influence business performance (Li *et al.*, 2021). Therefore, the research that focused on the relationships between open-mindedness, uncertainty readiness, and entrepreneurial optimism on business performance, and how entrepreneurial optimism moderates this relationship, is becoming more relevant to study, especially among women entrepreneurs who have operated their businesses for at least one year, as they are currently a strategic asset driving the national economy and face various challenges.

Although the relationships between psychological factors such as open-mindedness, uncertainty readiness, and optimism with business performance have been widely discussed in previous studies, recent findings still indicate inconsistencies across research. For example, Rahmawati *et al.* (2024) found that uncertainty readiness positively influences business performance in Indonesia, but the mediating effect of optimism was not proven significant, and the research only focused on the F&B sector. Conversely, a study by Sharfaei *et al.* (2023) showed that environmental uncertainty can directly decrease business performance, but the role of uncertainty readiness was only a weak moderator, indicating the impact on business performance was insufficient to withstand or strengthen the effects of market uncertainty. The inconsistency was also found in a study by Ben Fatma *et al.* (2024), which showed that optimism has a direct and significant effect on business success, and positive psychological factors can enhance performance. However, Ma *et al.* (2024) found that excessive optimism can reduce decision-making quality and lead to overconfidence, thus giving a negative impact on long-term business performance. Although a lot of studies have examined the relationship between psychological factors as variables influencing business performance, there is still limited research explicitly measured uncertainty readiness, open-mindedness, and optimism in relation to actual business performance, particularly among women entrepreneurs. This research gap indicates that there is still limited empirical research comprehensively examining the relationship between open-mindedness, uncertainty readiness, optimism, and business performance, specifically within the group of women entrepreneurs. There is limited research that integrates all three variables into a single conceptual model capable of explaining the psychological mechanisms behind the success of women entrepreneurs' businesses. This provides an

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opportunity for future research to make theoretical and empirical contributions by understanding how these psychological factors interact to influence the business performance of women entrepreneurs. Accordingly, this study aims to (1) analyze the influence of open-mindedness on the business performance of women entrepreneurs, (2) analyze the influence of uncertainty readiness on the business performance of women entrepreneurs, (3) analyze the influence of entrepreneurial optimism on the business performance of women entrepreneurs, (4) examine the moderating role of entrepreneurial optimism in the relationship between open-mindedness and business performance, and (5) examine the moderating role of entrepreneurial optimism in the relationship between uncertainty readiness and the business performance of women entrepreneurs. Previous research findings have shown inconsistencies, with some studies confirming a direct positive influence of uncertainty readiness and optimism on business performance (Ben Fatma *et al.*, 2024; Rahmawati *et al.*, 2024), while other studies have reported weak, insignificant, or even potentially negative relationships when excessive optimism leads to overconfidence (Ma *et al.*, 2024). This inconsistency highlights the need for more in-depth research into the relationship between these variables, especially within different social, cultural, and gender contexts. This study offers novelty that differs from previous studies that focused on specific sectors, which focus on women entrepreneurs in Indonesia who have been operating their businesses for at least one year. This study integrates psychological and entrepreneurial perspectives to examine how open-mindedness, uncertainty readiness, and entrepreneurial optimism interact to shape business performance among women entrepreneurs. This approach extends the application of Psychological Capital Theory (Luthans *et al.*, 2006) within the context of gender and entrepreneurship in developing countries, an area that remains empirically underexplored. The theoretical benefit of this research is to contribute development of literature on psychological factors among women entrepreneurs, specifically on how open-mindedness, uncertainty readiness, and entrepreneurial optimism can be sources of non-material competitive advantage that impact business performance. The practical benefit of this research is to provide a foundation for policymakers, entrepreneurship training institutions, and MSME support organizations to design programs for women entrepreneurs that focus on developing psychological readiness and an optimistic mindset in navigating uncertain market dynamics. Through these objectives, this research is expected to provide new insights into how women entrepreneurs can cultivate open-mindedness and envision promising futures amidst global economic uncertainty, while also serving as an empirical foundation for more sustainable economic empowerment of women in Indonesia.

2. Literatur Review

2.1 Psychological Capital Theory

Psychological Capital Theory was first introduced by Luthans, Youssef, and Avolio (2006) as a new approach in human resource management that emphasizes the development of positive psychological strengths in individuals, rather than just technical skills or work experience. This theory is an approach from Positive Organizational Behavior (POB) that explains the importance of human psychological potential, such as hope, self-efficacy, resilience, and optimism, which can be developed and managed to improve business effectiveness and performance (Wang *et al.*, 2022). Psychological Capital is defined as "an individual's positive psychological state of development," which consists of four main dimensions known as HERO: Hope, Efficacy, Resilience, and Optimism. Although each dimension has different roles, these four dimensions complement each other (Goel, 2024). Hope refers to individual's capacity to set goals. Efficacy indicates a person's belief in their ability to solve a problem and achieve success. Resilience describes ability to bounce back from difficulties and learn from failure. Meanwhile, optimism describes an individual's tendency to expect good outcomes and see negative experiences as temporary and manageable experiences (Goel, 2024). In the entrepreneurial context, individuals with high levels of Psychological Capital generally exhibit stronger performance and adaptability (Nasreen *et al.*, 2024). In the context of this research, Psychological Capital Theory is used to explain how positive psychological strengths such as hope, resilience, and optimism shape individuals' readiness to confront uncertainty and

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create an open mindset that supports effective decision-making in business environments. Uncertainty readiness is closely related to the key components of Psychological Capital (Kromidha & Bachtiar, 2024). Individuals with high levels of Psychological Capital are able to withstand pressure (Nasreen *et al.*, 2024). Having a high level of Psychological Capital, entrepreneurs will be more capable of adapting to environmental changes and improving business performance (Li *et al.*, 2021). This theory explains that the business performance of women entrepreneurs is influenced not only by external resources but also by internal capabilities, specifically, open-mindedness, and is supported by strong positive psychological attributes such as uncertainty readiness and optimism (Rahmawati *et al.*, 2024).

