



RESEARCH PAPER

**Impact of Technical and Vocational Education on Students' Career
Productivity at Sukkur Region, Sindh**

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ABSTRACT

To help society develop toward professional productivity, technical and vocational education should be implemented. Without skilled, knowledgeable, and effective students, the environment's changing needs cannot be met. Due to its impact on financial improvement and profitability, technical and vocational education has been a fundamental component of national progress

. The economic growth of developing states announces Technical and Vocational education as a key factor. It is normally laid out on the grounds that the variety of instruction emphasizes the applying of aptitudes, information, and states of mind required for work in an exceedingly unequivocal occupation in any field of social and financial action.

All students at technical colleges and vocational center are population of this study and random sampling design was adopted. A convenience sampling design was used to pick 150 students as the total sample size.

A Bandura self-efficacy questionnaire was adapted for use with students. Data was gathered by distributing questionnaires, and SPSS was used for analysis. The hypothesis is rejected and based on regression analysis; it is found that there is a significant impact of Technical and Vocational career productivity. It is recommended that the Government should initiate policy & training programs for teachers and students' career productivity.

Keywords: Technical and Vocational education, Students, Career Productivity.

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Introduction

Technical and Vocational Education (TVE) with respects to individual job-related preparation in adding to nationwide growth is widespread nowadays. TVE has played an imperative role in new students preparing for the career, skills, knowledge, and efficiency of tomorrow. Today, global wealth is concentrated less in the land, factories, and machinery. Human capital in Pakistan is now three times more important than physical capital. The developing countries move towards TVE. The high-quality human capital is established in a great quality of TVE with advanced knowledge, skills and efficiency skills in today's workplace (Atchoarena & Delluc, 2012).

TVE is considered very important because, in the last three to four decades, TVE has been challenging globally at school and college level. In Pakistan, for instance, there is few Technical and Vocational higher education in specific and the main educational system in general; Due to expensive equipment, it is difficult to run technical and vocational institutions. Moreover, all equipment, working tools and to extend learning resources are often important for learning skills.

Today, in Pakistan, the preparation of manpower in skills and efficiency of the nationwide growth is well recognized through TVE, the professionals to provide career skill growth, enhancement and increase efficiency to the related jobs. Moreover, the TVE system was organized to teach knowledge, skills, and efficiency that would prepare students more competent and skillful in the field (Lent & Brown, 2009).

The program effectively connected institutions and workplace environment also increased students' grades, motivation and attitude towards a career (Worthington & Juntunen, 2007). In Pakistan, it's remarkably indispensable to understand that Brobdingnag at quantities of adolescents' square measure outside the formal foundation, requiring the blend of non-formal learning approaches and procurement programs into national education plans; To revive, modernize and blend TVE in order to revise it into an idealistic movement for the adolescent improvement and human ability working is important in Pakistan (Bird, 2017).

TVE projects and foundations as vehicles for local collaboration and reconciliation yet as a financial improvement since it identifies with upgrades in the framework, innovative advancement, vitality, exchange, the travel industry, farming and brilliant administration (Kazmi, 2007).

The new innovations square measure being produced and connected, substitution existing advancements and procedures. Since the new innovations square measure information escalated, the creating nations, being web merchants of remote innovation, square measure committed to overhaul and improve the ability dimension of their hands. This progression is imperative in order to douse up and keep up new advances, daintiness the fundamental job of TVE. In this framework, Bird (2007) explained a fully qualified technical/vocational teacher as one who is certified in his/her area of knowledge and has the proper level of pedagogical skill. Therefore, this study was concentrating on the three groups of students' career productivity in the Sukkur region. In this research, skills and efficiency of career-related were focused. Because these areas

are essential for a career choice or career opportunities.

Statement of the Problem

TVE should lead learners to hands learning by integrating concepts into career productivity. This implies that the learners should understand the importance of TVE, and through TVE to increase achievement like as skills, knowledge and efficiency for the gaining career. This involves the availability resources for doing practical work related to job demand. That reason is that there is a need to consider what kinds of students want to learn, how it will be learned and develop itself in gaining careers.

Research Objectives

1. To find out the impact of TVE on students' career productivity at Sukkur Region, Sindh.
2. To find out the existing status of availability of resources in the technical colleges and vocational centers to enhance the career productivity of students.

