



Role of Vocational Training in Socio-Economic and Political Development of Tribal Youth in Pakistan

Sami Ullah and Zilakat Khan Malik

Department of Economics, University of Peshawar, Peshawar, Khyber Pakhtunkhwa, Pakistan

Key words: FATA-DA, political, tribal, analysis, parameters, environment

Abstract: This study was conducted to evaluate the role of vocational training imparted by Federally Administered Tribal Area's Development Authority (FATA-DA) in the socio-economic and political development of the tribal community in Pakistan. The survey was initiated in the year 2019. Total 400 male youth in the age group (16-35 years) were selected for data collection from all over FATA. The disproportionate simple random sampling procedure was adopted. Cross Tabulation Analysis was used for the analysis of data by using the Statistical Package for Social Sciences (SPSS). The results indicate that vocational training imparted by FATA-DA contributed very less to socio-economic and political change and development in FATA. Among 13 parameters of social change, the result on only 02 parameters was found significant. It is likely, that weaknesses on certain quality parameters, i.e., vocational curriculum, training duration, learning environment, trainer interest and education, career counseling, post-training financial support and internship facility might have hindered the positive influence of vocational training of FATA-DA on socio-economic and political development of FATA's youth. This study concluded that vocational training does have the contribution to socio-economic and political change but in the case of FATA-DA training, the impact was not desirable. It is recommended that quality parameters must be taken into consideration during the initiation of a vocational training program for social change and youth development. This study adds valuable stuff to the literature in the sense that this is the first ever impact study of FATA-DA vocational trainings.

Corresponding Author:

Sami Ullah

Department of Economics, University of Peshawar, Peshawar, Khyber Pakhtunkhwa, Pakistan

Page No.: 1-13

Volume: 18, Issue 1, 2021

ISSN: 1683-8831

Pakistan Journal of Social Sciences

Copy Right: Medwell Publications

INTRODUCTION

Investment in human capital is highly focused phenomena in the modern economy. Economists and

human capital theorists believe that vocational training is an essential mean for socio-economic development of individual and nations. Human capital development means to increase the earning potential of the human

being. It focuses on obtaining knowledge, skills, competencies and personality traits through education and training^[1, 2]. Vocational training is considered an indispensable way for the development of human capital. Vocational training means the attainment of knowledge and practical skills related to various occupations in different sectors of economic life. Vocational training increases the chances of employment and earnings which breed considerable economic and social benefits for human beings. It has an indirect effect of the decline in crime rate, decrease in mental illness, improvement in health condition, better schooling of children and social cohesion. In this regard, it has observed that skilling youth with vocational training has a significant effect on the socialization of youth community (Managing Vocational Training Systems: A Hand book for Senior Administrators in 2001). Excessive academic literature present that vocational training has the potential of bringing positive changes in individual well being^[3].

From a social view point, vocational training is a tool for fighting against individual poverty by promoting equal opportunities in terms of labour, social context and citizenship. A research conducted by European Centre for the Development of Vocational Training (CEDEFOP) has shown that technical and vocational training can foster confidence and self-esteem in individual, contributing to their engagement with families and society. Technical and vocational skills development can play a significant role in the transformation of rural communities by making people empowered to make decisions and take action to improve their social, cultural, economic and political lives in a way that result in a broad positive impact on society as a whole^[4]. It enhances a wide range of so-called 'life skills' such as communication, motivation, teamwork, responsibility, violence prevention and training in reproductive health which shows that technical and vocational training is increasingly accepted as a way of enhancing youth capability sets^[5]. In most countries of the world, technical and vocational training schemes have been started to make under privileged citizens believe that they have a bright future. Prominently, these schemes have provided a means of reducing the psychological pressure of socio-political and economic trauma that is bedeviling most of the underdeveloped countries. It has been observed that if the youth of a country deprived of vocational and technical skills, there are the tendencies of becoming caught up in the web of depression, hopelessness, juvenile delinquency, social aggression and economic dependency. These observations, as mentioned above, have been the greatest cause of prostitution, thuggery and hooliganism for most of the youth community who remained deprived of such vocational training programs^[6].

Federally Administered Tribal Areas (FATA) is the most lagging and underdeveloped community in Pakistan. It is spread over an area of 27,220 km² with a total population of 5001676^[7]. About 97.1% of people in FATA are living in rural areas. Two-third of the population (73%) is living under the poverty line with Multidimensional Poverty Index (MPI) 0.337 and poverty incidence 73.7%. FATA consistently ranks lowest in the country in terms of human development indicators like literacy, health care access, potable water access, employment rates, average income etc. The political system remained weak in FATA for ages. After the independence of sub-continent, the Government of Pakistan also failed to devise a better policy for tribal Pashtuns and kept them deprived of representation and political right still 1997. Due to lack of education in FATA, most of its community is engaged in agriculture, live stock rearing, non-technical labour and local businesses. The overall literacy rate is 33.3% which is far less than the national average (58%). Unemployment in FATA is higher than the national average and other provinces of the country. The highest rate of unemployment (10.8%) prevails in youth fall in the age bracket 15-24 years. This age group remained them a in resource pool for militant recruitment in the near past. Majority of women (74.4%) are married by the age of 18^[8].

FATA-Development Authority was established in the year 2004 as a specialized body for prompt development in FATA. FATA-DA started imparting technical education and vocational training to both male and female youth to make them developed. Since, the year 2006 till 2018, FATA-DA imparted vocational training to more than 50 thousands youth in 70 different vocational trades. This study was, therefore, conducted as an evaluation study to investigate the socio-economic and political impacts of vocational training of FATA-DA on FATA's youth. This study is a first-ever evaluation study on the impacts of the said program. Results confirmed the limited impacts of the vocational training program of FATA-DA on socialization and political development of FATA's youth. However, the impacts were significant on two parameters, i.e., "poverty reduction and life-long learning". In a study from Portugal, it was reported that the impacts of vocational training on the social development of communities are not certain as community transformations generally take longer time.

