

## Impact of Skill Development Program for Producing Women Entrepreneurs in Pakistan

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### Abstract

*A fundamental requirement for a competent and successful entrepreneur is knowledge and practice of entrepreneurial skills, particularly in the commercial context. This study investigates the impact of several entrepreneurial skill development programs in Pakistan, including the Benazir Bhutto Shaheed Human Resource Research Development Board (BBSHRRDB) and the National Vocational and Technical Training Commission (NAVTTTC). The population of this study consists of 255 entrepreneurs. The broad objective of the study is to examine the impact of the Skill Development Program on producing Women Entrepreneurs in Pakistan. The sample size of this study is 280 female entrepreneurs. A systematic random sampling technique was used to analyse the data. Using Araoye's (2004) sampling procedure, a sample of female business owners is selected for the study. The data were received by distributing a questionnaire to all respondents. For analysing the data, descriptive statistics were used, and the regression test was performed to test the hypotheses. It was determined that BBSHRRDB and NAVTTTC have an impact on the development and performance of female entrepreneurs across all evaluated metrics. The study also concluded that social factors such as formal/business networks, informal networks, and social acceptance have a significant impact on the success of women entrepreneurs in Pakistan.*

**Keywords:** skill development, entrepreneurship, women entrepreneurs, and NAVTTTC.

### Introduction

According to many economists, the advancement of entrepreneurial culture in a country's economy is critical to its long-term growth and development

(Schumpeter, 2003). Currently, women's entrepreneurship is considered a gender-specific field of entrepreneurial research (Shanine et al., 2019). It is vital to provide business openings for women because it allows them to realise their full potential as useful members of their community and benefits them socially and economically. Women entrepreneurship has long been documented as an important indicator of the global economy but it has taken a long time for that recognition to be extended to them (Roos, 2019). Research indicates that men and women approach business decisions in distinctly different ways because they come from diverse social and economic origins (Brieger et al., 2019; Shanine et al., 2019).

The disparity in attitude between men and women entrepreneurs is particularly pronounced in rural areas of developing countries such as Pakistan, where alongside lack of education, religious restrictions are imposed on women entrepreneurs (Hasan, 2020). Although studies on women's entrepreneurship have revealed that results differ depending on the circumstances, there is no existing entrepreneurial theory applicable to all geographical regions of the world (Honig & Hopp, 2019). When conducting the current research in Pakistan, the researcher discovered that the country is a male-dominated society in which women are treated as second-class citizens due to the customary standards that prevail throughout the country's social order. In Pakistan, women's lives have been severely harmed in every aspect, including their social status and participation in the larger community (Shahzad et al., 2021).

In Pakistan, a developing third-world country, with a few exceptions, in a patriarchal society, women are not permitted to associate with males other than their immediate family members. However, a small number of women engage in micro-enterprises such as dressmaking and needlework from the comfort of their homes to supplement their income and ensure their survival. The majority of the women in this group are low-income and in desperate need of help. The actions of rural women are more likely than those of urban women to differ when it comes to creating their enterprises and many of them look to start a low budget business as an alternative source of income (Hasan, 2020).

Women's empowerment and entrepreneurship in Pakistan have been unable to acquire traction in the country due to societal and psychological restrictions on women in most regions of the country (Williams & Shahid, 2016). Thus,

women in Pakistan's rural areas have long been subjected to social and economic discrimination, as well as a dearth of government support. The upshot is that several issues remain unsolved in this context, including the function of entrepreneurship programs in encouraging female entrepreneurship. Furthermore, most research conducted in this field is theoretical. As such, the purpose of this study is to close this gap by conducting an empirical investigation into the impact of various skill development programs for producing female entrepreneurs in Pakistan.

### **Problem Statement**

The profile of women's entrepreneurship in underdeveloped nations like Pakistan has emerged as an intriguing topic. Therefore, examining the place of women in business, the challenges they face in the process, and the standards of being corporate visionaries is of prime importance (Crossen, 2015). Another key problem is that of personality incompatibility which affects female business owners. Women entrepreneurs, like males, have different temperaments, indicating that some may be better suited to entrepreneurship than others. Differing temperaments may be the issue rather than the negative effects of irritation, cynicism, and arrogance (Houghton et al., 2012).

Consequently, one person with a bad attitude might have an impact on the mood of work. Given the importance of business in general, the interaction of women entrepreneurs' personalities indicates a substantial research need. The current study tries to close this gap. First and foremost, this study attempts to investigate how various factors affect women's desire to become entrepreneurs and investigates the effect of self-leadership on women's ambition to start their own business. The study adds to the body of theoretical knowledge on women entrepreneurs in developed and emerging nations, particularly Pakistan.

