

ACCESS TO FINANCE AND LEGAL FRAMEWORK IN FEMALE ENTREPRENEURSHIP DEVELOPMENT IN BANGLADESH: THE MEDIATING ROLE OF SELF-LEADERSHIP



Zhu Yingjun¹
Sharmin Jahan²
Md. Qamruzzaman^{3*}

^{1,2}School of Management, Huazhong University of Science and Technology, China.

³School of Business and Economics, United International University, Bangladesh.

Email: zaman_wut16@yahoo.com



(+ Corresponding author)

ABSTRACT

Article History

Received: 25 March 2021

Revised: 20 July 2021

Accepted: 27 August 2021

Published: 23 September 2021

Keywords

Access to finance

Legal constraint

Entrepreneurial skills

Women entrepreneurs

Self-leadership

Bangladesh.

JEL Classification:

D21, H81, L20, L25.

The growing need for entrepreneurship is considered to be a prominent segment of an economy's evolution, especially female entrepreneurs. This study's motivation is to unleash the critical determinants for female entrepreneurs' evolution in the economy of Bangladesh by following institution and self-leadership theory. The study adopted a quantitative method and a structured questionnaire for data collection from female entrepreneurs in Bangladesh. Structural equation modeling (SEM) was applied to explore the causal effects of access to finance and legal framework. The study revealed that women's entrepreneurial activities are immensely influenced by access to finance, legal constraints, and entrepreneurial skills. The mediating effects of self-leadership behavior also influence women's participation in business activities. Based on the results, it is recommended that the government and other institutions should take the initiative in female entrepreneurship that affect women's self-leading behavior and policymakers should consider the financial aspects relating to women's business activities. This study is also helpful for empowering women financially and helping them to understand their legal rights by formulating a women-centric strategic plan.

Contribution/Originality: This study contributes to the existing literature by focusing on the development of female entrepreneurs, especially in developing nations. It revealed that access to external capital and easy business formation are critical determinants for the development of small and medium-sized enterprises (SMEs), especially those owned by women in Bangladesh. Thus, to accelerate female-owned SMEs, the present status of credit has to be extended.

1. INTRODUCTION

Female entrepreneurs are the fastest-growing group of entrepreneurs globally, and they have gained the attention of many academics, particularly in recent years. According to emerging literature, women will make a major contribution to entrepreneurial activity (Noguera, Alvarez, & Urbano, 2013) and economic growth (Hechavarria, Bullough, Brush, & Edelman, 2019; Kelley et al., 2015) in terms of generating new employment, and raising gross domestic product (GDP) (Ayogu & Agu, 2015; Bahmani-Oskooee, Kutan, & Xi, 2013), which will have a beneficial impact on poverty reduction and social exclusion (Langowitz & Minniti, 2007; Rae, 2014). However, the number of women who plan to follow an entrepreneurial profession is smaller than the number of men (Elam et al., 2019). This disparity is greater as the nation's pace of growth rises (Coduras & Autio, 2013).

Globally, entrepreneurship contributes to the growth of any economy, and it also plays a role in creating innovative opportunities for others (Fielden & Davidson, 2005). Female entrepreneurship is a growing area of research worldwide. When any enterprise is developed and managed by women, it's not only increases the economy, but also has many desired effects (Leitch, Welter, & Henry, 2018). Due to its benefits, entrepreneurship development depends on some internal and external environmental factors in society, including social, cultural, religious, and psychological factors. The gender gap is a massive barrier to emerging entrepreneurship globally and eliminating this gap can help us to understand the significant challenges that female entrepreneurs encounter and their effects on economic growth.

Several limitations hinder the growth of female entrepreneurs, and those constraints are suggested within the literature. However, the financial barrier is a critical issue for female entrepreneurs entering into entrepreneurial activities (Athanne, 2011; Avdullahi & Ademi, 2020; Giglio, 2020; Kyalo & Kiganane, 2014; Niethammer, Saeed, Mohamed, & Charafi, 2007). In growing markets, the lack of female entrepreneurs is affected by unequal legal rights that make financial constraints a significant barrier to building up business securities for women (Mwobobia, 2012). Over the past few decades, legal reforms have been brought into more than 20 countries to end discrimination issues and give women the same rights as men. Moreover, the standard economic theory indicates that financial constraints can be reduced through legal reforms (Ghani, Kerr, & O'Connell, 2011). Finance, or capital, is necessary to start a business, though most women who took part in the study stated that they faced difficulties getting loans from financial institutions as the loan requirements and procedures are very complicated (Kinyanjui, 2016).

Regarding women entrepreneurship, finance is an essential element required to enhance business activities, and without it, organizations wouldn't succeed. Also, as entrepreneurs, women need to manage their financial responsibilities and enhance their businesses (Stevenson & St-Onge, 2005). Most of the survey participants identified that loan requirements are challenging in financial institutions, where they behave maliciously toward women who apply for business loans due to the male-dominated culture. Therefore, some organizations don't offer financial assistance to female-driven enterprises. Bankers and business consultants should be helpful to people who have entrepreneurial financial requirements (Brush, Ali, Kelley, & Greene, 2017). Bangladesh is also seen as women entrepreneurship development activities by the government to make an essay to work for women entrepreneurs remotely. Still, financial barriers are noted, which are faced by women due to the unavailability of easy access to loans because organizations cannot be established without assets (Tambunan, 2009).