2.2 Open-Mindedness

Open-mindedness is one of the important psychological characteristics that reflects an individual's ability to accept new ideas, information, and perspectives without bias or prejudice (Caballero-García & Sánchez Ruiz, 2024). An individual tends to accept new ideas, curious about new things, thinks outside the box, learn new marketing approaches, and is willing to change strategies (Peljko & Auer Antončič, 2022). In the entrepreneurial context, open-mindedness is a fundamental basis for making more rational strategic decisions, enabling to objectively evaluate alternatives before making decisions (Mu *et al.*, 2022).

2.3 Uncertainty Readiness

Uncertainty readiness is an individual's psychological ability to remain calm, flexible, and able to think clearly when faced with unpredictable situations (Sharfaei *et al.*, 2023). Individuals with a high level of uncertainty readiness tend to make more rational decisions amid change and have strong adaptability when dealing with risks (Rahmawati *et al.*, 2024). Do *et al.* (2022) also explains that individuals with high tolerance for uncertainty are more open to various alternative solutions and have a better ability to evaluate long-term risks. Rapp & Olbrich (2020) state that businesses must use appropriate decision-making logic when facing uncertainty.

2.4 Optimism

Optimism is not only a personality attribute but also a key factor influencing decision-making, innovation, and business performance, more higher the levels optimism will significantly increases company size, revenue, and market expansion, which in directly influence business performance (Ben Fatma *et al.*, 2024). Optimism is not just positive thinking, but also involves how individuals perceive negative experiences as temporary and manageable, allowing them to focus more on opportunities rather than obstacles (Margaça *et al.*, 2022). This indicates optimism enables entrepreneurs to identify opportunities amid challenges and take calculated risks with greater confidence.

2.5 Business Performance

Business performance explains how well a business can achieve its strategic, operational, and financial goals within a specific time period, as well as its ability to grow, survive, and create value in a competitive environment (Sakib *et al.*, 2022). Business performance is a key indicator for evaluating the effectiveness of business strategies and the business's ability to adapt to an uncertain environment (Haleem *et al.*, 2019). From a gender perspective, Expósito *et al.* (2023) identify a gap between female and male entrepreneurs, which tends to be caused by limited access to capital, business networks, and innovation opportunities. However, the study also shows that innovation has a strong mediating effect, where women entrepreneurs who are able to innovate will achieve business performance equal to or even better than men. This finding aligns with studies indicating that psychological factors significantly contribute to business performance (Rahmawati *et al.*, 2024). Thus, in this study, business performance is considered a reflection of the effectiveness of strategies and the psychological capacity of women entrepreneurs in navigating uncertainty, where business performance serves as an indicator of economic success and also demonstrates women's empowerment in contributing to national economic growth.

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2.6 The Influence of Open-Minded Entrepreneur on Business Performance

Open-mindedness is an essential psychological characteristic that reflects an individual's ability to accept new ideas, appreciate diverse perspectives, and adjust strategies in response to changes in the business environment (Rahmawati *et al.*, 2024). Individuals with high open-mindedness tend to be more adaptable, creative, and able to identify business opportunities amidst market changes (Kromidha & Bachtiar, 2024). According to Psychological Capital Theory (Luthans *et al.*, 2006), open-mindedness is one of the positive psychological strengths that enhances decision-making ability and business innovation, which will impact business performance. Furthermore, Ben Fatma *et al.* (2024) stated that open-mindedness enables entrepreneurs to think more openly and can expand connections that influence the effectiveness of market strategies. In the context of women entrepreneurs, open-mindedness is an important factor in facing social and structural challenges that often restrict entrepreneurial mobility (Rahmawati *et al.*, 2024). Barriers such as gender norms, dual responsibilities, limited access to networks, and resource constraints mean that women entrepreneurs need to have a more open and adaptive mindset in order to create breakthroughs and improve business performance (Ahmad *et al.*, 2023). The characteristics of women entrepreneurs differ from those of men, so having an open mind to new ideas is an important driving factor in maintaining and improving business performance (Franzke *et al.*, 2022). H1: Open-mindedness influences the business performance of women entrepreneurs.

2.7 The Influence of Uncertainty Readiness on Business Performance

Uncertainty Readiness refers to an individual's psychological ability to remain calm, rational, and anticipatory when confronted with unpredictable conditions (Rahmawati *et al.*, 2024). Based on Psychological Capital Theory (Luthans *et al.*, 2006), readiness to face uncertainty aligns with two core components, resilience and self-efficacy. Resilience enables individuals to recover from failure and maintain motivation, while self-efficacy fosters confidence in managing risks. The combination of these components helps women entrepreneurs view uncertainty as an opportunity for growth and learning. In the entrepreneurial context, uncertainty readiness indicates the extent to which business owners are able to adapt to manage risks and make strategic decisions in response to changes in fluctuating business environment conditions (Do *et al.*, 2022). Entrepreneurs who can anticipate market trends more quickly are better positioned to adjust business strategies and sustain competitiveness (Rahmawati *et al.*, 2024; Sharfaei *et al.*, 2023). Adaptive capability has been identified as a key factor of business success, particularly in the MSME sector (Nguyen *et al.*, 2025). H2: Uncertainty readiness influences the business performance of women entrepreneurs.

2.8 The Influence of Optimism on Business Performance

Optimism is the positive belief that the expected results can be achieved through effort and that there is always a solution to overcome any difficulties encountered (Ben Fatma *et al.*, 2024). Psychological Capital Theory (Luthans *et al.*, 2006) positions optimism as a main component that drives individual success in achieving goals. In the context of entrepreneurship, optimism is not just a positive attitude but a psychological resource that drives adaptability, which in turn influences business performance (Margaça *et al.*, 2022). Optimistic entrepreneurs with a long-term view of success will remain focused on achieving their goals despite encountering obstacles, and will be able to see failure as an opportunity to learn and grow (Nguyen *et al.*, 2025). An optimistic attitude, such as never giving up, allows female entrepreneurs to survive in business competition, even when facing social and economic pressures (Adeel & Batool, 2025). Sustained business performance based on optimism will have a positive impact on sales growth, customer loyalty, and the stability of business profits (Ben Fatma *et al.*, 2024). Women entrepreneurs who are optimistic and confident in their abilities can overcome gender challenges and barriers, expand their business networks, and make strategic decisions that positively impact business performance (Ahmad *et al.*, 2023; Nguyen *et al.*, 2025). H3: Optimism influences the business performance of women entrepreneurs.