### **Research Questions**

The following research questions were framed to guide the work.

1. Do psychological factors have any significant effect on women entrepreneurs in Pakistan?
2. What is the effect of social factors on the success of women entrepreneurs in Pakistan?
3. How do BBSHRRDB and NAVTTC programs affect the performance of

women entrepreneurship in Pakistan?

### **Research Objectives**

The broad objective of the study is to examine the impact of the Skill Development Program on producing Women Entrepreneurs in Pakistan. The specific objectives include:

1. To ascertain the effect of psychological factors on the success of women entrepreneurs in Pakistan
2. To determine the effect of social factors on the success of women entrepreneurs in Pakistan.
3. To examine the impact of BBSHRADB and NAVTTC programs on the performance of women entrepreneurship in Pakistan.

### **Significance of the Research**

The various factors that have contributed to the study's significance are discussed in greater depth below.

1. The goal of this research is to learn more about how skill development programs affect the development of female entrepreneurs in Pakistan.
2. Secondly, this study will help researchers better understand concerns such as BBSHRADB, NAVTTC, social, and psychological aspects, and how these influence women's intentions to start a business.
3. The findings of this study are also expected to be beneficial in supporting policymakers in enhancing provisions for women's entrepreneurship, as well as contributing to existing studies on the poor performance of women company owners in developing nations like Pakistan.

The paper consists of five sections, part one includes the introduction, section two covers the theoretical framework and literature review, section three covers the technique employed; section four covers the research results and findings, and section five covers the conclusions and recommendations.

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## Review of Literature

In Pakistan, one of the concerns currently being addressed is the utilisation of women for the benefit of the country as a whole. Women's access to opportunities for academic education, vocational training, employment, and entrepreneurship is therefore critical if they are to make substantial contributions to Pakistan's socio-economic progress and prosperity (Linfang et al., 2021). In the context of national development, all citizens are expected to take part in the growth of a country's socio-economic prosperity. However, it is the youth, as well as women, that play a significant role in nation-builders in the truest meaning of the word. Several stakeholders, including the government, the community, and non-governmental organisations, have been made aware of the problem, and steps have been taken to address it; nonetheless, the outcome has been limited. Research conducted around the world in nearly identical scenarios has identified gender parity as a relevant issue (Khan et al., 2021). Social and psychological (Rastogi et al., 2022) education (Turko, 2016) and government policy are critical factors to consider for women to be able to start and grow their businesses on strong, sustainable, and effective foundations. Following these considerations, a contextual framework for this study is constructed based on the information presented so far. Although similar studies have been conducted in other countries, no such studies have been conducted in Pakistan thus far. As a result of this study, women will be empowered because the researcher will try to fill the gap by looking into skill development programs for the development of women's entrepreneurship in Pakistan, with the ultimate goal of enhancing their economic independence (Panda, 2018).

### Women Entrepreneurship in Pakistan

In Pakistan, women's economic involvement is significantly lower than that of men, even though women make up nearly half of the population (Salahuddin et al., 2022). Pakistan is ranked 132nd out of 134 nations in terms of the number of chances available for female entrepreneurs (Khan et al., 2021). According to Noor and Isa (2020), the rate of entrepreneurial activity in Pakistan as a whole is quite low, and the rate of entrepreneurial activity among females is even lower, coming in at 3.43 percent.

Results of a study conducted by Yaqoob (2020) highlighted how women entrepreneurs manage their businesses while overcoming various social, cultural

and financial obstacles to further economic and social well-being. The approach was used in this study to examine the path travelled by Pakistani women entrepreneurs in terms of growth. By examining the experiences of individual women, the author discovered certain socioeconomic, economic, and cultural restrictions during the expansion stage. The new, evolving model serves as a good foundation for pressing future research needs.

### **Factors affecting the Entrepreneurial Performance**

The term “performance” refers to the successful completion of an activity by utilising one’s expertise. A person’s performance can be defined as the actions, functions, and behaviours necessary to complete an activity (Shahzad et al., 2021). By beginning new firms and expanding existing ones, small businesses can contribute to the economy, which can be measured in terms of the number of jobs created and the amount of wealth generated. According to Soomro and Shah (2019) performance tends to be conceptualised, measured, and operationalized in a variety of ways. However, the parameters that are most frequently utilised for measuring performance are return on sales, growth in sales, annual sales, number of employees, and number of employees (Ali et al., 2019).

Khan et al. (2021) examined the elements that contribute to Pakistani women entrepreneurs’ success. Data from 181 registered SMEs that operate in Pakistan were gathered using structured questionnaires. While using the analysis software SPSS and AMOS, a hypothetical model was generated. The findings showed that internal influences, such as the desire for accomplishments, self-assurance, taking risks, and external influences such as economic and sociocultural issues positively and significantly impact the achievement of women-owned businesses.

