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Barriers to Entrepreneurial Intentions of Rural Women: A Case Study in North Western Province, Sri Lanka

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Abstract
Micro and small-scale entrepreneurship is essential in alleviating poverty and promoting development. This study examines the statistically significant effect of sixteen barriers on rural women's entrepreneurial intention using primary data obtained through a structured questionnaire from 213 rural women who have participated in the North Western Province's Department of Rural Development's skills development program in Sri Lanka. Furthermore, this article examines the impact of demographic factors (age, marital status, highest level of education, number of children, and monthly household income) on rural women's entrepreneurial intentions using an analysis of variance. Findings indicated that lack of confidence in the business idea and lack of necessary practical details to start a firm have a statistically significant negative effect on entrepreneurial intention. Furthermore, marital status has a statistically significant impact on entrepreneurial intention. The study is critical because its findings fill a gap in the literature through quantitative analysis of the barriers facing rural women in entrepreneurial start-ups. It will aid in developing more effective government policies and planning decisions related to rural women's entrepreneurship development.

Keywords: Barriers, Entrepreneurship, Entrepreneurial Intention, Rural Women

JEL Codes: B54, L26, M13

1. Introduction

1.1 Importance of Women's Entrepreneurship in Sri Lanka

***A means of escaping poverty*:** In Sri Lanka, rural areas account for 84% of poor households. According to labour force statistical data in 2020, the economically inactive female population in Sri Lanka is 73.5%, and 60.3% are engaged in housework. The economically inactive rural female population accounts for 74.1%. According to the distribution of economically inactive rates by standardized age groups, 55.9% of those aged 25 to 34 and 56.1% of those aged 35 to 54 fall into this category (Department of Census and Statistics Sri Lanka, 2020). As a result, female entrepreneurship development is crucial for Sri Lanka's economic and social development, particularly among rural women. Globally, micro and small-scale enterprises are well known for their immense contribution to poverty reduction. Removing barriers could create more significant opportunities for rural women to start their

micro or small-scale enterprises, contributing to women's economic empowerment, gender equality, job creation, and poverty reduction. Not only poverty reduction but also, according to The Economist (2013), women reinvest 90% of their earnings in their families and communities. Therefore, investing in women is an investment in our collective future.

1.2 North Western Province, Sri Lanka

The study is based in Sri Lanka's North Western Province. Sri Lanka's North Western Province is divided into two districts: Kurunegala and Puttalam. North Western Province has 46 divisional secretariat areas ("Divisional Secretariat" is an administrative division). Puttalam has 16 divisional secretariat areas, while Kurunegala has 30. In 2021 the population of Kurunegala District is 1,743,000, whereas Puttalam District has a population of 849,000. According to Sri Lanka's new poverty line, the poverty headcount index in 2019 was 14.3 percent. North Western Province has a poverty headcount index of 11.8 percent, proportioning to a total poverty rate of 9.7 percent. The poverty headcount index in Kurunegala district is 12.5 percent, while it is 10.5 percent in Puttalam district. Kurunegala district has the third-highest percentage of contribution to total poverty (6.9) among Sri Lanka's 25 districts. It is 2.8 percent in the Puttalam district. (Department of Census and Statistics, 2022).

According to the Annual Report of the Sri Lanka Labour Force Survey, 2020, by the Department of Census and Statistics, the unemployment rate in North Western Province is 4.3 percent. The percentage of economically active females in the Kurunegala district is 38.7 percent, and it is 30.8 percent in the Puttalam district.

1.3 Women's Skills Development Program Conducted by the Department of Rural Development in North Western Province, Sri Lanka

One of the main objectives of the Department of Rural Development in Sri Lanka's North Western Province is to alleviate poverty among rural women and their families. Under the objective mentioned above, the critical activity is encouraging rural women to start micro or small-scale enterprises. To fulfill that, the Department of Rural Development in Sri Lanka's North Western Province organizes skills development programs for rural women in all 46 divisional secretariat areas every year to assist rural women in starting their micro or small-scale enterprises. This skills development program serves nearly 1,000 rural women in Sri Lanka's North Western Province each year. The percentage of rural women who start their micro or small-scale enterprises is around 35.00 percent (Department of Rural Development, 2019). This gives the base for the research question: Why have these trained women not started any entrepreneurial activity yet?. Indicating that simply providing a skills development program will not alone help rural women start their enterprises. There may be several barriers for these women, and identifying those barriers and their Entrepreneurial Intention is critical in developing rural women's entrepreneurship, which is the focus of this study.

1.4 Study Area

Women face several barriers when trying to engage in entrepreneurial activities. Due to specific social, cultural, economic, and geographic constraints, such barriers are more visible in rural communities. Studies found that barriers women face in starting entrepreneurial activities include financial, family, market, institutional and organizational, personality and behavioural, and geographic. Removing such barriers could create opportunities for rural women to start their enterprises.

