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Gender norms of employability; a case study of females'
technical and vocational education in Multan and Bahawalpur,
South Punjab, Pakistan

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Abstract

This report focuses on gender dimensions, in the context of Technical and Vocational Education and Training (TVET) in Multan and Bahawalpur in South Punjab, Pakistan. Gender among TVET to employability is an essential determinant of the access to power and resources. By employing qualitative methodology, the report tried to identify TVET scenario, female-learners' perceptions and factors hindering the acquisition of employable skills through this education. Data was gathered in the form of observation and semi-structured in-depth interviews. Through data-analysis, it was found that TVET programs for females, have potential, and may contribute to improved outcomes for females in Pakistan, but the significant limitations including the systematic reinforcement of traditional gender identities within and outside the school have a negative impact on females' learning. Study-findings strongly indicated that gender norms lead to minimising females' TVET participation. Familial and institutional barriers, meanwhile can be primarily attributed to strict social norms rather than being own deterrents of inequality. The financial dependency then again leads to structural imbalances which consequently solidifies already existed marginalisation. Study-conclusions suggest that in order to deliver the envisaged outcomes for females through this educational pathway, provision of gender-friendly learning environment and improved instructional practices are needed to make a substantive change. By doing so, females' empowerment and gender equality through TVET learning can be encouraged and promoted.

Keywords: Technical and Vocational Education, Gender Norms, Gender Equality, Gender Identity

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As my study time at the OsloMet University draws to a close, this research-project will be the last contribution from my side. There are few important people to whom I am highly thankful for their assistance through these years.

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Acronyms and Abbreviations

CA	- Capability Approach
CBC	- Competency Based Curriculum
CBT&A	- Competency Based Training and Assessment
CPD	- Continuous Professional Development
GDD	- Gender Digital Divide
ICT	- Information and Communication Technology
NAVTEC	- National Vocational and Training Education Commission (Pakistan)
NAVTTTC	- National Vocational Technical Training Commission (Pakistan)
NSD	- Norwegian Centre for Research Data
NSS	- National Skill Strategy
NVQF	- National Vocational Qualification Frame
OECD	- Organization for Economic Co-operation Development
SDGs	- Sustainable Development Goals
SDG 4	- Sustainable Development Goal 4 (Quality education)
SDG 5	- Sustainable Development Goal 5 (Gender equality)
STEM	- Science Technical Engineering Mathematics
TEVTA	- Technical Education and Vocational Training Authority
TVET	- Technical and Vocational Education and Training
UNESCO	- United Nations Educational Scientific and Cultural Organization

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Chapter 1 Introduction

This thesis reports on a research project focused on the issue of gender norms and their impact on access to and the contents on technical and vocational education as a pathway to future employability. The project examines the female-learners' participation in and views of the technical and vocational education and training (TVET) institutes in Multan and Bahawalpur cities, in South Punjab, Pakistan, including the learners' interest in TVET learning and whether their interests and perceptions have been discouraged and interrupted along the way. The project also examines the social and cultural environment as well as the TVET institutional structure, to consider the ways in which they welcome or inspire female-students to pursue their TVET disciplines as their future occupational careers, and any ways in which they, unwittingly create barriers. These barriers include those that are the product of social influences which might influence the female-learners' educational and occupational decisions and lead them to steer-away from these traditionally male-dominated fields of study. Educational researchers promote the idea that female-learners can learn the requisite knowledge and employable skills to excel in the TVET fields through appropriate mentoring if they are interested and motivated (Paudel, 2019).

1.1. Problem statement

The world, we are living in today, seems heavily reliant on technologically skilled-workforces. In that general sense, encouraging more graduates in the TVET fields can be said to be, important for a society's overall development in order to achieve a competitive advantage in the global economy. While higher skill-education prepares the learners in such professions, TVET is a field where females have been and continue to be under-represented compared to their male-counterparts (World Bank, 2019a). We require to identify which challenges the female-learners perceive as the stumbling blocks to acquire employable skills in their TVET learning.

This can be troublesome that persistent myths and misconceptions still exist regarding the TVET domain which might discourage the female-learners from pursuing their technical and vocational disciplines as their future career pathways. These misconceptions often portray the TVET disciplines as being reserved for 'male-geeks', rendering it an unappealing career choice for females. These misconceptions can connect antisocial and stereotypical labels to TVET which may conflict with females' educational and occupational aspirations. It is, therefore important to investigate these misconceptions as these can have significant impact.

