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Empowering the Poor in Economic Development: How Personality, Knowledge, and Mindset Influence Home-Based Businesses?

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ABSTRACT

Malaysian government has taken many efforts to help low-income group (B40) to increase their income by at least RM2,000 every month. Business is a very potential field to help increase income and reduce poverty. Many B40 women have been involved in business either as a main source of income or as an additional source of income for their families or themselves. The business sector run by these women entrepreneurs directly creates new job opportunities and increases the country's income and economic activity. There are several factors in determining their success. These include having interest, motivation, a confident personality, willingness to take risks, past work experience, and innovative ideas. Thus, the purpose of this study is to examine the influence of personal factors such as personality, knowledge, and mindset on the performance of home-based businesses owned by women entrepreneurs from low-income group (B40). The questionnaires were distributed to a total of 300 respondents using a purposive sampling. The data analysis in this research is done with the Structural Equation Modeling (SEM) method using AMOS software. The findings have discovered direct relationships between personality, knowledge, mindset and business performance and entrepreneur's mindset mediates the relationships between personality, knowledge, business performance. Therefore, the entrepreneurial characteristics are important and must be present in every entrepreneur to achieve success.

1. Introduction

Issues related to the quality of life of the low-income group, also known as the bottom 40 (B40), are critical in the country's development agenda. The National Social Policy (*Dasar Sosial Negara*), approved in 2013, emphasizes the quality of life in the community. This is evident through the general objective outlined in

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this policy, which is to ensure that every person, family, and community, regardless of race, religion, gender, and political affiliation, contributes to the development of the country and experiences the wellbeing of life (Ariffin et al., 2020). Concern for the welfare of people in need is a social responsibility that must be shouldered and given priority by the government (Zainudin, 2021). When the people's welfare is prioritized, the difference in living standards between the societal classes can be reduced to some extent. Many studies prove that entrepreneurship is among the tools or ways to eradicate poverty and the income gap (Morris et al., 2020). According to Si et al. (2021), government support programs, social entrepreneurship, women participation, small and medium enterprises, youth empowerment, and crosscollaboration can stimulate employment and reduce poverty. Okolie et al. (2022) also stated that policymakers need to focus on increasing the number of entrepreneurs in their countries to reduce poverty. The National Entrepreneurship Policy is a long-term strategy of the country to make Malaysia a superior entrepreneurial nation by the year 2030 (Ariffin et al., 2020).

The traditional role of women is as a wife and housewife. However, women also contribute to the country's economic development. The business sector has allowed women to find a source of income (Klasen et al., 2021). The tradition of women getting involved in business is common in Southeast Asian countries. In Southeast Asia, many businesses are dominated by women. In Malaysia, for example, Kelantanese women are actively involved in general economic activities and trade, causing them to be the leaders in the household (Kang & Yaacob, 2024). An entrepreneur is an individual who runs a business until it succeeds with the motive of making a profit while practicing strategic practices to continue to succeed (Rosário et al., 2022). In addition, entrepreneurship can also be defined as the behavior or style of an entrepreneur acting on opportunities, starting a business, and expanding and maintaining the viability of the business (Mmbaga et al., 2020). A person's motive to become an entrepreneur is a driving factor for a person to venture into the field of entrepreneurship, which can be categorized as a pulling factor and a pushing factor. Entrepreneurs can see and evaluate business opportunities, combine the needs of resources to take opportunities and take appropriate actions to ensure success (Mmbaga et al., 2020).

Several factors cause women entrepreneurs to be unable to survive in the business world. Among them are limited financial resources to develop the business, dependence on one or several vital customers, limited production capacity that limits business growth, product or service quality that is not yet optimal, inefficient organizational structure, low level of customer satisfaction, lack of knowledge or experience in marketing or sales, weaknesses in customer relationship management, and intense competition from larger or stronger competitors (Aladejebi, 2020; Cho & Chaudhuri, 2020; Mohd Noor et al., 2024). To overcome these challenges, successful entrepreneurs are said to have unique and different personal profile characteristics from non-entrepreneurs (Mohd Noor et al., 2023; Noor & Omar, 2024; Noor et al., 2023). Among the characteristics are proactive, visionary, obedient, openness, risk-taking, team-oriented, and results-oriented. All these characteristics should be present in every entrepreneur to make them successful. Past studies have also found the significance of personality traits on business performance (Ahmed et al., 2022; Noor et al., 2023). Knowing the personality traits can increase self-awareness and provide insight towards personal growth and self-improvement (Kumar & Shukla, 2022). Personality can also influence leadership style (Laouiti et al., 2022). For example, high conformity might make them compassionate leaders, while high openness might make them creative leaders. Besides that, successful entrepreneurs are also highly knowledgeable people (Olsson & Bernhard, 2021). They can search for knowledge by surfing the Internet, reading business-related books, or attending entrepreneurship seminars. Through this effort, they can learn how to do business and the risks that will be experienced (Troise & Tani, 2020).

Therefore, this article aims to examine the influence of personal factors such as personality, knowledge, and mindset on the performance of home-based businesses. This study also believes that the entrepreneurial mindset could mediate the relationships between personality, knowledge, and the performance of home-based businesses. Entrepreneurs need to have a mindset that sees problems as challenges and aims to solve

the problems (Daspit et al., 2023; Kuratko et al., 2023). A viable entrepreneur will always find a way to increase the business's productivity (Kuratko et al., 2021). The results of this study are expected to help identify ways to help and empower women entrepreneurs. This study is also expected to help increase the motivation level and guide women entrepreneurs to achieve tremendous success in the business industry. This study is also hoped to be used as a general reference material for policymakers. This study also fills the research gaps by focusing on the internal or individual factors of entrepreneurship development and performance. Most studies have focused on external factors such as political stability, economy, market, industry, regulation, and others (e.g., Audretsch et al., 2020; Galvão et al., 2020). Forming a character of entrepreneurship is a noble initiative that can catalyze the empowerment of Malaysia as a superior entrepreneural nation. The role of entrepreneurship in improving the local economy and the country cannot be denied anymore. However, despite many entrepreneurship programs and assistance, some individuals are not confident in entrepreneurship. Not everyone is born with the talent and character needed to succeed in the business world. Therefore, the focus on developing individual characteristics and talent is crucial.