This paper quantitatively identifies the barriers preventing the start-up of micro and small-scale enterprises by rural women in the North Western Province of Sri Lanka. It analyzes the relationship between Entrepreneurial Intention and Barriers. The data for this study came from a sample of 213 rural women who completed a skills development program conducted by the Department of Rural Development in Sri Lanka's North Western Province. From aforesaid primary data, this study analyzes the following barriers: (1) Fear of failure, (2) Family duties, (3) Start-up cost, (4) Technical and business knowledge, (5) Management and entrepreneurial skills, (6) Practical details to start a firm, (7) Lack of experience and exposure, (8) Confidence, (9) Competitors, (10) Support of organizations, (11) Assistance in accessing the viability, (12) Time Constraints, (13) Lack of opportunities, (14)

Long-distance, (15) Difficult to get access to utilities, and (16) Lack of sufficient support from government organizations have a statistically significant negative effect on Entrepreneurial Intention of the rural women. Moreover, this study analyzes whether there is a significant relationship between Entrepreneurial Intention and the Demographic Variables: (1) Age group, (2) Marital status, (3) Highest education level, (4) Monthly household income category, (5) Number of children, and (6) Age category of the children. By the findings, this study fills the gap in the literature by quantitatively identifying the barriers to rural women's entrepreneurial start-ups and the relation between Entrepreneurial Intention and Barriers to rural women's entrepreneurship.

2. Literature Review and Conceptual Framework

2.1 Entrepreneurial Intention

In general, '*intention*' refers to thinking about, aiming for, or planning to achieve something. It can also be committing to a specific activity now or in the future. According to Ajzen (1991), intentions determine how much people want to do and how hard they plan to work to execute a given behaviour. Bird & Jelinek (1998) define *intention* as "A state of mind, leading attention, experience, and actions towards a specific goal (object) or pathway to its achievement." The intention of each individual varies and is also affected by time (Thompson, 2009). It is up to the individual to decide whether or not to engage in a particular behaviour.

Entrepreneurial intentions are commitments to creating a new business, and a strong desire should include at least an attempt to start a firm. Entrepreneurial intentions can take the shape of a formalized plan or choice and can be implemented now or in the future (Krueger, 1993). According to Dutta and Thornhill (2008), Entrepreneurial Intention is the desire to own a business or start a new one.

Carsrud, Krueger, and Reilly (2000) found that intention-based models are more highly predictive of entrepreneurial behaviour than individual-variable models. Many academics and scholars have produced various models to explore entrepreneurial goals and other intentions such as education, personal attitude, personal qualities, culture, social conventions, and various other aspects. Shapero (1982) created the Entrepreneurial event model; Huefner et al. (1991) created the Entrepreneurial attitude orientation model; Carsrud et al. (2000) created the Intentional basic model, and so on. Ajzen (1991) created the Theory of Planned Behavior (TPB), regarded as the most refined intention model for studying the impact of intentionality on entrepreneurial behaviour.

It has previously shown a clear link between barriers and entrepreneurial intentions. According to Wagner's (2007) results, there is a direct link between fear of failure and entrepreneurial intentions. Franke and Lüthje (2003) investigated engineering students' attitudes and entrepreneurial intentions in several countries (the United States, Canada, Asia, and Europe). They discovered a direct link between perceived entrepreneur support, perceived barriers to entrepreneurship, and students' intention to pursue an entrepreneurial career. They concluded that people are less inclined to become entrepreneurs if they perceive an unfriendly atmosphere for firm founders. A positive assessment of the support provided to potential business founders links to a greater likelihood of pursuing a career as an entrepreneur.

Pruett, Shinnar, and Toney (2009) discovered a direct link between the perceived relevance of barriers and behavioural intentions in their study of Spanish, American, and Chinese students. Individuals who perceive a lack of knowledge, business hazards, and funding are less likely to have solid entrepreneurial intentions.

People are generally delighted and engaged in entrepreneurial efforts. They can express or possess entrepreneurial ambition and take proper steps to start a new business, which various variables can stifle or affect.

2.2 Barriers to Women's Entrepreneurship

Entrepreneurs are essential drivers of economic and social change, according to the World Economic Forum (2013). Verheul & Thurik, Verheul, and Zwan (2012) define five levels of the entrepreneurial process, namely" never considered starting a business, thinking about starting a business, taking steps to start a business (nascent

entrepreneurs), running a business for less than three years and running a business for more than three years." (p. 628).

According to Linder and Sperber (2018), personal evaluations of their entrepreneurial ecosystem link to entrepreneurial decisions. The World Economic Forum (2013) identifies seven components of an entrepreneurial ecosystem: markets, human capital, funding and finance, the regulatory framework and infrastructure, education and training, culture, and a support system.

According to Li, Wu, and Zhang (2019), most research on women's entrepreneurship has centred on their obstacles. From an empirical study, Thurik, Verheul, and Zwan (2012) found that men are more likely to consider entrepreneurship a career than women, and men are more likely to undertake nascent activities. However, at the later stages of the entrepreneurial process, this gender difference tends to disappear.

In their study on the barriers to women's entrepreneurship in Canada, Glass et al. (1992) identified the following barriers: a lack of training and experience in business management, a lack of financial support and an information network, and an inappropriate family environment, and negative attitudes toward women.

According to Kaur and Sidhu (2006), human and environmental factors influence women's entrepreneurial development. Hard labour, technical expertise, risk tolerance, innovativeness, and work experience influence rural women's entrepreneurial development. Environmental factors include infrastructure facilities, entrepreneurial activity capacity, supplier availability, and institutional backing.

