

EFFECTS OF FINANCIAL INCENTIVES AND EMPLOYABILITY
ATTRACTION ON TECHNICAL VOCATIONAL EDUCATION AND TRAINING (TVET)
ENROLLMENTS

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Abbreviations

BTE	Board of Technical Education
CBO	Community Based Organization
CBTA	Competency Based Training & Assessment
CPEC	China Pakistan Economic Corridor
CVT	Cooperative Vocational Training
DLM	Department of Labour & Manpower
GIZ	German Development Cooperation Agency
GOP	Government of Pakistan
INGO	International Non-Governmental Organization
IDD	Industrial Demand Driven
IT	Information Technology
JICA	Japan International Cooperation Agency
MENA	Middle East and North Africa Region
MOFEPT	Ministry of Federal Education & Professional Training
NAVTTTC	National Vocational & Technical Training Commission
NA	National Assembly
NGO	Non-Governmental Organization
NSIS	National Skills Information System
NPHS	Naya Pakistan Housing Scheme
PMYSDP	Prime Minister's Youth Skill Development Fund
PNVQF	Pakistan's National Vocational Qualification Framework
PVTC	Punjab Vocational Training Council
QABs	Qualification Awarding Bodies
TEVTA	Technical Education and Vocational Training Authority
TIKA	Turkish International Cooperation Agency
TTB	Trade Testing Boards
<u>TVET</u>	<u>Technical Vocational Education and Training</u>
UNIDO	United Nations Industrial Development Organization
UNESCO	United Nations Education, Scientific and Cultural Organization
VCJP	Vocational Career & Job Placement Centers
WB	World Bank

Table of Contents

Abstract	5
Chapter-I Introduction	
1.1 Significance	6
1.2 Scope	7
1.3 Research Question	8
1.4 Objective	8
Chapter – 2 Literature Review	
2.1 Understanding TVET System	9
2.2 Classification of Financial Incentives in TVET sector within Pakistan	11
2.3 Overview of Current Employability Attractions	13
2.4 Role of Financial and Employability Attractions on Enrollments	14
2.5 <u>Crafting Hypothesis</u>	15
Chapter – 3 Methodology	
3.1 Research Strategy	16
3.2 Variables and Research Model	16
3.3 Research Instrument	17
3.4 Data Collection and Sampling	17
3.5 Statistical Treatment & Data Management	18
Chapter – 4 Findings & Analysis	
4.1 Demographic Analysis	19
4.2 Pie-Charts	20
4.3 Analysis of Responses to Variables	20
4.4 Inferential Data	22
4.5 Interpretation	23
Chapter – 5 Discussion	
5.1 Results	24
Chapter – 6 Conclusion	
6.1 Recommendation	25
6.2 Limitations	25
6.3 <u>Future Studies</u>	26
References	
Annexure Copy of Research Instrument (Questionnaire)	

To study the effects of financial incentives and employability attractions on Technical Vocational Education and Training (TVET) enrollments.

Abstract

Technical Vocational Education & Training (TVET) sector is neglected in Pakistan. It's not the first choice by trainees and parents. Government has initiated various courses in which stipend is being paid to attract the youth so that enrollments within TVET sector could be increased. In addition to this, new employability attractions have also attracted the prospective trainees to technical institutes. This research paper is for the use of TVET practitioner, policy makers and relevant stakeholders. The existing literature review showed mixed evidence regarding financial incentives and employability attraction. This research paper has analyzed the response received from 205 trainees enrolled in Punjab TEVTA institutes located in Lahore city. Multiple regression analysis was undertaken. It has been found that financial incentives have no significant impact on enrollments. However, employability attractions have a positive role in increasing enrollment within TVET institutes.

Chapter-I Introduction

“Would anyone of you will send your younger sibling or a child to a Technical Vocational Education and Training (TVET) institution in Pakistan”. “Would anyone will aim to become a welder, plumber, or mechanic rather doctor or engineer in Pakistan”. “Would parents and guardians will prefer technical and vocational education to general education in Pakistan”. The answer is simple “NO”. TVET stream in Pakistan is neglected and considered inferior to general education stream. A child is send to general education system, if he fails, he finds his place in madrassah education. If he too fails there, he is send to TVET institution. Within a TVET institution, the trainees are classified into two categories. One of them are those who belongs to middle class and as a last resort they are sent to TVET institution. On the other hand, children of poor families who have no financial capacity are also found in large numbers in public TVET institution.

Owing to the plight of low enrollments within TVET stream, Pakistan’s apex national body, “National Vocational & Technical Training Commission (NAVTTTC)” mandated for coordination,

policy direction and regulation initiated TVET courses by giving monthly stipends. Federal Government through NAVTTC and provincial governments through respective TEVTAs (Technical Education and Vocational Training Authority) has taken refuge in propagating a culture of financial incentives to attract idle youth. Stipends amounting to Rs. 1500 to Rs. 3600 & above per month is currently being paid to trainees who are enrolled in TVET institution owned by public and private sector. In addition to this, recent employability trends are also attracting youth in TVET stream. The prospective trainees, parents and families are well informed about mega infrastructure development projects within domestic and international markets.