Research Questions

1. Does TVE have an impact on students' career productivity at Sukkur Region, Sindh?
2. What resources are available in the technical colleges and vocational centers to enhance the career productivity of students?

Research Hypothesis

1. There is no significant impact of technical and vocational education on students' career productivity at Sukkur Region, Sindh.

Scope of the Study

The main scope of this study is the TVE produced skilled, knowledgeable and efficient students for the job. This research study was conducted to determine the impact of TVE on students' career productivity at technical colleges and vocational centers of Sukkur region, province of Sindh, Pakistan. This research suggests solutions to the existing TVE related career job and students' productivity-related problems.

Literature Review

Technical and Vocational Education

Those alternatives of instructional strategy including the investigation of advancements and associated sciences and furthermore the securing of sensible abilities, general training, states of mind, comprehension and information with reference to occupations in fluctuated divisions of financial life; Technical and Vocational Education (TVE) has been a basic piece of national advanced courses in a few social orders because of its effect on profitability & financial improvement regardless of its commitments; The pioneers of Nigeria haven't given this aspect of training in the eye of merits which is one of the clarifications for the country's underdevelopment (Victor, 2005).

Technical education is an arranged program of courses and learning encounters that start with an investigation of professional decisions, bolsters essential instructive and fundamental abilities,

and licenses achievement of high instructive principles, administration, readiness for industry-characterized work, and progressed and proceeded with the instructions (Association for Career & Technical Education, 2014).

Furthermore, the instruction gets students ready for professions that are basically situated in manual or sensible exercises, verifiable non-scholastic and interrelated with a choice to exchange, occupation or livelihood. In elective words, it's Partner in Nursing training intended to create movement aptitudes; Professional and Technical education gives individuals the ability to live, learn and fill in as a beneficial subject in exceeding world society (Professional Training). The arrangement of vocational and technical schools includes a long history. Prior to the business Upset (somewhere in the range of 1750 and 1830) the house, furthermore, the internship structures were the key origins of training, anyway, common orders were later constrained by the decay of handcraft and specialization of movement abilities to produce the foundations of instruction (Duffy, 2007).

According to Alhmali (2007) to wind up profitable businesspeople since it causes masterful and inventive thoughts, extend the financial pie, and increment individual flexibility. The majority of the asserted 'ostracize engineers' joined countries organization square measure being paid scores of bucks to make Nigeria's streets and scaffolds square measure alumni of specialized and business colleges (Elzalitni, 2008; Alhmali, 2007).

Skill instructions are distinct from professional education, that places significant worry upon the speculations, comprehension, and standards of a decent group of material intended to prepare the alumni to pursue authoritatively in such fields as science, designing, etc. (Saunders et al., 2007). Skilled occupations square measure critical in an exceedingly huge determination of fields, and agribusiness, business organization, information process, training, ecological and asset the board, realistic expressions, mechanical style, and wellbeing and prescription; Technical educational program square measure correspondingly concentrated over a wide shift (UNESCO, 2009).

Benefits of Career and Technical and Vocational Education

The writer refers to a few sources that exhibit the benefits of Career and Technical Education (CTE). For instance, dynamic learning and being inundated in vocation arranged material could encourage understudies joined countries organization square measure agitated to remain focused on and curious about customary educators; the deficiency of mindfulness in learning is generally expressed in light of the fact that the commitment hole and as often as possible happens to understudies all through their high school years (Asset space for Instructing, 2015).

As indicated by the Asset space for Educating (2015), dynamic learning will re-invigorate an understudy's concentration related to rising correspondence and essential reasoning abilities. The Leading group of Agreeable Instructional Administrations (2018) places worth on CTE serving to understudies assembles the relationship between the schedule and application inside the labor. When understudies imagine the association between what they're realizing and their future, they will be extra planned to seek after post-optional training and get related in a stable profession.

Redman and Wilkinson (2018) elucidate vocation on the grounds that the use of a man's mental

component and capacities, giving orders over calling, auspicious work involvement and a premise of creating and ameliorative business systems. Individuals choose vocation taking care of seeking after gifted destinations, getting taught regarding future changes, their outcomes, and their convenient assessments. It is the idea of to be a beginning in the phases of vocation determinations, anyway still of prevailing importance. Individuals like the profession that would offer them sound reason for enhanced customary of living (Geri & Turgunbayeva, 2015). Vocation design done on a private premise might be a set up in any way a private would encourage in his calling. As respects the structure level, it talks regarding limited time viewpoints alongside self-improvement quadrant (Bayraktaroglu, 011).