In a study, Jahangiri et al. (2006) looked at the role of women in rural economic activities in the province of Fars. The findings revealed a link between education and economic participation among rural women. With age, women's economic engagement rises. The study ultimately discovered that women's attitudes toward their work are the most influential factor influencing their economic participation rate variations.

The study of Fallah-Jelodar et al. (2007) identified financial and credit supports, technical-vocational courses, family networks, governmental support policies, availability and the use of both individual and group information channels and sources, and affiliation in rural associations as the most significant in the success of rural women's entrepreneurship.

The empirical study by Wagner (2007) confirms that the degree and effect of considering fear of failure as a reason not to start one's own business differs significantly between men and women, which is relevant for explaining the sex gap in entrepreneurship.

According to Shahhosseini (2008), women face particular cultural, economic, and societal challenges regarding entrepreneurship and business enterprises. As a result of distinct cultural and social factors, such limitations are more visible in rural communities. On the way to entrepreneurship, rural women confront more barriers than urban women.

From exploratory qualitative research, Farani and Movahedi (2012) identify nine barriers to rural women's entrepreneurship. These barriers include individual, personality and behavioural, family, education, social and cultural, facilities and services, legal, financial, institutional, and geographical barriers.

Linder and Sperber (2018) found that financial support is an essential motivator for men and women in entrepreneurial decisions, and females rely more on social support. Camelo-Ordaz, Diánez-González, and Ruiz-Navarro (2016), from an empirical study, found that "gender decisively influences their entrepreneurial intention." (p.261). Furthermore, three mediators between gender and entrepreneurial intention were found: self-efficacy, fear of failure, and ability to recognize opportunities.

According to Hechavarria and Ingram (2018), women are more likely to engage in entrepreneurship when the entrepreneurial environment includes low barriers to entry, supportive government policy toward entrepreneurship, limited commercial and legal infrastructure, and a normative culture that encourages it.

Li, Wu, & Zhang (2019). Discoveries demonstrate that weak female entrepreneurial cognitions and a high initial funding demand result in low female entrepreneurship. In addition, the findings highlight a low initial funding requirement as a crucial incentive for female entrepreneurship development.

In conclusion, findings from entrepreneurship research demonstrate that numerous elements might be barriers to women's entrepreneurship development. This study analyzes the barriers that affect the Entrepreneurial Intention of rural women. Despite this, it fills a gap in the literature by quantitatively analyzing rural women's barriers to starting a business.

2.3 Conceptual Framework

According to this study's model, demographics and barriers to women entrepreneurship considerably impact entrepreneurial intention. *Figure 1* shows the conceptual framework for this research.