1.1. Significance

Policy makers at Federal level and TVET practitioners at provincial level has to face questions from evaluators and employers on the enrollments and quality of TVET graduates. After the 18th constitutional amendment, a lot of money has been poured in TVET sector. Today, annual budget of Punjab TEVTA is more than PKR 8000 million, Sindh TEVTA is crossing PKR 5000. Besides, several donors, such as German Development Cooperation Agency (GIZ), World Bank (WB), Japan International Cooperation Agency (JICA), Turkish International Cooperation Agency (TIKA), United Nations Industrial Development Organization (UNIDO) etc are also financing TVET programs in Pakistan. Overall, the TVET sector of country is being reformed, revamped and upgraded. Interventions such as building and class room upgradations, capacity building in terms of new equipment's, trainee focused flexible new curricula and demand driven interesting trades have been initiated.

The efforts of government and donor's organizations dealing with TVET sector are eclipsed when it comes to the question of enrollments. It is often said that financial incentives have played a key role in high enrollments rather the improvements made in the system. On the other hand, employers are found reluctant to offer the jobs to public sector TVET pass-outs. They believe that trainees lack aptitude, skills and knowledge to perform the required job. They are of the view that trainees are not motivated and have no sincere quench for upgrading their skill. Trainees only join government TVET institutions just for the sake of monthly stipends. Employers don't find positive impact in high enrollments. In contrast, TVET practitioners are of the view that employability attractions due to mega infrastructure projects coupled with ongoing reforms within TVET sector have resulted in high enrollments.

This research study will be significant for policy makers, TVET practitioners, donors, employers, prospective trainees, and their parents. Policy makers can be benefited from the findings as to see how far the financial incentive has resulted in improved enrollments. TVET practitioners can be able to read the mindset of trainees either they are coming to TVET institution for the sake of financial incentives or they really have a motivation for finding a job after undertaking this training. Donors community can reevaluate their strategy in supporting TVET institutions by deliberating the results of this research. Similarly, employer's confidence on the TVET pass outs from public sector TVET institute can be increased or decreased. Lastly, prospective trainees and their parents are the end-users as they are the ambassadors and advocates of TVET stream in Pakistan.

1.2. Scope

Within the technical and vocational sector, there is diversity in duration of courses, type of institution, ownership of institute, and amount of financial incentives. There are tailor-made courses which are often offered by NGOs, CBOs, INGOs which lasts from one week to two weeks. While, the minimum duration of nationally recognized courses at public and private sector TVET institution is six months. Similarly, there are technical institutes, vocational institutes, monoteknique institutes, poly-technique institute owned by public and private sector. The amount of stipends also varies from Rs. 1000 to Rs. 3600 and above, based on the institute and course. NAVTTC sponsored training courses has a monthly stipend of Rs. 3000. While, Punjab TEVTA pays Rs. 1000 per month in “industrial demand driven (IDD) courses” and Rs. 2000 per month in courses related to “information technology (IT)”.

Based on the timeline of three months for this research study, four institutions of Punjab TEVTA were covered for collection of data. The institutions situated in Lahore city and have good reputation amongst the local public were selected. Two institutions (each) for male and female were taken into consideration. Trainees enrolled in three kinds of courses were approached. The duration of these courses was six months stretching from August 2018 to January 2019. It includes “industrial demand driven (IDD)” and “information technology (IT)” courses funded by Punjab Technical Education & Vocational Training Authority (PTEVTA) and “Prime Minister's Youth Skill Development Fund (PMYSDP)” courses funded by National Vocational & Technical Training Commission (NAVTTC). The details of institutions are as under;

S. No.	Name of Institution	Gender
1	Government Technical Training Institute (Male), Mughalpura	Male
2	Government Technical Training Institute (Male), Gulberg	Male
3	Government Vocational Training Institute (Women), Township, Lahore	Female
4	Government Vocational Training Institute (Women), Baghwanpura, Lahore	Female

1.3. Research Questions

This research study has probed the answers of following two research questions;

1. What are the effects of financial incentives in the form of monthly stipends on Technical Vocational Education & Training (TVET) enrollments?
2. What are the effects of employability attractions on Technical Vocational Education & Training (TVET) enrollments?

1.4. Research Objectives

This research study intends

- a) to find out the effects of stipends which is being paid on monthly basis at public sector institutions to the trainees,
- b) to examine the linkage of employability attractions in the form of mega infrastructure development within domestic and international markets on enrollments.
- c) to provide a useful information to TVET stakeholders regarding financial incentives and employability attractions on TVET enrollments

Chapter – 2 Literature Review

2.1 Understanding TVET System of Pakistan

2.1.1 Governance

Technical Vocational Education & Training (TVET) sector is being administered by Ministry of Federal Education & Professional Training (MoFEPT, 2018) at Federal level through its attached department National Vocational & Technical Training Commission (NAVTTTC, 2018). At provincial levels, there are Technical Educational & Vocational Training Authorities (TEVTA, Technical Education and Vocational Training Authority, 2018). Currently, in all provinces including Azad Jammu and Kashmir fully functional TEVTAs exists excluding Balochistan and Gilgit Baltistan. There is a Directorate of Manpower & Training (DMT) in Balochistan under provincial Department of Labour & Manpower (DL&M) together with other three allied departments including Industries, Social Welfare, and Higher & Technical Education. While, in Gilgit Baltistan, recently a dedicated TVET Cell under the administrative control of Department of Education has been made functional.