According to Ozen (2018), the decisions that people assemble related to their vocation are arranged to be affected by two factors that square measure mental and social. Mental elements are related in person's discernment, thoughts, mental element and successful aims, convictions, demeanor, and appraisals related to the pending business air.

Research Methodology and Method

The present study was conducted by quantitative research methodology and survey method was used for collecting data. Both male and female students participate in this study, with the mean score being the starting point for find out the impact of Technical and Vocational education on students' career productivity at Sukkur Region, Sindh.

Population of the Study

All the students at technical colleges and Vocational center of the Sukkur region of Sindh, Pakistan was the population of this research study.

Sampling Technique and Size

Convenience sampling technique was used. A total of six technical colleges and four vocational centers are present in Sukkur region from these technical colleges and vocational centers; three colleges and two vocational centers were selected for sampling size. From all these colleges and centers 150 respondents randomly were selected.

Research Tool

Data for this study was gathered using a questionnaire tool. The student questionnaire was adapted from the Bandura self-efficacy scale

In the questionnaire, it explained student career and productivity for studying TVE, which method the teacher used in the class, which type of material teacher used in the class, and which things are necessary for career productivity.

Data Collection and Data Analysis Procedure

Data was collected through a questionnaire. Male and female students in their second and third years were given questionnaires. Data was analyzed through SPSS. From data, it is find out the impact of Technical and Vocational education on students' career productivity at Sukkur region, Sindh.

Theoretical Frame Work

Figure 1

Impact of independent variable on dependent variable



Analysis of the Questionnaire

Table1 Reliability of the Questionnaire

Case Processing Summary			
		N	%
Cases	Valid	150	100.0
	Excluded	0	.0
	Total	150	100.0

a. List wise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	No. of Items
.989	15

Demographic Information of the Questionnaire

i. Gender

Table 2 Gender of Participants

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	96	65.5	64.0	64.0
	Female	54	35.5	36.0	100.0
	Total	150	100.0	100.0	
Missing	System	0	0		
	Total	150	100.0		

ii. Name of Institution

Table 3 Names of Institutes

Name of institution				
	Frequency	Percent	Valid Percent	Cumulative Percent
Govt: Poly Technic Institute (boys) Golimar Road Sukkur.	32	21.3	21.3	21.3
Govt: Poly Technic Institute (girls) Sukkur.	30	20.0	20.0	41.3
Govt: College of Technology Khairpur Mir's.	34	22.7	22.7	64.0
Govt: Vocational Training Institute (boys) Khairpur Mir's.	32	21.3	21.3	85.3

Govt: Vocational Training Institute (girls) Khairpur Mir's.	22	14.7	14.7	100.0
Total	150	100.0	100.0	

Item-Wise Analysis of the Questionnaire

Complete Confidence=CC

Much Confidence=MC

Moderate Confidence=MoC

Little Confidence=LC

No Confidence at All=NCAA

Table 4

Item-Wise Analysis of the Questionnaire

Items	CC (5)	%	MC (4)	%	MoC (3)	%	LC (2)	%	NC AA (1)	%
I learned a lot of new things to help myself work better and faster at the workplace.	105	70	31	20.6	12	8	1	0.7	1	0.7
The curriculum here allows some flexibility so that student can really focus on career productivity.	68	45.3	66	44	11	7.3	3	2	2	1.3
The course is well linked to the relevant industry.	115	76.7	19	12.7	8	5.3	4	2.7	4	2.7
Technical and vocational education is a study on the way the human mind works.	105	70	29	19.3	14	9.3	1	0.7	1	0.7
I keep myself focused on the things while I doing some practical work in the laboratory.	70	46.7	44	29.3	33	22	0	0	3	2
Bringing people with different viewpoints together with corporations through a group work activity in the Technical and vocational education is possible.	95	63.3	37	24.7	13	8.7	4	2.7	1	0.7
Technical and vocational education gives a chance to talk in front of your classmate and teachers.	107	71.3	32	21.3	7	4.7	3	2	1	0.7