A comprehensive analysis of the relevant literature reveals that the issue of gender and the performance of businesses is not accorded a great deal of attention (Soomro & Shah, 2019). This conclusion was reached as a result of the findings gotten from different studies such as the work of (Rastogi et al., 2022; Linfang et al., 2021; Ali et al., 2019). There are disparities between the sexes in terms of many performance indicators. It is not just about generating money for a woman who starts her own business; she does it to pursue goals that are more important to her, like the freedom and flexibility to balance her personal and professional responsibilities. When it comes to performance, businesses that are owned and

operated by women fare worse on metrics such as growth, employment levels, and sales (Fischer et al., 1993). They are unable to do as well in business due to the structural obstacles they confront, as well as the persistent lack of social, human, and financial capital (Purwati et al., 2021; Belitski et al., 2022).

Women are developing as a group with an entrepreneurial spirit; as a result, their businesses are typically newer and less established than those owned by men. At first glance, the performance of businesses owned by women appears to be significantly worse than that of businesses owned by males (Rosa et al., 1996). The underperformance of firms owned by women in comparison to those owned by males is not due to a lack of managerial or strategic failings related to gender, but rather to a lack of initial investment in these businesses (Belitski et al., 2022).

### **Psychological Factors**

Researchers investigate the psychological characteristics of successful businesspeople to identify traits that are a part of their personality (Linfang et al., 2021). An inclination to take risks, a drive for accomplishment, and an internal locus of control are all examples of such variables (Haddoud et al., 2022; Hartmann et al., 2022). Tolerance for ambiguity can be defined as “the inclination to view ambiguous situations as desirable,” whilst intolerance for ambiguity can be defined as “the tendency to perceive ambiguous situations as sources of threat” (Hartmann et al., 2022). Because of this, business owners are more likely to have a good reaction to a murky circumstance than workers who struggle to remain calm in uncertain settings (Turkina et al., 2015).

Linfang et al. (2021) examine how personality factors affect women’s propensity for entrepreneurship. In the study, the mediation of self-leadership on female entrepreneurs’ personality traits and intents was introduced. The research was quantitative, and the results were gathered by convenience sampling through a questionnaire survey. The significance of the link between personality characteristics and entrepreneurial intention was demonstrated by the results. The study recommended that, from a commercial standpoint, personality concerns be considered and utilised.

## **Social Factors**

Hasan and Almubarak (2016) stated that a woman who wants to start and run her own business as well as expand it requires the assistance of her social network. Recent research has shown that there are two very different pictures when it comes to social support. In some instances, a family will encourage female entrepreneurs and provide them with a supportive role in the development of business ideas but in other instances, families will not appreciate their efforts and will try to dissuade them from continuing in their line of work (Bullough et al., 2022). The success of women entrepreneurs needs to have the emotional or instrumental support of their families as well as the maintenance of healthy marital relations. When women go into business for themselves, they are met with several challenges; nonetheless, social ties, internal motivation, and the support of family members are key factors that contribute to the success of women entrepreneurs in small businesses (Fathizadeh et al., 2022). An entrepreneur's ability to get support and acceptance from their circle of friends, relatives, and former acquaintances is directly correlated to the success and expansion of their company (Purwati et al., 2021). There is a positive correlation between the support system and the performance of the business (Karim et al., 2022).

Senna and Agbolosoo (2021) identify the socioeconomic factors that affect the success of female entrepreneurs. 40 female entrepreneurs from the Adaklu Waya district provided the information using a mixed-methods strategy that combined surveys and in-person interviews. Several sociological and cultural obstacles that restrict women from beginning small enterprises were found in the study. The study's conclusions and other research have policy repercussions for women in business. It's also important to address cultural misconceptions about powerful women in business. These would support and encourage female business, enabling this important demographic to act as catalysts for economic growth, the creation of jobs, and the alleviation of poverty.

## **Training Programs**

Providing women with an education that is not only up to date with current needs but also of high quality is the first and most significant step toward maximising their contribution to the labour market. Currently, young men and women (aged 18 to 35 years) are being trained under the BBSHRDB and the



