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Impact of COVID-19 on the Technical and Vocational institutes (A case study of Pakistan TVET institutes)

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Abstract

After the global financial crisis of 2008, the COVID-19 is a pandemic disease that hardly affected global public health, and in Educational, Economical, business etc. On February 26, 2020, in Pakistan special Assistant of Prime Minister Imran Khan, confirmed 2 cases of COVID-19 were diagnosed, both Patients came from the visit of Iran, both patients belonged to Sindh, Pakistan. Due to COVID-19, all the sectors are running abnormally, especially the educational sector. Globally all the countries announced lockdowns and ordered to closed the entire Educational sector to prevent COVID-19, This research investigates the major challenges faced by TVET institutes of Pakistan during the crises of COVID-19 and Conducted a comparative analysis on TVET institutes of Pakistan during the COVID-19 crises. The data collected from the various reports of COVID-19 prepared by national and international agencies, regarding comparative analysis information collected from the national website of the (National vocational and technical training commission (NAVTTTC) of Pakistan and the Provincial websites of TVET authorities of (Punjab, Sindh, Balochistan, and Khyber Pakhtunkhwa) on the Impact of COVID-19 crises on TVET institutes of Pakistan, Finally Conclusion and recommendations were provided to overcome the COVID-19 crises on TVET sector of Pakistan

Keywords: Impact of COVID-19, TVET institutes Pakistan

1. Introduction

After the global financial crisis of 2008, the COVID-19 is a pandemic disease that hardly affected global public health, also in every sector such as Educational, Economical, business etc. The WHO named officially coronavirus as COVID-19 on 11 February 2020 the abbreviation is that “co” stands for Corona and “vi” means Virus, D means disease and the 19 showed the Year in which the virus emerged (31 December 2019) the first case of Covid-19 outbreaks in the Wuhan city, China. During the five days close to 70000 infected cases were reported and 1800 people were killed. On February 26, 2020, in Pakistan special Assistant of Prime Minister Imran Khan, confirmed 2 cases of COVID-19 were diagnosed, both Patients came from the visit of Iran, both patients belonged to Sindh, Pakistan, one from Karachi and 2nd from the interior of Sindh. Due to COVID-19, all the sectors are running abnormally, especially the educational sector. Globally all the countries announced lockdowns and ordered to closed the entire Educational sector to prevent COVID-19, The UNESCO reported that during April 2020 from the total world population 90% of students were infected by COVID-19, more than 120 crores of students and Youths were infected in this planet. After a few months WHO advised the entire world to maintain distance is a major step to the prevention, therefore countries of the world announced lockdowns and suspended the classes and physical activities of Schools, Colleges, and universities and postponed exams and internships of students and the Higher Education Commission ordered that shift all the activities online through the (Zoom app, Ms. Teams, Google classroom, Skype, etc.) also made WhatsApp

groups of students, Parents, guardians for better communication) which is successful in developed countries but like in Pakistan, there are many challenges faced because (PTA, 2019) reported that only 36.86% of the population of Pakistan have access of Internet. In Pakistan, two main streams are running in the education system i.e. formal and non-formal education systems. Technical and vocational education (TVE) is counted as the major branch of the professional education system. General education is identified as a key of any development strategy, and Technical & Vocational education is identified as a master plan to enhance the economic growth of all the developed & developing nations and improve the well-being of life. Unfortunately, COVID-19 immediately affects the Technical and Vocational education Training institutes of Pakistan as well as the World. According to the report of UNESCO, 2020, the majority of responses showed that 90% of TVET institutes are completely closed in 114 countries by the effects of COVID-19, but in some of the regions Responses about the partially closed in Asia, Europe, and central Asia. Including Pakistan. Due to the closure of Technical Institutes, trainers faced challenges in the provision of practical skills training, so they made video lectures and conferences about the skills training but due to unavailability of internet and machines at home it was very difficult to students they learn effectively. Therefore dropout ratio of students increased and the remaining students feel demotivated and report showed that due to lack of accessibility of the internet and equipment's poor students were not facilitated by the Online System. Another challenge for TVET centers is that due to lockdowns all the local markets and Industries closed; therefore, a lot of students have fewer chances to learn from on-the-job training (OJT). In Pakistan TVET institute's performance are not satisfactory due to having fewer facilities of Internet, Resources, and connectivity, and Technical and vocational education is based on Hands-on skills which are effectively possible in the laboratories and workplace, platforms, etc. For that reason, they faced disruptions and difficulties during the online and remote learning system. Therefore this research paper highlights the major challenges faced by TVET institutes of Pakistan during the crises of COVID-19, the major aspect of this research is conducted a comparative analysis of TVET institutes in Pakistan from the Provisional Websites of TVET Authorities of each province to know the performance of each provincial authority of TVET and at the end, this study has suggested recommendations for better outcomes in future.