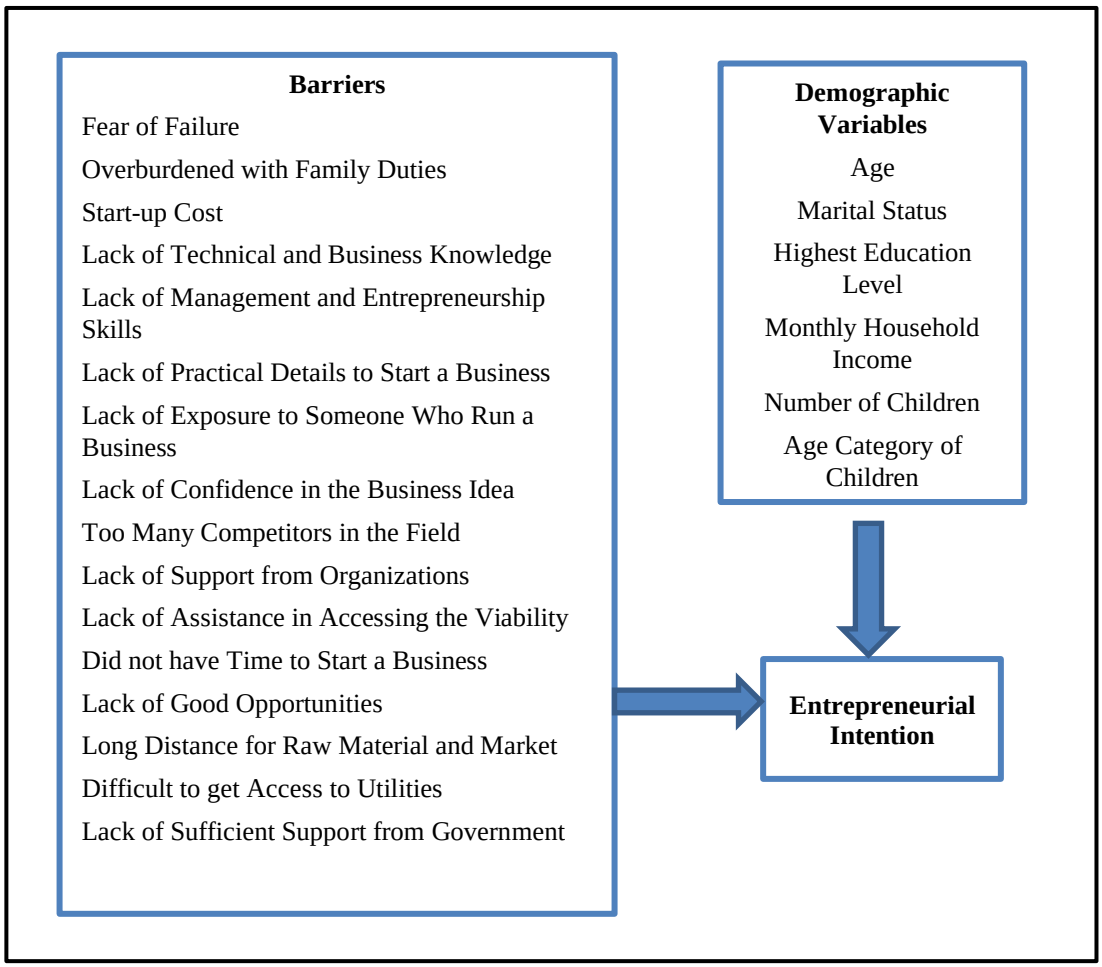


Figure 1: Conceptual Framework of the Study

Source: Developed by the Author

3. Method

3.1 Research Methodology

3.1.1. Sample Selection

This paper analyzes micro-cross-sectional data from 213 female participants in the skills development program conducted by the Department of Rural Development in Sri Lanka's North Western Province. Primary data was collected for this study by distributing a questionnaire to 230 women.

The method used to select the sample is as follows. In 2018, the Department of Rural Development's skills development program was conducted in 41 Divisional Secretariat divisions in the North Western Province in Sri Lanka. Eight hundred sixty-three women participated in the program. Five hundred forty-eight women have not started any micro or small-scale enterprise. Therefore, data was collected from the women who had not started any micro or small-scale enterprise for the day the research questionnaire was distributed. *Random sampling* is used to select 23 divisional secretariat areas out of 41, followed by another simple random sampling to choose ten women from each of the 23 selected divisional secretariat areas.

3.1.2. Definition of Variables

Table 1 contains the codes of the dependent variable, independent variables, and the demographic variables used in this study.

Table 1: Variable codes, descriptions and types

No.	Description	Variable Code	Variable Type
Dependent Variable			
01	Entrepreneurial intension	EI	Quantitative Continuous
Independent Variables			
02	Fear of failure	FEAR	Ordinal Variable
03	Overburdened with family duties	FAMILY	Ordinal Variable
04	Cannot afford start-up cost	COST	Ordinal Variable
05	Lack of technical and business knowledge	KNOWLEDGE	Ordinal Variable
06	Lack of management and entrepreneurship skills	SKILLS	Ordinal Variable
07	Lack of necessary practical details to start the business	PRACTICAL	Ordinal Variable
08	Lack of experience or exposure to someone who has run a business	EXPOSURE	Ordinal Variable
09	Not confident of the business idea	CONFIDENCE	Ordinal Variable
10	Too many competitors in the field	COMPETITORS	Ordinal Variable
11	Lack of support of organizations	SUPPORT	Ordinal Variable
12	Lack of assistance in assessing the viability of the business	VIABILITY	Ordinal Variable
13	Did not have time to start the business	TIME	Ordinal Variable
14	Lack of good opportunities	OPPORTUNITIES	Ordinal Variable
15	Long distance to centres providing raw materials and market	DISTANCE	Ordinal Variable
16	Difficult to get access to utilities	UTILITIES	Ordinal Variable
17	Lack of sufficient support from the government	GOVERNMENT	Ordinal Variable
Demographic Variables			
18	Age category	AGE	Nominal Variable
19	Marital status	MARI_STATUS	Nominal Variable
20	Highest education level achieved	EDUCATION	Nominal Variable

21	Number of children	CHILDREN	Nominal Variable
22	Age category of the participant's children	CHILD_AGE	Nominal Variable
23	Monthly household income category	INCOME	Nominal Variable

3.1.3. Questionnaire Design

This study uses a questionnaire as the survey instrument. This questionnaire was developed by referring to the Global Entrepreneurship Monitor 2001 National Expert Questionnaire Autio, E., Hechavarria, D.M., & Reynolds, P.D. (2008), Exploring entrepreneurial intentions among university students in Bangladesh by Ahmed, M.(2020), An investigation into the determinants of women entrepreneurship by Meyer, N.(2009), Barriers to entrepreneurial endeavours in a developing economy by Bakri, M., Bizri, R.M., Dani, A., Kojok, A., & Mokahal, M.(2012), and the analysis of the barriers and limitations for the development of rural women's entrepreneurship by Farani, A.Y., & Movahedi, R. (2012). A pretest of 20 individuals was undertaken to strengthen the reliability of the survey evidence.

The questionnaire used in this study has two sections (Section A and Section B). Section A consists of six (06) Demographic questions. Section B of the questionnaire consists of twenty-one (21), five-point (05) Likert scale questions from Strongly Agree (1) to Strongly Disagree (5).

3.2 Empirical Methodology

The two hypotheses of this study are,

Hypothesis 1(H1): *Each demographic variable (age, marital status, highest education level, monthly household income, and number of children) has a statistically significant effect on entrepreneurial intention among the participants.*

Hypothesis 2(H2): *Selected 16 barriers to entrepreneurship have a statistically significant negative impact on entrepreneurial intention among the participants*.

To test Hypothesis 1 **(**H1), an analysis of variance was run on demographic variables: Age, Marital status, Highest education level, monthly household income, and Number of children, which are independent variables, and entrepreneurial intention as the dependent variable.