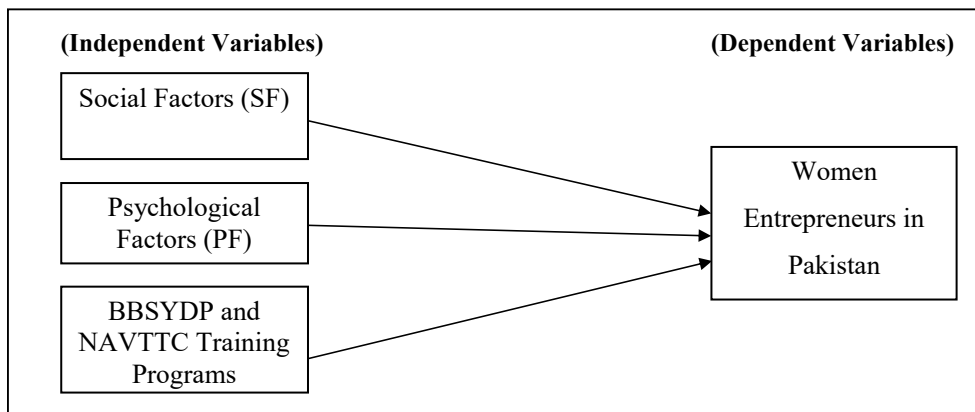
NAVTTTC in Pakistan. These programs aim to strengthen Pakistan's human resources by providing them with employable skill sets. BBSHRRDB and NAVTTTC are skills development programs that aim to produce trained individuals while also fostering the establishment of new jobs in the local communities they serve. It is vital to recognize that there is significant potential for the development of women's entrepreneurship in Pakistan and that this must be acknowledged. It is possible that promoting women's empowerment will result in several additional benefits such as improving the current economic situation, contributing to sustainable development, and giving prospects for economic growth in the long run.

### Conceptual Specification of Model

The conceptual model explains the connection between skill development programs and women's entrepreneurship in Pakistan. It was hypothesised that social, psychological, BBSHRRDB, and NAVTTTC characteristics contributed to the emergence of female entrepreneurs in Pakistan.

**Figure 1**

*Conceptual Framework of Model*



According to a comprehensive study of the literature, scholars in Pakistan are also investigating entrepreneurship, however, the area of gender and business is still in its infancy. A thorough review of the literature revealed that scholars in Pakistan focused their attention on the cultural, sociological, and psychological aspects of women entrepreneurs, as well as the problems they face in their endeavours. Little or no research has been conducted to determine the impact of various training programs, such as the BBSHRRDB and NAVTTTC training, on the

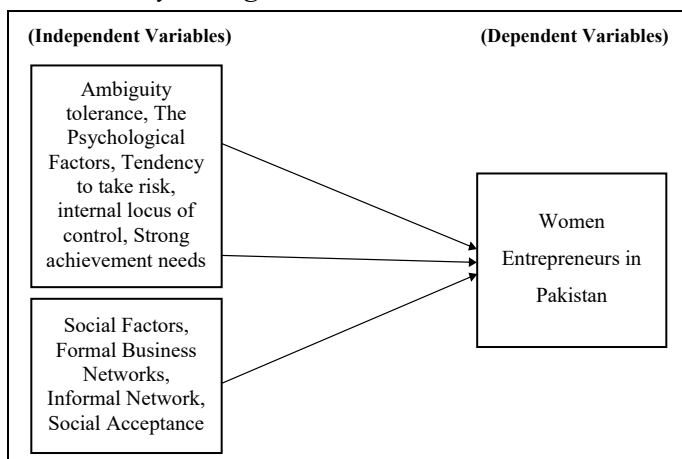
success of Pakistani women entrepreneurs. Roomi and Parrott (2008) investigate women's entrepreneurship in Pakistan, with a particular emphasis on women's entrepreneurship in a culturally and linguistically diverse environment. Specifically, explore the gender-related issues that women entrepreneurs in Pakistan confront, as well as the specific capacity-building needs of women entrepreneurs. There have been just a few attempts to explore the role of psychological factors in the performance of female entrepreneurs. However, this study seeks to close the gaps in our understanding of how the BBSHRRDB and NAVTTC training programs have affected the entrepreneurial performance of Pakistani women in the private sector in line with the examination of the psychological and sociological dimensions (Roomi & Harrison, 2010).

### Research Hypotheses

- H<sub>01</sub>: There is no significant effect of psychological factors on the success of women entrepreneurs in Pakistan
- H<sub>02</sub>: There is no significant effect of social factors on the success of women entrepreneurs in Pakistan.
- H<sub>03</sub>: The BBSHRRDB and NAVTTC programs have had no social and psychological discernible impact on the performance of Pakistani women's businesses.

### Original Conceptual Framework

**Figure 2**  
*Social & Psychological Factors*



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## Methodology

For this study, a method of systematic sampling was chosen to collect data. This is because a sampling frame consisting of female entrepreneurs in Pakistan was already available, and the population under study is diverse. The women entrepreneurs who participated in the BBSHRDB and NAVTTC Training that was organised by the appropriate agencies in Pakistan were selected through the use of a mechanism that used a systematic random sampling technique. To analyse the data for the study, the descriptive research approach was chosen to conduct the research. In this study, a quantitative approach was taken, and the questionnaire method served as the primary instrument of measurement. The population for this study includes a total of two hundred and eighty (280) female entrepreneurs. Of these, there are two hundred and fifty-five (255) female entrepreneurs in Pakistan who are registered members of the BBSHRDB and NAVTTC Training programs.

