



Analysis of the Determinants of Participation, Strengths and Weaknesses of Vocational Trainings of Federally Administered Tribal Area's Development Authority

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ABSTRACT

Modern economist emphasized human capital formation for socio-economic development. Human capital theory considered education and training essential tools for human capital formation. This study was conducted to analyze what factors determines participation rate of youth in vocational trainings of Federally Administered Tribal Area's Development Authority. Study also focused strengths and weaknesses of the trainings delivered. Data was collected on well-structured questioners from 400 respondents selected through disproportionate simple random sampling. The results revealed that age, marital status, father education, father profession, family size, family income and employment status before participation have significant effect on participation rate. Short duration, poor linkages with industries, lack of tool kits, career counseling, internship facility and post training financial support were recorded potential issues that challenged the achievement of anticipated outcomes of the program.

Keywords: Federally Administered Tribal Areas, Vocational Training, Human Capital, Technical and Vocational Education and Training, Determinants

JEL Classifications: I21, J24

1. INTRODUCTION

Modern economists emphasize a lot on investment in human capital consider as a pathway for socio-economic development of individuals and nations. Due to its keen importance; human capital development remained a considerable subject in various well known conventions and international conferences (Nafukho and Bunyi, 2013). Both technical education and vocational skills training are the key contributors to human capital development across the globe. Human knowledge and skills is the engine for social and economic development of nations (Goel, 2010). Vocational skills training means the acquisition of practical skills related to different occupation i.e. engineering, construction, agriculture, carpentry, dress making, automobile and electronic etc. Skills development has been the national development strategy for many countries. It increases the efficiency and

productivity of workers, employability and self-employment. It makes the labor market entry convenient, make it easy for youth to attain employable skills and increase monthly earnings. It makes individual to earn them without looking to white collar jobs in government or in private sector. The reality of more than 95% employment of youth in Germany and Poland is due to its skilled worker. Asian tigers i.e. Thailand, Malaysia, North Korea, Singapore and Hong Kong etc. saw the face of rapid development and industrialization due to its keen focus on human capital development. Despite economic and labor market outcomes, development of vocational skills also breeds a lot of social benefits. Labour market has become more specialized and demand high order technical and vocational skills. Governments, National and International organizations are intensively investing in vocational and technical skills trainings (Ullah et al., 2017).

The existing literature shows that participation of individuals in Technical and Vocational Education and Training (TVET) depends on individual personal characteristics, family background and quality parameters of the program. Participation ratio in vocational training is less than participation in general education. Participation ratio in TVET is higher for male than female (Evertsson, 2004). According to Ben-Porath (2002), chances of participation of individuals in skills training decrease with increase in age. Younger people participate more than their older counterpart. Similarly probability of participation in vocational and technical trainings decrease when individual is married (Pischke, 2001). Probability of attainment of skills training is directly proportional to qualification of individuals. Both are found complementary to each other. Occupations also influence skills attainment decision of people. Individual with occupation that requires higher skills are more likely to participate in skills training than others. Similarly employees working in capital intensive industries participate more in skills trainings. The same effect is observed for full time workers (Draca and Green, 2004). Efficient training delivery is required to achieve the core benefits and anticipated outputs of a vocational skills development program. According to Hanushek (1995) and Kremer (1995) quality of the skills training is important supply side factor expected to effect the demand. Skill development depends on a number of factors including the inclusion of practical and theoretical components in appropriate proportion (Wagner and Tahir, 2005).

In vocational training system, better equipment and learning material could enable the students to do better in their learning (Makombe et al., 2016). Vocational training system lacks internal and external efficiency because of shortage of training materials and equipments that further worsen employment rate and earning level of graduates (Association of Tanzania Employers, 2011). Strong collaboration of training institutes with relevant industries is strongly needed for upgrading the skills of graduates and other employees in line with technological advancements as well as the new ways of conducting business (Khan et al., 2019). Hujer et al. (2006) in a paper stated that the effect of vocational training on unemployment duration in Eastern Germany was significantly negative due to the hypothesis that the programmes offered were not compatible with market demand. According to Brunello and Rocco (2017) the wage and employment returns to VET are higher in countries where the relative supply of VET graduates was low with high demand. Career counseling and guidance is the process of supporting vocational graduates to accept and develop an adequate picture of him and to make them aware of their role in practical world environment (Ezeji, 2004). Practical vocational guidance and career counseling programs are needed more than ever because of technological advancement in changing world (Dokubo and Dokubo, 2013). Co-operation of the Institute administration and program sponsoring agency play a positive role in successful delivery of technical and vocational skills training program. Cooperation and persistence guidance from both side have significant impacts on outcome. Furthermore demand for a certain trade and relevancy to local industries is very important. Training the rural people open receive is inappropriate to the skills base needed for their local community and local industries (Rosholm and Skipper, 2009).