2.1.2 Type of Courses

There are two systems of classifications of courses within TVET. According to older system, there were three levels G-I, G-II, and G-III of technical diplomas' in various trades. There were short-tailor made vocational courses and certificate courses, too. The curricula which is used in older system is regarded as traditional curricula. It is more subjective, rigid, teacher and class room focused. 40% of the contents are theoretical in nature while 60% are practical hours. On the other hand, in new system, there are eight levels according to Pakistan's National Vocational Qualification Framework (NVQF, 2018). These levels complement the existing system and time is far away when the older system will be completely replaced with the new one. However, in new system, Competency Based Training & Assessment (CBT&A) curricula is used which is objective, flexible, student and workplace focused. 80% of the contents are practical in nature while theory has been limited to 20%.

2.1.3 Duration of Courses

Based on the type of course the duration of courses varies. The minimum duration of TVET courses set by Federal Government is six months. In the older system, there existed five different duration. Technical diploma courses have a duration of one year (G-I), two year (G-II) and three year (G-III) (TEVTA, Technical Diploma Courses, 2018). Vocational courses were divided into one months, three months and six months categories (TEVTA, Vocational Courses, 2018). While, short-terms tailor made certificate courses have a duration of one week to two weeks depending upon the organization imparting the training. According to the Pakistan National Vocational & Qualification (PNVQF), level 1 courses have three months, level 2 six months, level 3 one year, level 4 two year and level 5 three year which is equal to DAE courses in traditional stream. While, the Government has yet to make plans for TVET courses above level 5 and so on.

2.1.4 Type of Institutions

Institutions within TVET system are classified as per the ownership, type of courses and number of courses. Public sector institutions are under the administrative control of Government departments and provincial TEVTAs. While, private sector institutions are owned by NGOs, CBOs, companies, and welfare trusts. An institution offering only technical courses is labeled as Technical Institute such as courses related to light engineering, construction and information technology. Whereas, a vocational institution is limited to the traditional, local, cultural and normative trades which are useful in the market such as carpet weaving, hand embroidery, blue pottery. Any institution offering courses in single trade is known as a monotechnic institute. Those institutions where more than one trades are offered are called as polytechnic institutes. (UNESCO, 2009)

2.1.5 Certifications & Evaluations

Likewise, general education stream where there are Boards of Intermediate & Secondary Education, in TVET sector there are three bodies who have the mandate to conduct evaluation and issue certificate. Every province has Trade Testing Boards (TTBs) they act as third-party evaluators and conduct examination of all public and private institutes offering TVET courses. They are limited to issue certificates for a course duration from six months to two years. Of all the

TTBs, Trade Testing Board Khyber Pakhtunkhwa is considered as a role model. (TTB-KPK, 2018) Any course above two years which is often called as Diploma of Associate Engineer (DAE) is certified and evaluated by respective Technical Boards of Education (TBEs). Punjab Board of Technical Education (PBTE) is one of the oldest BTE in Pakistan (PBTE, 2018). Both TTBs and TBEs together are labeled as Qualification Awarding Bodies (QABs). In addition to them, any qualification falling under Pakistan National Vocational Qualification Framework (PNVQF) is dealt jointly by respective TTBs and National Vocational & Technical Training Commission.

2.2 Classification of Financial Incentives in TVET sector within Pakistan

2.2.1 Stipends

Before 18th constitutional amendment there was no concept of paying stipends to the prospective TVET trainees. According to the 18th amendment, education was devolved to provinces while technical and professional training was retained with Federal Government. Massive reform exercise was undertaken in post-amendment scenario. Provinces were reluctant to admit the supervisory role of NAVTTC. In order to build reputation and ensure coordination amongst provinces, Federal Government has to sponsor training courses in demand driven trades. In this approach, the training institution of TEVTAs and private sector were used while NAVTTC sponsored the training. Initially an amount of Rs. 1500 was fixed per month which is now Rs. 3000 for NAVTTC sponsored courses under “Prime Minister’s Youth Skill Development Program” (PMYSDP, 2018). Today, respective TEVTAs are also paying stipends on various courses.

Punjab TEVTA is not giving any stipend in their regular courses. Instead monthly fees is being taken from the trainees. However, an amount of Rs. 1000 is being paid in courses falling under the category of “Industrial Demand Driven Courses (IDD)”. Similarly, an amount of Rs. 2000 for “Informational Technology (IT)” courses is fixed. In Balochistan, the monthly stipend is Rs. 2400 to attract the youth. Sindh TEVTA is paying Rs. 2500 and Khyber Pakhtunkhwa TEVTA is limited to Rs. 2000 per month. On the other hand, in donor funded training courses the amount of stipend varies from Rs. 1500 per month Rs. 6000 per month as well.

2.2.2 Cooperative Vocational Training (CVT)

Another form of incentive is cooperative vocational training (CVT) based on German Dual Training model (Tribune, 2016). In CVT mode, half part of the training is imparted in TVET institution. Trainees are given basic training. Later on, they are shifted to workplace. They are given an opportunity to experience and make themselves familiar with industrial environment. Reputed employers are selected for CVT mode. Most of the time, it has been observed that employers have employed the trainees in their business, industry and company. For example, Honda Motors in Lahore, Gems and Jewelry Centers in Quetta, Blue Pottery enterprises in Multan etc. This concept is new in Pakistan but is evolving with each passing day.