To test Hypothesis 2(H2), a regression model (*Equation 01*) is analyzed using the Multiple Linear Regression method with the R statistical program.

$$EI = \beta_0 + \beta_1 FEAR + \beta_2 FAMILY + \beta_3 COST + \beta_4 KNOWLEDGE + \beta_5 SKILLS + \beta_6 PRACTICAL + \beta_7 EXPOSURE + \beta_8 CONFIDENCE + \beta_9 COMPETITORS + \beta_{10} SUPPORT + \beta_{11} VIABILITY + \beta_{12} TIME + \beta_{13} OPPORTUNITIES + \beta_{14} DISTANCE + \beta_{15} UTILITIES + \beta_{16} GOVERNMENT + \varepsilon \quad (1)$$

Information,

EI	=	Entrepreneurial Intention
FEAR	=	Fear of failure
FAMILY	=	Overburdened with family duties
COST	=	Cannot afford start-up cost
KNOWLEDGE	=	Lack of technical and business knowledge
SKILLS	=	Lack of management and entrepreneurship skills
PRACTICAL	=	Lack of necessary practical details to start the business
EXPOSURE	=	Lack of experience or exposure to someone who has run a business
CONFIDENCE	=	Not confident of the business idea

COMPETITORS	=	Too many competitors in the field
SUPPORT	=	Support of organizations
VIABILITY	=	Assistance in assessing the viability of the business
TIME	=	Did not have time to start the business
OPPORTUNITIES	=	Lack of good opportunities
DISTANCE	=	Long distance to centres providing raw materials and market
UTILITIES	=	Difficult to get access to utilities
GOVERNMENT	=	Lack of sufficient support from the government
β_0	=	Intercept
β_1	=	Coefficient of FEAR
β_2	=	Coefficient of FAMILY
β_3	=	Coefficient of COST
β_4	=	Coefficient of KNOWLEDGE
β_5	=	Coefficient of SKILLS
β_6	=	Coefficient of PRACTICAL
B_7	=	Coefficient of EXPOSURE
β_8	=	Coefficient of CONFIDENCE
β_9	=	Coefficient of COMPETITORS
β_{10}	=	Coefficient of SUPPORT
β_{11}	=	Coefficient of VIABILITY
β_{12}	=	Coefficient of TIME
β_{13}	=	Coefficient of OPPORTUNITIES
β_{14}	=	Coefficient of DISTANCE
β_{15}	=	Coefficient of UTILITIES
β_{16}	=	Coefficient of GOVERNMENT
ε	=	Error

The steps followed for the Empirical Analysis consist of assessing the reliability of the dataset, two ANOVA (Analysis of Variance) assumption (assumption of homogeneity of variance and assumption of normality) tests, and four regression assumptions such as Normality, Linearity, Homoscedasticity, and Multicollinearity.

4. Results

4.1 Reliability of the Questionnaire

The initial estimation of this study is Cronbach's alpha. Cronbach's alpha is a method for determining the reliability of a questionnaire. It provides a simple approach to determining whether a score is reliable. Cronbach's alpha measures internal consistency. It is a scale of reliability (Shrestha, 2021). The basic rule is that the alpha coefficient range between 0.7 and 0.8 is acceptable, values between 0.8 and 0.9 are good, and 0.9 and above are excellent. The questions on entrepreneurial intention have a Cronbach alpha value of 0.79, whereas the questions on barriers have a Cronbach alpha value of 0.73. As a result, the questionnaire's reliability is found to be acceptable.

4.2 Profile of the Respondents

Table 2 shows the respondents' demographic characteristics.

Table 2: Demographic Characteristics of Respondents

Variable	Frequency	Percentage
Age		
Less than 20	02	0.9
20 to 30	39	18.3
31 to 40	70	32.9
41 to 50	61	28.6
Above 50	41	19.2
Marital Status		
Widowed	12	5.6
Unmarried	20	9.4
Married	181	85.0
Highest Education Level		
No Schooling	00	0.0
Primary	06	2.8
Secondary	14	6.6
General Certificate of Education, Ordinary Level	112	52.6
General Certificate of Education, Advanced Level	72	33.8
Diploma	07	3.3
Degree or Higher	02	0.9
Number of Children		
None	31	14.6
One (01)	33	15.5
Two (02)	102	47.9
Three (03)	36	16.9
Four (04)	09	4.2
Five (05)	02	0.9
Age Category of the Children		
01 to 05	64	16.4
06 to 10	85	21.7
11 to 18	138	35.3
Above 18	104	26.6
Monthly Household Income		
Less than LKR 20,000	96	45.1
LKR 20,000 to 30,000	58	27.2
LKR 30,000 to 40,000	30	14.1
LKR 40,000 to 50,000	20	9.4
Above LKR 50,000	09	4.2

Source: Processed Primary Data (2021)

4.3 ANOVA (Analysis of Variance)

The demographic variables were used as independent variables, and the entrepreneurial intention was used as the dependent variable in an analysis of variance. Except for marital status, the results of the analysis show that none of the demographic variables statistically impact entrepreneurial intention. The only demographic variable with a statistically significant F-statistic (Sig. 0.00383 > 0.05) was marital status, indicating that different respondents' Marital Status have statistically different entrepreneurial intentions. *Table 3* shows the ANOVA results for Demographic Variables and Entrepreneurial Intention.