2. Literature Review

2.1 Differences between Entrepreneurs and Traders

A businessman or trader does a routine and runs an existing business. However, an entrepreneur will do something unusual, such as presenting new products and ideas (Larsen, 2022). Many people need to understand the meaning of traders and entrepreneurs and often use the terms traders and entrepreneurs interchangeably. A trader is a person who runs an existing business, such as running a cake shop or workshop. On the other hand, an entrepreneur is a person who starts a business with an idea or innovation that is new and does not exist yet (Pidduck et al., 2023). Through this, new businesses will position their business as a market leader. In simple language, an entrepreneur is a market leader, while a trader is a market player. Entrepreneurs create things, and traders run what is created (Mukhtar et al., 2021). A person who carries out any activity related to commercial and industrial purposes is known as a trader. Most traders will run a business with high demand or that can make a significant profit without considering the uniqueness of the business. Although the risk factors and chances of failure are low, a trader will face intense competition, as there are hundreds of traders already in the market and doing the same business. The main objective of traders participating in economic activities is to generate income using human, financial, and intellectual resources. Therefore, the merchant will treat the customer like a king in the business. An entrepreneur is a person who comes up with a unique idea or concept to start a business and make it a reality (Daspit et al., 2023). The entrepreneurs will not care about the upcoming competitors because their position will be maintained. In economics, the entrepreneur is considered the main factor of production, which gathers and mobilizes three factors of production: land, labor, and capital. Entrepreneurs are known for their creative approach (Kuratko et al., 2023). On the other hand, a trader is a person who starts a business using an old concept or way. A trader will follow in the footsteps of other traders; the possibility of failure is much less than an entrepreneur's. A trader uses traditional methods to conduct business. An entrepreneur uses an unconventional business method. A trader is oriented toward profit, while an entrepreneur is a person who is more focused on giving importance to employees, customers, and the public (Kuratko et al., 2021).

2.2 Personality Traits

Big personality trait model is a widely recognized and respected framework in psychology used to describe human personality (López-Núñez et al., 2020). This model outlines five broad dimensions of personality, which are believed to account for most of the significant variation in human behavior. The Big Five traits are often called OCEAN (Feher & Vernon, 2021). It includes Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. The concept of the Big Five emerged through the work of several psychologists throughout the 20th century. Early studies in the 1930s by Gordon Allport and Henry Odbert laid the groundwork by identifying many descriptive terms for personality traits. In the 1940s, Raymond Cattell used factor analysis to distill these traits into 16 major personality factors. Later, in the 1960s, psychologists such as Ernest Tupes and Raymond Christal further refined these factors into the five main dimensions. This model gained widespread acceptance in the 1980s through the work of Lewis Goldberg, who emphasized its utility in a variety of psychological assessments and research (Feher & Vernon, 2021).

Personality traits help predict how individuals are likely to behave in different situations, including entrepreneurship (Huarng & Yu, 2021; Boldureanu et al., 2020). Personality traits affect how people interact with others. Understanding these characteristics can improve communication, reduce conflict, and foster healthier personal and professional relationships. The Big Five Traits can provide insight into suitable career paths (Naz et al., 2020). For example, individuals high in extraversion may thrive in roles that require social interaction, while those high in conscientiousness may excel in tasks that require attention to detail and reliability. Extraversion is one of the main dimensions of the Big Five personality traits, and it describes a person's tendency to seek social interaction and be energized by external stimuli. These people are usually sociable and talkative and enjoy being the center of attention (Ernawati et al., 2022). Extroverts are confident and assertive in expressing their opinions and desire. Extraverts excel and often achieve tremendous success in many fields, especially those that require networking and customer interaction, such as sales, marketing, and public relations (Postigo et al., 2021). Agreeableness reflects a person's tendency to be compassionate and cooperative toward others rather than suspicious and antagonistic (Postigo et al., 2021). Highly emotional people are usually warm, friendly, and considerate. Individuals high in agreeableness often go out of their way to help others, sometimes at their own expense (Huarng & Yu, 2021). In roles that require direct interaction with clients or customers, such as customer service or healthcare, agreeable individuals excel because of their empathetic and helpful nature (Bergner, 2020). Conscientiousness reflects a person's tendency to be organized, reliable, and goal-oriented (Postigo et al., 2021). People who score high in conscientiousness are often disciplined and reliable, which makes them successful in many aspects of life (Huarng & Yu, 2021). Their organized nature helps them manage finances effectively. They tend to budget carefully, save consistently, and make prudent financial decisions. Conscientious individuals usually perform well at work. Their reliability, attention to detail, and goal orientation make them valuable employees who consistently deliver quality results (Bergner, 2020).

Next, neuroticism is characterized by a tendency to experience negative emotions such as anxiety, anger, and depression more frequently and intensely than others. Individuals who score high in neuroticism are often more emotionally reactive and prone to stress (Postigo et al., 2021). People high in neuroticism often experience chronic worry and anxiety, anticipating adverse outcomes. High neuroticism has significant implications for mental health and well-being. Understanding these effects can help manage and reduce adverse effects. Finally, the openness to experience trait describes a person's willingness to engage with unconventional experiences, ideas, and values (Bergner, 2020). Individuals with high openness scores are usually imaginative, curious, and open-minded. They have a rich imagination and enjoy activities involving creativity and innovation (López-Núñez et al., 2020). Thus, based on the above discussion, the following hypothesis is posited:

H1: Personality significantly influences the performance of women entrepreneurs in home-based businesses.