Technical and Vocational Education on Students' Career Productivity

Technical and vocational education plays a key role in updating and enhancing my skills for career choice.	72	48	70	46.7	5	3.3	1	0.7	2	1.3
Technical and vocational education curriculum is based on generic life skills and work skills.	116	77.3	24	16	7	4.7	3	2	0	0
The course contents offer skills for successful career productivity.	60	40	48	32	38	25	1	0.7	3	2
The teaching methodology is related to career skills which are beneficial for me at their workplace.	62	41.3	66	44	15	10	6	4	1	0.7
The provided infrastructure and the skills of the teachers, support the development of technical and vocational skills for career success.	112	74.7	24	16	12	8	0	0	2	1.3
Technical and vocational education is preparing me for self-efficiency.	68	45.3	71	47.3	7	4.7	4	2.7	0	0
The technical and vocational education provides us with self-efficiency which is appropriate for career needs.	120	80	26	17.3	2	1.3	2	1.3	0	0
The laboratories are well equipped to deliver the practical part of the course for a successful career.	62	41.3	67	44.7	15	10	4	2.7	2	1.3

Analysis of Research Hypothesis

Null Hypothesis

There is no significant impact of Technical and Vocational education on students' career productivity at Sukkur region, Sindh.

Table 5

ANNOVA interpretation

On the basis of ANOVA results, the overall model is significant (F-Statistics = 2459.807 and Sig < 0.05).

ANOVA					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	81.926	1	81.926	2459.807	.000
Residual	4.929	148	.033		
Total	86.855	149			

a. Dependent Variable: Technical Vocational Education

b. Predictors: (Constant), Career Productivity

Table 6

Linear regression interpretation for hypothesis testing

Coefficients						
	Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	.675	.105		6.440	.000
	Career Productivity	1.146	.023	.971	49.596	.000

a. Dependent Variable: Technical and Vocational Education

Here, the null hypothesis is rejecting because t-value is greater than 2 and sig. is less than 0.05. In simple words, there is an impact of Technical and Vocational education on students' career productivity.

$$Y = \alpha + \beta_1 X_1 + \varepsilon$$

$$Y = \alpha + \beta_1 (\text{TVE}) + \varepsilon$$

$$Y = 0.675 + 0.23(\text{TVE}) + \varepsilon$$

If there is 1% change in (TVE), there will be 0.23% change in career productivity.

Conclusion

Technical and Vocational education (TVE) provides an opportunity for students for jobs. From Technical and Vocational education students learn a lot of new things and tend to work better at the workplace. Through TVE students enhance their skills and knowledge, in both theoretical and practical work for a career.

In institutions, modern teaching-learning resources include training equipment and tools to be available to TVE students for effective teaching so that the students feel TVE program is beneficial. They provide flexibility in the curriculum, which is based on general life skills and work skills. The curriculum content is related to the requirements of the job market and institutes were linked with relevant industry and teachers organized different workshops and study trips so students can focus on career productivity.

The focus of the students is on practical work and for a successful career, laboratories are well

equipped to deliver the practical part of the course and combine students for group work. In different viewpoints, practical work and modules of study are adequately linked and appropriately progressed from one level to another level of study.

Provide students' a chance to enhance their skills and can talk in front of the class on different topics through practical work, because TVE plays a key role in updating and enhancing students' skills for career choice.

Teaching methodology plays a vital role in students' performance, and it is related to career skills, which is beneficial for students at the workplace. Good infrastructure and teachers' support, enhance skills for the career success of students and poor infrastructure can affect students' skills and efficiency.

According to the results of this study, the flexible curriculum is based on generic life skills and work skills (employability skills), linkage of the institute with industry and teaching methodologies of teacher significantly impacts on students' career productivity related to the skills and efficiency. TVE highlights the students towards the workplace updating/enhancing skills and efficiency for career productivity. Overall, it can be recognized that TVE has an impact on students' career productivity at Sukkur region, Sindh.

Recommendations

Based on the conclusion, concrete recommendations are:

To improve student performance and career productivity, the government should set up training programs for staff development.

The twenty-first century is known as the century of technological advancement. To tackle the problems of the modern world, the government should set forth enough money for the construction of computer and equipment labs in technical institutions and vocational centers. Students should be motivated to gain new skills for a profession and given a supportive environment at technical colleges and vocational centers.

For students to concentrate on career productivity, the government or institute head should connect the institution with pertinent industry, and instructors should plan various workshops and study excursions for students.

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