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2.9 The Moderation Role of Optimism

Besides directly impacting business performance, optimism also acts as a moderating variable that strengthens the relationship between open-mindedness and uncertainty readiness with business performance (Rahmawati *et al.*, 2024). In the context of female entrepreneurs, optimism is a psychological factor that can transform individuals' perception of challenges into opportunities, thereby strengthening the positive influence of open-mindedness and uncertainty readiness on business performance (Nguyen *et al.*, 2025). According to Psychological Capital Theory (Luthans *et al.*, 2006), optimism is a main component of psychological capacity that shapes individual reactions when facing uncertainty. Female entrepreneurs with high levels of optimism are more capable of maintaining open-mindedness and uncertainty readiness into concrete actions that enhance business performance. Open-mindedness provides opportunities for women entrepreneurs to explore new ideas, accept feedback, and innovate in running their businesses, but if open-mindedness is not balanced with optimism, it will make entrepreneurs hesitant to follow through on those ideas with concrete action (Kromidha & Bachtiar, 2024; Margaça *et al.*, 2022). Female entrepreneurs with high optimism will be more confident in testing new ideas and have the persistence to implement strategic actions despite encountering obstacles. Conversely, those with low optimism may fail to translate their open-mindedness into concrete behavior, resulting in limited impact on business performance (Ahmad *et al.*, 2023; Ben Fatma *et al.*, 2024). This indicates that optimism acts as a psychological factor that can strengthen the relationship between open-mindedness and business performance by enhancing the courage needed to make strategic decisions and implement them effectively. Furthermore, the moderating role of optimism is also evident in its interaction with uncertainty readiness. Uncertainty readiness reflects the entrepreneur's ability to remain calm, adaptive, and anticipatory in unstable market conditions, while optimism provides the confidence and a focused solutions mindset when facing uncertainty in unstable market conditions (Do *et al.*, 2022). Individuals with high uncertainty readiness but low optimism may remain overly cautious and pessimistic in decision-making. In contrast, when high uncertainty readiness is paired with high optimism, female entrepreneurs are more capable of identifying opportunities in change, enabling them to innovate and view uncertainty as a driver for learning and developing their business performance. These two moderating relationships indicate that optimism has a dual function as an independent variable that directly influences business performance, and also as a moderator that can either strengthen or weaken the effects of open-mindedness and uncertainty readiness on business performance. Consistent with the findings of (Rahmawati *et al.*, 2024), which show that the combination of open-mindedness, uncertainty readiness, and optimism significantly enhances business performance, this research aims to provide empirical evidence on how optimism moderates these relationships among female entrepreneurs, enabling them to sustain strong business performance amid market uncertainty. H4: Optimism moderates the relationship between open-mindedness and the business performance of women entrepreneurs. H5: Optimism moderates the relationship between uncertainty readiness and the business performance of women entrepreneurs.

3. Research Methodology

This study uses a quantitative approach with a survey method to analyze the relationship between uncertainty readiness, optimism, open-mindedness, and business performance among women entrepreneurs. The sampling technique used in this study is non-probability sampling, specifically purposive sampling, to target respondents based on specific criteria, female business owners who are currently and have been running their businesses for at least one year from all regions in Indonesia. This criterion is set to ensure that respondents have experience relevant to the research topic. The sample size was determined using G*Power 3.1 software, which is commonly used in social research to determine sample requirements based on power analysis (Kang, 2021). Based on the calculation results, it was found that the required sample size is 153 respondents. From the data collection process, respondents who filled out the questionnaire were gathered, and then a screening process was carried out based on the criteria. After the screening process, 153 women business owner respondents who met the criteria

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were obtained and used as the final research sample. The survey items were adapted from previously validated scales to measure the relationship between uncertainty readiness, optimism, open-mindedness, and business performance. A table of operational definitions containing the indicators, items, and sources of each construct is also provided to enhance transparency and facilitate reader understanding. The survey instrument was measured using a five-point Likert scale, ranging from "strongly disagree" to "strongly agree". The data analysis method used is the Partial Least Squares Structural Equation Modeling (PLS-SEM), assisted by the SmartPLS software. This method was chosen because it is suitable for research models that include several direct relationships and two moderating relationships. All variables in this study represent latent psychological constructs measured through multiple indicators, requiring a flexible analytical approach to estimate the relationships between variables. PLS-SEM is also suitable for use because the research objective is predictive, specifically to predict the performance of women entrepreneurs based on open-mindedness, uncertainty readiness, and optimism.

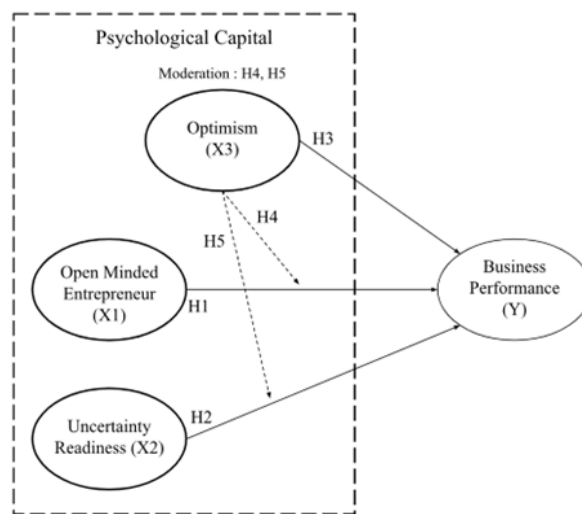


Figure 1. Conceptual Framework

Table 1. Variable Operational Definition

Variable	Indicator	Item	Source
Open-Minded Entrepreneur (X1)	Ability to exchange ideas	OM1. I actively exchange ideas with others.	(Alteren & Tudoran, 2019; Ratnawati & Sugiharti, 2023)
	Ability to receive new information	OM2. I routinely study current market conditions.	
	Creative and flexible thinking	OM5. I encourage employees to think outside the box.	
Uncertainty Readiness (X2)	Ability to manage unexpected situations	UR4. I am confident I can handle unexpected events effectively	(Botha, 2020; Caliendo <i>et al.</i> , 2023)
	Ability to solve problems under pressure	UR5. I can overcome any problems that come my way in my business.	
Optimism (X3 & Mo)	Belief in positive outcomes	OP1. I always try to see the positive side when running a business.	(Adomako <i>et al.</i> , 2016; Ma <i>et al.</i> , 2024; Wafeq <i>et al.</i> , 2019)
	Future-oriented expectations	OP4. In running my business, I hope more good things happen than bad things.	