This study adds valuable stuff to the existing literature in the sense that the vocational training program of FATA-DA has not been evaluated yet. Neither its economic contribution nor social contribution to the target group has been studied so far. Furthermore, limited

literature exists on the contribution of vocational training to the social advancement of the target community. Social development indicators taken in this study are less studied in the past. A cross-tabulation analysis was conducted to compare the out come for treatment and control groups that may not be used in previous studies on the same topic. This study also concluded that if quality issues exist in any vocational training program, the program will not deliver its objectives well like in the case of FATA-DA vocational training.

Literature review

Human capital theory: Schultz introduced the concept of human capital for the first time. He mentioned that human capital development is an important factor for the nation's growth. He further stated that human capital is entrenched in individual in the form of knowledge and skills. Human capital is closely linked with training, practical skills attainment, knowledge and abilities that facilitate the formation of personal, economic and social well being^[9].

Vocational training and attainment of vocational skills are considered essential means of human capital development. It has both direct and indirect economic and social effects on individuals and society. Technical and vocational training is considered by experts a specific instrument for human capital development that can play a significant role in promoting socio-economic progress^[10]. Vocational training result in economic gain with the impression of an increase in earnings that lead to a decline in the incidence of crimes in youth, change infertile behaviour, hinder population growth, reduce poverty and environmental pollution, etc.^[11,12]. Vocational training and skills development have both formal and informal effect on an individual's personal growth and development and income^[1].

Human capital development not only took into consideration the rate of monetary return but also consider social values and quality of life created due to investment in education and training. Vocational training develops specific human capital by creating job-specific skills that make the workers more suitable and productive^[2]. Vocational skill training increases productivity, innovation and growth and bridge poverty reduction among vulnerable communities. In a study, it was found that vocational skills development improves the quality and diversity of output and improves the lives and health of marginalized rural communities by increasing their earnings^[13].

New growth theory: According to the New Growth Theory, the economy can grow well by increasing the intellectual abilities and skills of human beings rather than increasing physical capital^[14]. New Growth Theory advocates increasing return on investment rather than

decreasing return as advocated by traditional growth theories. It claims that human capital allows the economy to grow at a constant rate as it has no diminishing marginal utility^[15]. This theory postulate that increased skills and knowledge of producing more with limited resources will surely impact the standard of living of people positively^[16].

Socio-economic impacts of vocational training: The measurement of social benefits of vocational training is much difficult than the economic benefits as social benefits tend to be more diffuse. Both social and economic benefits are strongly interconnected. For example, participation in vocational training can generate high employment which leads to a reduction in income inequality, an increase in life satisfaction and then a stable society. Less social benefits have been reported so far, owing to the fact of lesser research in this area. Furthermore, vocational and general education to a large extent substituted for each other in literature which makes it difficult to measure the unique social benefits of vocational training.

The association between human capital development and social awareness is based on a close inter-relationship that results in socio-economic and political development^[17]. Investment in vocational training and skills development is beneficial for individuals, society and a nation. There turn on investment for an individual is a better career path and earnings and is global competitiveness and economic development for nations and societies^[18]. Effective utilization of vocational skills training inculcates essential skills and capabilities in youth that would help them become self-confident. In a study on technical and vocational training, Akyeampong^[19] pointed out that these trainings are not important only for its economic contribution but also for its positive role in social, cultural and political development.

Vocational skills development reduces the economic dependency of family members on each other. In a study, it was concluded that adult learning caused improved earnings, decreased poverty, provided health benefits and brought considerable returns for one's children, etc.^[20]. The association between adult learning and community welfare contents from a social capital perspective which argues that adult learning promotes an active lifestyle that helps preserve community resources^[21]. Unemployment among youth is a major economic and social problem with consequences of skill shortages in the economy, underutilization of human capital, poverty among youth, a potential increase in drug use and criminal behaviour^[22]. In a study on data taken from the National Child Development Study (NCDS), it was revealed that adult learning (Vocational and Leisure Courses) has a significant positive effect on the socialization of adults.

The effect was observed in social and health outcomes, i.e. reduction in the use of alcohol and smoking, increase in physical exercise and other related measures of life satisfaction^[23].

In another study by Feinstein^[24], the effects of higher and vocational education were found less robust on depression and obesity. Self-esteem, gaining self-competencies, social integration, gaining a sense of hope and purpose are direct outcomes of education that result in better health conditions and well-being^[25]. Self-esteem and confidence associated with vocational courses had also been reported by Dawe. In another study, Hammond mentioned that failure to success in learning could have long-lasting negative effects on learners^[26]. National Centre for Vocational Education Research (NCVER) surveyed the indigenous Australians' community and reported that 90% of the respondents had gained self-confidence and communicated better to people as a result of undertaking vocational course (Butler, etc., forthcoming).

The demands of employment for vocational training and increased skills put pressure on the individual to delay marriage and avoid parenthood at the earlier stages^[27]. Durkheim wrote that developing "a sense of belonging to a larger society" should be the fundamental aim of formal (Institute based) and non-formal (Vocational) education regardless of the setting in which it emerges. Vocational education and training have immeasurable gains to a community as a whole. For instance, after controlling for one's income, the amount of money and time devoted to charity and civic engagements respectively is directly associated with employment and earning and indirectly with job skills and training^[28].

Goel^[29] stated that vocational skills and knowledge have a considerable effect on the social development of any nation thus plays an essential role in the economic development of a country. It was concluded in a study that more skilled workers volunteered twice as many hours as slow skilled personnel and donated 50% more in charities. This good feature of human capital development through vocational training may lead to social cohesion and integrity^[30]. More skilled and educated people contribute to the formation of a good society in many ways. They make conversant choices during voting, add positively to political ability and democratization, care more for human rights and are more trusted by others^[28].

