



## Assessing the Effects of Vocational Education Training (VET) on Depression, Stress, Anxiety on Rural Women: A Study of Mureed Khan Umrani Tharparkar

Misbah Rehman<sup>1</sup>, Rabia Hanif<sup>2</sup>, Maria Rafique<sup>3</sup>, Ayesha Malik<sup>4</sup>

<sup>1</sup> Riphah International University Rawalpindi, Pakistan. Email: [misbah.rehman@riphah.edu.pk](mailto:misbah.rehman@riphah.edu.pk)

<sup>2</sup> Riphah International University, Gulberg Greens Campus, Islamabad, Pakistan. Email: [drabia.Hanif@riphah.edu.pk](mailto:drabia.Hanif@riphah.edu.pk)

<sup>3</sup> Riphah International University Rawalpindi, Pakistan. Email: [maria.rafiq@riphah.edu.pk](mailto:maria.rafiq@riphah.edu.pk)

<sup>4</sup> Riphah International University Rawalpindi, Pakistan. Email: [ayesha.malik@riphah.edu.pk](mailto:ayesha.malik@riphah.edu.pk)

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### ABSTRACT

This research reflects the special role of VET on the different levels of Anxiety Depression and Stress. The population selected for the study was women living in the village of Mureed Khan. By using the purposive sampling technique 120 women were selected from the population. The sample was divided into two groups i.e., targeted, and non-targeted groups. Women with age 14 to 25 years old were selected to become part of the study. SPSS-22 software was used for testing of hypothesis. Pre-test and post-test differences in study variables show that VET is an effective intervention and caused significant changes in the participants.

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Corresponding Author's Email: [misbah.rehman@riphah.edu.pk](mailto:misbah.rehman@riphah.edu.pk)

## 1. Introduction

VET can be defined in terms of the connection between knowledge and development that a person needs to acquire and do a particular job (Hornby & Cowie, 1977). Vocational education training can be carried out to help society move towards not only sustainability and development but also productivity (Gu, Gomes, & Brizuela, 2011). Moreover, Vocational education training (VET) helps improve specific jobs, and occupations and is directly connected to the national efficiency and effectiveness (Anthony & Blanch, 1987). In addition, Okoro (1999) stated that vocational education is also an important experience for individuals to learn numerous new occupations, jobs, and skills at a larger level. All these experiences are under the control of organized institutional methods which are used to prepare individuals for the betterment of society.

VET is not just practice-based education, but it also makes students capable enough to handle job requirements and skills after their graduation. Targeted and structured vocational programs can help individuals with mental illnesses to learn job-relevant skills so that they can get employment or a chance to take admitted to the vocational rehabilitation system. Vocational programs can play a vital role in rehabilitation (Blankertz & Robinson, 1996). Similarly, Oranu (2003) further explained that vocational education is a technique/ method which teaches skills and training which ultimately enhance the information and knowledge of males and females for productive work. In addition, VET significantly reduces depression, anxiety, mental well-being, tension, and stress-related issues among the general public, including youth, males, and females (Jamil, Farooq, Sajid, & Shehzadi, 2021; Kashif, Shehzadi, & Arshad, 2020; Wuttke, Seifried, & Niegemann, 2020).

Among the different mental health conditions, "Depression" is considered a severe mental weakness and also harms the feeling and thinking of the individuals (APA, 2013; Kong, 2019). Insufficient resources to fulfill basic needs lead to poverty which can be a major cause of depression. Constant strains lead to the severity of the mental disorder (Gilbert, 2016).

VET provides numerous benefits to learners including upgraded knowledge, a better understanding of the work industry, strengthened decision-making ability related to employment, and develops self-awareness, and better social skills (Misko, 1999). Past studies Ediabonyia, Agbaje, and Suberu (2012); Igbinedion and Ojeaga (2012) explained that in rural areas females are less interested in VET, and their depression levels also high because of low income and poor background. Further, it is suggested that VET is one of the major factor which can reduce depression levels among rural women.

In addition, Erinosh (1997) also suggested that VET is one of the major factors which bring job opportunities and it is also helpful in decreasing the level of depression and other mental health-related issues. Comparatively, among women VET has proved to be more effective than traditional education to reduce the depression level (Ndahi, 2002).