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	Confidence in achieving business success	OP5. I am confident that my business will succeed in the long term.	
Business Performance (Y)	Market growth	BP2. My business's market reach has continued to grow over the past year.	(Kafetzopoulos et al., 2023)
	Financial growth	BP4. The financial performance of my business has continued to improve over the past year.	

4. Results and Discussion

4.1 Results

Table 2. Respondents Characteristics (n = 153)

	Demographic Characteristic	Frequency	Percentage
Gender	Woman	153	100%
	Age		
	< 20 Years	3	1,69%
	20-24 Years	60	39,22%
	25-29 Years	50	32,68%
	30-34 Years	27	17,65%
	35-39 Years	9	5,88%
	≥ 40 Years	4	2,61%
Marriage Status	Yes	76	49,67%
	No	77	52,33%
Job	Freelancer	15	9,80%
	Housewives	20	13,07%
	Civil Servants	11	7,19%
	Private Employees	30	19,61%
	Students	28	18,30%
	Professionals (Doctors, Lawyers, Consultants, etc.)	5	3,27%
	Self-Employed / Entrepreneurs	44	28,76%
Domicile	Aceh	3	1,96%
	Bali	5	3,27%
	Banten	8	5,23%
	Bengkulu	4	2,61%
	DI Yogyakarta	15	9,80%
	DKI Jakarta	13	8,50%
	Gorontalo	4	2,61%
	Jambi	8	5,23%
	Jawa Barat	11	7,19%
	Jawa Tengah	12	7,84%
	Jawa Timur	34	22,22%
	Kalimantan Barat	1	0,65%
	Kalimantan Selatan	3	1,96%
	Kalimantan Tengah	4	2,61%
Kalimantan Timur	1	0,65%	

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	Kalimantan Utara	3	1,96%
	Kepulauan Bangka Belitung	3	1,96%
	Kepulauan Riau	3	1,96%
	Lampung	5	3,27%
	Maluku	3	1,96%
	Nusa Tenggara Timur (NTT)	1	0,65%
	Riau	1	0,65%
	Sulawesi Barat	1	0,65%
	Sulawesi Selatan	2	1,31%
	Sulawesi Tengah	2	1,31%
	Sumatera Barat	1	0,65%
	Sumatera Selatan	1	0,65%
	Sumatera Utara	1	0,65%
	Maluku	3	1,96%
	Nusa Tenggara Timur (NTT)	3	1,96%
	Riau	5	3,27%
	Sulawesi Barat	3	1,96%
	Sulawesi Selatan	1	0,65%
	Sulawesi Tengah	1	0,65%
	Sumatera Barat	1	0,65%
	Sumatera Selatan	2	1,31%
	Sumatera Utara	2	1,31%
Type of Business	Agribusiness / Agriculture / Livestock	3	1,96%
	Fashion & Accessories	23	15,03%
	Professional Services (consulting, training, creative, design, etc.)	13	8,50%
	Beauty & Care	16	10,46%
	Health / Herbal	9	5,88%
Number of Employees	0–5	100	65,36%
	6–10	45	29,41%
	> 10	8	5,23%
Average turnover per month	< 10 million	73	47,71%
	10–50 million	68	44,45%
	> 50 million	12	7,84%
Length of Business Operation	1 Year	25	16,34%
	1 - 3 Years	60	39,22%
	3 - 5 Years	51	33,33%
	> 5 Years	17	11,11%

The descriptive table above presents the final sample of 153 respondents who met the research criteria, all of whom were women. Based on age groups, 1.69% were under 20 years old, 39.22% were within the age range of 20–24 years, 32.68% were 25–29 years, 17.65% were 30–39 years, and 2.61% were 40 years or older. In terms of marital status, 49.67% of the respondents were married, while 52.33% were unmarried. Based on educational background, 52.94% were high school graduates, 43.14% held a bachelor's degree, and 3.92% held a master's degree. Based on occupation, the majority were self-employed entrepreneurs (28.76%), followed by private employees (19.61%) and students (18.30%). Additionally, 13.07% were housewives, 9.80% worked as freelancers, 7.19% were government employees, and 3.27% were professionals. Based on domicile area, most respondents were from East Java (22.22%), followed by the Special Region of Yogyakarta (9.80%) and Jakarta (8.50%). Other provinces on Java Island, such as Central Java (7.84%), West Java (7.19%), as well as Banten and Jambi

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(each 5.23%), also contributed notable proportions. Several regions showed moderate representation, including Bali and Lampung (each 3.27%), and Bengkulu, Gorontalo, and Central Kalimantan (each 2.61%). Provinces with smaller representation included Aceh, South Kalimantan, North Kalimantan, Bangka Belitung Islands, Riau Islands, and Maluku (each 1.96%). Regions with the lowest percentages were West Kalimantan, East Kalimantan, East Nusa Tenggara, Riau, West Sulawesi, West Sumatra, South Sumatra, and North Sumatra (each 0.65%), as well as South Sulawesi and Central Sulawesi (each 1.31%). Overall, the distribution indicates that respondents originated from various provinces across Indonesia, with the largest proportion residing on Java Island. Based on the types of businesses operated, the majority of respondents were engaged in the Food and Beverage (F&B) sector (34.64%), followed by Retail or Online Shops (16.34%) and Fashion and Accessories (15.03%). Additionally, 10.46% were involved in Beauty and Personal Care, 8.50% in Professional Services such as consulting, training, and design, and 5.88% in Health or Herbal products. Some sectors with smaller proportions included Education or Courses (4.58%), Technology or IT (2.61%), and Agribusiness, Agriculture, or Livestock (1.96%). Based on the number of employees, most respondents manage small-scale businesses, with 65.36% having 0–5 employees, 29.41% having 6–10 employees, and only 5.23% employing more than 10 employees. In terms of average monthly turnover, 47.71% of respondents have a turnover below 10 million rupiah, 44.45% are in the range of 10–50 million rupiah, and 7.84% have a turnover of over 50 million rupiah. Regarding the duration of the business, the data shows that 6.34% had been operating for 1 year, 39.22% for 1–3 years, 33.33% for 3–5 years, and 11.11% for more than 5 years. Overall, the respondents in this study are women entrepreneurs predominantly in the productive age group, with medium to high levels of education, and distributed across various regions of Indonesia, with the largest percentage from Java Island. Most respondents operate micro and small enterprises in the Food and Beverage, Retail, and Fashion sectors, with a limited number of employees and varying levels of monthly revenue. Additionally, most respondents have been running their businesses for 1 to 5 years, indicating that they are in the business development and consolidation stage of their business growth.