Participants in these programs may be found all around the country and are supported by the government through programs such as BBSHRDB and NAVTTC Training. Since there is a relatively even representation of active women business owners in the information technology, freelancing, and export industries, the researcher decided to focus on individuals in those fields. The Taro-Yamane (1967) formula was used to determine the appropriate size of the sample using a confidence level of 95%.

The data from the respondents in the study were collected by using a questionnaire that was designed to be self-administered by the respondents. A Likert scale was used to generate responses, with respondents indicating their level of agreement or disagreement with each statement using the scale. For the constructs to be quantifiable which the focus of this research was, a few scales that had been used in previous studies were repurposed with some minor adjustments. Tolerance of ambiguity and the Need for achievement were some of the psychological factors that were measured by a scale that was developed by Ullah et al. (2012) was used. The questionnaire was sent out to respondent's online (using Google form) and was delivered to a variety of women's chambers of commerce, trade bodies, and councils, among other organisations.

Using a method known as random sampling, the respondents were chosen from the list. The Statistical Package for the Social Sciences (SPSS) Version 20

was used for data analysis. The validity of the research instrument, both convergent and divergent, was determined after first calculating its reliability. In the end, the hypotheses were examined through the lens of simple regressions. One of the requirements for an accurate measurement is that it be reliable (Bajpai, 2011). The Cronbach alpha is the reliability measure that is most commonly used and recommended. Its range is from 0 to 1, inclusive. It is acceptable to have a reliability of 0.5 to 0.6, but anything 0.7 or higher is preferable. Validity is one of the criteria for successful measurement, and it relates to the ability of an instrument to measure what it is intended to measure. Validity is one of the factors that determines how accurate a measurement is (Bajpai, 2011). The two different kinds of validity, known as convergent validity and discriminant validity, have both been taken into consideration and analysed in this particular research project.

Construct validity is most commonly used in quantitative research, and it can be demonstrated when a measure reliably and accurately represents a specific concept. This type of validity is most commonly used in research. Convergent validity has been established when the concepts that should be connected are related and when the scales that are highly dependable for demonstrating it are converging (Zikmund et al., 2013). To show convergent validity, the AVE for each construct must be larger than or equal to 0. Factor analysis was used to establish convergent validity in the current experiment. Also, the study examined the moderating value of age and educational qualification on the performance of women entrepreneurship in Pakistan.

## Moderating Effect of Age and Educational Qualification on Gender

**Table 1**

*Correlations*

		Age Education	Gender/Women Entrepreneurs	Education Qualification	Gender	Education Qualification
<b>Pearson Correlation</b>	Age Education	1.000	.660	.752	.660	.752
	Gender	.660	1.000	.061	.	.761
	Education Qualification	.752	.761	1.000	.761	1.000
	Score: Gender	.660	.	.761	1.000	.761
	Score: Education Qualification	.752	.761	1.000	.761	1.000
	<b>Sig. (1-tailed)</b>	Age Education	.	.790	.240	.790
Gender		.790	.	.389	.000	.389
Education Qualification		.240	.389	.	.389	.000
Gender		.790	.000	.389	.	.389
Education Qualification		.240	.389	.000	.389	.
<b>N</b>	Age Education	224	224	224	224	224
	Gender	224	224	224	224	224
	Education Qualification	224	224	224	224	224
	Gender	224	224	224	224	224
	Education Qualification	224	224	224	224	224

The tests for the moderating value between age and educational qualification on producing women entrepreneurs show a positive effect. The (correlation coefficient of age shows an  $r = .660$ ) and the (correlation coefficient of educational qualification shows an  $r = .752$ ) indicating both a moderate and strong level of significant relationship; between age and educational qualification in producing women entrepreneurs in Pakistan.

### Results of Data Analysis

#### Reliability

The reliability of a set was found by determining how strongly each item in the collection is linked to the others. In the current study, the reliability exceeded 0.70, suggesting that the dependability of all constructions is substantially above the suggested value. Consequently, high dependability was achieved.

**Table 2***Reliability Test of the Various Constructs*

S/N	Elements	Items	Cronbach Alpha
1	BBSHRRDB Training Program	5	0.856
2	NAVTTTC Training program	5	0.972
3	Social Factors	5	0.758
4	Psychological Factors	5	0.756
			0.862

Source: SPSS Output, 2022

**Discriminant Validity**

A calculation was made to determine the average extracted variance for each confirmatory factor analysis (CFA). According to the findings, the discriminant validity was proven for every concept, and each one had a CFA and AVE that was higher than the minimum threshold of .50. The information can be found in the table that follows.