Legal constraints are another hurdle for female entrepreneurs to overcome. Currently, the laws and policies are not adequate to increase businesswomen's opportunities. Applicable laws and policies need to be adapted to develop women's entrepreneurship comparatively, and should not just focus on equality from a gender perspective (Metcalf, 2008). Ultimately, adopting these policies, rules, and regulations will ensure a controlled approach in a male-dominated society that restricts the formation of businesses by women.

Making it difficult for women to gain financial strength is due to a male-dominated society. Further, it restricts and controls the power of women within the family. The majority suggested that there is a need to create a system where women do not face violence in order to obtain equal rights. However, many economies have a complicated financial distribution system that does not offer finance to female entrepreneurs. Proper legislations should make gender flexibility a focus in society. Women's traditional roles within society applies to 70% of the population, especially in Bangladesh's rural areas (Osman, Rashid, Ahmad, & Rajput, 2011). Therefore, financial development will enhance women's strength, and gender-based equality will increase the number of women in leadership roles. Further, this behavior improves the decision-making power regarding management issues and leads to innovative business creation, ultimately leading to economic growth. As a progression, once women have assumed executive roles, others are encouraged by this (Yenilmez, 2018). In a leadership role, the mediating effects of self-leadership have not yet been explored in either female or male entrepreneurs. This study could be extended to include other

social factors that would encourage women to invest in entrepreneurship (Ho & Nesbit, 2018). Self-leadership enhances the development of entrepreneurs in the context of both men and women, and the outcomes of previous studies have suggested that male entrepreneurs are more self-motivated to achieve their goals than their female counterparts, as they can quickly and efficiently implement strategies within the organization. However, the relationship between male and female entrepreneurs is negative. Because females have endangered information, they can develop innovative strategies (Bendell, Sullivan, & Marvel, 2019). This demonstrates that women are a focal point in many studies due to the need for motivation to overcome hurdles in entrepreneurship (Manzoor, Manzoor, & Qureshi, 2018).

This study's uniqueness examines the factors that influence women's business involvement, especially regarding access to finance, legal constraints, and entrepreneurial skills. These factors have a positive impact on female entrepreneurs when developing their businesses. The mediating analysis of self-leadership needs to be investigated due to a lack of confidence and self-motivation. The study examined the mediating effect between these factors. Further, these factors will positively affect female entrepreneurs who demonstrate self-leading behavior when running their businesses. They can enhance their decision-making powers in management to accomplish their objectives.

The study's remaining structure is as follows: relevant literature review and hypothesis development are explained in Section 2; variables definitions and analysis methodology are detailed in Section 3; Section 4 deals with model estimation and interpretation, along with hypothesis evaluation; the study's managerial and practical implications are contained in Section 5; and the findings and policy implication reports are detailed in Section 6.

2. LITERATURE REVIEW

2.1. Growth of Women Entrepreneurship

In economic growth, entrepreneurship plays a very important role and has proved to be one of the strongest and most successful strategies for addressing unemployment in countries such as Bangladesh. Increasing numbers of men and women are shifting to self-employment in Bangladesh, and women's entrepreneurship has recently increased exponentially. Women are launching their own companies to take ownership of their personal and professional lives. With unforeseen challenges, female entrepreneurs trying to start a company can find themselves in a largely unknown setting (Mordi, Simpson, Singh, & Okafor, 2010). Therefore, it is necessary to recognize the variables that can impede women's entrepreneurial participation, since female entrepreneurs have the potential to contribute substantially to society (Iyiola & Azuh, 2014; Teoh & Chong, 2014).

Business enterprises are essential for the development and advancement of economies worldwide, particularly small and medium-sized enterprises (SMEs) (Gërguri-Rashiti, Ramadani, Abazi-Alili, Dana, & Ratten, 2017). However, the connection between business enterprises and financial development has not been convincingly defined. Researchers have proposed that business visionaries display a range of behaviors that may contribute to such development. These behaviors incorporate improved innovations, the capacity to consolidate resources, and improve the pressure of competition (Wong, 2015). Different researchers have proposed that business people are fundamental to development through the capacity to innovate through actions and the utilization of funds that were previously under-used. Mmerekki, Hovorka, & Gwebu (2020) demonstrated that women are also influenced by gender inequality in the socio-economic climate in which they work. They encounter various social, environmental, educational, and technical obstacles and difficulties in obtaining economic capital than male entrepreneurs.

Support for the advancement of enterprises between small and medium businesses has been refined in developed and developing countries, and women's entrepreneurial participation has been significantly developed. In recent years, the ratio of women entrepreneurship development has decreased. Numerous past studies presumed that the number of female business visionaries is continually growing (Boddy, McCalman, & Buchanan, 1988). For example, fewer female entrepreneurs make business ventures in the United States, but their length of ownership is

longer (Kearney, Hisrich, & Roche, 2009). Even though innovative female-driven enterprises have been viewed and described, very little information is accessible relating to these business visionaries' profiles. From an alternate point of view, most Arabian countries have seen immense interest in women's business, yet the capacity to increase the number of female entrepreneurs relies upon the governments to ensure females' financial independence. This is essential for their strengthening and having the freedom to help themselves and their families. For instance, recently, the United Arab Emirates has seen a tremendous expansion in the ratio of female to male entrepreneurs (Machira, Njati, Thiaine, & Guyo, 2014).