Table 3: ANOVA results for Demographic Variables and Entrepreneurial Intention

Variable	Degrees of Freedom(df)	Sum of Squares	Mean Square	F value	Sig.
AGE	4	1.05	0.2614	1.234	0.298
Residuals	208	44.07	0.2119		
MARI_STATUS	2	1.96	0.9797	5.716	0.00383**
Residuals	210	35.99	0.1714		
EDUCATION	5	1.28	0.2565	1.448	0.209
Residuals	207	36.67	0.1772		
CHILDREN	5	1.43	0.2853	1.617	0.157
Residuals	207	36.53	0.1764		
INCOME	4	1.58	0.3941	2.254	0.0645
Residuals	208	36.38	0.1749		

Source: Processed Primary Data (2021)

Note: ** Sig at the level < 5%

The variances of the distributions of the populations are assumed to be identical in ANOVA. The ANOVA test is used to examine the plausibility of the null hypothesis, which states that all data come from the same underlying group with the same level of variability. As a result, if the variances of each group differ from the start, the null hypothesis will be rejected (within specific bounds), and there will be no purpose in employing ANOVA. Therefore, Bartlett's test is used in this study to test the assumption of homogeneity of variance. Bartlett's test examines the null hypothesis that the variances of the groups are equal versus the alternative hypothesis that the variances of the groups are not equal. *Table 4* contains the results of Bartlett's test for the MARI_STATUS (marital status) variable.

Table 4: Bartlett's Test of Homogeneity of Variances

Bartlett's K-squared	Degrees of Freedom(df)	p-value
0.37548	2	0.8288

Source: Processed Primary Data (2021)

Note: The p-value is 0.8288 which is above 0.05. Thus, the homogeneity of variances is accepted.

4.3.1. Tukey Multiple Comparisons of Means

Tukey's multiple comparison test is one of the various tests that can be used to discover which group of means differs from the others. The Tukey multiple comparison test is used to compare the difference between each pair of means because the ANOVA test concludes that there is evidence that the group means differ in MARI_STATUS (marital status). The results of the Tukey test are shown in *Table 5*. According to the test results, the p-value for the difference between each pair of means, widow-married and widow-unmarried, is statistically significant.

Table 5: Test Results of Tukey Multiple Comparison of Means

Marital Status	Difference	Lower	Upper	P Adjacent
unmarried-married	-0.1021409	-0.33241168	0.1281299	0.5481059
widow-married	0.3853591	0.09405684	0.6766614	0.0057777
widow-unmarried	0.4875000	0.13066742	0.8443326	0.0041579

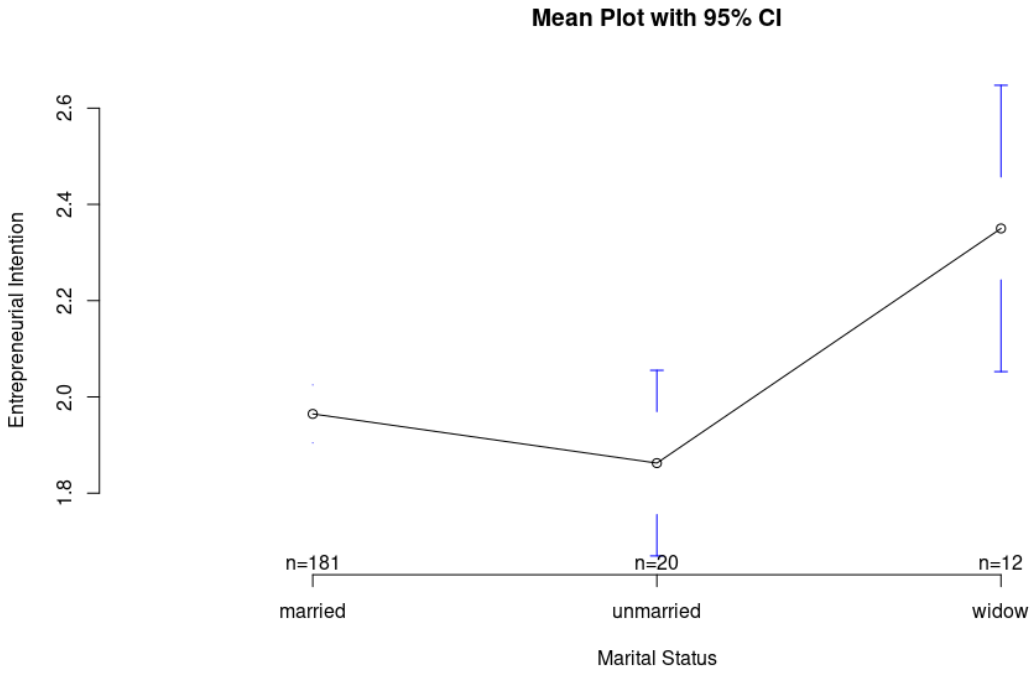
Source: Processed Primary Data (2021)

Note: 95% Confidence Level

According to *Figure 2*, in comparison to married (1.96) and unmarried (1.86) women, widows had a significantly higher mean value of Entrepreneurial Intention (2.35). Since the questionnaire's Likert scale runs from Strongly

Agree (1) to Strongly Disagree (5), widows have lower Entrepreneurial Intention than married and unmarried women.