Furthermore, there can exist prejudice in the TVET environment making the female-students feel unwelcome, so there is a need to explore whether the institutional structure of TVET is providing the opportunities for its female-students to pursue their career-trajectories in TVET disciplines. All these issues and questions seem pertinent and pose a real educational challenge in TVET, however, the question remains that what these factors are and how important they are in this particular case.

1.2. Research objectives

Considering the rationale of the study, the prior focus of this research-work is on the potential of technical and vocational education to enhance the inclusion of females in practical learning leading to their future employment. The study attempts to assess the practical implications of producing an employable skilled workforce responding to the global market requirements which is envisioned by TVET schools (see TVET vision-statement in Appendix D), and finding out the extent of its implementation for female-students.

This study aims to identify barriers to females' participation in the TVET learning that might contribute to the wider equity and equality commitments with regards to future employability at regional and national levels. This thesis report is based on the following detailed objectives:

- To highlight the conception and understanding of female learners on comprehensive technical and vocational education with regards to their participation in this education.
- To identify the challenges persisting in the TVET institutions on the parameters of satisfactory or dissatisfactory results with the quality of the training provided to them.
- To explore the possible bottlenecks in the female employability after TVET education and ways to improvise these barriers.

1.3. Research questions

This study seeks to develop an understanding of the perception of female-learners about the technical and vocational education and how this education may contribute to their potential skill development to future employability considering barriers within the school as well as community contexts in Multan and Bahawalpur cities in South Punjab, Pakistan. The research task, here, is twofold. Through various research methods, this study investigates the following research questions:

1. What are the perceptions of the female-learners enrolled in TVET institutions about their vocational learning and future employment?

2. What barriers do female-students face in acquiring TVET qualifications that can improve their employability and lead to employment?
3. How can TVET educational policies, structures and practices encourage more equitable-employability pathways and opportunities for the female-learners?

1.4. Thesis structure

This thesis report is organized into 7 chapters. Chapter 1 aims to include introduction of the studied domain with a brief coverage of the rationale behind conducting the study. Chapter 2 introduces study-background and the related literature review. Chapter 3 provides the theoretical framework employed for this study. Chapter 4 comprises of a systematic outline of the methodology procedure. Chapter 5 covers presentation, interpretation and analysis of the accumulated data. Chapter 6 focuses on key findings and discussion on the obtained research empirical results. Chapter 7 presents study conclusions, study-limitations and future research directions.

Chapter 2 Study background



Figure 1 ("Map of South Punjab, Pakistan,")

2.1. Profile of TVET in Multan and Bahawalpur

Multan and Bahawalpur districts are the main cities of the province South-Punjab, Pakistan consisting of about one-third population of the country. Their geographical boundaries may not be well defined still these districts of the Punjab province can be defined regarding the Seraiki belt, where Seraiki is widely spoken as the native/mother language. As lower divisions of the province Punjab, Multan and Bahawalpur are also unofficially included in the Southern Punjab and comprise 11 small districts with half landlocked areas of 48.5 percent of the whole Punjab. Comprising about 1.87 million of population, Multan is considered as the 7th largest cities of

the Punjab province with area 3721 square kilometres (Sheikh, Akhtar, Asghar, & Abbas, 2020). While Bahawalpur being the 11th largest city of Pakistan, covers the area of about 9587 sq.km., and gender-wise population in Bahawalpur comprises 53.09% of males and 46.90% of females with the lowest 8% literacy rate for the females (Azhar & Siddique, 2020). Both these cities are famous for their agricultural yields, specifically for ‘Cotton and Mango’ also well-designed mosques, shrines and mausoleums are considered as a major attraction for the tourists here. Climate in these cities is quite hot as compared to the other cities of Pakistan. Based on various welfare and development indicators, Multan can be categorised as the most unprivileged regions of South Punjab in terms of poverty and quality education, and attributable to the socio-economic, cultural and geographical reasons, people experience scarcity of higher technical education opportunities and professional development especially in rustic areas (Sheikh et al., 2020). Despite both federal and provincial government’s recent initiatives of technical education improvement, only two engineering programs at post graduate level are available in Multan and Bahawalpur entitled: The University College of Engineering & Technology, Bahauddin Zakariya, Multan and the Islamia University of Bahawalpur College of Engineering. Comprising a limited in-take for the learners, the industrially ample but educationally unprivileged South Punjab regions are unable to improve the technical skills of the learners mainly due to the weak academia-industry linkage and absence of multi-disciplinary courses for incubating entrepreneurial practices to address the technological impediments both locally and nationally (Bibi & Mansoor, 2018). The research of Bibi and Mansoor (2018), further investigated that although a handful of federal TVET institutes have been established, however, these regions continue lag behind because of weak policy planning and their execution.