2.3 Entrepreneurial Knowledge

When it comes to business, each of us has dreams of having a business and becoming an entrepreneur. Whether it is its products, stockists, drop ship, or others, all these are in very high demand in our country. Entrepreneurship is a field of knowledge that includes elements of attitudes, skills, and knowledge related to business and enterprise. Entrepreneurial knowledge helps improve a person's ability or competencies to perform entrepreneurial functions effectively (Karyaningsih, 2020). Small entrepreneurs are always advised to seek entrepreneurial knowledge regardless of any training program or guidance to develop their businesses and compete in an increasingly challenging and competitive market (Prayetno & Ali, 2020). Competencies or skills are owned through behavioral practices because of the influence of knowledge and values (Olsson & Bernhard, 2021). Being an entrepreneur is a challenging thing. Many things need to be considered, and of course, they need to have sufficient entrepreneurial knowledge. Otherwise, it is sure that the business built will only last for a while. The entrepreneurs need to have good communication skills (Pennetta, 2024). Being in business means working with others, both as a leader and subordinate. Both roles require humility, respect, and civility, and respect. They need to understand written, verbal, and non-verbal communication to communicate well. Managing financial decisions is a significant part of the role of most business owners. They should also be able to produce detailed and accurate financial reports (Pennetta, 2024). Other examples of business skills include analyzing business problems, analyzing costs, critical thinking, identifying interests and priorities of stakeholders, proposing solutions to business problems, research, strategic planning, strategic thinking, information technology, and writing proposals for business initiatives or projects. Several government agencies offer training to new entrepreneurs. Moreover, many entrepreneurship classes are held by private companies or nonprofit organizations (Galvão et al., 2020). Those who have more money may be able to join entrepreneurship classes held by private companies. For those who are less able, most government agencies provide special entrepreneurship training for entrepreneurs who are just starting a business. Among those agencies is Institut Keusahawanan Negara (INSKEN). INSKEN provides entrepreneurship training programs for those who want to set up an online business. Among the training provided are FB ads, copywriting, and others. This training certainly helps those who want to build an online business. Thus, learning entrepreneurship is not a difficult thing. Many agencies hold classes and entrepreneurship programs specifically for those who want to become entrepreneurs. What is essential is that the individual needs to have an attitude of wanting to succeed and to learn. Thus, the following hypothesis is posited:

H2: Entrepreneurial knowledge significantly influences the performance of women entrepreneurs in homebased businesses.

2.4 Entrepreneurial Mindset as a Mediator

What initial preparation does a person need before they become an entrepreneur? This debate is critical because of its connection to the degree of success or failure of a person at the pre-entrepreneur stage. Preparing the successful entrepreneur's mindset addresses the minimum internal qualities required before engaging in the business world (Larsen, 2022). At the pre-entrepreneurial stage, a person does not know how far he or she can endure tribulations, depression, and feelings of inferiority complex. Thus, entrepreneurs should always be on spiritual, solid, and emotional ground (Daspit et al., 2023). The level of hardship in self-employment is far different from the world of wage earners. Entrepreneurs need to be in the proper and strategic position at the initial stage; that is, it is necessary to install a sensor that can detect the direction (Kuratko et al., 2021). Oprah Winfrey, a media mogul and philanthropist, overcame incredible odds to become one of the most influential women in the world (Smith, 2020). Born into poverty and raised in a challenging environment, Oprah faced many obstacles. However, her positive mindset and relentless determination allowed her to overcome her circumstances and pursue her passion for broadcasting. Oprah's success as a talk show host, actress, and entrepreneur can be attributed to her unwavering belief in her abilities and her commitment to making a difference in the lives of others (Smith, 2020). Thus, an entrepreneur can combine resources such as finance, materials, workforce, and skills to produce products, process production, business, and new business organizations (Pidduck et al., 2023). The elements of entrepreneurship include motivation, vision, communication, optimism, and the ability to take advantage of opportunities. Success is a journey, not a destination. An entrepreneur's point of view should also be oriented toward the future. Most entrepreneurs experience ups and downs repeatedly before enjoying the results of their hard work. There are some specific characteristics that successful entrepreneurs have, such as having high self-esteem, positive attitude, and having goals and purposes in life (Kuratko et al., 2023). The nature of not easily giving up in the face of challenges and conjectures is also an important characteristic. Tenacious people have specific characteristics that make them exceptionally great compared to other entrepreneurs (Kuratko et al., 2023). This characteristic makes them willing to face anything to achieve their desired success. Those who belong to this category have extraordinary energy and are curious and optimistic about doing something beyond the expectations of ordinary people. Tenacious people are active, meaning their minds are always open to receiving new views and methods (Mukhtar et al., 2021). Thus, the following hypothesis is proposed:

H3: Entrepreneurial mindset significantly influences the performance of women entrepreneurs in homebased businesses.

H4a: Entrepreneurial mindset significantly mediates the relationship between personality and the performance of women entrepreneurs' home-based businesses.

H4b: Entrepreneurial mindset significantly mediates the relationship between entrepreneurial knowledge and the performance of women entrepreneurs' home-based businesses.

Figure 1 portrays the research model for the study.

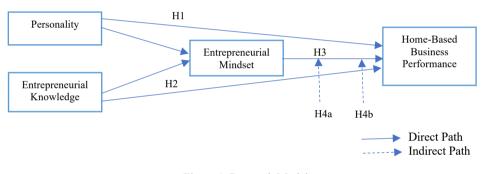


Figure 1. Research Model

3 Methodology

This research is quantitative. This study used a cross-sectional survey for data collection. Structural Equation Modelling (SEM) requires large sample sizes, and 300 samples have been suggested (Tabachnick & Fidell, 2013). This study was conducted in Selangor and Kuala Lumpur, and the study sample involved 300 B40 home-based entrepreneurs. Kuala Lumpur and Selangor were chosen due to the high development of business and industrial areas where patterns of business activities will exist. B40 stands for "Bottom 40%", referring to the 40% of households with the lowest income in Malaysia. Based on the latest statistics, B40 includes households with an income of less than RM4,850 per month. The sampling method used a purposive sampling technique, and research data was obtained through questionnaires to entrepreneurs. The criteria for respondent selection include: 1) age 18 years and above, 2) conducting home-based business either as a part-timer or full-time, 3) registered or unregistered business, 4) Malaysia citizen, and 5) having more than one year of business experience. To increase feedback, entrepreneurs are contacted and given friendly reminders repeatedly. This questionnaire contains items based on existing items constructed by previous researchers (i.e., Goldberg et al., 2006; Saptono et al., 2020; Hasan & Almubarak, 2016). Each item is measured using a 5-point Likert scale with a value of 1 = strongly disagree" to 5 = "strongly agree". Hair et al. (2010) state that Cronbach's Alpha values exceeding 0.70 are categorized as reliable items. Table https://doi.org/10.24191/abrij.v10i2

1 shows the measurement of the study variables, and the variables were reliable. Structural Equation Modelling (SEM) was employed to analyze the relationship between construct variables. SEM researchers can perform three activities at once, namely checking the validity and reliability of the instrument (equivalent to confirmatory factor analysis), testing the model of the relationship between latent variables (equivalent to path analysis), and obtaining models that are useful for prediction (equivalent to structural model or regression analysis). SEM is an integrated approach between the Measurement Model, Structural Model, and Path Analysis.