2.2.3 Paid Internships and Paid Apprenticeship

In routine practice all over the world, if a student is given a chance after completion of his/her studies in a workplace and it is not a paid work, it is called internship. During internship, the student is exposed to practical world, gather experience and apply for job. In contrast, apprenticeship is always paid. The employers admit the prospective employees on partial monthly remuneration and prepare them for regular jobs in future. Within TVET sector of Pakistan, there are paid internships often called as placements. Government pays internship to the trainees and finance the internship cost at the enterprise so that trainees may enhance their skills. For example, Punjab Vocational Training Council (PVTC) offers two-month placements after completion of six months training. On the other hand, paid apprenticeship is currently halted as Government has recently amended Pakistan's Apprenticeship Ordinance of 1960 (NA-GOP, 2018).

2.2.4 Free of the Cost Courses, boarding and lodging

Sometimes there is no stipend, but courses are offered without any cost. Even the trainees are provided free boarding (hostel facility) and lodging (one-time journey expenses from residence to institution and back to place of residence). This mode of financial incentive is rare but is often implemented whenever there is a special initiative. In the past, different provincial governments have sponsored trainings of youth of other provinces in their institution and have adopted this model. Federal Government on special instructions of Prime Minister of Islamic Republic of Pakistan also has taken such initiatives in the past. For example, in year 2012, Sindh Government sponsored trainings of 600 youth of Balochistan in reputed institutions of Sindh TEVTA. Similarly, through a special initiative NAVTTC has facilitated trainings of youth of Sindh (Rural) and remote areas of Balochistan in Punjab in year 2014.

2.3 Overview of Current employability attractions

2.3.1 Domestic Employability Opportunities

China Pakistan Economic Corridor (CPEC) is a multi-billion mega infrastructure development program which is believed to create 800,000 jobs over a period of next fifteen years. (Pak-Observer, 2017). Similarly, Naya Pakistan Housing Scheme (NPHS) is another mega project aim to build five million affordable accommodation promises generation of 6 million jobs. (Nation, 2018). Other big employability attractions include Neelum Jhelum Hydro Electric Project, Tarbela Dam construction, Orange Line Metro Training Projects, Revival of the Karachi Circular Railway, Billion tree Tsunami plantation drive, Punjab government's mega health infrastructure projects, Balochistan government's 100 dams construction project etc. All these are some of the significant employability attractions.

2.3.2 International Employability Opportunities

Qatar is going to invest \$100 billion in infrastructure development projects for Fifa world cup to be held in 2022. (WeBuildValue, 2018). Similarly, \$ 3.5 trillion pipeline projects in Middle East and North Africa Region (MENA) opens an opportunity for light engineering sector such as welders, plumbers, electricians, machine operators and construction workers. (Saudigazette, 2018) Another important international employability opportunity is the \$ 4.4 billion construction and housing initiative of Saudi Government (Woods, 2018)

2.3.3 National Skills Information System

National Vocational & Technical Training Commission (NAVTTTC) has established an online portal for bridging the gaps between supply and demand. The portal has been designed for TVET practitioners, institutions, trainees and employers. All the information related to institutions is available on the portal so that stakeholder may get their desired information in a blink of an eye. Similarly, agreements have been done with job portals (Rozee.com, Brightspyre etc.) and reputed employers to share their jobs related to skilled workers so that trainees may approach them. There is a separate window in which trainees can also upload their data so that employers may also contact the trainees directly. (NSIS, 2018)

2.3.4 Vocational Career & Job Placement Centers

In order to attract the youth to technical trainings, government through its donors have trained instructors of reputed TVET institutions and have supported them in establishment of dedicate Vocational Career & Job placement centers (VC&JP) across Pakistan. (TVET-SSP, 2017) The purpose of these centers is to provide free of the cost counselling to the prospective youth and to assist them in getting placements with employers. Trainees and their parents are benefitting from these centers. Provincial TEVTAs are making plans to establish VC&JP centers in all of their centers.

2.4 Role of Financial and Employability Attractions on Enrollments

2.4.1 Financial Incentives and Enrollments

Financial incentives are considered to bring positive impacts on enrollments especially in developing countries such as Pakistan and Bangladesh. A research was conducted which shows that poor families send their children to institutions so that they may learn something and bring home the money which is given to them as monetary benefits. (Slavin, 2009) This shows that incentives and motivation to study and get admission are correlated to each other. In another study, researchers have deduced that there is a strong correlation between incentives and motivation either it is education, job and business (Kenneth, P, Joshua, & Lopez, 2016).

2.4.2 Employability Attractions and Enrollments

In a study conducted in University of Cornell on the enrollments, attendance and engagement with the help of data collected from 50 states and 45 nations it was found that when students are informed about convincing pay-offs in the big time all three enrollments, attendance and engagement increases. (Bishop, 2004) One of the motivations to the youth in getting admission in technical institutes is the belief that they would be finding a good job (Eichhorst, 2015). In contrast, there are also instances where financial incentive was not found to be the primary source behind enrollments even the subjects refused to take monetary benefit. (Dumas, Begle, Brian, & Amanda, 2010)

2.4.3 Technical Training and Incentives

Researchers from University of Pennsylvania has conducted a review on the international available evidence and found that there is skill mismatch between supply and demand sides. Employers blame the institutions of poor quality and absolute trainings. Government fails to

address these issues across the globe. The choice of parents is always on general education. It is not an easy task to attract the youth so financial incentives are necessary to increase enrollments in technical training stream. (Conn, Park, Wakasa, Sherihan, & Thomas, 2017). Similarly, study shows that financial incentives have positive effects on high ability students but have detrimental effects on low-ability students (Leuwen, Osterbeek, & Klaauw, 2010).