2.2. Access to Finance and Entrepreneurship

Access to finance is a significant challenging factor for entrepreneurs (Boddy et al., 1988; Kipkorir, 2016; Roomi, Harrison, & Beaumont-Kerridge, 2009). These difficulties were looked at for both women and men, but it was women in particular who suffered a lack of financial access to start their businesses. For instance, research has indicated that female entrepreneurs start with the lowest capital and are given significantly less financial assistance than men (De Bruin, Brush, & Welter, 2007). Therefore, the study viewed that women's activities are excessively found to experience weak financial resources. They have to contend with the complicated issues in institutional sectors and therefore underachieve in the long term (Kennedy, Whiteman, & van den Ende, 2017). Issues accessing finance imply that women try to work with higher levels of self-finance than men, obtain less finance from banks, and secure less investment individually (Cabrera & Mauricio, 2017; Díaz-García & Brush, 2012; Welsh, Kaciak, & Minialai, 2017).

Generally, the literature examined agrees that financial capital is a significant and critical issue faced by female entrepreneurs due to gender inequality regarding financial availability from bank loans or personal investments (Terjesen & Elam, 2012). Therefore, different affiliations have been distinguished by gender when trying to obtain financial support. It is categorized as a deep-rooted relationship with a lack of financial obstacles that will prompt underperformance in the long term (Tambunan, 2009).

Many scholars found that lack of finance poses a real problem for women (Kungwansupaphan & Leihaothabam, 2016; Moses & Amalu, 2010; Roomi et al., 2009; Zeidan & Bahrami, 2011). Therefore, many women depend upon family savings or personal savings to overcome financial issues (Itani, Sidani, & Baalbaki, 2011), and they can't enhance their entrepreneurial activities if they lack finance (Tara, Arshed, Aziz, & Yamin, 2020). Moreover, it was found that finance is a very challenging factor in assessing an institution's malicious behavior toward women who apply for a loan. Therefore, banking institutions and other consulting experts need to change their attitudes and offer help to female entrepreneurs. Most institutions don't offer assistance to female-driven enterprises as they don't consider them to have positive contributions to economic development (Aladejebi, 2020).

H1: There is a positive relationship between access to finance and the participation of women in entrepreneurial activities.

2.3. Legal Constraints and Women entrepreneurship

In light of concrete proof of the significance of new business production for economic growth and sustainability, female entrepreneurship has gained growing interest (Langowitz & Minniti, 2007). Female entrepreneurship not only leads to economic development and employment opportunities, but it is also rapidly becoming accepted in every economic framework to expand the diversity of entrepreneurship (Verheul, Stel, & Thurik, 2006), and includes opportunities for female speech and future fulfillment (Jafari-Sadeghi, 2020). Rarely are these advantages unless female entrepreneurship is leveraged in a systemic way.

In the Middle East, legal boundaries and complications in the start-up of businesses can discourage female entrepreneurs from establishing organizations. A significant number of these obstructions are common to both female and male business visionaries; however, female entrepreneurs face additional limitations due to gender discrimination and cultural values within the legal, strategic, and supportive institutional systems (Tlaiss &

McAdam, 2021). For instance, women can't profit from extensive services, and they need to fight to avoid gender discrimination in the business environment. Generally, women have been recognized when executing contract services and managing their businesses. However, legal requirements put on women overly influence their ability to constantly self-improve. This factor is forced by the requirements that they need to meet in business setups. Therefore, rapid changes in technologies and progressing globalization positively impact financial streams and creation of businesses (Tlaiss, 2015).

Existing literature, such as Alhabidi (2013), Abou-Moghli & Al-Abdallah (2019), and Aladejebi (2020), has indicated that business laws may seem gender-neutral, but these laws contain drawbacks for women in an understated manner. Moreover, the most critical legal difficulty due to social and religious creed is that women are required to have confirmation from a male caretaker to work or travel. This significantly impacts the opportunities for starting organizations and improving their work outside the home (Bakar, Mohamad, Sharmeela-Banu, & Ganapathy, 2020). For example, a female dealing with a small-sized firm may need to travel to make agreements with clients or suppliers, yet she can't travel without authorization from her male partner. This system discourages women and smothers their aspirations to make progress in their professional lives. Some female entrepreneurs reported constraints for business meetings due to requiring approval to travel. This adds to the organizational strategies they need to address to maintain their organizations.

The study observed that there are many causes of weak and corrupt governance that influences women. These include the government enlisting positions that use workplaces as conductors for support, employing only those with the essential associations and training in developing countries (Alhabidi, 2013; Taqi, 2016). Comparatively, communities with better administration, greater inclusivity, and legal action plans are more helpful to working women, and they also offer women opportunities to contribute to their occupations due to better meritocracy. As a developing country, Bangladesh has a discriminatory concept of changing Islamic laws, and the enlargement of this concept affects women's lives and their development within organizations. Society needs to adapt to avoid demotivation among female entrepreneurs (Sinha, 2003), who are still being neglected by Bangladeshi laws. Moreover, legislative institutions need to focus on legal issues and develop their strategies to ensure a thorough understanding of lawful business activities (Afza, Osman, & Rashid, 2010).

H2: There is a positive relation between legal constraints and the participation of women in entrepreneurial activities.

2.4. Entrepreneurial Skills and Female Entrepreneurship

Another barrier that women face is the absence of entrepreneurial skills needed to build a business (Aldrich & Cliff, 2003). They may only be moderately experienced in the area in which they wish to establish their enterprise, and acquiring additional knowledge and skills is difficult to achieve. This makes it difficult for women to start a productive business based on weak knowledge and a lack of skills (McGowan, Cooper, Durkin, & O'Kane, 2015; Poyurovsky et al., 2003).