FATA is the home for 5,001,676 individuals and a sizeable pool of unemployed youth reside (Pakistan Bureau of Statistics, 2017). An analysis report by National Vocational Technical Training Commission (NAVTTTC) in 2017 indicated drop out in TVET sector is 27% in FATA which is much more than other parts of the country (NAVTTTC, 2017). The participation rate of youth in vocational skills training is far less than enrolment in general education. In order to improve the participation rate, it is important for policy makers and concerned organizations to understand the mechanism underlying participation decisions of youth. Information on predictors of participation in vocational training enable policymakers to design and target appropriate strategies for policy-relevant subgroups. This paper addresses this knowledge gap by providing an overview of the determinants of participation in vocational skills training of FATA youth. Nevertheless, vocational skills training sponsored by FATA-DA have not yet achieved its anticipated targets. Majority of FATA youth do not foresee training as important. Therefore, this study was conducted with the following two objectives;

- i. To analyze the determinants of participation in vocational trainings of FATA-DA.
- ii. To analyze the strengths and weaknesses of vocational trainings of FATA-DA.

2. LITERATURE REVIEW

According to Ben-Porath (1967) age of the respondent is negatively related to skills training participation. Agodini et al. (2004) in a study in US find out that participation rate of individual in vocational courses are positively related to their low academic performance. Curtis (2008) showed in his study that students with low level literacy and numeracy abilities are more likely to participate in short term vocational certificates. On the other hand Moenjok and Worswick, (2003) conducted a study in Thailand using probit model find out that academic performance has positive impact on enrolment in TVET for male only. Blasco et al. (2013) confirmed in his study in France that aged individuals are more likely to participate in short term training and learning program. Family income had a small but positive significant impact on decision of youth in attainment of TVET certificates/diploma (Behrman and Knowles, 1999) (Psacharopoulos, 1988). Influence of parent's education in TVET enrollment has not been focused as such however certain have showed a significant positive relationship among both (Curtis, 2008; Moenjok and Worswick, 2003). Fullarton (2002) concluded in Australia that with increase in parents' education, children are less likely to participate in secondary-level technical and vocational education.

Quality of the training being the supply side factor affects the demand for training participation (Hanushek, 1995; Kremer, 1995). According to the findings of (Birdsall, 1985), (Glewwe and Jacoby, 2006), (Tansel, 2002) a positive relationship exists between quality of training and enrolment. In labor market outcomes professional occupation growth rate is positively related to TVET enrolment (Grubb, 1988). Provision of equipments and instruments play a significant role in viability and sustainability of vocational training program. The adequacy of necessary equipments and material ensure the delivery of training adequate and provide easy way to the trainers

in explaining facts (Khan et al., 2019). Vocational skills training may be seriously hampered due to the lack of sufficient resources (Hadda and Sergio, 1990). Vocational skills training accommodate a small fraction of school leavers and very few skills needed in rural areas are taught (Owano, 2010). Internship is the efficient way of technical skills delivery. It is estimated that 40% of skills are acquired through field internship program worldwide (World Bank, 1994). Parents' involvement has a strong influence on enrolment and learning process of children. Parents support and encouragement increase children confidence and expansion of positive attitude towards attainment of education and technical skills (Moss and Bloom, 2006). Well established practical laboratories, workshops and proper space are needed in technical skills development training to maximize its output and outcome (Greaney and Kellaghan, 2005). Individual's characteristics like age, sex, education, parent's education, parent's occupation etc. also affect skills attainment (Achieng, 2012) Mature students adjust easily to the requirement of learning designed for younger people. Elder individual join the institutes again after a long time for the acquisition of working skills (Richardson and van den Berg, 2005). Indiscipline and lack of punctuality worstly affect the skills acquisition and results in poor performance of individuals (Mukwa and Too, 2002).