**Table 3***Validity and Factor Analysis of the Constructs*

S/N	Construct	Confirmatory Factor Analysis	Validity (AVE)
1	BBSHRRDB Training Program	0.743	0.750
2	NAVTTTC Training program	.0865	1.000
3	Social Factors	0.702	0.748
4	Psychological Factors	0.682	0.765

Source: SPSS Output, 2022

Table 3 demonstrates that all of the constructs were able to pass the minimum threshold that was stipulated for discriminant validity in the work of Larcker (1981) suggested a minimal threshold of 0.5. This was the case for all of the constructs.

**Convergent Validity**

The researcher used the data that were gotten during the pilot study to perform the measures of validation on the questionnaire using exploratory factor analysis. These measures of validation were meant to ensure that the questionnaire

was accurate. To guarantee that the research instrument possessed convergent validity, this step was taken (EFA). The research made use of both the Kaiser-Meyer-Olkin Measure of Sampling Adequacy as well as Bartlett's test of sphericity. While the Kaiser-Meyer-Olkin (KMO) measures the proportion of variance in the variable that may be caused by some underlying factors, Bartlett's test of sphericity tests the correlation of the hypotheses and indicates whether the variables are related and suitable for structure detection. In contrast, the KMO measures the proportion of variance in the variable that may be caused by some underlying factors. In contrast, the KMO determines the proportion of the variable's variance that may be attributed to some underlying causes by measuring this proportion. According to Kaiser (1974) the researcher is willing to accept KMO values so long as they are more than 0.5. In addition, if the value of the significance level is low (less than 0.05), this indicates that it would be helpful to apply a factor analysis to the data. The findings are shown in Table 3, which can be found here.

**Table 4**

*The Findings from the Factor Analysis Test*

	<b>The Item Number</b>	<b>KMO</b>	<b>Bartlett's Test</b>	<b>Sig.</b>
BBSHRRDB Training Program	5	0.865	44.542	0.021
NAVTTTC Training program	5	0.765	64.3305	0.001
Social Factors	5	0.852	42.217	0.002
Psychological Factors	5	0.827	45.268	0.011

Source: Researcher's Computation (2022)

The findings of the factor analysis, which can be seen in the table that is situated above, indicate that the KNO values for all three variables are more than 0.5, which is the recommended cut-off point. These findings can be viewed in the table that is located above (Kaiser, 1974). The findings of Bartlett's Test of Sphericity indicated, with a level of significance of 0.000, that each of the factors had a statistically significant impact on the overall picture. As a consequence of this, it can be concluded that the variables that are contained within the instruments are accurate. This demonstrates that the instruments are appropriate for measuring the structures that are being surveyed because they are suited for measuring them.

## Hypotheses Testing

### Hypothesis One

$H_0$ : There is no significant effect of psychological factors on the success of women entrepreneurs in Pakistan

$H_{01}$ : There is a significant effect of psychological factors on the success of women entrepreneurs in Pakistan.

**Table 5**

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate	Durbin-Watson
1	.464a	.215	.319	74.513	1.934

a. Predictors: (Constant), Psychological factors

b. Dependent Variable: Success of women entrepreneurs

**Table 6**

#### ANOVA<sup>a</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	434000646.390	1	434000646.390	5.678	.041 <sup>b</sup>
	Residual	687883847.226	223	76431538.581		
	Total	1121884493.616	224			

**Table 7**

#### Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.892	.318		2.805	.011		
	TAA	-.003	.103	-.007	-.031	.976	.947	1.056
	RTT	.194	.143	.301	1.353	.191	.906	1.104
	TT	.029	.101	.064	.285	.000	.720	1.144
	ILC_M1	.021	.037	.024	1.456	.779	.874	1.187
	ILC_M2	.027	.025	.081	1.456	.125	.972	1.077

Regression analysis was used to analyse the impact of psychological factors on the success of the entrepreneurial performance of women entrepreneurs. As



demonstrated by the Durbin-Watson value of 1.934, there is no autocorrelation of the first order in our simple linear regression data since this value falls between the 1.5 and 2.5 crucial thresholds. A large proportion of variance in the performance of entrepreneurs is predicted by psychological characteristics ( $f = 5.678$ ,  $p < .05$ ). The results indicate that psychological factors explain 21.5% of the variance in the production of female entrepreneurs. Given that the significant F-statistics show ( $f = 5.678$ ,  $p < .05$ ) and the p-value is less than 0.05, the model is fit. Thus, the alternative hypothesis that psychological factors have a substantial impact on the success of women entrepreneurs in Pakistan is accepted.