Leitch et al. (2018) agreed that relevant training should supplement the early stage awareness role of entrepreneurship education, as when they are ready to start up their company, training will offer the more practical skills that entrepreneurs need. To a certain degree, Van Vuuren, Nieman, & Botha (2007) suggested that organizations seeking to grow entrepreneurship by education believe that the lack of preparation for entrepreneurs is the key cause of enterprise failure. In addition, it is the most basic aspect of training required to pass on the necessary expertise and skills and is implemented into most training programs. Changing actions to prepare efficiently in the start-up process truly counts and yet is what most programs overlook.

Moreover, in developing countries, decision-making skills during adequate training will enable logical decision-making in business. Entrepreneurial skills are also a crucial factor in decision-making for business partners in developing countries. Simultaneously, in developing countries, the priority of marriage and family responsibilities

limit the number of women who are able to access entrepreneurial training for business despite women having similar education levels to men.

One study suggested that many female entrepreneurs require training to effectively manage their business activities. Also, they have disadvantages from the unavailability of commercial links in previous management roles (Boudreaux, Nikolaev, & Klein, 2019; Fischer, Reuber, & Dyke, 1993). The number of women in administrative positions is still minimal, and they have lower administrative positions; females make up approximately 50% of the workforce. Traditional women's professions show poor training and advancement opportunities, and females still operate prevalently on low-skilled jobs and get lower pay than men (Solesvik, Iakovleva, & Trifilova, 2019). Unskilled workers also face the issues of low wages due to a lack of experience (Roomi et al., 2009). In Bangladesh, this issue is rising among female entrepreneurs. These women put effort into enhancing their workforce via relevant training, but after their employees develop the skills required, they leave their jobs for high salaries in larger organizations. Despite this, most of the female population is illiterate because the government has failed to introduce educational improvements (Afza et al., 2010).

H3: There is a positive relation between entrepreneurial skills and the participation of women in entrepreneurial activities.

2.5. Mediating Effect of Self-Leadership

According to Bari & Arshad (2019) leadership is essential for entrepreneurs to develop business activities. On the other hand, the expansion of leadership in individuals can encourage others to compete with their organization (Khan, 2021; Visser & van Scheers, 2018). In a leadership concept, a self-leader defines goals and enhances the ability to secure their organizational resources (Shatzer, Caldarella, Hallam, & Brown, 2014). Moreover, self-leadership includes the behavioral strategies that significantly affect self-efficacy (Walumbwa et al., 2011). Self-leadership, according to Ziyae & Heydari (2016), has three aspects: behavioral strategies; expected reward strategies; and the construction of strategies to develop the necessary thinking patterns. Behavioral strategies focus on increased self-awareness and motivation to achieve goals individually, rewards focus on self-rewarding after the achievement of objectives, and constructive strategies are emphasized to develop a thinking pattern to attain their goals (Na-Nan & Saribut, 2020).

Recent studies, such as D'Intino, Goldsby, Houghton, & Neck (2007); Neck, Houghton, Sardeshmukh, Goldsby, & Godwin (2013); Kim & Noh (2012); and Neck & Manz (2010), examined the self-concept in both genders, and they found that women are more determined in self-concept than men. Men are more determined to succeed in the area of performance compared to women. Moreover, gender diversity leads to empowerment in women to enhance their businesses. More financial strengthening for women and gender equality is more concerning to leadership for business management. It leads to more supportive development in enterprises and helps to drive growth in the economy. Ultimately, women in leadership positions pursue other women's self-leading behavior in entrepreneurial activities (Yenilmez, 2018), but women are not encouraged to achieve employment in most organizations. There is a gap between legal practices in terms of equal rights and access to educational opportunities. The elimination of legal constraints will motivate women to participate in entrepreneurial activities, particularly in countries with a weak law enforcement system.

Further, entrepreneurial skills do not just increase job opportunities for entrepreneurs, they also have a significant impact on job satisfaction. Moreover, studies have found that entrepreneurs' self-leadership traits reduce malicious behavior in the achievement of organizational goals. They incorporated organizational structures to enhance a pleasant work environment (Georgianna, Müller, Schermelleh-Engel, & Petersen, 2016). The self-leadership strategies of both women and men increase self-leading behavior, which drives enterprise development (Afza et al., 2010). Moreover, the study suggested that male entrepreneurs are better at setting goals than females. Simultaneously, females are more self-promoting in goal-setting and achieving behavior than males (Bari & Arshad, 2019).

H4: There is a positive relation between self-leadership and the participation of women in entrepreneurial activities.

H5: There is a positive mediating effect of self-leadership between access to finance and the participation of women in entrepreneurial activities.

H6: There is a positive mediating effect of self-leadership between legal constraints and the participation of women in entrepreneurial activities.

H7: There is a positive mediating effect of self-leadership between entrepreneurial skills and the participation of women in entrepreneurial activities.