Indiscipline of the trainees had been the major cause of mass failure of skills development training and adult learning program (Njoroge and Nyabuto, 2014). He observed that in Kenya 50% of the individual are not properly graduated in vocational training due to indiscipline. (Njati, 2011) suggested that infrastructure facilities should be provided to youth polytechnic for efficient performance. (Lawrence, 1975) argues that teaching methodology has significant impact on learner's acquisition of skills and knowledge. Subject matter, instructional material and objectives are the factors influence teaching methodology. Volk et al. (2003) suggested the government of Japan after observing the crucial importance of youth skills development in bringing economic prosperity that the concerned should focus to equip the institutes through sufficient training resources, ensuring attractive packages and engage in widespread campaign. Aryeetey et al. (2011) studied that in Ghana due to minimum allocation of funding, general negative perception of people and less trained instructors the vocational trainings had not been very successful.

3. FEDERALLY ADMINISTERED TRIBAL AREAS (FATA)

3.1. Demographic Profile of FATA

FATA is the home for 5,001,676 individuals (2.4% of Pakistan population) living in 558,379 number of households (1.73% of household in Pakistan) (Pakistan Bureau of Statistics, 2017). In FATA, 4,859,778 individual (97.1%) reside in rural areas and 141,898 individuals (2.9%) resides in urban areas. Population growth rate was recorded as 2.41 % where it was little bit high in urban areas than rural area in FATA. Among them 2,556,292 (51.1%) are male, 2,445,357 (48.7%) are female and 27 (0.0005%) are transgender (Pakistan Bureau of Statistics, 2017). Detail of agency wise population is presented in the Table 1 below as per 2017 population census (Pakistan Bureau of Statistics, 2017).

3.2. Technical Vocational Education and Trainings (TVET) IN FATA

FATA is blessed with huge human resource in the form of youth but due to flaws in the quality and quantity of technical and vocational education and training; this resource pool is not so much productive. The situation of TVET is also not good all over the country but it is worse in terms of FATA. An analysis report on TVET sector in Pakistan by National Vocational Technical Training Commission (NAVTTTC) in 2017 indicated that drop out in TVET sector is 27% in FATA which is much more than other parts of the country. As a whole, 09 technical 52 vocational institutes are imparting technical and vocational trainings to FATA youth which is 2% of the total institutions in Pakistan. Among them 50% vocational and 80% technical are public sector institutes. In all public sector vocational institutes in FATA, there is a capacity of 7248 instructors to be employed but only 341 instructors are presently imparting vocational trainings to FATA's youth. According to the survey "English Speaking course" is the most popular course which is about 21% of the supply of vocational courses followed by tailoring which is 14% of the total supply (95-100% in the case of female). Computer and IT courses have 13% total supply in TVET sector in FATA. The annual share of skilled workforce from FATA is <1% in overall while its share in country population is 2.2%. Intervention is needed in order to increase the share of FATA in skilled workforce at least up to 2% (NAVTTTC, 2017).

Table 1: Agency/FR wise population and households in FATA (2017 population census)

S. No.	Agency/FR	Area (Sq. Km)	Population	Households
1	FATA (Overall)	27,220	5,001,676	558,379
2	Bajaur Agency	1290	1,093,684	120,457
2	Mohmand Agency	2296	466,984	48,118
3	Khyber Agency	2576	986,973	111,558
4	Kurram Agency	3380	619,553	67,244
5	Orakzai Agency	1538	254,356	31,253
6	North Waziristan Agency	4707	543,254	59,003
7	South Waziristan Agency	6620	679,185	80,717
8	FR Peshawar	261	64,691	7,065
9	FR Kohat	446	118,578	14,339
10	FR Bannu	877	43,114	4,188
11	FR Lakki Marwat	132	26,359	3,348
12	FR Tank	3229	36,389	4,165
13	FR D.I. Khan	2008	68,556	6,924

3.3. Technical and Vocational Training Institutes

Table 2 below shows a list of institutes in which FATA's youth were imparted vocational trainings by FATA Development Authority Peshawar (FATA-DA Annual report, 2017).