2.5 Crafting of Hypothesis

In the light of literature review, the following hypothesis are crafted for this research study;

Hypothesis 1 (H1) Financial Incentives (B₁) have positive impacts on TVET enrollments

$$H_0 : \mu B_1 = 0 \quad H_1 : \mu B_1 \neq 0$$

Hypothesis 2 (H2) Employability Attractions (B₂) have positive impacts on TVET enrollments

$$H_0 : B_2 = 0$$

$$H_1 : B_2 \neq 0$$

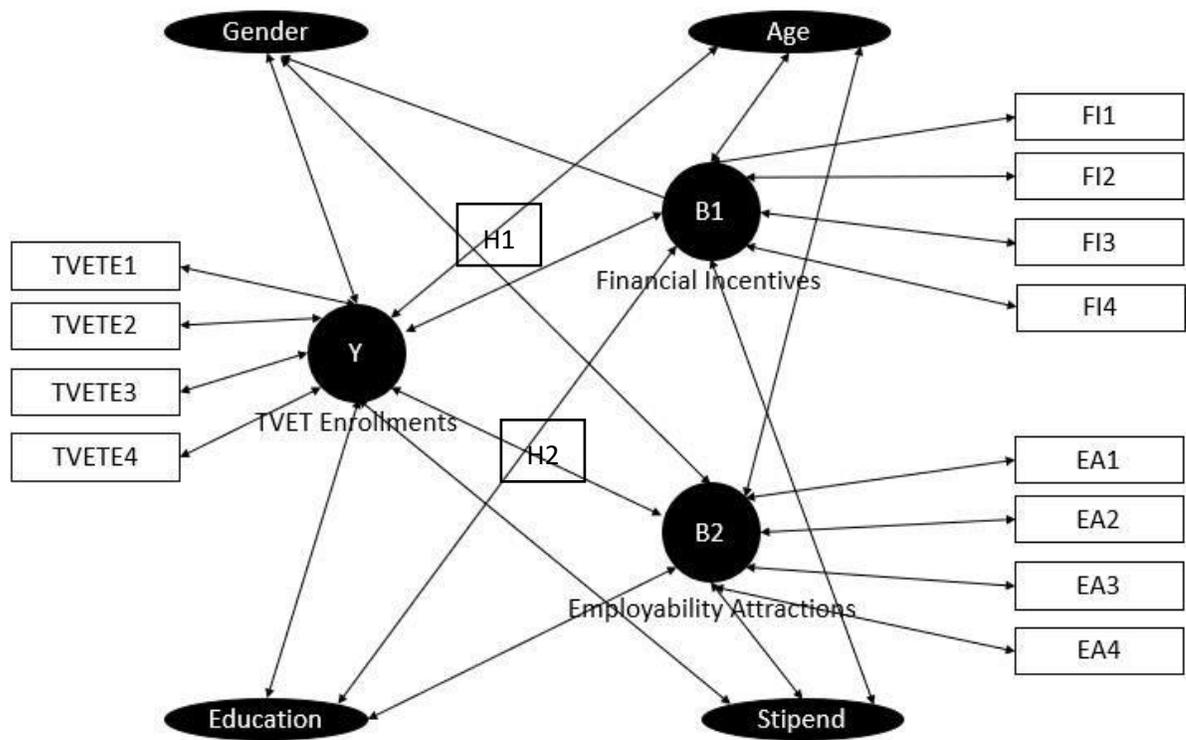
Chapter – 3 Methodology

3.1 Research Strategy

Initially, it was decided to take any important topic falling under the category of Technical Vocational Education and Training (TVET) sector of Pakistan. It was further refined by preliminary research by using internet source and brainstorming with peers. A focused research was initiated after the formulation of research question. It was eminent from the very beginning that research is going to follow quantitative analysis technique and will be descriptive and correlative in nature. The research has aimed to study the effects of financial incentives and employability attractions on TVET enrollments.

3.2 Variables and Research Model

Three kinds of variables for used in this research study. Demographic variables include Gender, Age, Stipends, and Qualification of the participants. Dependent variable (Y) which was TVET Enrollment were having four attributes, consisting of four questions. While, two independent variables, Financial Incentives (B₁) and Employability Attraction (B₂) each with four attributes / questions were used to conduct the study based in the research instrument. The research model is reproduced below;



3.3 Research Instrument

Self-administered, balanced, forced, closed ended questionnaire was developed as a research instrument. The first part of questionnaire was used for collection of demographic information which included Gender, Age, Education and Stipend. Within Gender two options were given Male (1) and Female (2). Age was classified into five categories; 17-20 years (1), 21-24 years (2), 25-28 years (3), 29-32 years (4) and 33 – above (5). Education was also divided into five scales starting from 1 to 5 including Middle (1), Under matric (2), Matric (3), Inter (4) and Graduation above (5). Stipend was assigned the values 1 for PKR 1000 – 1500, 2 for PKR 1600 – 2000, 3 for PKR 2100 – 2500, 4 for 2600 – 3000 and 5 for 3100 above.

Second part of research instrument contained the questions related to independent variable (B1) i.e. Financial Incentives. It has four questions. Likert scale was used for each of the question which includes “Strongly Disagree (1)”, “Disagree (2)”, “Neutral (3)”, “Agree (4)”, “Strongly Agree (5)”. Similarly, second independent variable “Employability Attraction (B2)” also has four questions following Likert scale. While, the last part of research instrument contained four questions related to dependent variable (Y) i.e. “TVET enrollments” .