Variable	Items	Cronbach's Alpha
Personality	Extraversion	0.798
	P1.I talk to a lot of different people at parties.	
	P2.I don't like to draw attention to myself.	
	P3.I don't mind being the centre of attention.	
	Openness to experience	
	P4.I have excellent ideas.	
	P5.I am quick to understand things.	
	P6.I have a vivid imagination.	
	Emotional stability	
	P7.I get upset easily.	
	P8.I get irritated easily.	
	P9.I often feel depressed.	
	Agreeableness	
	P10.I feel little concern for others.	
	P11.I am not interested in other people's problems.	
	P12.I feel others' emotions.	
	Conscientiousness	
	P13.I leave my belongings around.	
	P14.I make a mess of things.	
	P15.I avoid my duties.	
Entrepreneurial	K1.I understand how to look for the resources need to set up a business (e.g.,	0.811
Knowledge	financial support).	0.011
Kilowiedge	K2.I have adequate knowledge of how to organize a venture.	
	K3.I have adequate knowledge of how to organize a venture.	
	K4.1 have adequate knowledge in presenting a business idea.	
	K5.1 have adequate knowledge of how to manage a business.	
Entransia Minda et		0.840
Entrepreneurial Mindset	M1.I have considered from both positive and negative consequences in	0.840
	engaging with the entrepreneurial activities.	
	M2.I have considered whether I have the time to become engaged in	
	entrepreneurial activities.	
	M3.I have considered for both negative and positive information related to	
	entrepreneurial activities.	
	M4.I have considered about possible business ideas in the entrepreneurial	
	activities.	
	M5.I have considered whether it is desirable for me to be involved in the	
	entrepreneurial activities.	
Home-Based Business	B1. There is an increase in sales and profitability during the three last years.	0.812
Performance	B2.My business has the capacity to develop new products and processes.	
	B3.More than 50% of profit are reinvested in the business.	
	B4.My business is offering high quality of products and services.	
	B5.I am committed with social responsibility, i.e. employing local nationals.	

Table 1. Measurement of the Variables

4 Findings

4.1 Demographic Profiles

In this study, many respondents were 30 - 34 years old (n=120, 40%). Most respondents obtained secondary-level academic qualifications (n= 210, 70%). When asked whether the respondents have

business experience, 55.3% have been operating their business for five years and above (n=166). In terms of status, most of the respondents were married (n=240, 80%), and the rest were single (n=41, 13.6%) and divorced (n=19, 6.4%).

Profile		Frequency (n)	Percentage (%)
Age	18-24 years	8	2.6
-	25 – 29 years	70	23.3
	30 - 34 years	120	40
	35 – 39 years	67	22.3
	40 years and above	35	11.8
Highest Educational Level	Secondary Level	210	70
	Diploma/Foundation	86	28.7
	Bachelor's degree	0	0
	Graduate degree (MA or PhD)	0	0
	Others	4	1.3
Business	1 to 5 years	134	44.7
Experience	Five years and above	166	55.3
Status	Married	240	80
	Single	41	13.6
	Divorce	19	6.4

4.2 Confirmatory Factor Analysis (CFA)

This study uses Pooled Confirmatory Factor Analysis (CFA). The model fit test was performed to measure the fitness index and evaluate the factor loadings for each indicator. Several types of fit indices are used to measure the degree of fit of the model. The type of fit index includes Chi-square/degree of freedom ratio, Goodness of Fit Index (GFI), Comparative-Fit Index (CFI), Tucker-Lewis index (TLI), and Root mean square error of approximation (RMSEA). Evaluation of model suitability (Goodness of Fit) describes how well or fits a series of observations with the model. Most researchers use a minimum benchmark of 0.90 as a model parameter that is considered a good model. The Chi-square/degree of freedom ratio must be less than 5, and RMSEA less than 0.08 indicates a good fit model. The outcome of CFA revealed that the model met the recommended requirements of fit (Chisq/df = 1.145, CFI = 0.998, GFI = 0.995, TLI = 0.994, RMSEA = 0.028) (see Figure 2). All factor loadings involved must have a value greater than 0.50 (Bryne, 2010), positive, and not more than 1.0 to evaluate the factor loading. Any indicators that do not meet the requirements should be discarded. Convergent validity refers to a set of indicators that are considered as a yardstick in evaluating a construct (Kline, 2005). Brown (2003) defines convergent validity as the internal consistency of several items or indicators. It shows the strength of the relationship between the items estimated to represent a latent construct. Composite reliability (CR) measures a construct's internal consistency. The interpretation of composite reliability is the same as Cronbach's alpha, where the limit value of 0.70 and above is acceptable. In addition, the average variance extracted (AVE) value for each construct must be at least 0.50 (Fornell & Larcker, 1981). Based on the results, factor loadings, AVE, and CR values fulfil the requirements (see Table 3).