Studies have also outlined that stress is a central factor that has been affecting the participation and interest in VET among females living in far-flung areas (Igbinedion & Ojeaga, 2012). Ayonmike (2010) also supported that in rural areas females have more stress which contributes to their general lack of interest in VET. There is a contrasting result for stress being the major cause, literature also asserted that stress is not a major factor among females for participation in VET but there are some other cultural, social, and financial factors that cause hurdles for females to take interest in VET (Aina, 2006; Amaewhule, 2000; Oranu, 2003; Yakubu, 2006).

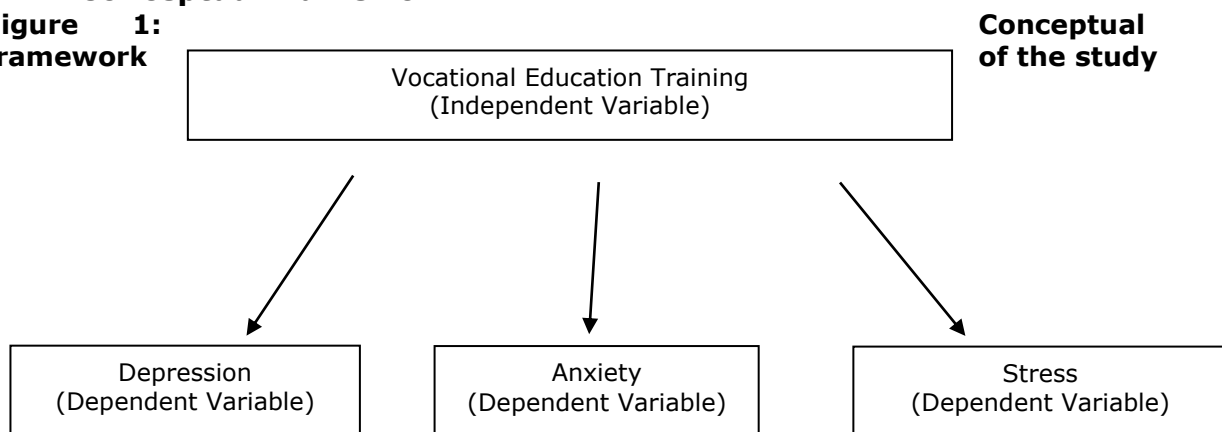
According to the report published by the Government of Pakistan after the rainfall flood people residing in Tharparkar remained deprived of a basic physiological needs for long periods (Government of Pakistan, 2011). When basic physiological needs are not fulfilled this deprivation might lead to different mental health issues. So, there was a strong need to explore and study the resources which can offer help not only in fulfillment of a physiological needs but also can help in coping with mental health issues as well.

The present study can provide supervision and direction to teachers, researchers, psychologists, and governmental agencies to take practical steps in rural areas where formal schooling and employment are uncommon and out of reach for the common community. Current study will not only aid in creating and spreading awareness regarding new techniques but will also empower them to improve their mental well-being instead of relying on donor agencies, NGOs and the government. The basic objective of the study was to explore the role of VET on different levels of depression, anxiety, and stress. The hypothesis of the study are;

- VET will cause a difference in different levels of depression after its implementation.
- VET will cause a difference in different levels of anxiety after its implementation.
- VET will cause a difference in different levels of stress after its implementation.

## 2. Conceptual framework

**Figure 1:**  
**framework**



### **3. Methodology of Study**

In this present study, a quasi-experimental design is used. VET is used as an intervention. Pre-testing and post-testing were done. Sample (n=120) was derived from the total population (N=215) of women belonging to village Mureed Khan located in desert Tharparkar, Pakistan. A non-random purposive sampling was used, and the age range for a selected sample was between 15-25 years. The population selected from this region was extremely underprivileged.

#### **3.1 Instruments of Study**

The DASS, a well-known 42-item questionnaire, was established by Lovibond (1983); Lovibond and Lovibond (1995). DASS is comprised of 3 self-report Likert-type scales to measure the stress, anxiety, and adverse emotional conditions of depression. There are 14 items with identical content in each of these scales. The Cronbach alpha reliability of the depression scale is 0.91, Anxiety is 0.84 and Stress is 0.90 (Lovibond, 1983; Lovibond & Lovibond, 1995).

The English version of the DASS was translated into the Sindhi language. Scale was translated by following Brislin (2001) translation method. Following Brislin criteria, at the start, scale forward translation was done by a total of 7 experts (2 masters of English, 2 experts in Sindhi, and 3 Ph.D. in Psychology). In 2<sup>nd</sup> step which was the committee approach, Bilingual experts translated scales into the Sindhi language. This translation was again examined by a Subject Matter Experts committee ( $n = 6$ ). Then back translation was done to ensure the accuracy of translated scales and five other experts ( $n = 5$ ) were requested to translate these scales into English. In the committee approach, a group of experts consisting of five bilingual experts ( $n = 5$ ) was asked to critically examine back-translated items and select the final items.