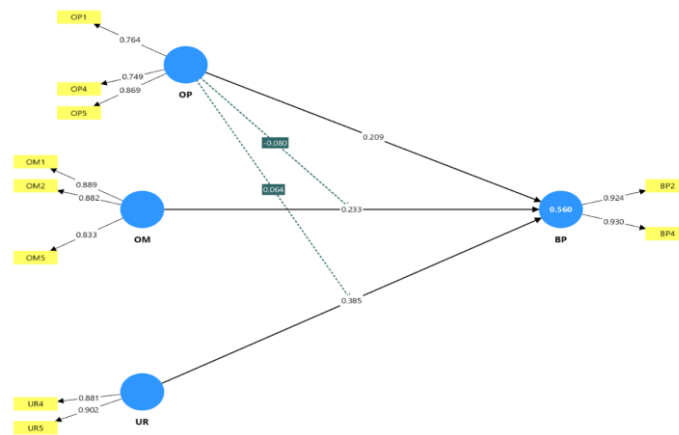


Figure 2. Research Model Framework

To ensure the validity of the measurement model in this study, a convergent validity test was conducted. The findings indicate that the selected variables effectively capture the intended construct, thereby strengthening the resilience of the research model. The following is the calculation of the PLS algorithm in SmartPLS. The results of the convergent validity test can be concluded as valid if they meet the criteria that the indicators have an outer loading value above 0.70 and an AVE value exceeding 0.50 (Cheung *et al.*, 2024). For the Open-Minded Entrepreneur variable (X1), indicators OM1, OM2, and OM5 have loading factor values of 0.889, 0.882, and 0.833. For the Uncertainty Readiness variable (X2), indicators UR4 and UR5 showed loading factors of 0.881 and 0.902. For the Optimism variable (X3), indicators OP1, OP4, and OP5 show loading factor values of 0.764, 0.749, and 0.869. For the Business Performance (Y) variable, indicators BP2 and BP4 show loading factor values of 0.924 and 0.930. All

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indicators of the variable exceeded the 0.70 threshold, confirming their validity. The Fornell-Larcker criterion is used to assess discriminant validity by comparing the square root of the AVE for each variable to its correlations with other variables. The square root of the AVE for Open-Minded Entrepreneur (X1) is $\sqrt{0.754} = 0.868$, which is higher than its correlations with other constructs, thereby confirming its discriminant validity. The square root of the AVE for Uncertainty Readiness (X2) is $\sqrt{0.795} = 0.892$, which exceeds its correlations with other constructs, thus confirming its validity. The square root of the AVE for Optimism (X3) is $\sqrt{0.633} = 0.795$, higher than its correlations with other constructs, indicating confirmed validity. The square root of the AVE for Business Performance (Y) is 0.859, which is also greater than its correlations with other constructs, thereby confirming its discriminant validity. Reliability testing was assessed through Cronbach's Alpha and Composite Reliability values, which must each be greater than 0.7. The Open-Minded Entrepreneur variable (X1) has a Cronbach's Alpha of 0.837 and a Composite Reliability of 0.840. The Uncertainty Readiness variable (X2) shows a Cronbach's Alpha of 0.742 and a Composite Reliability of 0.746. The Optimism variable (X3) has a Cronbach's Alpha of 0.723 and a Composite Reliability of 0.791. The Business Performance variable (Y) shows a Cronbach's Alpha of 0.836 and a Composite Reliability of 0.837. All of the reliability is greater than 0.7, indicating strong reliability and confirming that the construct is measured with high internal consistency.

Table 3. Discriminant Validity

	BP	OM	OP	UR	OP x UR	OP x OM
BP						
OM	0.781					
OP	0.758	0.855				
UR	0.876	0.895	0.836			
OP x UR	0.359	0.410	0.664	0.390		
OP x OM	0.428	0.411	0.730	0.427	0.741	

In addition, discriminant validity testing was also conducted using the Heterotrait–Monotrait Ratio (HTMT) value. The HTMT value for each pair of constructs must not exceed 0.90 to meet the criterion for discriminant validity (Mohd Dzin & Lay, 2021). Based on the test results, all HTMT values for each construct pair were below the 0.90, indicating that each variable in this study possesses adequate discriminant validity and that no construct overlap occurred. Accordingly, all variables in this study were confirmed to have satisfied the criteria for reliability, convergent validity, and discriminant validity, rendering them appropriate for subsequent structural model testing.

Table 4. R-Square

	R-square	R-square adjusted
BP	0.560	0.545

The R-square value test used to measure the variation in changes of independent variables on dependent variables in a study, more higher R-square value more better the predictive model of the proposed research model (Charles & Immanuel, 2025). According to (Hair *et al.*, 2014), R-square values of 0.75, 0.50, and 0.25 represent strong, moderate, and weak models. Based on the information presented in Table 5, the R-square value for Business Performance is 0.560, the moderate category. This indicates that Open Minded Entrepreneur (OM), Uncertainty Readiness (UR), and Optimism (OP) collectively explain 56% of the variance in Business Performance (BP), while the remaining 44% is explained by other variables not included in this study. Therefore, the research model demonstrates an adequate level of predictive capability in explaining variations in Business Performance. These findings suggest that Open Minded Entrepreneur (OM), Uncertainty Readiness (UR), and Optimism (OP) effect Business Performance (BP) significantly, particularly among women entrepreneurs who are the focus of this study.