Van de Werfhorst^[31] concluded that vocational education graduates had a lower level of political interest and engagement as compared to general education graduates. He further suggested that this type of rigid differentiation of educational institutions may form a threat to democratic equality. Vocational training raises job skills and earning potential of the individual which results in a decline in the crime rate. Crime become less

attractive for the highly skilled and employed workforce. In a study conducted in England, it was found that ultimate benefit from vocational education and skills training are growth in life long learning, increase in self-confidence, social cohesion and active citizenship of individuals. It also results in the extension of friendship and social network. The effect of skills development on individual workers and organization ends in an increase in social awareness that eventually leads to social development^[32].

Vocational education and technical skills training are the most important factors for economic growth and social inclusion in a country^[33]. The findings of a study in a Southern Punjab revealed that foreign funds play a significant role in boosting vocational training which is then a cause to all aviate individual poverty. It was also concluded that vocational training generates viable human capital for socio-economic development^[34]. In a study in Nigeria, it was supposed that the acquisition of technical and vocational skills improve the socio-economic condition of people and helps to transform men in to a self-reliant and economically stable person. It helps to reduce the incidence of militancy, restlessness, kidnapping and other social immoralities among youth. Typical short term vocational training programs have significant effects on individual performance levels and self-confidence. However, no absolute evidence is available to determine its impacts on most social behaviour, delinquency, employment and lifestyles^[35].

The existing literature has shown an indirect relationship between vocational education and socio-economic well-being through intermediary variables, i.e., income and earnings, etc. Variation in this relationship also depends on the socio-cultural context of rural/indigenous communities as well as on learning environment^[36]. More importantly, social contact, friendship, solidarity, family concepts, sense of belonging and supportive environment, etc. are factors affecting socialization of individual during the training process.

Vocational training program of FATA-DA: FATA-DA being a specialized agency for prompt development in infrastructure and human capital, started interventions in FATA in the year 2006. Human capital development is the priority sector of FATA-DA was focused, and huge amount of development budget (Approx. Rs. 2.8 billion) was allocated to vocational training. More than 52000 male and female in the age 16-35 were trained in >70 different market-oriented trades. A total of 90% of training was of six months duration each. The 10% were of either three months or twelve months duration. The program focused >70 different vocational trades listed as below:

List of trades:

- Auto Electrician
- Auto Mechanics
- Basic Electrician
- Building Painter
- Carpet Weaving
- Office Automation and Management
- Computer (Hardware)
- Cutting, carving, polishing of precious and semi-precious stones
- Domestic Electrician
- Dress making and tailoring techniques
- Electrician
- Fabric and Garments Productions
- Gemology and Carving
- Gemology and Faceting
- General Electrician
- Heavy Machinery Operator
- Industrial Electrician
- Laboratory Assistant
- Land Surveying (With Auto CAD)
- Marble and Granite mining, cutting, polishing
- Light Engineering
- Leather Goods
- Masonry
- Material Testing
- Computer Networking Technician
- Telecom Technician
- Control Room Operator
- Advanced Auto Mechanic (EFI/CNG)
- Construction Safety
- ACUDUCT Insulator
- Tile Mason
- Plaster Mason
- Block Mason
- Fall Ceiling
- Scarf Folder
- Football Stitching
- Leather Upper Cutting Stitching
- Mobile Phone Repairing
- Plumbing
- Quantity surveyor
- Refrigeration/Air-conditioning Repairing Sheet Metal Works
- Steel Fixer
- Surveyor Civil
- Turner Machinist
- TV/Radio Repairing
- Wood Technology
- X-Ray Machine Operator
- Call Centre Operator
- Stitching Machine Operator Training
- Fan Development and Parts Manufacturing
- Conventional Machinery Operator Course
- Electrical equipment and electric fan testing course

- Fan Assembly Course
- Auto CAD 2D, 3D
- CAD/CAM course
- Computerized Numerical Control (CNC)
- Mechanic-II (Engine)
- Mechanic-II (Chasis)
- Optical Fiber Cable Jointing
- Motor Winding Stitching Machine Operator Training
- Fan Development and Parts Manufacturing
- Conventional Machinery Operator Course
- Electrical equipment and electric fan testing course
- Fan Assembly Course
- Auto CAD 2D, 3D
- CAD/CAM course
- Machinery Course
- Mechanic-II (Engine)
- Mechanic-II (Chasis)
- Lasting Computerized Numerical Control
- Optical Fiber Cable Jointing (FATA-DA, 2019)

Students were recruited through open competition within agency quota and were invited through an advertisement in daily news as well as through the official website of FATA-DA. Basic eligibility criteria were candidates having FATA Domicile and fall in the age group of 16-35 years. Education requirements varied from the middle to matric in different categories. According to are port of FATA-DAS kill section, 95-96% of trainees completed their training. After 1-2 years of training completion, it was observed that 36% of trainees were engaged in any category of job, while 24% were found employed in the category of training (Relevant employment)^[37]. An unpublished study conducted by M&E Section of FATA-DA also showed 25-27% relevant employment for male youth of FATA after training completion.

MATERIALS AND METHODS

Study area: The study was conducted in an extremely backward area of the country (FATA) where most of the people (73%) living under the poverty line. It is a general perception that people of FATA are socially underdeveloped that can easily be seen from their involvement in anti-state and anti-social activities. People lack vocational skills hence restricted to subsistent farming fort heir livelihood.

Study population and sample size: Population for the treatment group was 23296 male who completed at least one course from FATA-DA from 2006 till June 2016. Population for the control group was male group age 16-35 years from FATA who didn't participate in the training program. The sample size of 200 each were taken from both population groups through disproportion are

stratified random sampling. This type of sampling was done to avoid under representation of one stratum as both groups were of uneven nature. The sample size was selected by using the following Slovin’s formula. The use of Slovin’s formula allows there searcher to sample the population with the desired degree of accuracy^[38]:

$$\text{Sample size (SS)} = \frac{N}{1 + N(a)^2}$$

Where:

N = Target population from which sample to be drawn
 a = Margin of error at 95% confidence level, i.e., 100-95% = 5%

Questioner development and survey administration:

A well-structured questioner was developed by incorporating information on personal and family parameters and questions on social development indicators. The questioner was developed by taking help from other questioners administered in similar studies conducted earlier. The survey was given to respondents at least 02 years after the training completion. The questioners were administered directly by face to face interaction together information from respondents.