#### **3.2 Procedure of Study**

At the start, study participants have given their written consent. Pre-testing was planned for both groups i.e., the targeted group and the non-targeted group. Before training, the response of the applicants was noted on the research questionnaires and demographic sheet. When the pre-testing was done, participants were given professional stitching and cutting training as an intervention for 4 hours a day and 6 days a week for almost 6-8 weeks. At the same time and for a similar duration control group was given an audio recording of current affairs related News. Later, when the interventional period (6 to 8 weeks) ended, post-testing was administered on targeted and non-targeted participants and the responses were documented. At the end of the study debriefing

#### **3.3 Training design of VET:**

The major points and aspects of VET were prearranged and according to strategy each week was planned. In the 1<sup>st</sup> week of Rapport Building, Prior-testing and simple cutting on the newspaper were practiced. In the 2<sup>nd</sup> week basic cutting, skills were taught to trainees. In the 3<sup>rd</sup> week, trainees were given chance to practice cutting on rough clothes. In the 4<sup>th</sup>-week basic stitching techniques were taught to trainees. In 5<sup>th</sup> week of training, trainee were given opportunity to cut complete dress in fine and new clothes. In the 6<sup>th</sup> week, trainees have stitched the children-sized clothes. In the 7<sup>th</sup> week, trainees stitched elder ladies' clothes. In the 8<sup>th</sup> week assessment of training was done. In 9<sup>th</sup> week, a farewell get-together was organized.

### **4. Results of Study**

The following results tables indicate that VET has a significant impact on Depression, Stress, and Anxiety.

Table 1 shows the descriptive statistics of demographic variables. In the current study total number of subjects were 120, 50% (60) in the Targeted Group and 60 (50%) were in the Non-Targeted Group. 60 (50%) of our participants were Married and 60 (50%) were Unmarried. 59 (49.2%) of our participants fall into the Age category of 14 to 17, 41 (34.2%) fall into the Age category of 18 to 21 whereas 20 (16.7%) fall into the Age category of 22 to 25. In the Education category, 96 (80%) of our participants were Uneducated, and 23 (19.2%) were only Primary pass.

**Table 1: Frequencies (f) and Percentages (%) Values of Demographic Variables in Terms of Marital Status, Age, Education, and Attendance (n=120)**

Variables	Categories	%	f
Study Group	Targeted	50	60
	Non-Targeted	50	60
Age	14-17	49.2	59
	18-21	34.2	41
	22-25	16.7	20
Marital Status	Married	50	60
	Unmarried	50	60
Education	Uneducated	80	96
	Primary	19.2	23

Note: f= Frequency, %= Percentage

**Table 2: Cronbach's Alpha Reliability Depression, Anxiety and Stress (Sub-scales of DASS) (N = 120).**

Scale	No. of items	Cronbach's $\alpha$
DEPRESSION	14	.83
ANXIETY	14	.70
STRESS	14	.70

Note: Anxiety = Anxiety (Sub-scale of DASS),  $\alpha$  = Alpha\*\* $p < 0.01$ , \* $p < 0.05$

Table 2 shows the Internal Consistency of Depression, Anxiety, and stress (Sub-scales of DASS). The analysis shows that Depression, Anxiety, and Stress (Sub-scale of DASS) have a high Internal consistency of the individual items (Cronbach's  $\alpha = .83, .70$  &  $.70$ ).

**Table 3: The Mean Differences, SD, p, t measurements in the Level of Depression concerning Prior-test (n=60) and Post-test (n=60) among Targeted Group**

Variable	Pre-test (n=60)		Post-test (n=60)		t	P	95%CI		Cohen's d
	M	SD	M	SD			UL	LL	
Depression	31.6	3.1	7.1	3.4	35.9	.00	23.1	25.8	7.5
Stress	32.0	4.9	8.5	3.3	27.7	.00	21.8	25.2	5.6
Anxiety	29.1	3.5	8.4	4.0	25.5	.00	19.0	22.2	5.5

Note: CI=Confidence Interval, LL=Lower Limit, UL=Upper Limit, Anxiety= Anxiety Subscale of DASS, p= Level of Significance; \*\* $p < 0.01$ , \* $p < 0.05$ , t= Differences in Mean.