1. Literature Review

The use of technical education term is mostly in a wide range of education, globally, the technical education use as an alternate of Technical and vocational education training TVET (UNESCO, 2010) Technical education aims to enhance the skills of youth in different fields which are required in industrial sectors, and the technical education is different from academic education. Academic education develops the minds of students to soft and intellectual skills, technical education based on practical or physical learning (Ali et al., 2017) all the Technical and general educational sector effected by COVID-19, globally it proved that there is no any single country who fully innovative and equipped in ways of online learning, due to temporary closure of Educational centers there were 1.7 billion students or learners were effected by COVID-19 and lot of TVET institutes of Pakistan faced many obstacles and challenges in online system because of limited resources in TVET centers, also other reason is Pakistan counted as a developing country which focused more in general education as compare to Technical Education therefore it created Digital gap, thus students feel demotivated due to less digital facilities and opportunities (Noor, et al., 2020) Pakistan government forced TVET institutes to start online learning approaches in the centers because of prevention from COVID-19, the Remote learning is totally new for TVET institutes as well as for students, therefore in the starting time they faced many issues in online classes because the Technical education is based on the practical training. Finally, to these reasons the government of Pakistan decided to promote students without assessments and exams in 2020 (ILO, report 2020) some private and government centers remain open but due to closure of markets and borders has affected for required Practical training materials. TVET trainers faced difficulties in the delivery of practical based courses such as in Electricians, Plumbing, Civil Engineering, etc. (Hayashi, et al., 2021) According to the report of ILO-UNESCO, 2020 due to the crisis of COVID-19 all the Practical based learning and On the Job Training (OJT) are completely stopped, therefore students only completed 60% their courses in an online system.

Furthermore below discussed table 01 indicated that in Pakistan there are 3,581 public and private TVET institutes currently working in different provinces in which 934 are technical institutes, and the vocational institutes are 2647. In Punjab 1817 institutes (662-Technical and 1155-Vocational) are working which means the large numbers of institutions are working in Punjab close to 51% of total institutions, 599 (17%) institutions (30-Technical and Vocational-569) in Khyber Pakhtunkhwa and in Sindh 589=16% of total institutions (186-Technical and Vocational-403) in Baluchistan 123 (08-Technical and Vocational-115) institution are working and other institutions are discussed in the table 1

Province	Technical	Vocational	Total
Pakistan	934	2647	3581
Punjab	662	1155	1817
Sindh	186	403	589
Khyber Pakhtunkhwa	30	569	599
Baluchistan	8	115	123
GB	8	167	175
AJK	12	102	114
ICT	19	84	103
FATA	9	52	61

Table 1 Provincial Distribution of TVET institutes

Research Objectives

1. To highlight the major challenges faced by TVET institutes of Pakistan in the crises of COVID-19
2. Conduct a comparative analysis of TVET institutes of Pakistan in the COVID-19

3. Research Methodology

In this research study data has been presented and collected from the various reports of COVID-19 which prepared by national and international agencies, remaining collected data from the national website of the (National vocational and technical training commission (NAVTTTC) Pakistan, and the Provincial websites of TVET authorities of (Punjab, Sindh, Balochistan, and Khyber Pakhtunkhwa, and also from related reports of UNESCO- ILO and Articles, E-Contents of the Impact of COVID-19 crises on TVET institutes of Pakistan.

4. Data Analysis and Results

4.1 Major Challenges Faced by TVET institutes of Pakistan in COVID-19

The TVET institutes of Pakistan hardly suffered due the crises of COVID-19, therefore many different challenges and obstacles faced TVET centers in Pakistan, some of the challenges were discussed below.

1. Hampered TVET institutes activities:

Due to COVID-19 crises and lockdown all level of classes and other physical activities were suspended and Exams and assessments of Technical courses and Trainings postponed. All the TVET activities delayed such as new admissions and entrance test, results, exams etc. students faced loss of three months in academic year of 20-2021, and also as student faced difficulties in online classes as well as they will facing difficulties in rejoin after huge gap of physical Activities.