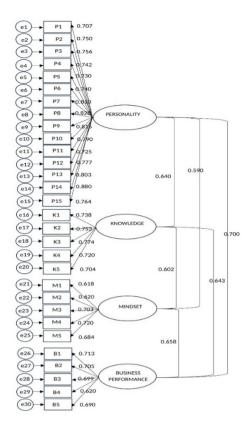


Figure 2. CFA Model

	Items Item Loadings		AVE	CR	
Personality	P1	0.707***	0.770	0.815	
2	P2	0.750***			
	P3	0.756***			
	P4	0.742***			
	P5	0.730***			
	P6	0.740***			
	P7	0.810***			
	P8	0.828***			
	Р9	0.816***			
	P10	0.790***			
	P11	0.725***			
	P12	0.777***			
	P13	0.803***			
	P14	0.880***			
	P15	0764***			
Entrepreneurial Knowledge	K1	0.738***	0.699	0.898	
- •	K2	0.753***			
	K3	0.774***			
	K4	0.720***			
	K5	0.704***			
Entrepreneurial Mindset	M1	0.618***	0.765	0.801	

Table 3.	Item	Loadings,	AVE,	and	CR

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	M2 M3 M4	0.620*** 0.703*** 0.720***		
Home-Based Business Performance	M5 B1	0.684*** 0.713***	0.720	0.847
	B2	0.705***		
	B3	0.699***		
	B4	0.620***		
	B5	0.690***		

4.3 Discriminant Validity

The discriminant validity of the measurement model with reflective indicators is evaluated based on crossloading measurements with constructs. For discriminant validity testing, it can be seen from the construct's cross-loading value and the AVE root. Other methods that can be used to assess the validity discriminant are based on the Fornell and Larcker criterion by comparing the square root AVE of each construct against the correlation between one construct and another in the research hypothesis model. When the results show that each construct's AVE square root value is greater than the correlation value between constructs, discriminant validity is achieved. Based on the results, this study's instruments fulfil the discriminant validity requirements (see Table 4).

Table 4. Discriminant Validity for the Variables

No.	Variable	1	2	3	4
1	Personality	0.877			
2	Entrepreneurial Knowledge	0.640**	0.836		
3	Entrepreneurial Mindset	0.590**	0.602**	0.874	
4	Home-Based Business Performance	0.700**	0.643**	0.658**	0.848

Note: Values in the diagonal show the square root of AVE

4.4 Assessment of Structural Model

As shown in Table 5, the findings revealed that there was a significant influence of personality (β =0.227, SE = 0.067, t = 3.768, p<0.001), entrepreneurial knowledge (β =0.119, SE = 0.050, t = 2.383, p<0.001), and entrepreneurial mindset (β =0.203, SE = 0.074, t = 2.740, p<0.001) on home-based business performance. Thus, H1, H2, and H3 were accepted. Similarly, personality (β =0.254, SE = 0.059, t = 4.198, p<0.001) and entrepreneurial knowledge (β =0.270, SE = 0.028, t = 5.484, p<0.001) also significantly and positively influenced entrepreneurial mindset. Next, the mediation effect was evaluated. The results confirm the relationship between personality (β =0.051, SE = 0.066, p<0.001, 95% CI [0.064, 0.086]) and entrepreneurial knowledge (β =0.054, SE = 0.049, p<0.001, 95% CI [0.036, 0.059]) on home-based business performance were mediated by entrepreneurial mindset. Hence, H4a and H4b were accepted. These significant relationships are displayed in Table 5, where the 95% bias-corrected bootstrapping test results show confidence intervals for indirect relationships between personality, entrepreneurial knowledge, entrepreneurial mindset, and business performance for LLCI and ULCI limits that do not contain zero values. Thus, the indirect effects are considered significant. The total effects were also calculated for mediating paths, adding indirect and direct effects (Hayes & Preacher, 2014). Figure 3 shows the final model of this study.

Path			β	Std. Error	t-value	Bootstrap (95% CI)	
Standardized Direct Effe	ects					Lower control limit	Upper control limit
Home-Based Business Performance	Ĵ	Personality (H1)	0.227***	0.067	3.768		
Home-Based Business Performance		Entrepreneurial Knowledge (H2)	0.119***	0.050	2.383		
Home-Based Business Performance	\Leftrightarrow	Entrepreneurial Mindset (H3)	0.203***	0.074	2.740		
Entrepreneurial Mindset	\Leftrightarrow	Personality	0.254***	0.059	4.198		
Entrepreneurial Mindset		Entrepreneurial Knowledge	0.270***	0.061	5.484		
	fects (N	Aediation Effect via Entr	epreneurial Min	dset)			
Home-Based Business Performance	\leftarrow	Personality (H4a)	0.051***	0.066	-	0.064	0.086
Home-Based Business Performance	\leftarrow	Entrepreneurial Knowledge (H4b)	0.054***	0.049	-	0.036	0.059
Standardized Total Effects (Direct Effect + Indirect Effect)							
Home-Based Business Performance	\leftarrow	Personality	0.278***	0.070	-		
Home-Based Business Performance	Û	Entrepreneurial Knowledge	0.173***	0.069	-		

 Table 5. Assessment of the Structural Model

Note: ***Paths are significant at the 1% level (p < 0.01). ***Indirect effects are significant at the 1% level with bootstrap at 5000 and bias-corrected percentile method

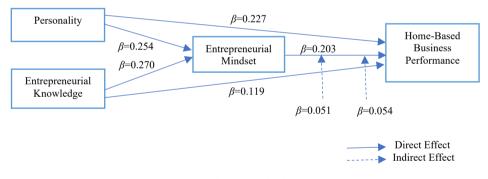


Figure 3. Final Hypothesised Model

5. Discussion

The findings first discovered direct relationships between personality, knowledge, mindset, and business performance. Second, an entrepreneur mindset mediates the relationships between personality, knowledge, and business performance. A positive mind is a mental attitude characterized by confidence, optimism, and a cluster on the bright side of life. Positive-thinking people focus on finding solutions rather than thinking about problems (Larsen, 2022). They see setbacks as opportunities for growth and learning rather than reasons to give up. These findings have shown that these characteristics can help entrepreneurs master the business operation (Daspit et al., 2023). Entrepreneurs are known for their process and success, but they rarely share the same experiences or challenges along the journey to success. What defines the personal characteristics of an entrepreneur is their ability to combine the unique factor with the opportunities in the market (Huarng & Yu, 2021; Boldureanu et al., 2020). Although successful businesspeople come from https://doi.org/10.24191/abrij.v10i2