Research design: Across-sectional research design was used for this study. This type of research data is collected in a single point of time. The quantitative research methodology was adopted. The respondents were asked questions on social changes brought by vocational training. Likert scale was used for data analysis in order to ensure the entire data sample is analyzed fairly. In order to compare the out come for treatment and control groups, data were analyzed through cross-tabulation in SPSS.

RESULTS AND DISCUSSION

Descriptive Statistics (Demographic Information of the Respondents): Table 1 summarizes the demographic differences of the treatment and the control group. Most of the respondents from both groups fall in the age group 16-20 years. Most of the respondents are unmarried. Maximum numbers of the respondents have education up to FA/FSc level. Fathers of most of the respondents in treatment group are illiterate while in the control group, they were having primary level education. Fathers of most of the respondents were self-employed having their own businesses. Most of the respondents in both groups were belonging to families having monthly income above Pak Rs. 20,000. It was also noted that most of the families were living inside FATA. Most of the respondents from the treatment group showed their family size of 9-12 members each while in case of the control group, it was 6-8 members each. In both the cases, maximum numbers

Table 1: Demographic information of respondents

Respondent information	Treatment group		Control group	
	Frequency	Percentage	Frequency	Percentage
Age of respondent				
16-20	93	46.5	123	61.5
21-25	78	39.0	57	28.5
26-30	25	12.5	14	7.0
31-35	4	2.0	6	3.0
Total	200	100.0	200	100.0
Marital status				
Unmarried	160	80.0	152	76.0
Married	40	20.0	48	24.0
Total	200	100.0	200	100.0
Respondents education				
Primary	4	2.0	3	1.5
Matric	42	21.0	60	30.0
FA/FSc	106	53.0	80	40.0
BA/BSc	33	16.5	42	21.0
MA/MSc	15	7.5	15	7.5
Total	200	100.0	200	100.0
Father education				
Nil	91	45.5	47	23.5
Primary	42	21.0	70	35.0
Matric	29	14.5	26	13.0
FA/FSc	20	10.0	12	6.0
BS/BSc	13	6.5	33	16.5
MA/MSc	5	2.5	12	6.0
Total	200	100.0	200	100.0
Father profession				
Unemployed	53	26.5	48	24.0
Self Employed	91	45.5	113	56.0
Government Job	51	25.5	29	14.5
Private Job	5	2.5	10	5.0
Total	200	100.0	200	100.0
Family income				
5000 and Below	4	2.0	18	9.0
6000-10000	22	11	42	21.0
11000-15000	40	20.0	53	26.5
16000-20000	39	19.5	25	12.5
Above 20000	95	47.5	62	31.0
Total	200	100.0	200	100.0
Family residence				
Outside agency	44	22.0	30	15.0
Inside Agency	156	78.0	170	85.0
Total	200	100.0	200	100.0
Family size				
5 or less	11	5.5	18	9.0
6-8	57	28.5	104	52.0
9-12	74	37.0	58	29.0
Above 12	58	29.0	20	10.0
Total	200	100.0	200	100.0
Household head				
Any other	194	97.0	194	97.0
Self	6	3.0	6	3.0
Total	200	100.0	200	100.0
Employment Status before training				
Not Employed	163	81.5	118	59.0
Employed	37	18.5	82	41.0
Total	200	100.0	200	100

Field Survey 2018

of families were reported to have household head other than respondent himself. When asked about previous job position, maximum numbers of the respondents were having no job before starting the training with FATA-DA. Analysis of Socio-economic and political impacts of Vocational Training.

Table 2: Participation in vocational training*My poverty level has reduced (Cross tabulation)

	My poverty level has reduced					Total
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Participation in vocational training						
Yes	39(19.5%)	36(18%)	55(27.5%)	47(23.5%)	23(11.5%)	200(100%)
No	28(14%)	56(28%)	79(39.5%)	33(16.5%)	04 (2%)	200(100%)
Total	67(16.75%)	92(23%)	134(33%)	80(20%)	27(6.8%)	400(100%)

Pearson Chi-square value = 26.25 (0.000); Field Survey in 2018

Table 3: Participation in vocational training*My life-long learning has increased (Cross tabulation)

	My life-long learning has increased					Total
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Participation in vocational training						
Yes	13(6.5%)	21(10.5%)	42(21%)	85(42.5%)	39(19.5%)	200(100%)
No	10 (5%)	37(18.5%)	63(31.5%)	75(37.5%)	15 (7.5%)	200(100%)
Total	23(5.8%)	58(14.5%)	105(26.2%)	160(40%)	54(13.5%)	400(100%)

Pearson Chi-square value = 20.29 (0.000); Field Survey in 2018

Poverty reduction: The result in Table 2 shows that vocational training has significantly contributed to poverty reduction in FATA. Overall, 35% of respondents from the treatment group were found either agree or strongly agree with the statement as compared to 18.5% from the control group. These findings are supported by Rothwell and Kazanas^[39] who stated that effective skills training leads to an increase in performance of craftsmen, hence their wages. On micro-level, investments in human capital formation through education and training were regarded as a means to create employment and increase earning, there by reducing individual poverty^[40].

Life-long learning: Lifelong learning is defined as“all learning activity is undertaken throughout life”. Life-long learning improves health condition, increase earning and reduce poverty^[20]. Respondents were inquired for an increase in life-long learning as a result of vocational training. The result shows a significant improvement in life-learning of respondents. The 62% of the respondents from the treatment group were found either agree or strongly agree with the statement as compared to 45% from the control group. These findings are supported by Schuler, etc. who in his study concluded that ultimate benefit from vocational education and skills training are growth in lifelong learning, increase in self-confidence, social cohesion and active citizenship of individuals. These finding also supported by Woesmann^[41] who stated that TVET could improve the non-cognitive skill so flow-skilled adults which further enhance their lifetime skill acquisition and learning (Table 3).