2. Impact of COVID-19 on employment:

During the crises of COVID-19 all the Recruitment agencies and companies postponed their recruitment process also delayed internship opportunities in industries. Placement of TVET graduates in industries effected due to delaying the recruitment process. The unemployment rate of Pakistan increased at the time of outbreak of COVID-19 because all the recruitment process of private and Government were stopped. Also lot of Bank jobholders leaves their jobs and some of private organizations fired their employees due to lockdowns.

3. Online/Distance Learning

At the time of pandemic, Pakistan government announced the lockdown and ordered to closure for all the educational Centers and shifted to distance learning, TVET centers faced lot of issues regarding the delivery of lectures online. Such as due to sudden announcement of lockdowns they have limited digital tools, equipment and Training resources, some online learning challenges listed below.

- Lack of effective online system
- Quality oriented online platforms
- Challenge for Students and trainers to conducted online Physical trainings
- Lack of planning and trainings
- Lack of digital skills in TVET teachers

4. **Lack of preparation in online Learning**

At the time of sudden cries of COVID-19 not all the Students and teachers were ready to shifted face to face class into online learning, some of teachers argued about the lack of planning and facilities we were not able to conducted classes online and the remaining teachers of Millennium generation were conducted sessions and classes through the (Zoom app and Google class rooms etc.) without dedicated Platforms of online learning it may not be effective learning, because of engagement of students possible in video lectures also students of ruler areas faced lot of voice and connectivity issues etc. during the online classes.

5. **Global opportunities of Employment reduced**

Due to the Traveling restrictions of peoples in COVID-19 lot of employees lose their employments from the other countries, remaining TVET graduates were not able to go in other countries regarding jobs. Many Pakistani peoples come back from other countries due the pandemic and some students already got jobs, Internships, Scholarships etc. but faced difficulties in joining. The recent Pakistani TVET graduates also fearing about the career because from 2020 continuously again and again government announced lockdowns in country and from 2 years recruitment process were stopped, no any government test and interviews were conducted, and some of candidates waiting for results and remaining were qualified their screening and written tests but due to lockdowns their interviews are not scheduled.

4.2 **Comparative analysis of TVET Sector of Pakistan in COVID-19**

Due to COVID-19 crises the TVET centers were hardly affected because the Technical and vocational education totally based on practical learning, therefore in this research major concern to do a comparative analysis between Provincial TVET centers of Pakistan during the crises of COVID-19

1. **Closure of TVET centers**

Due to sudden announcement by Government of Pakistan, majority of the TVET centers closed, results are that, in Punjab 90% centers were closed only 10% centers were opened with limited staff, and in Sindh TVETA centers totally closed, 95% TVET institutes were closed in Khyber Pakhtunkhwa and 92% were closed in Balouchistan 8% centers of were performed their duties with limited staff with SOPs, furthermore Percentage of closure of each province TVET centers are discussed below in graph

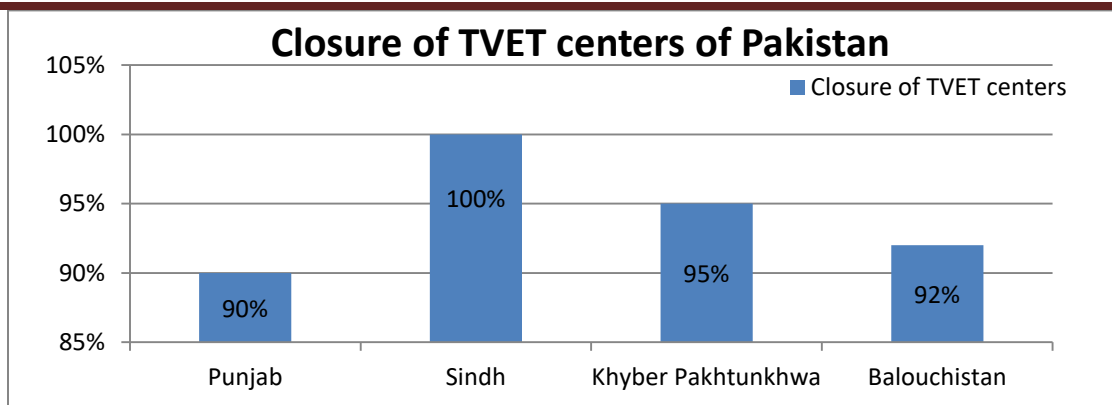


Figure 1Closure of TVET centers

2. Shifted to Remote learning

Due to lockdown TVET centers of different provinces were closed, therefore government announced to shifted educational institutes into online learning, due to sudden impact of COVID-19 therefore due to limited facilities and lockdowns fewer TVET centers were shifted their education online, such as 60% TVET centers of Punjab and 30% TVET institutes in Sindh, and 45% institutes of Khyber Pakhtunkhwa, 25% institutes of Balouchistan were shifted in Remote Learning.