many backgrounds and personalities, they possess some similar traits. The characteristics of successful entrepreneurs distinguish them from those who do not create something in line with the desired success (López-Núñez et al., 2020). The personality of an entrepreneur may be different for everyone, but all these traits are consistent with all successful entrepreneurs in history (Kuratko et al., 2023; Mukhtar et al., 2021). They can become a better entrepreneur when they can apply desire, drive, and dedication in the business journey. Moreover, entrepreneurs are always ready to develop knowledge. Self-development allows individuals to improve skills, develop positive thinking, and explore their full potential. Entrepreneurs expand their business horizons and open new opportunities by seeking new knowledge, acquiring new skills, and keeping abreast of the latest developments (Galvão et al., 2020). Knowledge can enhance skills, and these entrepreneurial skills consist of cognitive, social, technical, management, people, and decision-making skills. Continuous learning ensures they remain relevant and adaptable in a rapidly changing world (Pennetta, 2024).

The findings of the study have contributed to the current entrepreneurship literature. Undeniably, many successful women entrepreneurs have been involved in this field of entrepreneurship. However, the research conducted in this field of entrepreneurship should have focused on the contributing factors that help a person succeed. Most of them try to look at the factors contributing to their decision to become entrepreneurs. A preliminary study of the entrepreneur's personality traits and characteristics fails to explain why some entrepreneurs have the same demographic traits but fail to become successful entrepreneurs. In creating a more balanced study, this study was conducted to see the direct and indirect influence of personality, entrepreneurial knowledge, and entrepreneurial mindset on business performance. Personality is not enough to determine business success, and it could lend its influence via the intervening variables. Entrepreneurial mindset has a strong correlation with success and achievement. Entrepreneurs with solid mindsets are confident to take calculated risks, seize opportunities, and bounce back from setbacks (Daspit et al., 2023). As a result, they often achieve tremendous success in various aspects of life, including career, education, business, and personal development (Kuratko et al., 2023).

As practical implications, entrepreneurs are encouraged to conduct self-assessments to evaluate their capabilities. Identifying the strengths and weaknesses is fundamental to creating an effective personal development plan. This process requires them to look at their current skills, knowledge, and personal qualities to understand better where they excel and where they can improve. Among the essential questions they can ask are: What are my most vital skills and qualities? What areas do I need to improve? Moreover, What skills or qualities do I need to develop to achieve my goals? Instead of seeing weaknesses as failures, entrepreneurs need to see them as opportunities for improvement and development. After identifying the strengths and weaknesses, it is time to create a road map, which may involve acquiring new skills, developing existing ones, or changing habits and behavior. They can take a course, attend a workshop, or seek guidance from someone with the appropriate expertise. A journal is an excellent tool for self-reflection. This practice can help them gain a deeper understanding of their thinking and provide valuable insight into areas that need improvement. To cultivate a positive mindset, entrepreneurs need to find positive, supportive, and uplifting individuals who are inspiring and encouraging. The process of cultivating entrepreneurship is a long-term process and requires continuous effort. In shaping good qualities and characteristics, inculcating entrepreneurship needs to involve students at the primary and secondary school levels, students at higher education institutions, and the public. The culture of entrepreneurship can be divided into direct or indirect programs by various parties. The Malaysian Ministry of Education has implemented the Entrepreneurship Cultivation Program through the school curriculum. Several syllabi related to entrepreneurship, such as Principles of Accounts, Commerce, Business Studies, Life Skills, Vocational Subjects, Basic Economics, Household Economics, and others, have been formed for this purpose. More hands-on experience and related programs such as business pitching competitions, workshops, seminars, mentoring, and incubators for school and tertiary students and the public will help them learn business operations (Galvão et al., 2020).

6. Conclusion

The results of this study are expected to help the problems plaguing businesses, especially B40 women entrepreneurs. The determining factor for the success of women entrepreneurs is necessary to identify and help them succeed in the businesses they run. Based on the characteristics of the entrepreneurs studied, personality, knowledge, and entrepreneurial mindset are significant factors influencing the performance of B40 women entrepreneurs. Therefore, there needs to be a shift towards a knowledge-based economy if women want to be competitive in the global market. Such a shift is essential because it can produce a quality product that also reflects the application of the learned knowledge. The findings of this study should be interpreted by considering some limitations. First, this study was conducted using non-probability sampling; then, the study's results should be limited to representing the population of B40 women entrepreneurs in Malaysia. Future studies are recommended to use samples from a larger context. Second, this study was conducted cross-sectional, and the findings of this study cannot give a comprehensive picture of the constructs and cause-and-effect relationships studied. Therefore, future studies should be conducted in longitudinal studies to address this limitation. Finally, this study relies entirely on surveys. Therefore, a qualitative study should be done to explain and support the study's findings in more detail.

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Conflict of interest statement

The authors agree that this research was conducted in the absence of any self-benefits, commercial or financial conflicts and declare the absence of conflicting interests with the funder.

References

- Ahmed, M. A., Khattak, M. S., & Anwar, M. (2022). Personality traits and entrepreneurial intention: The mediating role of risk aversion. *Journal of Public Affairs*, 22(1), e2275. https://doi.org/10.1002/pa.2275
- Aladejebi, O. (2020). 21st century challenges confronting women entrepreneurs in Southwest Nigeria. Archives of Business Research, 8(3), 261-280. https://doi.org/10.14738/abr.83.8018.
- Ariffin, A. S., Baqutayan, S. M. S., & Mahdzir, A. M. (2020). Enhancing women entrepreneurship development framework: Policy & institution gap and challenges in the case of Malaysia. *Journal of Science, Technology and Innovation Policy*, 6(2), 22-33. https://doi.org/10.11113/jostip.v6n2.58
- Audretsch, D., Colombelli, A., Grilli, L., Minola, T., & Rasmussen, E. (2020). Innovative start-ups and policy initiatives. *Research Policy*, 49(10), 104027. https://doi.org/10.1016/j.respol.2020.104027
- Bergner, S. (2020). Being smart is not enough: Personality traits and vocational interests incrementally predict intention, status and success of leaders and entrepreneurs beyond cognitive ability. *Frontiers* in Psychology, 11, 204. https://doi.org/10.3389/fpsyg.2020.00204
- Boldureanu, G., Ionescu, A. M., Bercu, A. M., Bedrule-Grigoruță, M. V., & Boldureanu, D. (2020). Entrepreneurship education through successful entrepreneurial models in higher education institutions. Sustainability, 12(3), 1267. https://doi.org/10.3390/su12031267
- Brown, T. A. (2003). Confirmatory factor analysis of the Penn State Worry Questionnaire: Multiple factors or method effects? *Behaviour Research and Therapy*, *41*, 1411–1426.
- Bryne, B. M. (2010). *Structural Equation Modeling with AMOS: Basic concepts, applications and programming*. Lawrence Erlbaum Associates Publishers.