3.4. List of Trades

FATA Development Authority (FATA-DA) imparted vocational trainings in more than 70 different market oriented trades to FATA's youth. Detail of such trades is listed in the Table 3 below (FATA-DA Annual report, 2017).

4. RESEARCH METHODOLOGY

4.1. Study Area and Target Population

FATA was selected as a study area because of the reason that FATA is the most marginalized community of the country. Furthermore, FATA DA has imparted vocational training to more than 50 thousands youth of the area. 740,552 youth including 23,296 who participated in any vocational training of FATA DA was selected as target population.

4.2. Sample Size and Sampling Technique

A sample size of 400 male in the age of 15-34 years was selected from total population. 200 male were selected from treatment group and 200 from control group. The sampling method applied was disproportionate random sampling procedure where samples were taken from uneven group of people. The following Slovin's formula was used while taking sample.

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

N= Target population from which sample was drawn

a = Margin of error at 95% confidence level i.e. 100%-95% = 5%.

4.3. Data Collection and Data Analysis

Well-structured questioners were designed and self-administered for data collection from the respondents. Data was collected in a total period of 4 months. At certain places indirect mode of data collection was also applied where it was not possible through direct interaction. Data was sorted and analyzed in SPSS (Statistical Software for Social Sciences). Binary logistic regression analysis was conducted to analyze the determinants of participation in vocational trainings of FATA-DA. Binary logistic regression is normally used to avoid the shortcoming arise during linear regression analysis like probability of occurrence of an event may fall outside (0/1) interval. The model used was;

4.4. Model Specification

$$P_i = \beta_0 + \beta_1 \text{Age} + \beta_2 \text{MSt} + \beta_3 \text{FSz} + \beta_4 \text{FR} + \beta_5 \text{Edu} + \beta_6 \text{FE} + \beta_7 \text{FP} + \beta_8 \text{FI} + \beta_9 \text{HH} + \beta_{10} \text{SBT} + \dots + \varepsilon \quad (1)$$

Where, P_i represent probability of participation, β_0 = Intercept term, Age = Respondent Age, MSt. = Marital Status, FSz = Family Size, FR = Family Residence, Edu = Respondent Education, FE = Father Education, FP = Father Profession, FI = Family Income, HH = Household Head, SBT = Employment status before participation in training, ε = error term.

Likert scale was used to analyze the strengths and weaknesses of vocational trainings of FATA-DA. In this case data was collected only from 200 respondents from treatment group (those who participated in vocational trainings).

5. RESULTS AND DISCUSSION

5.1. Determinants of Participation

The output of binary logistic regression analysis in the Table 4 below shows that variable; age of the respondents, family size, father education, father profession, family income, employment status before training and marital status of the respondents have overall significant relationship with dependent variable i.e. probability of participation. Certain other important variables like respondent education, family residence, and household head were found to have insignificant relation ($P > 0.05$) and were found individually not good predictor. It is evident from the results that increase in age of the respondents increase probability of participation in vocational training. The odd ratio age (3) shows that individuals fall in age group "26-30 years" are 1.164 times more likely to participate in vocational training of FATA-DA than other age groups. These findings are in line with the study of Blasco et al. (2013) in France that individual with more education and age likely to participate more in short term employment training program. Family size as a whole was observed to have significant positive relationship with dependent variable "P." The probability of participation in vocational training increases with increase in family size. The higher impact was observed in case "FSiz (3)," and "FSiz (2)." The respondents belonging to families having more than 12 members and families having 9-12 members are 6.19 and 3.16 times respectively more likely to participate in the said program as compared to small size families. In large size families, due to availability of maximum number of young male, it is convenient for at least one young member to spare