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Table 5. Path Coefficients – Mean, STDEV, T values, p values

	Original Sampel (O)	Sample Mean (M)	STDEV	T statistics	P values
Open Minded Entrepreneurship to Business Performance	0.233	0.230	0.092	2.544	0.011
Uncertainty Readiness to Business Performance	0.385	0.386	0.094	4.106	0.000
Optimism to Business Performance	0.209	0.215	0.097	2.156	0.031
Open Minded Entrepreneurship to Business Performance moderate by Optimism	-0.080	-0.079	0.086	0.932	0.351
Uncertainty Readiness to Business Performance moderate by Optimism	0.064	0.836	0.079	4.106	0.413

Table 5 presents the results of hypothesis testing evaluating the relationship between Open Minded Entrepreneur (OM), Uncertainty Readiness (UR), Optimism (OP), and Business Performance (BP). The analysis results include direct effects and moderating effects. Hypothesis testing shows that Open Minded Entrepreneur (OM) significantly influences Business Performance (BP) with p-values of 0.011 (less than 0.05), Thus, H0 is rejected and H1 is accepted, indicating a positive influence of Open Minded Entrepreneur (OM) on Business Performance (BP). The influence of Uncertainty Readiness (UR) on Business Performance (BP) shows p-values of 0.000 (less than 0.05), thus rejecting H0 and accepting H2, confirming that Uncertainty Readiness (UR) positively influences Business Performance (BP). The influence of Optimism (OP) on Business Performance (BP) shows p-values of 0.031 (less than 0.05), thus rejecting H0 and accepting H3, confirming that Optimism (OP) positively influences Business Performance (BP). Furthermore, the hypothesis testing results regarding the moderating role of Optimism (OP) in the relationship between Open-Minded Entrepreneur (OM) and Business Performance (BP) show a p-value of 0.351 (greater than 0.05). Thus, H0 is accepted, and H4 is rejected, indicating that Optimism (OP) does not moderate the relationship between Open-Minded Entrepreneur (OM) and Business Performance (BP). Similarly, the moderating role of Optimism (OP) on the relationship between Uncertainty Readiness (UR) and Business Performance (BP) showed p-values of 0.413 (greater than 0.05), thus H0 was accepted, and H5 was rejected. This indicates that Optimism (OP) does not moderate the relationship between Uncertainty Readiness (UR) and Business Performance (BP). Therefore, Open Minded Entrepreneur (OM), Uncertainty Readiness (UR), and Optimism (OP) as independent variables were proven to have a significant direct influence on Business Performance (BP), but no moderating role of Optimism (OP) is found in the relationships between Open-Minded Entrepreneur (OM) and Business Performance (BP), nor between Uncertainty Readiness (UR) and Business Performance (BP). This finding indicates that although Optimism (OP) plays an important role as a direct variable, it does not strengthen or weaken the relationship between Open-Minded Entrepreneur (OM) or Uncertainty on Business Performance (BP).

4.2 Discussion

Open-minded entrepreneurs significantly influence business performance, as indicated by a path coefficient of 0.233, a T-statistic value of 2.544, and a p-value of 0.011. This indicates that women entrepreneurs with a high level of open-mindedness will effectively impact their business performance. This finding aligns with previous research showing that open-mindedness improves business performance by fostering entrepreneurial capabilities, thereby strengthening competitiveness and business performance effectiveness. According to (Kromidha & Bachtiar, 2024), individuals with high open-mindedness are more capable of identifying business opportunities adaptively, which positively impacts their business performance. Open-mindedness enables entrepreneurs to think more broadly, allowing them to build wider networks that improved business performance. (Ben Fatma *et al.*, 2024). Thus, H1 states that Open-Minded Entrepreneurship influences Business Performance can be proven. However, several studies argue that the effects of open-mindedness are not always consistent, as the variable may

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exert a positive influence in some contexts but may show no significant effect in others, depending on additional factors such as motivation, opportunity perception, and external conditions (Kusa *et al.*, 2021). This difference can be explained by the characteristics of women entrepreneurs, who tend to view open-mindedness as an important factor in facing market changes. Their ability to accept new ideas and evaluate opportunities is quite effective in improving their business performance. Overall, these findings emphasize that Open-Minded Entrepreneurship serves as a strategic capacity that can enhance business performance, particularly when female entrepreneurs operate businesses in environments that demand high levels of adaptability, creativity, and decision-making. Uncertainty Readiness significantly affects Business Performance, as indicated by a path coefficient of 0.385 with a T-statistic value of 4.106 and a p-value of 0.000. This indicates that female entrepreneurs who are highly prepared to face uncertainty will effectively impact their business performance. This finding is supported by previous research, such as Do *et al.* (2022), who stated that an entrepreneur's Uncertainty Readiness reflects their ability to adapt to risks and make strategic decisions in a continuously changing environment, thereby influencing subsequent business performance. This is also supported by (Nguyen *et al.*, 2025), who emphasized that adaptive capabilities, such as Uncertainty Readiness, are a key factor in the success of businesses in MSMEs. Therefore, H2, which states that Uncertainty Readiness influences Business Performance, is proven and accepted. This study shows that Uncertainty Readiness has a significant influence and represents the strongest predictor of Business Performance among Woman Entrepreneurs. Adaptive capability in Uncertainty Readiness can influence business performance, indicating a direct relationship between uncertainty readiness and business performance (Dovbischuk, 2022; Hokmabadi *et al.*, 2024).