3. THEORETICAL MODEL DEVELOPMENT

3.1. Self-leadership Theory

Self-leadership reflects an unconscious mechanism that leads men and women to regulate their behavior and thoughts. The aim of improved self-leadership for entrepreneurs is to become more successful leaders by understanding and implementing unique personal and professional growth techniques. Self-leadership defines a self-influence mechanism by which individuals gain the self-leadership and self-motivation required to carry out their roles (Manz & Sims Jr, 1986). Self-management consists of unique behavioral and cognitive techniques intended to affect personal efficacy favorably. These techniques are typically classified into three main categories: behavior-focused strategies; natural incentive strategies; and positive thinking pattern strategies (Prussia, Anderson, & Manz, 1998). Manz & Sims Jr (1986) extended the self-management theory to familiarize the self-leadership theory. The self-leadership theory was previously formed by self-influencing motivational theories, the self-management theory (Manz & Sims Jr, 1980), social-cognitive theories (Bandura, 1989), self-leadership theory (Kanfer & Kanfer, 1991), and self-motivation theories (Ryan & Deci, 1989). Many theories focus on the self-influencing method that affects people's behavior to attain the desired outcomes in their practices (Bandura, Ross, & Ross, 1961), and the self-influence concept increased individual performance to improve organizational performance (Andrasik & Heimberg, 1982). During the previous two decades, the self-leadership concept was extended by many researchers who agree with the self-leadership theory in articles and books regarding individual assessment performance (Manz & Sims, 2001). Moreover, studies started looking at the broad area of self-leadership to explain the individual changes and understand self-influencing behavior in entrepreneurship. This study also used the self-leadership theory to examine the entrepreneurs' factors (Neck & Houghton, 2006), and used the self-leadership theory to identify self-behavior in female entrepreneurs that leads to more participation in business activities.

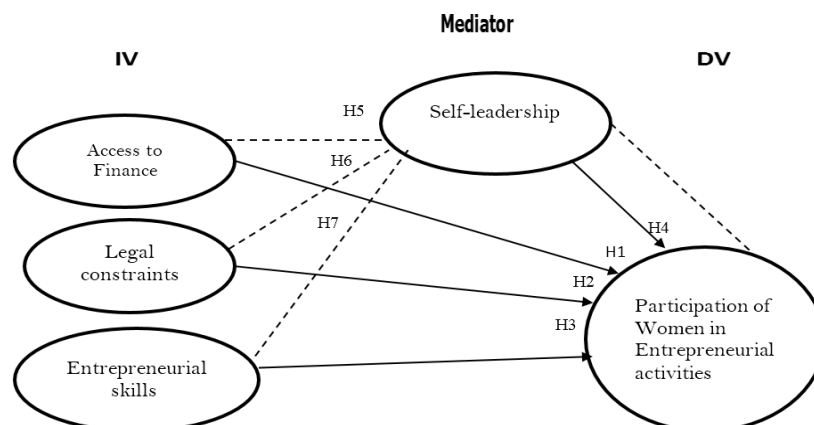


Figure 1. Conceptual model.

3.2. Conceptual Framework

Figure 1 indicates five constructs of the framework used in this study. These constructs comprise access to finance (AF), legal constraints (LC), entrepreneurial skills (ES), self-leadership (SL), and participation of women in

entrepreneurial activities (PWEA). AF, LC, and ES act as exogenous constructs, with SL playing an intervening role, and PWEA acting as an endogenous construct.

4. METHODOLOGY

4.1. Research Design

The current study adopted a quantitative research design using structured questionnaires. A cross-sectional approach and a stratified sampling method were used to collect data from 1200 women in Dhaka, Khulna, and Chittagong. For more details information relating sample construction see [Table 1](#). The data collection period started from November 07, 2020, to January 15, 2021 by implementing the stratified sampling techniques. Furthermore, deductive reasoning was applied to test the model. A total of 1200 questionnaires were distributed among the respondents. Out of the 875 questionnaires that were returned, 852 were suitably filled out, giving us a total return of 71%. The demographic profiles of respondents are displayed in [Table 2](#). According to sample representations in the study revealed that majority women owned SMEs belongs to cottage and leather business. Refers to their status with establishment, it is found that the significant number of SMEs doing business more than 7 years

4.2. Research Instruments

To measure access to finance, five indicators were used, which were developed by [Saeedikiya & Aeeni \(2020\)](#) and [Zeidan & Bahrami \(2011\)](#); the five items used to measure the legal constraints were taken from the studies by [Sadi & Al-Ghazali \(2010\)](#) and [Hattab \(2012\)](#); the five indicators used to measure entrepreneurial skills were adopted from [Kavuli \(2014\)](#); for self-leadership measurement, five statements were adopted from the study by [Bari & Arshad \(2019\)](#); and the participation of women in entrepreneurial activities was measured using the five indicators adopted by [Farah \(2014\)](#).

4.3. Analytical Tools and Methods

This study utilized SPSS, SmartPLS, and r-statistics for the measurements, and a structural model to confirm reliability, validity, and assessment. A robustness test was also executed to compliment the complex model and evaluate endogeneity and the curvilinear relationship.

4.4. Analysis and Interpretation

Table 1. Technical details of the research.

Category	Remarks
Sector	SMEs – female entrepreneurs
Geographical location	Bangladesh
Methodology	Structured questionnaire
Procedure	Stratified sampling
Sample size (response)	1200 (852)
Period of data collection	From November 07, 2020, to January 15, 2021

[Table 3](#) presents the outer loading of the indicators. Researchers have stated that the value of extreme loading should be greater than 0.708 to get reliable and valid results. Reliability and validity values are purely based on the extreme loading values ([Hair Jr, Hult, Ringle, & Sarstedt, 2016](#)). This study has some items with values lower than the desired threshold, but these were not omitted because there were no reliability or validity issues. Furthermore, these tables show the variance inflation factor (VIF), indicating multicollinearity. The threshold of the VIF should be < 3 , which implies no multicollinearity issue in the framework.

Table 2. Demographic profiles of respondents.