Figure 2: Mean plot of Entrepreneurial Intention vs. Marital Status



Source: Author's Compilation

4.4 Correlation

Pearson correlation was used in this study to analyze the strength and direction of the relationships between variables. It is critical to understand the link between variables to assess whether there is any influence. Correlation values should range from +1 to -1, with +1 indicating positive associations and -1 indicating negative relationships (Pallant, 2013).

As a result, the associations between the dependent and independent variables are negative except for the independent variables, SUPPORT and COST, as shown in *Table 6*. It is also crucial to figure out how strong the connections between variables are. The r-value can be used to assess the strength of the correlation using the rule of thumb: r = 0: No Relationship, 0 > r > ±.15: Very Weak Relationship, r in between ±0.16 to ±.30: Weak Relationship, r in between ±.31 to ±.45: Moderate Relationship, r in between ±.46 to ±.60: Strong Relationship, and r above ±.60: Very Strong Relationship (Cohen, 1988).

Table 6: Strength of Relationship between Dependent and Independent Variables

Variables	**Correlation Value**	**Strength of Relationship**
EI to FEAR	-0.1099	Very Weak Relationship
ET to FAMILY	-0.1214	Very Weak Relationship
EI to COST	0.0621	Very Weak Relationship
EI to KNOWLEDGE	-0.1849	Weak Relationship
EI to SKILLS	-0.1649	Weak Relationship
EI to PRACTICAL	-0.3088	Moderate Relationship
EI to EXPOSURE	-0.2099	Weak Relationship
EI to CONFIDENCE	-0.4884	Strong Relationship
EI to COMPETITORS	-0.1690	Weak Relationship

EI to SUPPORT	0.0715	Very Weak Relationship
EI to VIABILITY	-0.0287	Very Weak Relationship
EI to TIME	-0.1111	Very Weak Relationship
EI to OPPORTUNITIES	-0.1705	Weak Relationship
EI to DISTANCE	-0.0185	Very Weak Relationship
EI to UTILITIES	-0.1362	Very Weak Relationship
EI to GOVERNMENT	-0.0005	Very Weak Relationship

Source: Processed Primary Data (2021)

4.5 Regression Analysis

4.5.1. Summary Statistics of the Regression Model

Summary statistics of the dependent variable and the independent variables are shown the *Table 7.*

Table 7: Summary Statistics of the Dependent and Independent Variables of the Regression Model

Variable Code	Number of Observations	Minimum	Maximum	Mode	Mean	Standard Deviation
EI	213	1.00	3.20	2	1.98	0.40
FEAR	213	1.00	5.00	4	3.20	1.12
FAMILY	213	1.00	5.00	4	3.58	1.00
COST	213	1.00	5.00	2	2.49	1.01
KNOWLEDGE	213	1.00	5.00	4	3.20	1.00
SKILLS	213	1.00	5.00	4	3.36	0.92
PRACTICAL	213	1.00	5.00	4	3.27	0.94
EXPOSURE	213	1.00	5.00	4	3.60	0.94
CONFIDENCE	213	1.00	5.00	4	3.60	1.00
COMPETITORS	213	1.00	5.00	4	3.54	0.94
SUPPORT	213	1.00	5.00	2	2.60	1.05
VIABILITY	213	1.00	5.00	2	2.89	1.03
TIME	213	1.00	5.00	4	3.28	1.09
OPPORTUNITIES	213	1.00	5.00	4	3.49	0.92
DISTANCE	213	1.00	5.00	4	2.99	1.13
UTILITIES	213	1.00	5.00	4	3.68	0.92

GOVERNMENT	213	1.00	5.00	2	2.66	1.08

Source: Processed Primary Data (2021)

4.5.2. Normality, Linearity, and Homoscedasticity

Histogram, Q-Q plot, and statistical normality tests are used to determine the normality of residuals. These tests show that the normality assumption is met. The model met the linearity assumption to a large extent. As a result, this regression model's coefficients and standard errors are reliable for making predictions and testing hypotheses. Square-rooted Standard Residuals against Fitted Values plot and two statistical tests (Studentized Breusch-pagan test and White test) are used to test for homoscedasticity of residuals in the regression model. The model nearly matched the homoscedastic assumption. As a result, this regression model's coefficients and standard errors are reliable for making predictions and hypothesis testing.

4.5.3. Multicollinearity

The Variance Inflation Factor (VIF) tests multicollinearity using R software. As shown in *Table 8*, VIF values for the regression model met the multicollinearity condition successfully. Therefore, this regression model's coefficients and standard errors are reliable for making predictions and hypothesis testing.