Table 2: List of institutes

Construction Technology Training Institute (CTTI), Islamabad	Pak Emirates Polytechnic Trade, Training and Test Centre, Rawalpindi
Khyber Institute of Technical Education (KITE), Peshawar	National Institute of Sciences and Technical Education, Islamabad
Waziristan Institute of Technical Education (WITE), SWA	National Institute of Cultural Studies, Islamabad
Agricultural Light Engineering Program (ALEP), Mardan	Wana Institute of Technical Training, Wana
Gems and Gemological Institute of Pakistan (GGIP), Peshawar	Precision System Training Centre, PCSIR Peshawar
Swedish Group of Technical Institute, Wah Cantt	Govt. Technical and Vocational Center, Peshawar
Dimension Stone Center, PCSIR Laboratory, Peshawar	Pak German Wood Working Center, Peshawar
Govt. Advance Technical Training Institute, Peshawar	Pakistan Readymade Garment Training Institute, Lahore
Fan Development Institute, Gujrat	Leather Goods Services Center, Bannu
Automotive Training Center, Small Industrial Estate, Peshawar	Pakistan Knitwear Training Institute, Lahore
National Logistic Cell, Mandra	Ensign Communiqué, Karachi

Table 3: List of trades

Auto Electrician	Mobile Phone Repairing
Auto Mechanics	Plumbing
Basic Electrician	Quantity surveyor
Building Painter	Refrigeration/Air-conditioning
Carpet Weaving	Repairing Sheet Metal Works
Office Automation and Management	Steel Fixer
Computer (Hardware)	Surveyor Civil
Cutting, carving, polishing of precious and semi-precious stones	Turner Machinist
Domestic Electrician	TV/ Radio Repairing
Dress making and tailoring techniques	Wood Technology
Electrician	X-Ray Machine Operator
Fabric and Garments Productions	Call Centre Operator
Gemology and Carving	Stitching Machine Operator
Gemology and Faceting	Training
General Electrician	Fan Development and Parts
Heavy Machinery Operator	Manufacturing
Industrial Electrician	Conventional Machinery
Laboratory Assistant	Operator Course
Land Surveying (With Auto CAD)	Electrical equipment and electric fan testing course
Marble and Granite mining, cutting, polishing	Fan Assembly Course
Light Engineering	Auto CAD 2D, 3D
Leather Goods	CAD/CAM course
Masonry	Computerized Numerical Control (CNC)
Material Testing	Mechanic-II (Engine)
Computer Networking Technician	Mechanic-II (Chasis)
Telecom Technician	Optical Fiber Cable Jointing
Control Room Operator	Motor Winding Stitching
Advanced Auto Mechanic (EFI/CNG)	Machine Operator Training
Construction Safety	Fan Development and Parts
ACUDUCT Insulator	Manufacturing
Tile Mason	Conventional Machinery
Plaster Mason	Operator Course
Block Mason	Electrical equipment and electric fan testing course
Fall Ceiling	Fan Assembly Course
Scarf Folder	Auto CAD 2D, 3D
Football Stitching	CAD/CAM course
Leather Upper Cutting Stitching	Machinery Course
	Mechanic-II (Engine)
	Mechanic-II (Chasis)
	Optical Fiber Cable Jointing
	Lasting Computerized Numerical Control

Table 4: Determinants of participation in vocational trainings of FATA-DA

Variable	B	S.E.	Wald	Sig.	Exp(B)
Age	---	---	8.014	0.046	---
Age(3)	0.152	0.915	0.027	0.868	1.164
FSz	---	---	25.596	0.000	---
FSz(2)	1.150	0.485	5.616	0.018	3.158**
FSz(3)	1.823	0.530	11.823	0.001	6.188*
Fed	---	---	25.182	0.000	---
FEd(1)	1.826	0.687	7.069	0.008	6.208*
FEd(3)	1.292	0.703	3.376	0.066	3.639***
FPr	---	---	7.017	0.071	---
FPr(3)	1.160	0.657	3.119	0.077	3.190***
FI	---	---	16.960	0.002	---
FI(3)	1.750	0.683	6.569	0.010	5.755**
FI(4)	1.654	0.662	6.251	0.012	5.228**
SBT(1)	1.072	0.274	15.293	0.000	2.920*
MSt(1)	0.871	0.345	6.367	0.012	2.390
Constant	-4.652	1.446	10.346	0.001	0.010*
Model	-2 Log likelihood		Cox and Snell R Square	Negelkerke R Square	
Summary	423.825		0.279	0.372	