Nature of Business		Years of Experience		Age of Owner	
Handicraft	152	Less than 3	190	Between 25–30	145
Cottage	225	Between 3–7	137	Between 30–35	200
Garments	150	Between 7–12	275	Between 35–40	275
Leather	175	More than 12	250	More than 40	232
Woodwork	150	Total	852	Total	852
Total	852				
Owners' education levels					
MBA	95				
BBA	350				
HSC	232				
SSC	175				
Total	852				

Table 3. Outer loading and multicollinearity.

	AF	ES	LC	SL	PWEA	VIF
AF1	0.950					2.624
AF2	0.961					2.98
AF3	0.880					2.014
AF4	0.849					1.985
AF5	0.880					2.549
ES1		0.987				2.887
ES2		0.949				2.553
ES3		0.886				1.847
ES5		0.809				1.945
LC1			0.883			2.410
LC2			0.873			2.250
LC3			0.838			2.114
LC4			0.873			2.011
LC5			0.983			2.845
SL1				0.887		2.594
SL2				0.886		2.754
SL3				0.923		2.167
SL4				0.854		2.873
SL5				0.876		1.572
WEA1					0.885	1.674
WEA2					0.875	3.690
WEA3					0.933	1.132
WEA4					0.871	1.982
WEA5					0.758	1.701

Table 4. Reliability of constructs.

	Cronbach's Alpha	Rho_A	CR	AVE
Access to finance	0.959	0.892	0.899	0.743
Entrepreneurial skills	0.891	0.845	0.874	0.716
Legal constraints	0.971	0.893	0.892	0.672
Participation of women in entrepreneurial activities	0.914	0.876	0.897	0.752
Self-leadership	0.875	0.887	0.898	0.721

Table 4 shows the reliability and the convergent validity of the constructs. Cronbach's alpha, rho_A, and CR thresholds should be > 0.70 (Sarstedt, Hair Jr, Cheah, Becker, & Ringle, 2019). The study found that the values for Cronbach's alpha, rho_A, and CR were greater than the threshold. Moreover, the value of the average variance extracted (AVE) should be > 0.50. Statistics show that there was no reliability or validity issues in the constructs.

Table 5. Discriminant validity.

Constructs	Fornell–Larcker					Heterotrait–Monotrait				
	AF	ES	LC	PWEA	SL	AF	ES	LC	PWEA	SL
AF	0.822									
ES	0.450	0.885				0.701				
LC	0.636	0.512	0.811			0.754	0.74			
PWEA	0.647	0.523	0.742	0.875		0.812	0.621	0.755		
SL	0.622	0.614	0.709	0.645	0.842	0.754	0.664	0.820	0.845	

Table 5 shows the discriminant validity. There were two available methods for assessing discriminant validity—the Fornell–Larcker criterion, and the Heterotrait–Monotrait ratio. The diagonal values for the Fornell–Larcker criterion should be greater than the remaining values. The remaining values of the Fornell–Larcker ratio were the correlation between the constructs. Contrarily, the value of HTMT should be < 0.85 , which indicates no discriminant validity issue (Hult et al., 2018). The study found that there was no discriminant validity issue.

Table 6. Hypothesis testing.

Relationships	Path	Std. dev.	T-value	P-value	LLCI	ULCI
Panel A: Direct effects						
AF -> PWEA	0.244	0.057	3.711	0.000	0.094	0.311
AF -> SL	0.231	0.054	4.088	0.000	0.121	0.330
ES -> PWEA	0.175	0.056	2.851	0.005	0.053	0.269
ES -> SL	0.175	0.056	2.277	0.023	0.026	0.230
LC -> PWEA	0.201	0.067	2.934	0.003	0.060	0.325
LC -> SL	0.404	0.056	8.799	0.000	0.375	0.593
SL -> PWEA	0.179	0.067	4.196	0.000	0.149	0.405
Panel B: Indirect effects						
AF -> SL -> PWEA	0.081	0.021	2.964	0.003	0.028	0.108
ES -> SL -> PWEA	0.074	0.017	2.101	0.036	0.007	0.070
LC -> SL -> PWEA	0.175	0.040	3.499	0.001	0.069	0.215

Table 6 shows the direct and indirect effects. Results showed a significant and positive effect of access to finance (a coefficient of 0.244), entrepreneurial skills (a coefficient of 0.175), legal constraints on women's participation (a coefficient of 0.201), and self-leadership behavior (a coefficient of 0.179) on entrepreneurial activities. Furthermore, the direct effects of independent variables, access to finance, entrepreneurial skills, and legal constraints established a positive and statistically significant impact on self-leadership. More precisely, a 10% increase in independent variables can cause a positive change in self-leadership behavior by 2.31% due to access to finance, by 1.75% due to entrepreneurial skills, and 4.04% due to legal compliance. Panel B in the table displays the mediating effects of self-leadership on women's entrepreneurial activities. Study findings establish a positive, statistically significant effect on the participation of women in entrepreneurial activities. Moreover, this study also found a positive and significant effect of access to finance (a coefficient of 0.081), entrepreneurial skills (a coefficient of 0.074), and legal constraints (a coefficient of 0.175) on women's involvement in entrepreneurial activities in the presence of self-leadership.

Table 7. Curvilinear relationship.