### Hypothesis Two

$H_0$ : There is no significant effect of social factors on the success of women entrepreneurs in Pakistan.

$H_{01}$ : There is a significant effect of social factors on the success of women entrepreneurs in Pakistan.

**Table 8**

#### *Model Summary*

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate	Durbin-Watson
1	.285a	.081	.067	.483	0.753

a. Predictors: (Constant), Social factors

b. Dependent Variable: Women entrepreneurs

**Table 9**

#### *ANOVA<sup>a</sup>*

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.322	1	1.322	5.666	.020 <sup>b</sup>
	Residual	14.935	223	.233		
	Total	16.258	224			

**Table 10**  
*Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.945	.367		8.030	.000		
	FNS	-.066	.166	-.082	-.397	.696	.868	1.151
	IFN	.309	.130	.525	2.372	.028	.764	1.309
	SSS	.124	.115	.224	1.078	.295	.869	1.151
	L1_F1	.141	.135	-.236	-1.044	.309	.733	1.365

To determine the influence of social determinants on female entrepreneurship, regression analysis was used. The Durbin-Watson d value of 0.753 shows that our linear regression data do not have any first-order linear autocorrelation. Located between the 1.5 and 2.5 critical thresholds, this number is ideal. The results of linear regression analysis indicate that social factors explain a large amount of variance in the production of female entrepreneurs ( $f = 5.666$ ,  $p < .05$ ). Social factors account for 28.5% of the variance in the output of female entrepreneurs, as demonstrated by the findings. Given that the significant F-statistics show ( $5.666$ ,  $p < 0.05$ ) and the is value are less than 0.05, the model is fit. Thus, the alternative hypothesis is adopted, which demonstrates that social variables have a substantial effect on the success of women entrepreneurs in Pakistan.

### Hypothesis Three

$H_0$ : The BBSHRRDB and NAVTTC programs have had no social and psychological discernible impact on the performance of Pakistani women businesses.

$H_{01}$ : The BBSHRRDB and NAVTTC programs have had a social and psychological discernible impact on the performance of Pakistani women businesses.

**Table 11**  
*Model Summary*

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate	Durbin-Watson
1	.861 <sup>a</sup>	.741	.823	27.345	.801

a. Predictors: (Constant), BBSHRRDB and NAVTTC

b. Dependent Variable: Performance of Pakistani women businesses

**Table 12***ANOVA<sup>a</sup>*

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1005.382	1	1005.382	41.345	.026 <sup>b</sup>
	Residual	6729.700	223	747.744		
	Total	7735.082	224			

**Table 13***Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.173	.419		2.796	.011		
	BBSHRRDB	.181	.149	.261	1.209	.241	.932	1.073
	NAV TTC	.166	.178	.222	.931	.363	.764	1.308
	BBSHRRDB_	.031	.176	.041	.174	.864	.765	1.307
	NAV TTC							

Regression analysis was used to assess the influence of the BBSHRRDB and NAVTTC training programs on the entrepreneurial performance of women. As demonstrated by the Durbin-Watson value of 0.801, there is no first-order linear autocorrelation in our linear regression data. This value falls between the 1.5 and 2.5 crucial thresholds. The results of linear regression analysis indicate that BBSHRRDB and NAVTTC training programs predict a large amount of variance in the performance of women entrepreneurs ( $f = 41.345$ ,  $p < .05$ ). The results indicate that the BBSHRRDB and NAVTTC training program explains 74.1 percent of the change in performance of female entrepreneurs. Given that the significant F-statistics show ( $41.345$ ,  $p < 0.05$ ) and the p-value is less than 0.05, the model is fit. Thus, the alternative hypothesis is adopted, which indicates that the BBSHRRDB and NAVTTC programs have a substantial effect on the performance of women entrepreneurs in Pakistan.

## Discussion

The purpose of this study was to investigate the impact of the skill development program for producing women entrepreneurs in Pakistan concerning psychological, social, and BBSHRRDB and NAVTTC training programs. The following conclusions were drawn from the investigation of the hypotheses:

### **Discussion of Psychological Factors**

According to the findings of the research, psychological factors have a significant effect on the success of women entrepreneurs in Pakistan. Therefore, the findings support the findings of (Digan et al., 2019; Isiwu & Onwuka, 2017; Parasuraman et al., 1996; Carsrud & Johnson, 1989) who hold that the psychological characteristics of business owners are critical to the performance and success of their businesses. The relationship between neuroticism and self-leadership is favourable. Individuals with high neuroticism levels are often more likely to develop illogical thought habits, which lessens the effects on their neural systems. Self-leadership is also strongly correlated with women's propensity to start their own business. Self-leadership plays a major mediating role between women's entrepreneurial desire and personality attributes.