*Significant at 1% level, **Significant at 5% level, ***Significant at 10% level

monthly income 16,000-20,000 and more than 20,000 are 5.75 and 5.22 times respectively more likely to participate in the said program of FATA-DA. Probability of participation increases with increase in family income. These findings are in line with most of other studies that were looking at the relationship between family incomes, educational quests and labor market outcomes. All of them observed family income have positive, although small, effect on enrollment decisions of individuals in labour market training programs (Behrman and Rosenzweig, 2005; Behrman and Knowles, 1999; Psacharopoulos, 1997). The influence of marital status of the respondents on dependent variable was also investigated. The result indicated that unmarried individuals were 2.39 times more likely to participate than married individuals. Married individual might be due to their heavy engagement in family matters and responsibilities would have less chance to spare time for participation in trainings. Employment status before training also determines the decision of individual for his/her participation into labour markets program. The output indicated that employment status has positive significant relationship with dependent variable "P." The odd ratio of variable SBT (1) in Table 4 below shows that individuals who were unemployed before participation are 2.92 times more likely to participate in vocational training. It's very understandable that unemployed individuals have more time to participate. Unemployed individual readily participate in the sense they will acquired vocational skills and may get paid or self-employment.

Negelkerke R Square (NRS) test value (0.372) indicates 37% of the variance in outcome or dependent variable predicted by predictors in the model. The NRS value (0.37) is logical considering the recommendation of minimum value of 0.15 (Mitchell et al., 1989). In social science where human behavior is studied, this value typically lower than 0.2 i.e. 20% (Becker and Tomes, 1986). Overall the model is significant, good enough fit to data and a good predictor.

time and to avail the opportunity of participation in vocational training. Father education was also found to have positive significant relationship ($P < 0.05$) with dependent variable "P." The greater impact was observed in case "FEdu (1)," where it is indicated that respondents who's fathers were illiterate are 6.208 times more likely to participate as compared to others. High educated parents prefer general education on vocational for their children. Father profession was also observed to have positive significant relationship with dependent variable "P." The result shows that individuals whose fathers were in government service participated more than others. The odd ratio interprets that they are 3.19 times more likely to participate in vocational training. It is logical that parents in service know the benefits of training hence motivate their children too. Family income also has positive significant relationship with dependent variable "P." Odd ratios of family income categories "FI (3) and FI (4)" indicated that individual belonging to families having

5.2. Strengths and Weaknesses of Vocational Trainings of FATA-DA

Strengths and weaknesses of any vocational training program surely lead to either success or failure of the program. 76% training graduates were still looking for relevant jobs ((Ullah and Malik, 2019). Data was collected from respondents on the below mentioned quality parameters using Likert scale and result recorded in %.

5.2.1. *The training was good and fruitful*

The quality of education and training is considered an important supply-side factor effecting the demand for education and training (Hanushek, 1995; Kremer, 1995). Quality skills training ends in efficient output leads to better outcome (employability and increased earning) and long lasting impacts (Socio-economic development). The respondents were asked about goodness of training and was observed that 57.5% were found agree and 19% strongly agree with the statement. Only 17% of them was found either disagree or strongly disagree.

5.2.2. *Balance between theory and practical portion*

Nübler et al. (2009) concurred that courses and standards offered in the TVET are considered to be insufficient, lacking quality learning materials and tools. Wagner and Tahir (2005) pointed out that skills training needs practical as well as theoretical components in appropriate proportion so individuals must demonstrate that they are able to perform all of the key functions in the business. The respondents were inquired for the same reason and recorded that balance between theory and practical portion was appropriate. 58% of the respondents were found agree and 12% strongly agree with the statement. Only 17.5% were found disagree and strongly disagree.

5.2.3. *Instructors were well educated, trained and sincere*

Institute standard, course curriculum and instructors expertise are equally important for efficient training delivery. Trainers background knowledge of the course, technical skills, dedication and sincerity play a key role in vocational learning's (Oyebade et al., 2012). The respondents were asked the subject question and found that 56% of the respondents were agree and 18.5% strongly agree with the statement. 15% of the respondents were found either disagree or strongly disagree.