3.4 Data Collection and Sampling

Permission was taken from higher management of Punjab TEVTA through professional acquaintances of the researcher for conducting the data gathering exercise. Four institutions of Punjab TEVTA were selected as unit of analysis. Two of them were for male and two for female. Within these institutions, trainees of only those courses were selected as respondents who were being paid stipends. Cross-sectional data was gathered from the unit of analysis. The respondents were from the ongoing session of TEVTA which has started from August, 2018 to January, 2019. Purposive non-probability sampling was used, and research instrument was got filled from the respondents. The normal strength of class in TVET sector is between 20 to 25 trainees. The target was to get filled 200 questionnaires and it was initially planned to visit 10 class rooms but to low strength data from 11 trades / classes was acquired.

The details of data collection are as under;

S. No.	Name of Institution	Trades / Class (Six Months Duration)	Questionnaire Yielded	Stipend being paid
1	Government Training Institute (Male), Mughalpura	Technical Auto-Mechanic	20	Rs. 3000
		Plumber	20	Rs. 3000
		HVACR	21	Rs. 3000
2	Government Training Institute (Male), Gulberg	Technical AutoCAD	20	Rs. 2000
		Industrial Electrician	15	Rs. 1000
		Welder	17	Rs. 1000
3	Government Training Institute (Women), Township, Lahore	Vocational Beautician	18	Rs. 3000
		Dress Making	18	Rs. 3000
		Hand Knitting	26	Rs. 1000
4	Government Training Institute (Women), Baghwanpura, Lahore	Vocational Graphic Designer	15	Rs. 2000
		Computer Application	15	Rs. 2000
			205	

3.5 Statistical Treatment & Data Management

Data coding was used in first instance on MS-Excel. The questions related to independent variable (Y) “TVET Enrollments” were coded in columns with “TVETE1 to TVETE4”. While, questions related to dependent variables (B1) “Financial Incentives” and (B2) “Employability Attractions” were coded with columns “FI1 to FI2” and “EA1 to EA2”, respectively. Data was checked thoroughly for any mistakes and then transferred to SPSS Version 2.1. Values were assigned according to the research instrument. Multiple regression analysis was undertaken along with generation of PIE charts, frequency tables, and report summaries which have been used for findings, analysis and interpretation in this research study.

Chapter – 4 Findings & Analysis

4.1 Demographic Analysis

Four variables were included to undertake the demographic analysis, Gender, Age, Education and Amount of stipend being paid to the trainees. Out of 205 respondents, 44.9% were female and 55.1% were male making it 92 and 113 in numbers. As far as age is concerned, it was found that majority of the respondents were teenagers. 77.1% of the respondents were having the age of 17-20 years while only 22.9% fall between the age of 21 – 24 years. Not a single respondent showed up who have the age more than 24 years. In contrast to age, Educational profile of the respondents shown diversity but majority of them have a qualification of matriculation level making it 70.7% of the total. However, there was no one amongst the respondents who has qualification more than intermediate. Lastly, 47.3% of the respondents were being paid stipend amounting between PKR 2600 – 3000, while 28.3% and 23.4% an amount of PKR 1000 – 1500 and PKR 1600 – 2000, respectively.

Gender				
		Value	Count	Percent
Standard Attributes	Measurement	Nominal		
Valid Values	0	Female	92	44.9%
	1	Male	113	55.1%

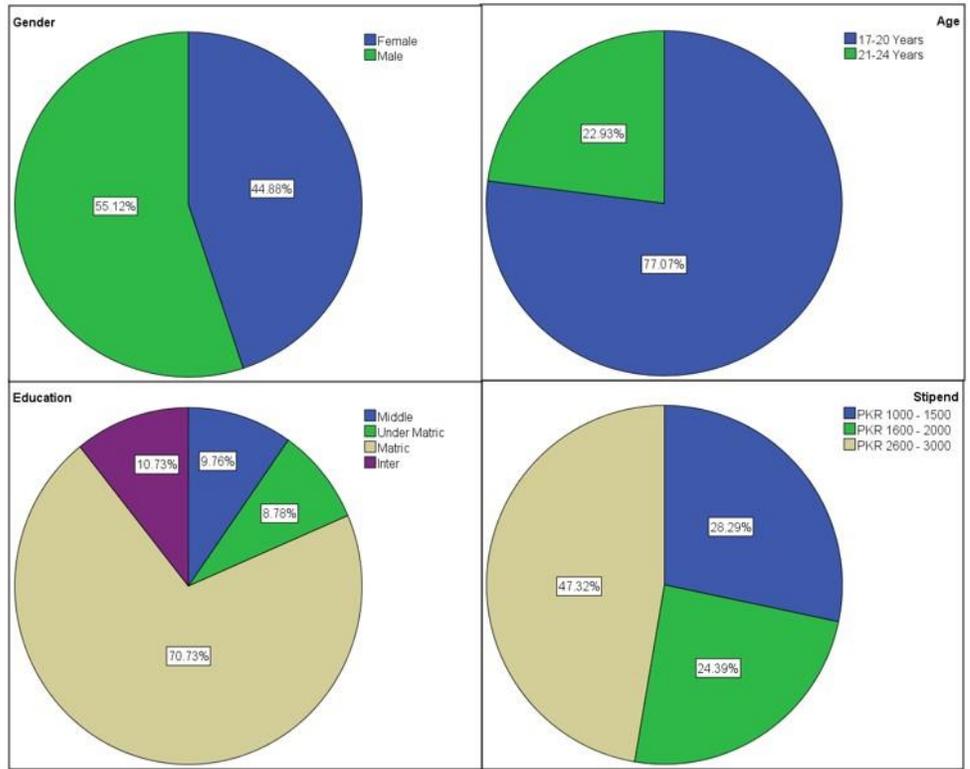
Age				
		Value	Count	Percent
Standard Attributes	Measurement	Nominal		
Valid Values	1.00	17-20 Years	158	77.1%
	2.00	21-24 Years	47	22.9%
	3.00	25-28 Years	0	0.0%
	4.00	29-32 Years	0	0.0%
	5.00	33-Above Years	0	0.0%