At regional level in these regions of South Punjab, 402 TVET formal and informal institutes are running under the charge of the Technical Education and Vocational Training Authorities (TEVTAs) with around 200457 enrolled students (Siddiqui, Hameed, Akbar, & Khan, 2019) with an aim to provide appropriate and quality trainings to the TVET female-learners. Formal TVET. At tertiary level, both Multan and Bahawalpur technical university colleges offer 4 years B.S., M.S. and doctorate programs which is relatively a key bottleneck to upgrade skills in Pakistan.

Under the recent global scenario of TVET, the goal of the TVET is plausible in a sense that TVET equips learners not just to acquire the technical and vocational skills but also with attention to what is needed for graduates’ representation in workplace for their socio-economic

prosperity (Mutarubukwa & Mazana, 2017). That said, the existing setup of the TVET sector in Pakistan, according to a study by Alam (2015) is arguably seemed not sufficient to harness the challenges at regional level pertaining to the supply of skill and labour-market demands for competitive skilled workforce. Furthermore, the study of Alam (2015) also indicated that with the fast-increasing youth population in Pakistan, delivery capacity for demand-driven employment skills enhancing trainings and capabilities remain inadequate to meet recent labour-market needs and challenges. According to the study (Alam, 2015) unmaintained and unattended TVET infrastructure, scarcity of instructional materials and unsatisfied working environment can be said the main contributors of the skill-supply gap. The study of Alam (2015) concluded that in the context of local and provincial needs for skill labor-force and gender-employment productivity levels, the present situation essentially requires extensive policy plans in these cities to fill up the skill supply gap and demand therein especially.

2.2. National TVET policy-initiatives to enhance skill-development for employability

Human-resource development in a country can improve the economic growth which can further lead to social-mobility, economic-emancipation and stability. In this regard, skill-development, as an essential component of human-resource development, can play a pivotal role in an individual's productive potential. Recognizing the importance of skill-development, the government of Pakistan established National Skill Strategy (NSS) under the supervision of two autonomous organizations, the Technical Education and Vocational Training Authority (TEVTA) and National Vocational and Technical Education Commission (NAVTEC), to implement the policy plans for all TVET schools (Pakistan Government, 2018). The purpose of TVET is to aid in the implementation of industrial as well as economic development strategies. To align with the Sustainable Development Goals (SDGs), the national government of Pakistan produced the 'Skill Development Vision 2025' as a national strategic blueprint to upgrade the economic stability of the country through the development of social and human capital of the country (Pakistan, 2014). In addition, to implement the competence-based training and assessment (CBT&A) align with the National Vocational Qualification Frame (NVQF) has also been designed for the quality assurance, productivity, labour mobility and capacity-building and adaptability of the skill-workers (Pakistan Government, 2018). This alignment aimed specifically at the integration of the pre-service and in-service training for the TVET instructors and the teachers by upgrading the TVET institutes into the centres of excellence (CoE). These centres have been established in all the provinces of the country bearing the responsibility of quality functional training for the TVET instructors, managers,