https://doi.org/10.24191/abrij.v10i2

- Cho, Y., Li, J., & Chaudhuri, S. (2020). Women entrepreneurs in Asia: Eight country studies. Advances in Developing Human Resources, 22(2), 115-123. https://doi.org/10.1177/1523422320907042
- Daspit, J. J., Fox, C. J., & Findley, S. K. (2023). Entrepreneurial mindset: An integrated definition, a review of current insights, and directions for future research. *Journal of Small Business Management*, 61(1), 12-44. https://doi.org/10.1080/00472778.2021.1907583
- Ernawati, E., Sinambela, E. A., Cici, C., Silviana, R. J., Azizah, R. N., & Naudalia, S. (2022). The effect of social support and extraversion personality on entrepreneurial interest in students. *Journal of Social Science Studies (JOS3)*, 2(2), 39-44.
- Feher, A., & Vernon, P. A. (2021). Looking beyond the Big Five: A selective review of alternatives to the Big Five model of personality. *Personality and Individual Differences*, 169, 110002. https://doi.org/10.1016/j.paid.2020.110002
- Fornell, C., and Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*, 39–50. https://doi: 10.2307/3151312
- Galvão, A., Marques, C., & Ferreira, J. J. (2020). The role of entrepreneurship education and training programmes in advancing entrepreneurial skills and new ventures. *European Journal of Training and Development*, 44(6/7), 595-614. https://doi.org/10.1108/EJTD-10-2019-0174
- Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. G. (2006). The international personality item pool and the future of public-domain personality measures. *Journal of Research in Personality*, 40(1), 84–96. https://doi.org/10.1016/j.jrp.2005.08.007
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th Ed.). Pearson Education Inc.
- Hasan, F. S. M. A. & Almubarak, M. M. S. (2016). Factors influencing women entrepreneurs' performance in SMEs. World Journal of Entrepreneurship, Management and Sustainable Development, 12(2). https://doi: 10.1108/WJEMSD-09-2015-0037.
- Hayes, A. F. & Preacher, K. J. (2014). Statistical mediation analysis with a multicategorical independent variable. *British Journal of Mathematical and Statistical Psychology*, *67*(3), 451-470.
- Huarng, K. H., & Yu, T. H. K. (2021). Complexity theory of entrepreneur characteristics. *International Entrepreneurship and Management Journal*, 17(3), 1037-1048. https://doi.org/10.1007/s11365-020-00718-2
- Kang, B., & Yaacob, M. R. (2024). Husband's Supports Behind Successful Malay Women Entrepreneurs in Kelantan. In *Contemporary Issues in Entrepreneurship and Innovative Technology* (pp. 161-170). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-50927-8_10
- Karyaningsih, R. P. D. (2020). Does entrepreneurial knowledge influence vocational students' intention? Lessons from Indonesia. *Entrepreneurial Business and Economics Review*, 8(4), 138-155.
- Klasen, S., Le, T. T. N., Pieters, J., & Santos Silva, M. (2021). What drives female labour force participation? Comparable micro-level evidence from eight developing and emerging economies. *The Journal of Development Studies*, 57(3), 417-442. https://doi.org/10.1080/00220388.2020.1790533
- Kline, R. B. (2005). Principles and practice of structural equation modeling (2nd Ed.). The Guilford Press.
- Kumar, R., & Shukla, S. (2022). Creativity, proactive personality and entrepreneurial intentions: Examining the mediating role of entrepreneurial self-efficacy. *Global Business Review*, 23(1), 101-118. https://doi.org/10.1177/0972150919844395
- Kuratko, D. F., Hornsby, J. S., & McKelvie, A. (2023). Entrepreneurial mindset in corporate entrepreneurship: Forms, impediments, and actions for research. *Journal of Small Business Management*, 61(1), 132-154. https://doi.org/10.1080/00472778.2021.1907585
- Kuratko, D. F., Fisher, G., & Audretsch, D. B. (2021). Unraveling the entrepreneurial mindset. Small Business Economics, 57(4), 1681-1691. https://doi.org/10.1007/s11187-020-00372-6
- Laouiti, R., Haddoud, M. Y., Nakara, W. A., & Onjewu, A. K. E. (2022). A gender-based approach to the influence of personality traits on entrepreneurial intention. *Journal of Business Research*, 142, 819-829. https://doi.org/10.1016/j.jbusres.2022.01.018
- Larsen, I. B. (2022). Fostering an entrepreneurial mindset: A typology for aligning instructional strategies with three dominant entrepreneurial mindset conceptualizations. *Industry and Higher Education*, 36(3), 236-251. https://doi.org/10.1177/09504222211038212
- López-Núñez, M. I., Rubio-Valdehita, S., Aparicio-García, M. E., & Díaz-Ramiro, E. M. (2020). Are entrepreneurs born or made? The influence of personality. *Personality and Individual Differences*, 154, 109699. https://doi.org/10.1016/j.paid.2019.109699