	Path	Std. dev.	T-value	P-value	LLCI	ULCI
AF*AF -> PWEA	0.032	0.031	1.013	0.312	-0.029	0.098
LC*LC -> PWEA	0.013	0.046	0.274	0.784	-0.077	0.101
ES*ES -> PWEA	-0.027	0.045	0.591	0.555	-0.120	0.053
SL*SL -> PWEA	-0.015	0.040	0.383	0.702	-0.097	0.065

It is complementary for all studies to have a complex model to assess the framework's robustness. There were two methods conducted to test the robustness—the curvilinear relationship and the endogeneity test (see Table 7). This study used the quadratic effect recommended by Henseler, Ringle, & Sarstedt (2012), and to evaluate the endogeneity, the Gaussian copula approach is recommended (Hult et al., 2018).

According to Henseler et al. (2012), two steps were taken to assess the curvilinear relationship. First, the latent score was generated, and second, using the latent score, the quadratic method was used to assess the curvilinear relationship. This study found no curvilinear relationship between the exogenous and endogenous constructs.

Table 8. Gaussian copula method.

Test	LV	Coeff.	P-value	Boot	Test	LV	Coeff.	P-value	Boot
Model 1	AF	0.126	0.108	0.108	Model 2	AF	0.211	0.000	0.000
	ES	0.167	0.000	0.003		ES	0.135	0.150	0.144
	LC	0.194	0.001	0.004		LC	0.196	0.001	0.004
	SL	0.276	0.000	9.223		SL	0.279	0.000	9.018
	AF ^C	0.072	0.147	0.184		ES ^C	0.019	0.764	0.457
Model 3	AF	0.215	0.000	0.000	Model 4	AF	0.208	0.000	0.000
	ES	0.155	0.001	0.007		ES	0.164	0.001	0.005
	LC	0.152	0.130	0.112		LC	0.191	0.002	0.005
	SL	0.283	0.000	7.346		SL	0.341	0.000	0.000
	LC ^C	0.035	0.877	0.363		SL ^C	-0.047	0.350	0.414
Model 5	AF	0.128	0.106	0.109	Model 6	AF	0.132	0.101	0.105
	ES	0.150	0.111	0.102		ES	0.165	0.001	0.004
	LC	0.193	0.001	0.004		LC	0.167	0.098	0.085
	SL	0.276	0.000	0.000		SL	0.278	0.000	0.000
	AF ^C	0.072	0.152	0.086		AF ^C	0.070	0.170	0.104
Model 7	ES ^C	0.013	0.835	0.760	Model 8	LC ^C	0.021	0.735	0.604
	AF	0.100	0.220	0.229		AF	0.215	0.000	0.000
	ES	0.178	0.000	0.002		ES	0.144	0.132	0.123
	LC	0.184	0.003	0.006		LC	0.155	0.133	0.111
	SL	0.370	0.000	0.000		SL	0.283	0.000	0.000
Model 9	AF ^C	0.093	0.076	0.048	Model 10	ES ^C	0.010	0.888	0.832
	SL ^C	-0.073	0.166	0.237		LC ^C	0.033	0.616	0.419
	AF	0.209	0.000	0.000		AF	0.213	0.000	0.000
	ES	0.109	0.262	0.286		ES	0.161	0.001	0.006
	LC	0.189	0.003	0.006		LC	0.128	0.213	0.211
Model 11	SL	0.358	0.000	0.001	Model 12	SL	0.357	0.000	0.001
	ES ^C	0.048	0.501	0.408		LC ^C	0.050	0.442	0.277
	SL ^C	-0.060	0.267	0.364		SL ^C	-0.055	0.286	0.362
	AF	0.133	0.101	0.103		AF	0.099	0.224	0.235
	ES	0.155	0.106	0.097		ES	0.117	0.228	0.235
Model 13	LC	0.170	0.102	0.084	Model 14	LC	0.181	0.004	0.008
	SL	0.279	0.000	0.000		SL	0.389	0.000	0.000
	AF ^C	0.070	0.171	0.106		AF ^C	0.094	0.073	0.044
	ES ^C	0.008	0.907	0.864		ES ^C	0.052	0.460	0.356
	LC ^C	0.019	0.772	0.651		SL ^C	-0.088	0.120	0.206
Model 13	AF	0.213	0.000	0.000	Model 14	AF	0.105	0.205	0.214
	ES	0.118	0.228	0.237		ES	0.123	0.211	0.214
	LC	0.136	0.192	0.183		LC	0.148	0.157	0.145
	SL	0.368	0.000	0.001		SL	0.395	0.000	0.000
	ES ^C	0.037	0.615	0.511		AF ^C	0.091	0.084	0.056
Model 13	LC ^C	0.042	0.532	0.350	ES ^C	0.045	0.538	0.429	
	SL ^C	-0.064	0.242	0.342	LC ^C	0.027	0.688	0.538	
					SL ^C	-0.089	0.115	0.202	

Table 8 shows the endogeneity of all 14 models. For the assessment of endogeneity, the Gaussian copula approach was adopted. The study found that the copulas of all 14 models were insignificant with p-values greater than 0.05 (Hult et al., 2018), and these results confirm that there was no endogeneity issue in the framework.