This finding aligns with previous studies stating that uncertainty readiness enables entrepreneurs to respond adaptively to changes and maintain performance during crises, thereby improving business performance (Han *et al.*, 2023; Kim & Yang, 2024; Koporcic *et al.*, 2025; Kusa *et al.*, 2021; Lee & Jung, 2021). However, several studies indicate that Uncertainty Readiness does not always lead to improvements in business performance (Abdul Razak *et al.*, 2024; Dağdeviren & Erturgut, 2024; Gun *et al.*, 2024). These inconsistencies can be explained by variations in business characteristics, differences in entrepreneurs' adaptive capacities, and the diverse industry dynamics in which they operate, suggesting that uncertainty readiness does not give the same impact on business performance. Overall, these findings confirm that Uncertainty Readiness is an important strategic capability that supports women entrepreneurs to improve business performance in a dynamic environment. Optimism has a significant influence on Business Performance, as indicated by a path coefficient of 0.209, a T-statistic value of 2.156, and a p-value of 0.031. This indicates that female entrepreneurs with high optimism will effectively influence their business performance. According to Margaça *et al.* (2022), optimism is a psychological resource that promotes adaptability, which influences business performance. This finding is also supported by the statement that entrepreneurs with an optimistic attitude will focus on achieving their goals despite encountering obstacles, allowing them to survive in business competition, which will positively impact business performance (Adeel & Batool, 2025; Ben Fatma *et al.*, 2024; Nguyen *et al.*, 2025). This study indicates that Optimism has a positive influence on business performance among women entrepreneurs. A woman optimism in business will help develop business performance through strategic decisions made (Ma *et al.*, 2024). This finding is supported by previous studies, which demonstrate that optimism can enhance business performance because individuals with positive expectations tend to persist when facing challenges, act more proactively in decision-making, more inclined to share knowledge and generate innovations that contribute to improved business performance (Amore *et al.*, 2022; Chen *et al.*, 2023; Hu *et al.*, 2023). However, some studies show that optimism does not always have a direct and positive impact on business performance, as optimism is often conditional, influenced by other mediating variables, and can also lead to activity without producing better innovation outcomes, which could potentially negatively affect future business performance (Ben Fatma *et al.*, 2024; Mahn *et al.*, 2024; Nel *et al.*, 2022). The difference in these findings can be explained by the characteristics of women entrepreneurs, who often use optimism as a driving force to continue innovating, thereby improving business performance.

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Overall, the results emphasize that Optimism serves as an important psychological factor that strengthens strategic evaluation and adaptive responses among women entrepreneurs, thereby supporting the enhancement of Business Performance when optimism is managed realistically and balancedly controlled. The discussion section must interpret and analyze the results that have been presented. Explain the meaning of these findings and how these findings contribute to the knowledge that exists in related fields. Compare the results of this study with the results of previous studies that have been described in the literature review section. Discuss whether these results support or contrary to previous findings and provide possible explanations for each difference. In this section, it must also be mentioned the limitations of research that may affect the validity or generalization of findings. Explain how this limitation can be overcome in future research. Also discuss practical, theoretical, or policy implications for research findings. Explain how these results can be used in practice or how they contribute to existing theories. Give suggestions for further research based on the findings and limitations of this research. The analysis results indicate that Optimism does not significantly moderate the relationship between Open Minded Entrepreneur and Business Performance. This is evidenced by a negative path coefficient of -0.080, a T-statistic of 0.932, and a p-value of 0.351, which is far above the 0.05 significance threshold. The low T-statistic value (commonly considered significant when above 1.96 at the 5% significance level) suggests that the moderating effect is not strong enough to be considered meaningful. This result aligns with the statement of Ma *et al.* (2024) that the role of optimism is contextual, optimism can moderate some relationships but not all variable, especially those related to entrepreneurship. Thus, the influence of Optimism on the relationship between Open-Minded Entrepreneurs and Business Performance does not have sufficient statistical significance to prove the moderation hypothesis. Consequently, H4, which states that Optimism moderates the relationship between Open-Minded Entrepreneurs and Business Performance, is not proven. This study found that Optimism does not significantly moderate the relationship between Open Minded Entrepreneurship and Uncertainty Readiness with Business Performance among female entrepreneurs. This result indicates that the level of optimism possessed by women entrepreneurs does not alter the influence of open-mindedness or readiness to face uncertainty on business performance. Although several previous studies have shown that Optimism may influence the relationship between psychological variables, such as Open-Minded Entrepreneurs and Uncertainty Readiness with Business Performance (Alves & Yang, 2022; Ma *et al.*, 2024; Sekścińska *et al.*, 2022), the present findings suggest that open-mindedness has a sufficiently strong impact on business performance without needing to be influenced by optimism. One possible explanation is that the female entrepreneurs who are the focus of this study already have a high level of openness to new ideas in terms of entrepreneurship, which allows the process of idea generation, opportunity exploitation, and innovative ability to continue smoothly despite differences in optimism levels among individuals (Peljko & Antončič, 2022).

The analysis results also show that Optimism does not significantly moderate the relationship between Uncertainty Readiness and Business Performance. This is reflected in the path coefficient of 0.064, a T-statistic of 0.818, and a p-value of 0.413, which is far above the 0.05 significance threshold. The low T-statistic value (generally considered significant if T-statistic > 1.96 at a 5% significance level) indicates that the relationship is not strong enough to be considered important. Therefore, the influence of Optimism on the relationship between Uncertainty Readiness and Business Performance does not have sufficient statistical significance to support the moderation hypothesis. This result is consistent with the findings of (Rahmawati *et al.*, 2024) ,who reported that Optimism does not act as a mediator in the relationship between Uncertainty Readiness and Business Performance, indirectly suggesting that Optimism may not always play a role in linking these two variables. Therefore, the influence of Optimism on the relationship between Uncertainty Readiness and Business Performance does not have sufficient statistical significance to prove the moderation hypothesis. Consequently, H5, which states that Optimism moderates the relationship between Uncertainty Readiness and Business Performance, is not proven. The findings indicate that Uncertainty Readiness has a strong impact on Business Performance without being influenced by Optimism. This is also likely due to the focus of this research, which is that women entrepreneurs already have a high level of readiness to face market uncertainty, so their ability to monitor

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the market and make adaptive decisions works effectively, even tho the level of optimism varies among individuals (Dovbischuk, 2022; Hokmabadi *et al.*, 2024). These findings align with studies suggesting that Optimism does not always have a direct effect on outcomes, but rather must go through mediators such as self-efficacy, making the influence of Optimism on Business Performance conditional and not always strengthening the relationship between variables (Hashmi *et al.*, 2021; Lei & Lei, 2022; Usán *et al.*, 2022). Studies by Mahn *et al.* (2024), Nel *et al.* (2022), and Fatma *et al.* (2024) also highlight that optimism tends to function as a narrative signal whose effects on outcomes can be inconsistent, different, or even negative in certain contexts. Thus, these results demonstrate that Optimism does not change how Open-Minded Entrepreneur or Uncertainty Readiness influence Business Performance among Woman Entrepreneurs.