Table 3 shows that there is a significant effect of training on Depression, stress, and anxiety. As mean depression score before training is 31.6, and the Standard deviation is 3.1 but after skill development Mean and Standard deviation of the Depression score decrease to 7.1 and 3.4 respectively. These differences are highly significant because the p-value (.00) is less than 0.01. The mean stress score before training is 32.0 and the Standard deviation is 4.9 but after skill development Mean and Standard deviation of stress scores decrease to 8.5 and 3.3 respectively. These differences are highly significant because the p-value (.00) is less than 0.01. The mean anxiety score before training is 29.1 and the Standard deviation is 3.5 but after skill development Mean and Standard deviation of the anxiety score decrease to 8.4 and 4.0 respectively. All these differences are highly significant because the p-value (.00) is less than 0.01.

**Table 4: The Mean Differences, SD, p, t measurements in the Level of Depression concerning Prior-test (n=60) and Post-test (n=60) among non-Targeted Group**

Variable	Pre-test (n=60)		Post-test (n=60)		t	P	95%CI		Cohen's d
	M	SD	M	SD			UL	LL	
Depression	32.7	4.1	1.6	.09	-.19	2.4	0.3	32.7	4.1
Stress	31.3	5.1	-.77	.44	-2.5	1.1	0.1	31.3	5.1
Anxiety	30.5	5.0	1.7	.08	-.19	2.9	0.3	30.5	5.0

Note: CI=Confidence Interval, LL=Lower Limit, UL=Upper Limit, Anxiety= Anxiety Subscale of DASS, p= Level of Significance; \*\* $p < 0.01$ , \* $p < 0.05$ , t= Differences in Mean.

Table 4 shows that there is a non-significant effect of training on Depression, stress, and anxiety. As the mean depression score before training is 32.7, and the Standard deviation is 4.1 and after skill development, the Mean and Standard deviation of the Depression score are 7.1 and 3.4 respectively. These differences are not statistically because the p-value (2.4) is greater than 0.01. The mean stress score before training is 31.3 and the Standard deviation is 5.1 after skill development Mean and Standard deviation of stress scores are 31.3 and 5.1 respectively. These differences are not statistically because the p-value (1.1) is greater than 0.01. The mean anxiety score before training is 30.5 and the Standard deviation is 5.0 and after skill development Mean and Standard deviation of anxiety scores are 1.7 and 0.08 respectively. All these differences are statistically not significant because the p-value (0.3) is greater than 0.01.

## 5. Discussion

The present study aimed to explore the effects of skills development (VET) as healthy activities for people living in deprived areas. The 1<sup>st</sup> hypothesis of the current study was that "VET will cause the difference in different levels of depression after its implementation". The results of the current study supported that skill development can decrease the rate of depression. Humberto (2011) recommends that vocational education training contributes to activeness in a learning environment for young ones to establish work-ready skills and aids in mental well-being services.

The 2<sup>nd</sup> hypothesis of the present study was that "VET" will cause the difference in different levels of anxiety after its implementation". The study results showed there are noticeable differences in the stress level of our participants after going through VET.

The 3<sup>rd</sup> hypothesis of this research was "there would be a substantial change in the stress level due to execution of vocational education training." The study results showed there are noticeable differences in the stress level of our participants after going through VET. Tharparkar is a deprived area and people living there are facing day-to-day stressors. These long-term stressors are resulting in a major cause of stress levels. Recovery is endorsed by the confidence level established from employment (Provencher, Gregg, Mead, & Mueser, 2002). Achievement in professional and occupational life facilitates recovery of mental health issues (Lloyd & Waghorn, 2007). According to the ideas of Orman and O Dea (2018) level of stress can also be decreased by changing routine. The positive change as training in the present study decreased the level of stress among participants. These results are also supported by Significant statistical results that show that study hypotheses are accepted.

## 6. Conclusion of Study

This research reflects the special role of VET on the different levels of Anxiety Depression and Stress. The population selected for the study was women living in the village of Mureed Khan. By using the purposive sampling technique 120 women were selected from the population. The sample was divided into two groups i.e., targeted, and non-targeted groups. Women with age 14 to 25 years old were selected to become part of the study. SPSS-22 software was used for testing of hypothesis. Pre-test and post-test differences in study variables show that VET is an effective intervention and caused significant changes in the participants. VET has caused a significant and positive effect on the overall mental health of participants. Creating self-employment opportunities will help people to cope with their day-to-day problems in a more focused and oriented way.

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