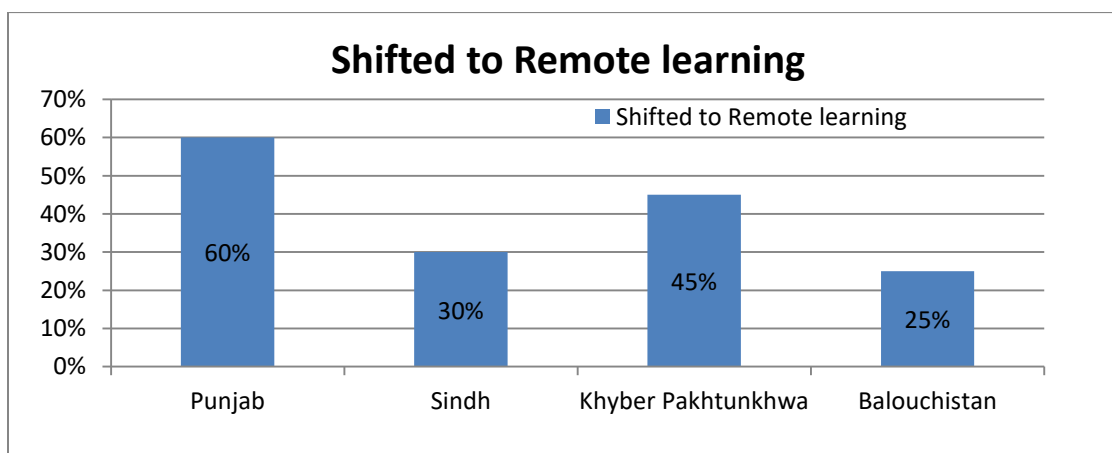


Figure 2 shifted to remote learning

3. Facilities of Internet/ Connectivity Resources in TVET Centers

The facilities of internet is most major element which help to shift the remote learning, so the below figure shown the data of Internet facilities in TVET centers of different Province. In Punjab province there is 99% availability of internet facilities in technical and vocational institutes, 32% in Sindh and 78% facility of internet available in Khyber pakhtunkhwa and 25% internet facilities available in TVET institutes of Balouchistan. Thus, in Sindh and Balouchistan very low facilities of Internet in TVET centers so they faced lot of issues to shifted their activities into Remote learning.

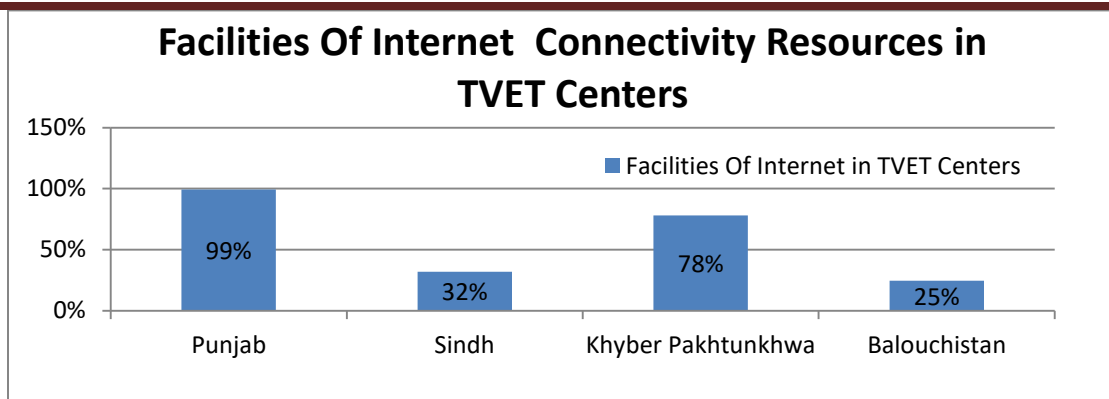


Figure 3. Facilities of Internet/ Connectivity resources

4. Backup source of Electricity

During the crises of COVID-19 TVET sectors shifted online system but due to load shading lectures were disrupted therefore they must have backup source of electricity for remote learning, below graph represented data that, in Punjab they have 72% backup plan of electricity (UPS, Generator, Solar, etc.), 17% in Sindh TVET sectors and 21% backup plan of electricity in Khyber Pakhtunkhwa, Balouchistan have 23% backup plan of electricity.