5.2.4. *Availability of well-equipped laboratories*

In vocational trainings, laboratories setup and equipments availability play an essential role. Vocational training system lacks internal and external efficiency because of shortage of training materials and equipments that results in low employment rate and earning level of graduates [Association of Tanzania Employers (ATE), 2011]. Makombe et al. (2016) in their study argued that with better equipment and learning materials, we could enable the students to do better in their learning. Respondents were asked the same question and the result revealed 53% of the respondents were found agree and 15.5% strongly agree with the statement. 13.5% were found disagree and 8% strongly disagree with the statement.

5.2.5. *Training linkages with relevant industries*

A strong linkage of training with industries guarantees the success of vocational training program in term of gainful employment.

The same is in practice in Germany and in Poland and they reached 95-100% youth employment. During survey, 36% of the respondents were found either agree or strongly agree with the statement that their training were linked with relevant industries while 48.5% of them were found either disagree or strongly disagree with the statement. According to researcher own observations, there is no such proper linkage of the vocational training program of FATA-DA with relevant industries. Unesco (2011) and World Bank (2012), argue that there is a general need to enhance collaboration with industry in the provision of in-house training at work places with a view to upgrading the skills of graduates and other employees in line with technological advancements and new ways of conducting business.

5.2.6. *Market demand for the concerned trade/technology*

Hujer et al. (2006) in a paper stated that the effect of vocational training on unemployment duration in Eastern Germany was significantly negative due to the hypothesis that the program offered were not compatible with market demand. According to Brunello and Rocco, (2017) the wage and employment returns to VET are higher in countries where the relative supply of VET graduates was low with high demand. The result revealed that 58.5% of the respondents were found either agree or strongly agree with the statement that their training were compatible with market demand. 30.5% of them were found either disagree or strongly disagree and 11% neutral.

5.2.7. *Career counseling and guidance*

Career counseling and guidance is the process of supporting vocational graduates to accept and develop an adequate picture of them and to make them aware of their role in practical world environment (Ezeji, 2001). Vocational guidance and career counseling programs are needed more than ever because of technological advancement in changing world (Dokubo and Dokubo, 2013). Students due to less understanding of job markets remain jobless after successful completion of vocational training courses. The result of the survey conducted so far revealed that 43.5% of the respondents were found either agree or strongly agree while 46% were found disagree or strongly disagree about the statement. The remaining 10.5% were neutral to the statement.

5.2.8. *Co-operation of institute administration and sponsoring agency*

Co-operation of institute administration and program sponsoring agency play a significant role in successful delivery of training program. Strong co-ordination and follow-up may identify issues timely during training. Again it exposes the real face of progress towards goal and targets. The respondents were asked for the same reason and recorded that 50% of the trainees were found agree and 14.5% were found strongly agree with the statement. Only 24% of them were found either disagree or strongly disagree. The remaining 11.5% were found neutral.

5.2.9. *Training duration*

According to Rosholm and Skipper (2009) often the training the rural people receive is inappropriate to the skills base needed for their local community and often short term, not geared to providing trainees with lifelong sustainable living and working skills. 90%

courses in which FATA youth were imparted training were of short duration of 6 months. The respondents from treatment group were investigated whether the training duration was enough for efficient learning. The result revealed that 40% of the respondents were found agree and 11.5% strongly agree. 37.5% of the respondents were found disagree and 6.5% strongly disagree with the statement. 4.5% of the respondents remained neutral to the statement.

5.2.10. Tool kits provision

Tool kits provision at the end of training give support to the poor graduates and enhance their chances of self-employment. Most of the successful training graduates heal to poor families and are unable to start self-employment due to lack of essential tools and equipments. The respondents were asked whether they had provided tool kits after course completion by FATA-DA. The result showed a major chunk of the respondents (79%) were found either disagrees or strongly disagree with the statement. Only 17% of the respondents were found agree and strongly agree.