https://doi.org/10.24191/abrij.v10i2

- Mmbaga, N. A., Mathias, B. D., Williams, D. W., & Cardon, M. S. (2020). A review of and future agenda for research on identity in entrepreneurship. *Journal of Business Venturing*, 35(6), 106049. https://doi.org/10.1016/j.jbusvent.2020.106049
- Mohd Noor, N. H., Yaacob, M. A., & Omar, N. (2024). Do knowledge and personality traits influence women entrepreneurs'e-commerce venture? Testing on the multiple mediation model. *Journal of Entrepreneurship in Emerging Economies*, 16(1), 231-256. https://doi.org/10.1108/JEEE-01-2023-0023
- Mohd Noor, N. H., Mohamad Fuzi, A., & El Ashfahany, A. (2023). Institutional support and self-efficacy as catalysts for new venture performance: a study of iGen entrepreneurs. *Journal of Entrepreneurship* and Public Policy, 12(3/4), 173-196. https://doi.org/10.1108/JEPP-02-2023-0015
- Morris, M. H., Santos, S. C., & Neumeyer, X. (2020). Entrepreneurship as a solution to poverty in developed economies. *Business Horizons*, 63(3), 377-390. https://doi.org/10.1016/j.bushor.2020.01.010
- Mukhtar, S., Wardana, L. W., Wibowo, A., & Narmaditya, B. S. (2021). Does entrepreneurship education and culture promote students' entrepreneurial intention? The mediating role of entrepreneurial mindset. *Cogent Education*, 8(1), 1918849. https://doi.org/10.1080/2331186X.2021.1918849
- Naz, S., Li, C., Zaman, U., & Rafiq, M. (2020). Linking proactive personality and entrepreneurial intentions: A serial mediation model involving broader and specific self-efficacy. *Journal of Open Innovation: Technology, Market, and Complexity, 6*(4), 166. https://doi.org/10.3390/joitmc6040166
- Noor, N. H., & Omar, N. (2024). Balancing motherhood and entrepreneurship: A phenomenological study of mumpreneur business restraining and enabling factors. *Global Business Management Review*, 16(1),19-35.htps://doi.org/10.32890/gbmr2023.16.1.2
- Noor, N. H. M., Kamarudin, S. M., & Shamsudin, U. N. (2023). The influence of personality traits, university green entrepreneurial support, and environmental values on green entrepreneurial intention. *International Journal of Accounting, Finance, and Business (IJAFB), 8*(48), 59-71. https://doi.org/10.55573/IJAFB.084806
- Okolie, U. C., Ehiobuche, C., Igwe, P. A., Agha-Okoro, M. A., & Onwe, C. C. (2022). Women entrepreneurship and poverty alleviation: Understanding the economic and socio-cultural context of the Igbo Women's basket weaving enterprise in Nigeria. In *Entrepreneurship and the Informal Sector* (pp. 8-27). Routledge.
- Olsson, A. K., & Bernhard, I. (2021). Keeping up the pace of digitalization in small businesses–Women entrepreneurs' knowledge and use of social media. *International Journal of Entrepreneurial Behavior* & Research, 27(2), 378-396. https://doi.org/10.1108/IJEBR-10-2019-0615
- Pennetta, S., Anglani, F., & Mathews, S. (2024). Navigating through entrepreneurial skills, competencies and capabilities: A systematic literature review and the development of the entrepreneurial ability model. *Journal of Entrepreneurship in Emerging Economies*, 16(4), 1144-1182. https://doi.org/10.1108/JEEE-09-2022-0257
- Pidduck, R. J., Clark, D. R., & Lumpkin, G. T. (2023). Entrepreneurial mindset: Dispositional beliefs, opportunity beliefs, and entrepreneurial behavior. *Journal of Small Business Management*, 61(1), 45-79. https://doi.org/10.1080/00472778.2021.1907582
- Postigo, A., Cuesta, M., García-Cueto, E., Prieto-Díez, F., & Muñiz, J. (2021). General versus specific personality traits for predicting entrepreneurship. *Personality and Individual Differences*, 182, 111094.
- Prayetno, S., & Ali, H. (2020). The influence of work motivation, entrepreneurship knowledge and advocate independence on advocate performance. *International Journal of Innovation, Creativity and Change*, 12(3), 147-164.
- Rosário, A. T., Raimundo, R. J., & Cruz, S. P. (2022). Sustainable entrepreneurship: A literature review. Sustainability, 14(9), 5556. https://doi.org/10.3390/su14095556
- Saptono, A., Wibowo, A., Narmaditya, B. S., Karyaningsih, R. P. D., Yanto, H., & Cheng, M. (2020). Does entrepreneurial education matter for Indonesian students' entrepreneurial preparation: The mediating role of entrepreneurial mindset and knowledge. *Cogent Education*, 7(1). https://doi.org/10.1080/2331186X.2020.1836728
- Si, S., Ahlstrom, D., Wei, J., & Cullen, J. (2021). Introduction: Business, entrepreneurship and innovation toward poverty reduction. In *Business, entrepreneurship and innovation toward poverty reduction* (pp. 1-20). Routledge.

Smith, B. K. (2020). Branded literacy: the entrepreneurship of Oprah's Book Club. In *Women and Literacy* https://doi.org/10.24191/abrij.v10i2

(pp. 157-170). Routledge.

Tabachnick, B. G., & Fidell, L. S. (2013). Using multivariate statistics (6th ed.). Boston: Pearson Education. Troise, C., & Tani, M. (2020). Exploring entrepreneurial characteristics, motivations and behaviours in equity crowdfunding: Some evidence from Italy. *Management Decision*, 59(5), 995-1024. https://doi.org/10.1108/MD-10-2019-1431

Zainudin, M.Z. (2021). Social Policy Implementation in Malaysia and Its Impact on the Community. In Tajmazinani, A.A. (Eds.). Social Policy in the Islamic World. International Series on Public Policy. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-57753-7 12

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Authors' contributions

Nurul Hidayana Mohd Noor and Amirah Mohamad Fuzi conceived of the presented idea. Amirah Mohamad Fuzi led the data collection. Nurin Farzana Mohamad Fadzil and Afief El Ashfahany verified

the analytical methods. Nurul Hidayana Mohd Noor led the manuscript writing. All authors discussed the results and contributed to the final manuscript.



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