5. Conclusion

This study concludes that psychological factors, Open-Minded Entrepreneur, Uncertainty Readiness, and Optimism, have a significant influence on improving Business Performance among Indonesian Women Entrepreneurs who have been running their businesses for at least one year. Referring to Psychological Capital Theory, the findings of this study confirm that positive psychological capacity is a strategic resource that can enhance adaptability and resilience in business owners when facing uncertainty. Women entrepreneurs who are open-minded will be more responsive in seizing opportunities, adaptable in facing changes, and innovative in developing business strategies that enable them to drive sustainable business growth and performance. Furthermore, the study reveals that Uncertainty Readiness also contributes positively to business performance, where female entrepreneurs who are prepared for uncertainty can manage risks and adjust strategies, resulting in relatively high business stability amidst continuous market changes. Meanwhile, research results also show that optimism has been proven to play a positive role in business performance. Optimism in individuals will foster self-confidence, encouraging boldness in decision-making and boosting motivation to try various new business strategies. However, research findings confirm that optimism does not significantly moderate the relationship in the research model, optimism was found to neither strengthen nor weaken the relationship between Open-Minded Entrepreneur or Uncertainty Readiness and Business Performance. This phenomenon may be explained by the characteristics of the sample, which consists of women entrepreneurs who already have a relatively high and uniform level of open-mindedness and readiness to face uncertainty. Overall, this study answers the research objectives by showing that although the three psychological variables have different influences, they are complementary in influencing Business Performance among Woman Entrepreneurs. Open-minded entrepreneurs and uncertainty readiness have proven to be the foundation that strengthens the adaptation and innovation process in running a business, while optimism serves as a psychological drive that helps entrepreneurs maintain motivation and a future-oriented business perspective. These findings indicate that enhancing open-mindedness, uncertainty readiness, and optimism constitutes an important strategy to improve the competitiveness of women entrepreneurs in the business world. Theoretically, the findings of this research contribute to enriching the study of Psychological Capital Theory, particularly within the context of women entrepreneurs. The results of this study prove that Open-Minded Entrepreneur and Uncertainty Readiness significantly influence Business Performance, indicating that openness and readiness to face uncertainty are important psychological capacities in influencing business performance among Women Entrepreneurs. This finding expands the literature by showing that these two variables have a strong direct impact on the dynamic business environment, particularly in women-owned businesses. Additionally, this research also provides a theoretical understanding by showing that although Optimism directly affects Business Performance, it does not moderate the relationship between Open Minded Entrepreneur and Uncertainty Readiness toward Business Performance. This implication is important for theory development because it shows that optimism, as one component of Psychological Capital, does not always strengthen or weaken the relationships between other psychological variables.

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Thus, this study enriches the understanding that each dimension of Psychological Capital can have an independent effect and does not always interact to create a synergistic effect. The practical implications of this research offer benefits to female entrepreneurs, mentors such as MSME support institutions, and policymakers. For women entrepreneurs, the findings emphasize the importance of developing open-mindedness in entrepreneurship, such as being receptive to new ideas, maintaining the capability to face uncertainty by adapting to market changes, and engaging in collaboration within the business environment. Additionally, although Optimism is valuable, it should not serve as the sole basis for decision-making. Women entrepreneurs are encouraged to balance their optimism with realistic planning, accurate data, and appropriate risk evaluation to ensure that business decisions remain objective and not solely driven by positive expectations. For support institutions and policymakers, this study can inform the design of empowerment programs that go beyond technical business training to also include the strengthening of psychological capacities among women entrepreneurs. Interventions for psychological capacity building, such as mentoring, workshops on entrepreneurial mindset, and ongoing support, can help women entrepreneurs increase their self-confidence, resilience, and preparedness to face the ever-changing market dynamics. These programs have the potential to enhance the sustainability of women's businesses, thereby boosting their economic contribution. Thus, the practical implications of this study not only assist Woman Entrepreneurs in building stronger psychological capacities but also provide direction for the development of more effective policies and training programs aimed at creating adaptive women entrepreneurs who are prepared to face uncertainty and capable of improving business performance sustainably. This research has several limitations that need to be considered. First, this study only focuses on Woman Entrepreneurs, which is a relatively psychologically homogeneous population group, so the findings may not be generalizable to other broader entrepreneurial groups. Second, this study uses a self-reported questionnaire, which has the potential to introduce biases such as social desirability bias or inaccurate self-perception, making respondents likely to provide answers considered more positive than their actual condition. Third, the research only tested three main psychological variables: Open-Minded Entrepreneur, Uncertainty Readiness, and Optimism, while other factors that could potentially influence business performance were not included. Fourth, this study employs a cross-sectional research design, in which data are collected at a single point in time, limiting the ability to draw causal inferences. Lastly, the study does not consider external factors such as socioeconomic status or cultural variations among respondents, which may influence how women entrepreneurs assess open-mindedness, uncertainty readiness, and optimism in entrepreneurship. These limitations provide opportunities for future research to expand the scope of variables, diversify sample characteristics, and use longitudinal approaches that can provide more accurate insights.

Future research is recommended to broaden the scope of research variables to include other external factors, such as cultural and socioeconomic aspects, which can significantly influence the dynamics of psychological capacity on business performance among women entrepreneurs. Cultural factors and socioeconomic conditions, such as family support, gender norms, and access to business capital, have the potential to provide a deeper understanding of how women face uncertainty and develop openness in entrepreneurship. In addition, future studies are encouraged to explore other moderating or mediating variables, considering that Optimism did not exhibit a significant moderating effect on the relationships between variables in this study. Variables such as resilience, entrepreneurial passion, self-efficacy, perceived social support, or work-life balance can provide richer insights into how psychological capacity functions in the context of women's entrepreneurship. Furthermore, future research could consider expanding the sample characteristics to include female entrepreneurs from different industrial sectors, business sizes, experience levels, or geographical regions, thereby increasing the generalizability of the findings. More diverse methodological approaches can also be applied in future studies, such as longitudinal designs to observe changes in the psychological capacity of women entrepreneurs over time and how they adapt when facing challenges in dynamic business environments. Experimental testing or field studies can also be conducted to assess whether a specific intervention, such as a training program, can strengthen the psychological capacity of women entrepreneurs and improve their business performance. By expanding variables, enriching the research sample, and applying more comprehensive

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methodological approaches, future research is expected to generate deeper and more holistic insights into the role of psychological capacity in supporting the business success of women entrepreneurs in Indonesia.

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