5.2.11. Provision of course completion certificates

Being a signal of one's skills and abilities, course completion certificate in hand enhance the probability of finding a job. Delay in provision of course completion certificates obviously delays paid employment. On respondents investigation it was recorded course completion certificates were provided on time. 63% of the respondents were found agree and 23.5% strongly agree with the statement. Only a small segment (11%) of the respondents were found either disagree or strongly disagree with the statement.

5.2.12. Financial support for self-employment

Self-employment generation among youth is considered the major outcome of vocational trainings. Self-employed individual become employer of others and the process of development continue. Most of the training graduates in FATA failed to established entrepreneurship due to lack of financial resources. The respondents were asked if they were supported financially for self-employment after completion of training. The results revealed that respondents have not been supported financially for self-employment by any agency. Maximum numbers of respondent (84.5%) were found either disagrees or strongly disagree with the statement of provision of financial support.

5.2.13. Provision of internship facility

Provision of field internship of 6-12 months duration after completion of institute based training facilitates the first entry of youth into job market. Competent graduates perform well when given internship or field sessions and they become innovative and entrepreneurs. The respondents were asked if they were offered any field internship facility after course completion. It was recorded that field internship facility was not provided as such. 81.5% of the respondents were found either disagree or strongly disagree with the statement while 19.5% were found agree and strongly agree.

6. CONCLUSION

The study concluded that age of the respondents (Age), family size (FSiz), father education (FEdu), family income (FI), marital status (MSt.), and employment status before training (SBT) have

significant relationship ($P < 0.05$) with dependent variable "P." The odd ratio (Exp (B)) for these variables shows that an individual fall in age group "26-30" years is 1.164 times more likely to participate in vocational training than individuals from other age groups. Similarly a person belonging to families having family size 6-8 and 9-12 are 3.18 and 6.19 times respectively more likely to participate than others. The odd ratio for father profession indicates that individuals whose fathers were government servant are 3.2 times more likely to participate than others. Individuals belonging to families having monthly income 16,000-20,000 and above 20,000 are 5.75 and 5.22 times respectively more likely to participate than individuals whose families' income fall in less income categories. Those individuals who were unmarried and who were not employed before participation were 2.4 and 2.4 times respectively more likely to participate in vocational skills training of FATA-DA as compared to married and employed individuals.

During analysis of weaknesses and strengths, it was concluded that 77% respondents were found agree and strongly agree that training delivered to them was good and fruitful. 70% respondents were found agree and strongly agree that balance between theory and practical portion was kept appropriate. 75% of the respondents were found agree and strongly agree that their instructors were well educated, trained and sincere in imparting technical skills to them. 69% of the respondents were found agree and strongly agree that well equipped labs were available inside the institutes for practical portion of the training. 37% of the respondents were found agree and strongly agree that the training was linked to the relevant industry while 48% were found disagree and strongly disagree with the statement. 59% of the respondents were found agree and strongly about the trade in which they were offered training was having high market demand while 30% respondents were found disagree and strongly disagree. 44% of the respondents were found agree and strongly agree that they were given career counseling and professional guidance before, after or during the training while 45% were found either disagree or strongly disagree with the statement. 65% respondents were found agree and strongly agree with the statement that institutes administration and FATA-DA official were found cooperative during the course of study while 24% were found either disagree or strongly disagree. 52% of the respondents were found either agree or strongly agree that training duration of 6 months was enough for fruitful training delivery while 43% were found either disagree or strongly disagree. 79% of the respondents were found either disagree or strongly disagree that they were provided tool kits after course completion while only 17% were found either agree or strongly agree. 87% of the respondents were found agree and strongly agree that they were provided course completion certificates on time. Only 10% were found either disagree or strongly disagree with the statement. 84% of the respondents were found either disagree or strongly disagree that they were financially supported after training for starting self-employment. Only 12% were found either agree or strongly agree while 4% remained neutral. In case of provision of internship facility after IBT, 84% respondents were found disagree and strongly disagree while 12% either agree or strongly agree.

The study suggested that FATA-DA may increase the participation rate of FATA's youth in the said training program by increasing the

efficiency of the training program. Incentives, pre and post training counseling and guidance sessions, financial support and provision of internship facilities would increase the efficiency of the training.

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