Table 8: Variance Inflation Factor (VIF) Result of Regression Model

Variable Code	**VIF Value**
FEAR	1.476384
FAMILY	1.643704
COST	1.315675
KNOWLEDGE	1.469592
SKILLS	1.655397
PRACTICAL	1.834193
EXPOSURE	1.686743
CONFIDENCE	1.708063
COMPETITORS	1.544113
SUPPORT	1.784567
VIABILITY	1.427247
TIME	1.721588
OPPORTUNITIES	1.514408
DISTANCE	1.450776
UTILITIES	1.585443
GOVERNMENT	1.787318

Source: Processed Primary Data (2021)

Note: Variance inflation factor value starts from one. The rule of thumb for the variance inflation factor is as follows: a value of 1 indicates that the variables are not correlated, and a value between 1 and 5 indicates that they are moderately correlated. A value greater than 5 indicates that they are highly correlated—the VIF values for this regression model range from 1 to 1.8. As a result, the regression model meets the multicollinearity *assumption.*

4.5.4. Multiple Linear Regression Results

The mean value of Entrepreneurial Intention was found to be 1.98, indicating that respondents have a significant desire to engage in entrepreneurial activity. According to *Table 9*, the adjusted R^2 value for the regression model is 0.3428, indicating that this model accounts for 34.28 percent of Entrepreneurial Intention. The low p-value (less than 3.419 x 10-13) and low F-statistic value (7.423) indicate the overall high significance of the model's results.

The residuals have a normal distribution, with roughly similar minimum and maximum values (-1.02602 and 1.00154) and a close to zero median value (-0.00557).

Two independent variables' t-values and p-values reveal a statistically significant impact on Entrepreneurial Intention. CONFIDENCE, one of the two independent variables, is statistically significant in the 99% confidence range. Entrepreneurial intention will drop by 19% for the participants who have no confidence in their business idea, assuming all other variables remain constant. PRACTICAL is the other significant independent variable. In the 95% confidence interval, it exhibits statistical significance. Entrepreneurial intention will drop by approximately 10% for participants who do not know the necessary practical elements to start a business, assuming all other variables remain constant.

Table 9: Regression Results of the Model

Residuals:				
Min	1Q	Median	3Q	Max
-1.02602	-0.15016	-0.00557	0.14390	1.00154
Coefficients	**Estimate**	**Std. Error**	**t value**	**Pr(>|t|)**
(Intercept)	2.985160	0.168163	17.752	< 0.0000000000000002 ***
FEAR	0.033454	0.023251	1.439	0.15192
FAMILY	0.013945	0.028644	0.487	0.62696
COST	-0.039023	0.024227	-1.611	0.10899
KNOWLEDGE	-0.012189	0.026546	-0.459	0.64665
SKILLS	-0.004257	0.030401	-0.140	0.88880
PRACTICAL	-0.099751	0.031736	-3.143	0.00195 **
EXPOSURE	-0.009303	0.030295	-0.307	0.75914
CONFIDENCE	-0.190008	0.028357	-6.701	0.000000000254 ***
COMPETITORS	-0.010452	0.028964	-0.361	0.71861
SUPPORT	0.047101	0.027208	1.731	0.08514.
VIABILITY	0.021410	0.024676	0.868	0.38673
TIME	0.006069	0.026047	0.233	0.81602
OPPORTUNITIES	-0.007099	0.029176	-0.243	0.80805
DISTANCE	-0.015245	0.023139	-0.659	0.51084
UTILITIES	0.016893	0.030712	0.550	0.58296
GOVERNMENT	-0.039858	0.026332	-1.514	0.13185
Residual standard error: 0.3013 on 181 degrees of freedom				
Multiple R-squared: 0.3962, Adjusted R-squared: 0.3428				
F-statistic: 7.423 on 16 and 181 DF, p-value: 0.0000000000003419				

Source: Processed Primary Data (2021)

Note: Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

5. Conclusion & Recommendations

According to this study's Hypothesis 01(H1), none of the demographic variables statistically impact entrepreneurial intention except for marital status. Also, there is a statistically significant difference in the Entrepreneurial Intention of widows compared to married and unmarried women. Therefore, it is essential to study further the problems that widows face compared to married and unmarried women when starting entrepreneurial activities. For Hypothesis 02(H2), It is observed that only two barriers have a statistically significant negative impact on entrepreneurial intention. Those two barriers are a lack of confidence in the business idea (CONFIDENCE) and a lack of necessary practical details to start a business (PRACTICAL). Accordingly, the following recommendations are helpful to develop rural women's entrepreneurship.

5.1 Recommendations

Expanding business counselling services, financial literacy programs, business mentoring schemes, and providing information and advice on how to start a business, how to do good bookkeeping, how to prepare business plans, and other topics will have strong catalytic effects on enhancing women's entrepreneurship, particularly in areas where women entrepreneurs have limited access to networks of other women entrepreneurs. Which will boost confidence and information among them.

Introducing role models and success stories to the participants will improve the practical business skills among rural women and support improving their positive attitude towards initiating entrepreneurial activities.

The government can partner with business clusters formed by women entrepreneurs to secure them even when there are downfalls. These partnerships will lessen the fear of failure among women, and they will be encouraged in entrepreneurial start-ups. A Procurement Preference Policy might be adopted to help rural women entrepreneurs gain a more significant proportion of government contracts. Also, the government can promote business relationships between large enterprises and women entrepreneurs through buyer-seller meetings, buy-back, and subcontracting agreements to maintain a steady market for women entrepreneurs.

6. Directions for Future Research

As a finding of this study, the marital status of these women significantly impacts their entrepreneurial intention. Therefore, an in-depth qualitative analysis of this is recommended for future research.

Finally, a detailed investigation into the exact nature and type of variables that affect the rural women's entrepreneurship development process at various positions on the entrepreneurship ladder will aid in developing more effective government policies related to rural women's entrepreneurship development.

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