Education				
		Value	Count	Percent
Standard Attributes	Measurement	Nominal		
Valid Values	1.00	Middle	20	9.8%
	2.00	Under Matric	18	8.8%
	3.00	Matric	145	70.7%
	4.00	Inter	22	10.7%
	5.00	Graduation Above	0	0.0%

Stipend				
		Value	Count	Percent
Standard Attributes	Measurement	Nominal		
Valid Values	1.00	PKR 1000 - 1500	58	28.3%
	2.00	PKR 1600 - 2000	50	24.4%
	3.00	PKR 2100 - 2500	0	0.0%
	4.00	PKR 2600 - 3000	97	47.3%
	5.00	PKR 3100 - above	0	0.0%

4.2 Pie Charts

The pie-charts supporting the demographic analysis have been exported from SPSS and reproduced below;



4.3 Analysis of Responses to Variables

While analyzing the responses to first independent variable “Financial Incentives”, inconsistent and unstable results were found. 61% of the respondents “agree” that they love to complete training course as they were paid full stipends. 19.5% preferred to be “neutral”. In contrast, 39.5% “agree”, 29.3% “disagree” and 18% “neutral” responses were marked when the respondents were asked that whether they maintained their 80% attendance only for the sake of stipend payment or otherwise. Similarly, 36.5% “agree”, 29.3% “neutral” and 20% “disagree” that they don’t pay any attention to stipends if it is disbursed late. In addition to this, mix results were achieved when the responds for asked whether they are more vigilant and always demanding for monthly stipends if it is late or otherwise.

Second independent variable “Employability Attractions” showed stable results in all the four questions that were asked. 60% of the respondents “agree” and 40% “strongly agree” that they believed to find a job after completion of these trainings. 51.2% “agree” and 33.7% “strongly agree” to foresee promising future due to CPEC and other mega projects will help them to get a job. 33.2% of the respondents marked “strongly disagree” while 29.8% as “disagree” when they

were asked whether they don't see any employability attraction or were just in the TVET institute to utilize their time in technical courses. A high number of the respondents rejected this. Similarly, 43.4% "agree" and 48.3% "strongly agree" that they believed only skilled workers has a future in Pakistan's job market.

Lastly, the responses related to depended variable "TVET enrollments" have also showed stables results. 45.9% "agree" and 32.2% "strongly agree" that they had got admission in TVET institute as it was better to be a skilled person rather idle. 43.9% "agree" and 44.4% "strongly agree" that skill training would enhance their competencies and help them in future. While, 58.5% "agree" and 39.0% "strongly agree" that enrollments in TVET classes has increased on due CPEC and mega projects employability attractions. On the other hand, 55.1% "agree" that they understood that no other alternatives were available that's why more idle students were joining technical courses.

4.4 Inferential Data

Multiple regression analysis was calculated to predict (Y) TVET Enrollment based on (B1) Financial Incentives and (B2) Employability attractions, and the inferential data is cited below;

$$Y \text{ (TVET Enrollments)} = \beta_0 + \beta_1 \text{ (Financial Incentive)} + \beta_2 \text{ (Employability Attraction)} + \text{Gender} + \text{Age} + \text{Education} + \text{Stipend}$$

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.512 ^a	.262	.239	.42919	.262	11.694	6	198	.000

a. Predictors: (Constant), B2, Stipend, Education, Age, Gender, B1

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1					
Regression	12.925	6	2.154	11.694	.000 ^b
Residual	36.473	198	.184		
Total	49.398	204			

a. Dependent Variable: Y

b. Predictors: (Constant), B2, Stipend, Education, Age, Gender, B1

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	2.372	.395		6.010	.000
Gender	-.258	.077	-.262	-3.340	.001
Age	-.038	.075	-.032	-.505	.614
1 Education	.051	.044	.078	1.155	.249
Stipend	-.028	.026	-.075	-1.077	.283
B1	-.079	.057	-.119	-1.389	.166
B2	.564	.095	.406	5.953	.000

a. Dependent Variable: Y

4.5 Interpretation

Multiple regression analysis shows that model which was selected for this research study is significant as the p-value is 0.000 which is less than $\alpha = 0.05$. A significant regression equation was found ($F(6,198) = 11.694, p < 0.000$) with an R^2 of 0.26. It has explained 26% of the variation and has left 74% of the variation unexplained as $R^2 = 0.26$. Purposive non-probability sampling was used for conducting this research and responses from only 205 respondents were taken. Due to limited number of respondents, the value of R^2 is low. According to the analysis of coefficients, 205 respondents predicted the model with the following calculations;

$$Y = 2.372 + (-0.079)\text{Financial Incentive} + 0.564 (\text{Employability Attraction}) + (-0.258)\text{Gender} + (0.038)\text{Age} + (0.51)\text{Education} + (0.283) \text{Stipends}$$

Furthermore, it has been found that predictor Gender together with one of the independent variable “Employability Attraction” have a significant impact on the dependent variable.