Voluntary communal activities and social engagements: The respondents were asked if they were actively participating in voluntary communal activities after training completion. The result shows no significant effect of participation in vocational training in that respect. About 52.5% of respondents from the treatment

group were found either strongly disagree or disagree with the statement as compared to only 10.5% from the control group. About 56.5% of respondents from the control group were found either agree or strongly agree as compared to 32.5% from the treatment group. These findings are inconsistent with the findings of Schuler, etc. Relationship of vocational training with social change also depends on the socio-cultural context of the indigenous communities as well as on learning environment^[36]. In the case of vocational training of FATA-DA, the non-significant effect may also be due to not suitable learning environment or due to socio-cultural issues (Table 4).

Avoiding risky health behaviours: Respondents were investigated for the subject effect after completion of their training. The result showed no significant effect of vocational training of FATA-DA on building a sense of avoiding the risky health behaviour. The 42% of the respondents from the treatment group were found either agree or strongly agree with the statement as compared to 87% from the control group. These findings are in line with the findings of Stanwick^[36] who concluded that higher level qualifications were closely associated with better health outcomes and healthy life behaviour while lower-level vocational qualifications were not. In another study by Feinstein^[24], the effects of higher and vocational education were found less robust on depression and obesity (Table 5).

Perception of male youth towards female education: FATA’s women had been deprived of their educational rights for ages. The male being a dominant group in FATA does not allow their female counterpart to get an education. It is evident from the existing female literacy rate in FATA which is 3% and drops out ratio which is 70.6%. Positive change in perception of male toward female education was the expected outcome of the

Table 4: Participation in vocational training*Participation in voluntary communal and social activities

Participation in voluntary communal and social activities						
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Participation in vocational training						
Yes	28(14%)	77(38.5%)	30(15%)	52(26%)	13(6.5%)	200(100%)
No	08(4%)	13(6.5%)	79(39.5%)	67(33.5%)	46 (23%)	200(100%)
Total	36(9%)	90(22.5%)	109(27.2%)	119(30%)	59(14.8%)	400(100%)

Pearson Chi-square value = 90.471 (0.000); Field Survey in 2018

Table 5: Participation in vocational training*Caring more about risky health behaviors

Caring more about risky health behaviors						
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Participation in vocational training						
Yes	13(6.5%)	13(6.5%)	90(45%)	58(29%)	26(13%)	200(100%)
No	04(2%)	09(4.5%)	13(6.5%)	89(44.5%)	85(42.5%)	200(100%)
Total	17(4.2%)	22(5.5%)	103(25.8%)	147(36.8%)	111(28%)	400(100%)

Pearson Chi-square value = 1.01 (0.000); Field Survey in 2017

Table 6: Participation in vocational training*Favor of higher education for female of FATA

Favor higher education for female of FATA						
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Participation in vocational training						
Yes	20(10%)	26(13%)	31(15.5%)	77(38.5%)	46(23%)	200(100%)
No	18(9%)	03(1.5%)	14(7%)	87(43.5%)	78(39%)	200(100%)
Total	38(9.5%)	29(7.2%)	45(11.2%)	164(41%)	124(31%)	400(100%)

Pearson Chi-square value = 33.63 (0.000); Field Survey in 2018

vocational training program. The result shows no significant effect of participation in vocational training. 62.5% of the respondents from the treatment group were found either agree or strongly agree with the statement as compared to 82% from the control group. On the other side, 23% of the respondents from the treatment group were found either strongly disagree or disagree as compared to 10.5% from the control group. According to Bennett^[42], general education is more effective than technical and vocational in bringing social change and awareness among masses. Furthermore, it can be stated that the learning environment and short duration of the training would not have been enough for bringing positive change in the perception of male youth towards female education (Table 6).

Appreciating FATA’s women for doing a job: In FATA context, in a male-dominated society, women are rarely allowed to work outside their homes. The respondents were inquired for the same reason and found that participation in vocational training of FATA has no significant effect on changing mentality of male towards working women.

About 33.5% of the respondents from the treatment group were found either disagree or strongly disagree with the statement as compared to 22% from the control group. These findings are supported by Bennett^[42] who stated that vocational education is less effective in bringing social changes and awareness among masses. Furthermore, quality training and learning environments also matter (Table 7).

Preference for an educated life partner: As per the findings of Anderberg and Zhu^[43], the educated and skilled individual prefers a life partners of the same qualification and background. The respondents were asked if they desire educated and skilled life partners and observed no significant difference between treatment and control groups. A maximum number of the respondents from both groups were found interested in having an educated and skilled life partner. These findings show social change among the youth of FATA but again no significant role of vocational training of FATA-DA was found (Table 8).

Perceptions of family planning: According to the economic theory of fertilityII, parents desire to have less number of children with higher human capital investment. Increasing return to human capital development results infertility decline^[44]. Family Planning is a vague concept in the context of FATA. Respondents were asked for any positive change if occurred due to vocational training. The result shows no significant difference between treatment and control groups. These findings are inconsistent with the findings of Baird *et al.*^[45] and Baynner and Blackwell^[27] but supported by Bennett^[42] who stated that vocational education is less effective in bringing social changes and awareness among masses. In FATA context, due to the stronger influence of culture and religion; six months short duration vocational training courses may not be enough alone to change the perception of FATA’s youth towards family planning (Table 9).