assessors as well. For skill enhancement, another action plan agenda ‘Skills for All’ has also been developed by the government (World Bank, 2019a). Moreover, NAVTTC as national level body, has been designed to fill up capacity-gap at provincial levels and to provide the important policy enforcement for TVET sector in the country (Pakistan Government, 2018). It also aims to address TVET related other issues and to promote demand-driven technical and vocational education to the learners especially from the rural areas and to provide them equitably effective vocational training to get employment. Despite this evidence of expansion of TVET, there are arguably still many issues that need to be addressed in technical education and training domain. These include issues of the lack of proper facilities, low levels of female representation, infrastructural and administration management issues (Pakistan Government, 2018). Such problems require in-depth study assessing various factors behind these persisting issues and effective policy plans. A research effort by Nooruddin (2017) for example, presented a detailed description of the objectives and the significant roles of the TEVTA, TVET and NAVTTC also highlighted the policies regarding manpower, structure, quality etc, in the context of economic sustainability. His research-work further discussed how effective policy devising can positively influence the production technology to contribute to the country’s economy. However, the research (Nooruddin, 2017) did not cover how to bridge the gap for the female employability at national levels. In the similar vein, another study (Chamadia & Shahid, 2018) was conducted to evaluate the execution plans of the NSS’s execution plans for TVET reformation in different TVET schools in Pakistan. Their study analysis declared that despite all governmental strategies, the expected outcomes for TVET restoration have not been achieved so far. Dilapidated infrastructure, outmoded curriculum, disinclined institute-industry linkage and dearth of trained instructors are the most pronounced findings of their study. Dealing with the above-stated issues, the research of Chamadia and Shahid (2018), however presented a limited focus on the challenges with the reference of female-students in TVET schools.

In the wake of SDG # 5, which focuses on gender equality and women empowerment, there are several ‘loper-holes and lacunas’ found in TVET policy implementations in Pakistan both at national and provincial level mainly due to organizational gender issues (NAVTTC & Sabina, 2019). The report (NAVTTC & Sabina, 2019, p. 13) unfolds the TEVTAs’ rhetoric that the programs and initiatives aimed to empower females, lack gender-mainstreaming specifically in the underprivileged parts of Punjab where significant gender disparities have been observed in terms of females’ enrolment both in public and private TVET schools. In

corollary to this, TVET policies though predominantly put emphasis on skill learning, but as Raza and Ibrahim Khalid (2017) argue, these policies are not sufficiently delivering the comprehensive set of international labour-market related employable skills for the female-learners. Considering this, Jamil and Iqbal (2020) conducted an evaluative-research at Layyah, a least-develop rural area in South Punjab, Pakistan. Their research examined the lack of entrepreneurial skills for female-learners. This, they argue, was the root-cause of the suboptimal quality and efficiency of TVET in Layyah. Jamil and Iqbal (2020) further argued that entrepreneurial skills are a prerequisite, and their scarcity could have negative consequences such as low human-capital cumulation. These sorts of employable skill-supply deficiencies and impediments could also undermine the TVET sector's potential, especially for the female learners. In order to minimize this risk, the research (Jamil & Iqbal, 2020) put forward suggestions such as more systematic syllabi revision, improved instructional policies and activity-based vocational learnings for women.

Before digging-out more of the TVET scenario in Pakistan, I will present a brief contextualization of the TVET by reviewing some important literature.

2.3. TVET contextualization

Education is arguably, a core component of the Sustainable Development Goals (SDGs) (UNESCO, 2015). SDG # 4 seeks to ensure that all children from any backgrounds have an equal access to quality primary, secondary and post-secondary education (PSE). In this section,, I will try to provide a picture of the TVET that how it is constructed, organized, understood, and delivered globally. The definition of technical and vocational education and training (TVET) has been taken into practice by UNESCO in 2000 by promoting TVET programs with the main objective of preparing skilled workers for human development. Whereas the world bank puts more emphasis on the human capital and economic prosperity. Therefore, for human development and to secure good outcomes for the TVET programs, environmental conditions, cultural and social contexts or settings must be taken into consideration by the respective societies. In this regard, the following reviewed study-works have touched upon various aspects of the TVET systems. According to the study of Ludwig-Mayerhofer et al. (2019), TVET programs can be most successful when to support the youth workforce markets combining education and employment as one of the main criteria of achieving success of the TVET programs is the successful transition of the young people into the workforce markets. Their study also contrasted the linkage between various 'supply and demand-side' influences as well as their effects on vocationalization and work placement

procedures by the community. The study (Ludwig-Mayerhofer et al., 2019), provides an insight into the underlying social processes leading to various vocational education and work-market results when the success of vocational programs and policy is defined in terms of getting people into work.