5. DISCUSSION AND MANAGERIAL IMPLICATIONS

This study aimed to determine the effect of access to finance, entrepreneurial skills, and legal constraints on women's participation on entrepreneurial activities. Self-leadership was seen to play a mediating role between the relationships. This study found that access to finance has a positive and significant effect on self-leadership (beta = 0.220, $p = 0.000$) and PWEA (beta = 0.211, $p = 0.000$); this result was consistent with Ali & Rana (2016). In the empirical literature, the nexus between access to finance and entrepreneurial development has been extensively investigated, and it has been established that financing availability plays a deterministic role for SME growth, especially those managed by female entrepreneurs, in every part of the economy (Aliyu, Ahmad, & Nordin, 2019). Women's liberation has now become a global dilemma. Women's entrepreneurship has been a powerful and common platform in both industrialized and developing countries to promote women's economic independence. Women still make up half of the overall global population, but due to varying reasons, such as demographic, social and political factors, in both developing and industrialized countries, their involvement in business is not recognized as being important. Among the many concerns, access to finance is regarded as a fundamental barrier to women's entrepreneurship growth (Ghosh, Ghosh, & Chowdhury, 2018; Niethammer et al., 2007; Witbooi & Ukpere, 2011).

Female entrepreneurs have limited access to bank financing resources compared to male entrepreneurs for several reasons, i.e., lack of leverage, failure to provide a credible guarantor, and the unfavorable views of female entrepreneurs by commercial banks' lending officers (Cardellina et al., 2012). In all types of operations, female entrepreneurs concluded that they could not grow their enterprises largely due to a shortage of funding from financial institutions. Most of those who apply for a loan from commercial banks do not receive the necessary loan amount (Richardson, Howarth, & Finnegan, 2004). Furthermore, women's businesses have restricted access to expertise and technology, tools and services, and industry intelligence and company services, mostly backward and forward integration (Makena, Kubaison, & Njati, 2014).

Entrepreneurial skills were found to have a significant and positive effect on self-leadership (beta = 0.127, $p = 0.023$) and PWEA (beta = 0.159, $p = 0.005$), similar to Tlaiss (2015).

Moreover, legal constraints were found to have a positive and significant effect on self-leadership (beta = 0.496, $p = 0.000$) and PWEA (beta = 0.197, $p = 0.003$). These results were consistent with McGuire & Sperling (2016). Contrarily, self-leadership was also found to have a positive effect on PWEA (beta = 0.279, $p = 0.000$), which was similar to the results of the study by Bendell et al. (2019).

Gender disparities in recognition of opportunities have been attributed to differences in variables in human capital, including schooling and job experience, with men reported to exploit slightly higher levels of previous business or entrepreneurial experience as well as employee management experience than women (De Vita, Mari, & Poggese, 2014; Neergaard, Shaw, & Carter, 2005). Although, as recently suggested by DeTienne & Chandler (2007), men and women can also have distinct and segregated stocks of human resources. The evidence typically shows that women have less human capital to enter into self-employment, which negatively impacts their capacity to find and leverage opportunities.

The study also found that significant and positive effects of access to finance on PWEA in the presence of self-leadership (beta = 0.061, $p = 0.003$). These results were also coherent with Yenilmez (2018). Entrepreneurial skills significantly and positively influence PWEA in the presence of self-leadership (beta = 0.036, $p = 0.007$). Moreover, Legal constraints also found a positive and significant effect on the PWEA while self-leadership playing mediating roles between the relationship (beta = 0.139, $p = 0.001$), which was consistent with Kumbhar (2013).

Literature suggests that female entrepreneurs start with lower levels of total capital and lower debt ratios than their male peers in terms of funding (Parker, de Bruin, & Fischhoff, 2007). Carter & Kolvereid (1997) argued that with more punctuated and interrupted job histories and lower remuneration patterns, women face more restrictions when accessing personal savings. Zhu, Kara, & Zhu (2019) postulated that women are less likely than their male peers to have developed a credit track record to create structured creditworthiness. Female-driven business enterprises often prefer to focus on service markets that are typically cheaper and simpler to start up. Both male and female entrepreneurs tend to tap into investments and family resources. There have also been different correlations between gender disadvantages and financing, sometimes defined as chronic obstacles to obtaining capital linked to gender, which is needed for success in the long term.

For scholars, educators, and politicians, this analysis is useful and allows female entrepreneurs to recognize the obstacles that they will face if they plan to start their own business. Furthermore, to reach their targets, they should increase self-leading actions and extend their creative behavior with distinct self-leading techniques. This research is also useful for supporting women financially and for recognizing their legal rights. With this analysis, entrepreneurial teaching can strengthen, as it is important to educate and inspire women to adopt entrepreneurial lifestyles.

In addition, through governing organizations in Bangladesh and developing countries, the study leads to policymaking regarding female entrepreneurs. Women's business networks should be able to access IT, raw materials, and markets that are important to their companies' creation, sustainability, and extension. The study also benefits women in rural areas by extending their business with the financial help of their families. In the sense of female entrepreneurship, the self-leadership principle frequently leads to the perception of daunting conditions.

6. LIMITATIONS AND FUTURE RESEARCH

Women's entrepreneurship studies are rising internationally. It is proposed that future studies should concentrate on some other variables affecting funding at the macro and micro levels, and also explore the opportunities for young entrepreneurs in need of financial resources to launch their businesses. Regarding the self-leadership philosophy, other economic and financial ideas may help to explain environmental influences in accomplishing their goals. In rural and urban areas, how to split the network based on gender should be explored. To develop self-motivation, research should provide more detail about the numerous legal concerns of the self-leadership theory. In addition, lean start-up theories need to be used to improve women's entrepreneurship capabilities in future studies. To improve international borders, further studies on logistics, technical, and entrepreneurship capabilities should be explored.

Funding: This study received no specific financial support.

Competing Interests: The authors declare that they have no competing interests.

Acknowledgement: All authors contributed equally to the conception and design of the study.

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