Table 7: Participation in vocational training* Appreciate women of FATA for doing job

Appreciate women of FATA for doing job outside homes						
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Participation in vocational training						
Yes	49(24.5%)	18(9%)	63(31.5%)	41(20.5%)	29(14.5%)	200(100%)
No	26(13%)	18(9%)	45(22.5%)	66(33%)	45(22.5%)	200(100%)
Total	75(18.8%)	36(9%)	108(27%)	107(27.8)	74(18.5%)	400(100%)

Pearson Chi-square value = 19.35 (0.000); Field Survey in 2018

Table 8: Participation in vocational training* Preferences for educated life partner

Preferences for educated life partner						
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Participation in vocational training						
Yes	28(14%)	35(17.5%)	35(17.5%)	64(32%)	38(19%)	200(100%)
No	20 (10%)	29(14.5%)	44(22.0%)	61(30.5%)	46(23%)	200(100%)
Total	48(12%)	64(16%)	79(19.8%)	125(31.2%)	84(21%)	400(100%)

Pearson Chi-square value = 3.755 (0.440); Field Survey in 2018

Table 9: Participation in vocational training* Perceptions towards bringing more children

Perceptions towards bringing more children						
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Participation in vocational training						
Yes	21(10.5%)	35(17.5%)	30(15%)	77(38.5%)	37(18.5%)	200(100%)
No	11 (5.5%)	36(18%)	43(21.5%)	77(38.5%)	33(16.5%)	200(100%)
Total	32(8%)	71(17.8%)	73(18.2%)	154(38.5)	70(17.5%)	400(100%)

Pearson Chi-square value = 5.683 (0.224); Field Survey in 2018

Self-confidence and sense of responsibility: As employees undergo skill training, their confidence level increases and their value can also be confirmed^[46]. The respondents were asked if they had built self-confidence and sense of responsibilities after participation in the vocational training of FATA-DA. The result shows no significant effect of the said training on the treatment group. About 85% of the respondents from the control group were found either agree or strongly agree with the statement as compared to 73% from the treatment group. Typical short term vocational training courses have significant effects on individual performance levels and self-confidence^[35]. In case of FATA's youth, respondents from the control group didn't participate in vocational training but they might have continued their general education that may have resulted in building more confidence and sense of responsibility as compared to vocational training graduates (Table 10).

Financial support of the needy people: Alms and charitable giving is an indirect beneficial effect of vocational training^[12]. The respondents were inquired if they have developed such type of kind behavior after participation in the vocational training of FATA-DA. The result shows no significant effect. Less number of the respondents from the treatment group, i.e., 45.5% were found either agree or strongly agree with the statement as compared to respondents from the control group (87%). These findings are in contrast to the findings of Wolfe and Haveman. The 64% of graduates of the training program

were still unemployed^[37]. An unpublished report of M&E Section of FATA-DA showed 73-75% unemployment among graduates of the vocational training program of FATA-DA (Table 11).

Participation in politics: People of FATA due to certain discriminatory policies of government remained deprived and unaware of their political rights in the past. The respondents were asked about their political participation after training completion. The result shows no significant contribution in this area. About 62.5% of respondents from the treatment group were found either agree or strongly agree as compared to 79.5% from the control group. These findings are supported by the study of Van de Werfhorst^[31] where he concluded that vocational education graduates had a lower level of political interest and engagement as compared to general education graduates (Table 12).

Favour of participation of FATA's women in politics: FATA's society remained male-dominated; therefore, women are not allowed to participate in activities other than agricultural activities and house hold chores. The respondents were asked for a change in their perception of women participation in political activities. No positive impact was observed. Less number of individuals (41%) from the treatment group was found either agree or strongly agree with the statement as compared to the control group (70.5%). Vocational skills development has a significant effect on the socialization of youth community (Managing Vocational Training Systems: A

Table 10: Participation in vocational training* Feeling self-confidence and sense of responsibility

Feeling self-confidence and sense of responsibility						
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Participation in vocational training						
Yes	9(4.5%)	07(3.5%)	38(19%)	101(50.5%)	45(22.5%)	200(100%)
No	05(2.5%)	04(2%)	21(10.5%)	91(45.5%)	79(39.5%)	200(100%)
Total	32(8%)	11(2.8%)	59(14.8%)	192(48.0)	124(31%)	400(100%)

Pearson Chi-square value = 16.70 (0.002); Field Survey in 2018

Table 11: Participation in vocational training* Financial support of needy people in the community

Caring more about risky health behaviors						
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Participation in vocational training						
Yes	13(6.5%)	19(9.5%)	79(39.5%)	67(39.4%)	22(11%)	200(100%)
No	03(1.5%)	01(0.5%)	22(11%)	103(51.5%)	71(35.5%)	200(100%)
Total	16(4%)	20(5.0%)	101(25.2%)	170(42.5)	93(23.2%)	400(100%)

Pearson Chi-square value = 88.059 (0.000); Field Survey in 2018

Table 12: Participation in vocational training*Participation in political engagements

Participation in political engagements						
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Participation in vocational training						
Yes	16(8%)	24(12%)	35(17.5%)	88(44%)	37(18.5%)	200(100%)
No	10(5%)	06(3%)	25(12.5%)	100(50%)	59(29.5%)	200(100%)
Total	26(6.5%)	30(7.5%)	60(15%)	188(47)	96(24%)	400(100%)

Pearson Chi-square value = 19.659 (0.001); Field Survey in 2018

Table 13: Participation in vocational training*Participation of FATA's women in political activities

Participation of FATA's women in political activities						
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Participation in vocational training						
Yes	28(14%)	40(20%)	50(25%)	50(25%)	32(16%)	200(100%)
No	08(4%)	21(10.5%)	30(15%)	93(46.5%)	48(24%)	200(100%)
Total	36(9%)	61(15.2%)	80(20%)	143(35.8)	80(20%)	400(100%)

Pearson Chi-square value = 38.159 (0.000); Field Survey in 2018

Table 14: Participation in vocational training* Favor of FATA merger with KP

Favor of FATA merger with KP						
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Participation in vocational training						
Yes	20(10%)	17(8.5%)	33(16.5%)	81(40.5%)	49(24.5%)	200(100%)
No	25(12.5%)	15(7.5%)	10(5%)	76(38%)	74(37%)	200(100%)
Total	45(11.2%)	32(8%)	43(10.8%)	157(39.2)	123(30.8%)	400(100%)

Pearson Chi-square value = 18.223 (0.001); Field Survey in 2018

Handbook for Senior Administrators in 2001) but here may be due to quality issues the training didn't show its effect (Table 13).