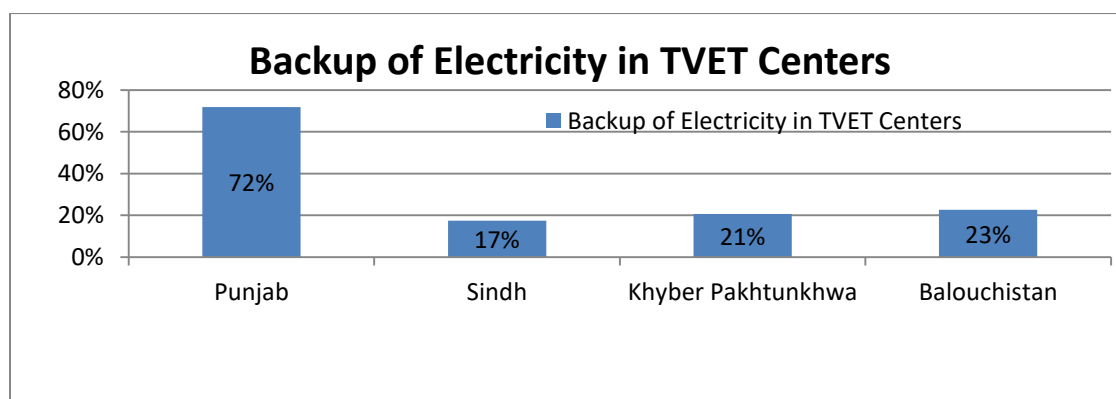


Figure 4 Backup of Electricity in TVET Centers

5. Lack of Motivation of Teachers and Students in COVID-19

TVET programmes and trainings are based on practical activities which must be performed through the laboratories and workplace, Workshops etc. due to all the activities of TVET centers shifted into remote learning so trainers and teachers faced lot of difficulties in engagement of students and also delivering practical trainings online through Videoconferences, Zoom app, MS Teams etc. students also demotivated because they couldn't understand lectures effectively without practical use of equipment's therefore students and teachers feel demotivated during the classes. According to the report of UNESCO-2020 After adopted remote learning in Pakistan TVET centers, Teachers faced stress and work overload in online teaching methodologies and students demotivated because of connectivity and electricity/Network issues in rural areas.

6. Disruption in the delivery of apprenticeships

During the time of crises of COVID-19 lockdowns imposed in overall Pakistan all the local industries and enterprises closed, for those reasons all practical trainings such as on the job Training (OJT) and Apprenticeships, work placements were disrupted such as some practical modules were cancelled and

some training schedules were postponed in Pakistan. In Karachi, Sindh, TVET some organizations remained opened so apprentices activities performed as part time in workplace.

5. Discussion of Findings

The finding of first objective of study referred that lot of obstacles and issue faced TVET centers of Pakistan in the crises of COVID-19, at that sudden announcements of lockdowns all the activities shifted into remote learning therefore due to fewer facilities and lack of trained staff, connectivity issues it's not possible as effective.

The second objective of this study revealed comparative analysis of TVET centers of different provinces of Pakistan such as (Punjab, Sindh, Khyber Pakhtunkhwa and Balouchistan) in during the crises of COVID-19 the findings shown in above graphs that all the provinces affected hardly at the time of COVID-19 especially Sindh and Balouchistan. In order to the results of graphs the performance of Punjab was best, and performance of Khyber Pakhtunkhwa were satisfactory but the performance of Balouchistan and Sindh were not satisfactory at the time of COVID-19 crises

6. Conclusion

This research study concluded that TVET institutes playing vital role in the growth and development of youth of Pakistan, At the time of COVID-19 all sectors hardly affected. thus, Government of Pakistan needs to developed different strategies, SOPs and provide different facilities and platforms for remote learning to face the COVID-19 crises, also TVET stakeholders and enterprises can work together during and after the crises of COVID-19 which reduce the impact of crises on education.

Bio-Sketch

Muhammad Faheem was born at Sakrand Sindh, Pakistan on February, 01, 1996, He did bachelor's degree in Business Administration from shaheed Benazir Bhutto University, shaheed Banzirabad, currently he is enrolled in Master in business administration in HRM at Mehran University of engineering and technology jamashoro, Pakistan, his area of research is Quality assurance in higher Educational sectors, Human Resource Management and skill development. Currently he is working on research projects on quality enhancement of both Technical and general educational sectors under the supervision of Dr. Asif Ali Shah and he is the Associate professor and Additional director of Quality Enhancement cell of Mehran University jamshoro



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