Chapter – 5 Discussion

5.1 Results

The research study based on quantitative analysis of responses received from 205 respondents by using SPSS has shown positive impacts by employability attractions on enrollments within Technical Vocational Education and Training (TVET) sector at public institutions. Trainees are motivated and joining TVET institutions as they believed that they would find a job after completion of these trainings. They foresee their promising future due to CPEC and other mega projects in getting a job. Trainees have also contended that in Pakistan only skilled workers has a future instead of an idle person. Hence, hypothesis No. 2 (H2) is accepted. This further correlate that the ongoing reforms within TVET sector of Pakistan by government and donor agencies have enhance the quality, access and relevance of technical institutions.

On the other hand, financial incentives in the form of monthly stipends failed to give significant positive impacts on enrollments within TVET sector. Motivation of trainees was not purely linked to stipends. Financial incentive was not a prime source for maintaining 80% attendance. Trainees were found not paying heed if their stipend is disbursed late. Similarly, majority of the respondents were not bothered to pay attention to the stipends. This shows that their employability attractions, promising future of finding a job and respectable way of earning livelihood was the motivational force which have attracted the trainees to get technical training. Hence, hypothesis No. 1 (H1) is rejected.

Chapter – 6 Conclusion

6.1 Recommendation

- a) Government may formulate a strategy in which employability attractions within TVET sector may be disseminated at grass root level, well in time so that prospective trainees and their parents may make up their minds to approach TVET institutes.
- At national level, it may be made essential in all PC-I forms of infrastructure development projects that only the certified and nationally recognized labor / skill workers will be used in the execution of projects so that means of employability could be formalized.
- At international level to cater job opportunities abroad for Pakistani emigrants, office of the consular through their commercial attaches be reformed and revamped so that

they may be able to analyze the employability attractions in near future and facilitate the prospective skilled workers in getting a job abroad.

- The amount which is being spent as stipends can be used for capacity building and upgrading training paraphernalia. The government and donor agencies may come up with alternatives where this money could be utilized efficiently

6.2 Limitations

Owing to lack of resources, mobility issues, and time constraints, this research study was conducted in only four institutions of Punjab TEVTA out 446 institutions currently functional across Punjab. Only district Lahore was selected out of the 36 districts of Punjab. Furthermore, the questionnaire was self-administered in the month of December, most of the trainees were on vacations. Few of the trainees were found reluctant to take interest in the questionnaire as there was no incentive for them to fill the questionnaire. No in-depth interviews, focused group discussions with the relevant authorities was undertaken. The research study was purely and solely based on the responses of respondents.

6.3 Future Study

The researchers, policy analysts and program evaluators may conduct a holistic study on the quality of TVET pass-outs from public versus private TVET institutes. The employability and placement percentage of TVET institutes needed to be evaluated. There is no study available in Pakistan which shows the actual spending of government and donors on development and nondevelopment side. For example, if the annual budget of Punjab TEVTA is PKR 8 billion, then 5 billion is non-development (salaries of employees), 1 billion is for annual repair, maintenance and operational matters and in the end only 2 billion find its way to development matters such as training of teachers, capacity building of institutions, lab-upgradations, new curricula making etc.

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Annexure Copy of Research Instrument (Questionnaire)



University of Management Technology
School of Governance & Society

121

[This questionnaire is solely for academic purpose. It is being filled in partial fulfillment of Research Methodology Course required for completion of MS-Public Policy degree. The topic of research is

To study the effects of financial incentives and employability attraction on TVET enrollments

Please the appropriate response or fill in the blanks.

1. Gender: a. Male b. Female
2. Age: a. 17-20 Years b. 21-24 Years c. 25-28 Years
 d. 29-32 Years e. 33-Above
3. Education/Qualification
 a. Middle b. Under-Matric c. Matric
 d. Inter e. Graduation above
4. Stipend
 a. 1000-1500 b. 1600- 2000 c. 2100 – 2500
 d. 2600-3000 e. 3100-above

5. Name of Institution/Organization/ Department/
Ayesha Ali - Handknitting GVTI - W, Township

Financial Incentives

Q.No.	Question	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1	I love to complete training course as I am paid full stipends.			<input checked="" type="checkbox"/>		
2	I maintain my 80% attendance otherwise my stipend will not be released.					<input checked="" type="checkbox"/>
3	I don't pay any attention to stipends if it is disbursed late		<input checked="" type="checkbox"/>			
4	I am more vigilant and always demanding for monthly stipends if it is late	<input checked="" type="checkbox"/>				

Employability Attraction

Q.No.	Question	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
5	I believe that I will find a job after completion of these trainings				✓	
6	Promising future due to CPEC and other mega projects will help me to get a job				✓	
7	I don't see any employability attraction, I just want to utilize my time in technical training course	✓				
8	I believe that only skilled worker has a future in Pakistan job market					✓

TVET Enrollment

Q.No.	Question	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
9	I have got admission as it is better to be a skilled person rather idle					✓
10	Skill training will enhance competencies and help me in future					✓
11	I believe that mega projects such as CPEC has helped in increasing enrollments in technical training classes				✓	
12	I understand that no other alternatives were available that's why more idle students are joining technical courses				✓	

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