Perception towards FATA's merger with Khyber Pakhtunkhwa (KP) Province: From last few years, FATA's merger with Khyber Pakhtunkhwa Province was government first priority. With the merger, it was expected that a change would occur in tradition, economy, politics and socio-economic development of FATA^[47]. A significant number of well-known elders and associations have strongly rejected the idea of merging FATA with KP with the view that it will replace one corrupt system in the shape of a political agent with a more corrupt system in

the form of police and judiciary^[48-50]. Respondents were asked about their concern on FATA's merger with KP province^[51, 52]. The result shows 65% of the respondents from the treatment group were found either agree or strongly agree as compared to 75% from the control group. No significant effect of the vocational training of FATA-DA was observed. Taking the merger, a political issue, these findings are again supported by the study of Van de Werfhorst^[31] (Table 14).

CONCLUSION

This study concluded with the findings that vocational training of FATA-DA have limited impact on

the social development of FATA's youth. Among 13 indicators of social change and development that were focused in this study, the positive impact was observed only on 02 indicators, i.e., reduction in poverty level and an increase in lifelong learning. Same responses were observed for both the treatment and control group on 02 indicators, i.e., preference for an educated life partner and family planning. On 09 indicators of social change, i.e., participation in voluntary communal activities, avoiding healthy risky behaviour, perception towards the education of female, appreciating women for doing jobs, self-confidence and sense of responsibility, financial support of poor people, political participation, favour of the participation of women in politics and perception regarding FATA's merger in KP province, the impact of vocational training of FATA-DA recorded were recorded not significant.

Literature is deficient in studies focusing on social impacts of vocational training. Most of the studies have focused on the social impacts of general and higher education. Few studies showed, i.e., studies conducted by Van de Werfhorst^[31], etc. reported limited social impacts of short term vocational training. As far as the FATA-DA vocational training is concerned; the researcher in another study on vocational training of FATA-DA recorded that only 24% of training graduates got relevant employment after training completion. As evident from the literature that social impacts of the vocational training up to maximum extent are indirect and depends on intermediary variables, i.e., income and employment etc. Less employment and minimum earning may have the leading causes of limited social impacts in this case. It is recommended that quality parameters should be focused for maximum outcome. A course on ethics, social and behavioural studies may also be included in the vocational training curriculum. It is also recommended that the same study may be replicated again with bigger sample size.

ACKNOWLEDGEMENT

The researcher acknowledge the support of FATA-DA Officials in the provision of data and FATA's youth for their participation in the survey.

REFERENCES

01. Mincer, J., 1958. Investment in human capital and personal income distribution. *J. Political Econ.*, 66: 281-302.
02. Becker, G.S., 1975. Investment in Human Capital: Effects on Earnings. In: *Human Capital: A Theoretical and Empirical Analysis*, with Special Reference to Education, Becker, G.S. (Ed.). NBER, Cambridge, Massachusetts, pp: 13-44.

03. Maclean, R. and D. Wilson, 2009. *International Handbook of Education for the Changing World of Work: Bridging Academic and Vocational Learning*. Vol. 1, Springer Science & Business Media, Berlin, Germany,.
04. Catherine, K. and M. Jacob, 2014. Vocational skills development for youths in the informal sector of the economy in Africa. *J. Bus. Manage.*, 15: 81-87.
05. Debrah, E., 2013. Alleviating poverty in Ghana: The case of Livelihood Empowerment Against Poverty (LEAP). *Afr. Today*, 59: 41-67.
06. Elebute, A. and O.M. Shagaya, 2016. Impact of vocational and technical education on livelihood sustenance and economic development in Nigeria: The art workshop experience. *Int. J. Vocational Tech. Educ. Res.*, 2: 15-35.
07. Pakistan Bureau of Statistics, 2017. Provisional summary results of 6th population and housing census-2017. Pakistan Bureau of Statistics, Pakistan.
08. BoS., 2015. FATA Development Indicators Household Survey (FDIHS) 2013-14. Ministry of National Health Services, Regulations and Coordination, Islamabad, Pakistan.
09. Garavan, T.N., M. Morley, P. Gunnigle and E. Collins, 2001. Human capital accumulation: The role of human resource development. *J. Eur. Ind. Train.*, 25: 48-68.
10. Wallenborn, M., 2010. Vocational education and training and human capital development: Current practice and future options. *Eur. J. Educ.*, 45: 181-198.
11. Sweetland, S.R., 1996. Human capital theory: Foundations of a field of inquiry. *Rev. Educ. Res.*, 66: 341-359.
12. McMahan, W.W., 1998. Conceptual framework for the analysis of the social benefits of lifelong learnings. *Educ. Econ.*, 6: 309-346.
13. Atchoarena, D. and L. Gasperini, 2003. Education for Rural Development towards New Policy Responses. International Institute for Educational Planning (IIEP) UNESCO, Paris, France,.
14. Cortright, J.C., 2001. New growth theory, new growth theory, technology and learning: Technology and learning: A practitioner's guide a practitioner's guide. *Rev. Econ. Dev. Lit. Pract.*, 1: 1-40.
15. Romer, P., 1994. New goods, old theory and the welfare costs of trade restrictions. *J. Dev. Econ.*, 43: 5-38.
16. Grossman, G.M. and E. Helpman, 1994. Endogenous innovation in the theory of growth. *J. Econ. Perspect.*, 8: 23-44.
17. Grubb, W.N. and M. Lazerson, 2005. Vocationalism in higher education: The triumph of the education gospel. *J. Higher Educ.*, 76: 1-25.