### **Discussion on Social Factors**

In addition, concerning the effects of social factors on the achievement of success by female entrepreneurs in Pakistan, the findings of the research indicate that the achievement of success and performance by female entrepreneurs can be forecasted based on certain social characteristics. These characteristics include formal/business networks, informal networks, social support, and social acceptance. This is in line with the studies of previous scholars such as (Isiwu & Onwuka, 2017; Parasuraman et al., 1996). Internal elements such as self-assurance, risk-taking, and the hunger for success, and outside variables, such as economic and sociocultural variables, have impact both favourable and significant on Pakistani women entrepreneurs' success. According to the study's findings, women are more likely than men to strive for success in entrepreneurship and the conviction that such opportunities exist in cultures where society acknowledges that they are qualified, capable, and inclined to run their own businesses. Additionally, females are just as likely as men to see entrepreneurship as a stimulating and satisfying way of life. However, their success is hampered due to lack of support for starting a business, dearth of personal resources, and minimal interpersonal connections with other female entrepreneurs.

### **Discussion on BBSHRRDB and NAVTTC program**

The findings of this hypothesis indicate that there is a considerable impact of formal networks on the entrepreneurial success of registered women

entrepreneurs such as those taught in the BBSHRADB and NAVTTC programs. This is indicated by the fact that this hypothesis was tested. As a result, the findings are in line with the work of previous researchers who asserted the significance of formal networks in the expansion of an enterprise (Tinkler et al., 2015; Handy et al., 2002; Hasan & Almubarak, 2016; Jyoti et al., 2011; Nasir et al., 2019; Khan et al., 2021). Therefore, prominent training programs in Pakistan like BBSHRADB and NAVTTC have played a role in helping women by providing access to training networks which is very important and should not be underestimated. Finally, the result of the study also confirms that BBSHRADB and NAVTTC programs have a significant impact on the performance of women entrepreneurship in Pakistan. The results of this study support the work of scholars who believe that training programs have a key role in promoting women entrepreneurs via support from formal networks, particularly colleagues, banks and chambers of commerce (Bhatti et al., 2021; Nasir et al., 2019; Premalatha, 2010; Roomi & Parrott, 2008).

### **Conclusion and Recommendations**

The study has shown that training programs initiated by the Pakistan government such as BBSHRADB and NAVTTC have significantly ignited the interest of young women in getting involved in entrepreneurship activities. However, notwithstanding the training and benefits of these programs, a majority of women business owners in Pakistan may be uninformed of the services of formal networks such as BBSHRADB and NAVTTC and this creates a gap. Regarding informal networks, women company owners are capitalising on informal mentoring and contacts to take advantage of business prospects. This study also concludes that there exists a psychological factor that has a significant effect on the performance of women entrepreneurs in Pakistan.

There is a considerable relationship between psychological characteristics and the performance of entrepreneurs. The investigation concluded that female business owners in Pakistan put in a lot of effort because they seek personal fulfilment, self-accomplishment, and independence. The study also concluded that social factors such as formal/business networks, informal networks, and social acceptance have a significant impact on the success of women entrepreneurs in Pakistan. With more social acceptance and recognition, women in Pakistan have the ability to perform as well as or even better than their male counterparts.

## Recommendations

In light of the findings of the study, the following recommendations were made:

1. Since not all business owners (men or women) have the same temperament, it is recommended that psychological factors, such as the ability to tolerate ambiguity and the willingness to take risks, should be considered when formulating policies regarding the entrepreneurship of women in Pakistan.
2. Government officials and policymakers should concentrate on personality-related issues and develop plans to assist women in handling stressful circumstances. They should facilitate workshops and lectures for girls pertaining to development of individual identities from a business standpoint.
3. Female students in educational institutions should take courses on personality disorders and self-leadership from the standpoint of commercial goals so that female entrepreneurship is encouraged.
4. Government and society should foster an environment where women can make decisions and think for themselves with confidence. Self-leadership in females contributes to better decision making and controls their behaviour in response to environmental changes.
5. In addition, the study suggests that programs should be established to recognize women business owners who have excelled in their chosen industries. Previous research has shown that the emotional or instrumental support of one's family as well as social acceptance and recognition play a significant role in the success of women who start their businesses.
6. Finally, the research suggests that training programs for entrepreneurs should take into account the different entrepreneurial issues faced by males and females. This necessitates conducting research on and making evaluations of women's issues, followed by the incorporation of those issues and women's concerns into the planning, execution, and assessment of training programs.

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