18. Alam, G.M., 2008. The role of technical and vocational education in the national development of Bangladesh. *Asia Pacific J. Cooperative Educ.*, 9: 25-44.
19. Akyempong, A.K., 2002. Vocationalisation on secondary education in Ghana. World Bank, Washington, USA.
20. Sabates, R., 2008. The impact of lifelong learning on poverty reduction. National Institute of Adult and Continuing Education, England, UK.
21. Merriam, S.B. and Y. Kee, 2014. Promoting community wellbeing: The case for lifelong learning for older adults. *Adult Educ. Q.*, 64: 128-144.
22. Meager, N., 2009. The role of training and skills development in active labour market policies. *Int. J. Train. Dev.*, 13: 1-18.
23. Feinstein, L. and C. Hammond, 2004. The contribution of adult learning to health and social capital. *Oxford Rev. Educ.*, 30: 199-221.
24. Feinstein, L., 2002. Quantitative estimates of the social benefits of learning, 2: Health (depression and obesity). Wider Benefits of Learning Research Report, Centre for Research on the Wider Benefits of Learning, Institute of Education, London, England.
25. Hammond, C., 2002. What is it about education that makes us healthy? Exploring the education-health connection. *Int. J. Lifelong Educ.*, 21: 551-571.
26. Hammond, C., 2004. Impacts of lifelong learning upon emotional resilience, psychological and mental health: Fieldwork evidence. *Oxford Rev. Educ.*, 30: 551-568.
27. Bynner, J. and L. Blackwell, 2002. Learning, family formation and dissolution. Wider Benefits of Learning Research Report No. 4, Centre for Research on the Wider Benefits of Learning, Institute of Education, University of London: London.
28. Wolfe, B.L. and R.H. Haveman, 2002. Social and nonmarket benefits from education in an advanced economy. *Conf. Ser.-Federal Reserve Bank Boston*, 47: 97-131.
29. Goel, V.P., 2013. Technical and vocational education and training system in India for sustainable development. India Country Paper, No. 1-49, National Centre for Vocational Education Research (NCVER), Bonn, Germany.
30. Hodgkinson, V.A. and M.S. Weitzman, 1990. Giving and volunteering in the United States. Charities Aid Foundation, Kings Hill, England.
31. Van de Werfhorst, H.G., 2017. Vocational and academic education and political engagement: The importance of the educational institutional structure. *Comp. Educ. Rev.*, Vol. 61, No. 1.
32. Beach, J.M., 2009. A critique of human capital formation in the US and the economic returns to sub-baccalaureate credentials. *Educ. Stud.*, 45: 24-38.
33. Nilsson, A., 2010. Vocational education and training-an engine for economic growth and a vehicle for social inclusion?. *Int. J. Train. Dev.*, 14: 251-272.
34. Hayyat, A. and S.H. Chughtai, 2015. The impact of vocational training on poverty alleviation through moderation role of foreign funds: Evidence from Southern Punjab. *Manage. Stud. Econ. Syst.*, 54: 1-15.
35. Knox, G.W., 1981. Vocational and educational upgrading for juvenile delinquents: Community-based programs and the current state of the art. National Center for the Assessment of Alternatives to Juvenile Justice Processing, University of Chicago, School of Social Service Administration, Chicago, Illinois.
36. Stanwick, J., 2006. Outcomes from higher-level vocational education and training qualifications. National Centre for Vocational Education Research Ltd., Stational Arcade, Adelaide, Australia.
37. Ullah, S. and Z.K. Malik, 2020. Analysis of the determinants of participation, strengths and weaknesses of vocational trainings of federally administered Tribal area's development authority. *Int. J. Econ. Financial Issues*, 10: 149-157.
38. Ellen, S., 2012. Slovin's formula sampling techniques. Scribd, Inc., San Francisco, California, USA.
39. Rothwell, W.J. and H.C. Kazanas, 2003. Planning and Managing Human Resources: Strategic Planning for Human Resources Management. Human Resource Development Press, Amherst, Massachusetts,.
40. Tilak, J.B., 2002. Determinants of household expenditure on education in rural India (No. 88). National Council of Applied Economic Research, New Delhi, India.
41. Woessmann, L., 2008. Efficiency and equity of European education and training policies. *Int. Tax Public Finance*, 15: 199-230.
42. Bennett, P., 2018. The heterogeneous effects of education on crime: Evidence from Danish administrative twin data. *Labour Economics*, 52: 160-177.
43. Anderberg, D. and Y. Zhu, 2010. The effect of education on marital status and partner characteristics: Evidence from the UK. CESifo Working Paper 3104, CESifo Inc, UK.
44. Pradhan, E., 2016. Link between education and fertility in low and middle income countries. Harvard TH Chan School of Public Health, Boston, Massachusetts.
45. Baird, S., E. Chirwa, C. McIntosh and B. Ozler, 2010. The short-term impacts of a schooling conditional cash transfer program on the sexual behavior of young women. *Health Econ.*, 19: 55-68.
46. Noe, R.A., J.R. Hollenbeck, B. Gerhart and P.M. Wright, 2014. Human Resource Management. 9th Edn., McGraw-Hill, New York, USA..

47. Aisyianita, R.A., 2017. [Sustainable tourism development in DI Yogyakarta through a social entrepreneurship approach (Sociopreneurship)]. *Media Wisata*, Vol. 15, No. 2.
48. Ozler, B., C. McIntosh and S. Baird, 2010. Cash or condition? Evidence from a randomized cash transfer program. The World Bank, Washington, USA.
49. Nwojiewho, D.I. and D. Chidinma, 2014. The impacts of vocational and technical education programmes on the empowerment of rural dwellers in South-South, Nigeria. *J. Educ. Social Res.*, 4: 233-238.
50. Gasskov, V., 2000. *Managing Vocational Training Systems: A Handbook for Senior Administrators*. International Labour Organization, Geneva, Switzerland, Pages: 262.
51. Gough, A.M., T. Schuller, J. Preston, C. Hammond, A. Brassett-Grundy and A. Green, 2002. *Learning, continuity and change in adult life*. The Centre for Research on the Wider Benefits of Learning, Institute of Education London, London, UK.
52. Riddell, W.C., 2006. *The impact of education on economic and social outcomes: An overview of recent advances in economics*. Canadian Policy Research Networks, Ottawa, Canada.