In similar connection, an important point has been highlighted in the research-effort of Bolli, Oswald-Egg, and Rageth (2021) that the successful linkage of education and employment into TVET programs can contribute greatly to address skill-mismatch challenges and to achieve successful youth workforce market outcomes. Taking this into consideration, their research-report stressed upon employing a dual vocational education system for the success of job-market linkage and work-efficiency enhancement. The research (Bolli et al., 2021) proposed dual system programs of education and employment connection though can have their long-lasting effects, but these programs can prove less-progressive when the school-based vocational educational programs have low enrolment percentage as this demands other components as well for the overall improvement and success. Their research further elucidated that the obstacles in the dual system of education and employment may be overcome by engaging the actors to accurately train the students for job-market demands for economic stability.

2.3.1. TVET for human and economic development

Despite stating the advantages of the TVET programs, the above-reviewed studies did not focus the cardinal aspect of 'technical and vocational skill development' which can contribute to get several social and economic benefits. With regards to this, 21st century skills focus on competencies, knowledge and transferable skills creating new avenues for occupational categories and new employments (UNESCO-UNEVOC, 2018). Furthermore, these twenty-first century competencies and skills also include critical thinking, flexibility, communication and information literacy, collaboration, technological competencies etc (Stehle & Peters-Burton, 2019) which are said to lead towards the human and economic sustainability. In connection to this, report of UNESCO-UNEVOC (2018) also highlighted that shift in the 21st century development paradigm towards countries' demographic changes, socio-economic growth, labour-market trends and sustainable development, are the key elements that can help driving the dynamic future of the TVET. And these high-levelled skills and increased global competitiveness seem now become the important tools for economic development and societal stability. Therefore, the countries are encouraged to focus on the TVET to respond to the uncertainties and challenges presented by the enhanced change in global market that is

characterized by the countries' economic competition and high emphasis/focus on the skill development (UNESCO-UNEVOC, 2018).

TVET learning can contribute to human development and to sustain the economic development, as the primary objective of TVET education is to develop effective and sustainable employable abilities in its learners (Omar et al., 2020, p. 613). This presupposes that TVET can play a key role into the development of robust economy that can prioritize technical and skill development require to improve productivity. However, from a human development perspectives, McGrath and Powell (2015) elucidate that the outcomes of TVET learning must not only be employed to earn income, but to add to the quality and capability of the people's life by contributing to social and political development. As TVET, according to McGrath and Powell (2015) requires to be viewed as multifaceted mechanism including regional, national as well as international aspects. In this connection, workforce market demands high order of vocational and technical skills, which Ullah, Malik, and Khan (2017) highlighted in their study by stating that international and national organizations and governments of countries need to intensively invest significant amount in hands-on learning of technical and vocational skill training for the overall development of the people, instead of putting emphasis merely on the theoretical aspects of the vocational teaching and learning.

This notion has also been articulated by the report (World Bank, 2019b) which encourages the governments to better care for their people by devising accurate reforms for the improvement of the job-market laws and policies. The report also puts great emphasis on the value of multiple different skills such as advanced cognitive and socio-behavioural skills which are required for lifelong-learning and sustainable development. Given the significant role of TVET in shaping and enhancing the skill sets need to meet the long-term technological, economical, industrial and societal needs of the countries, TVET can attract the attention of the states and the governments as an alternative education to address the challenges the societies confronting in recent times (World Bank, 2019b).

2.4. TVET in Pakistan's region

In accordance with the above-reviewed studies, much of the literature has also been generated on the TVET programs and functionality in many countries worldwide. This section reviews TVET systems of few neighbouring countries of Pakistan's region, with some commonalities of socio-cultural factors and on common economic, political and historical grounds.

2.4.1. TVET in Bangladesh

In Bangladeshi context, technical and vocational education systems are to be said, produce low level of employment results in labor market because of the limited provision of TVET at the industry levels, and as Dewan and Sarkar (2017) reported that the weak linkage between educational institutions and labor market is so prominent in Bangladesh that the TVET training institutes are not able to fulfil the demands of the required skills of the labor market. Their study also revealed that the Bangladeshi TVET system is underfunded which has made the education system unable to address the everchanging requirements of the job-market thus, causes this poor alignment. Their study also suggested that in order to enhance employability among the Bangladeshi youth and to establish industries with jobs, the Bangladeshi government needs to develop skill-acquisition programs by upgrading their current TVET system.

Similarly, considering the skill-gap, the importance of the industrial attachment can play a significant role in instilling the practical skills, information and better understanding in the TVET learners for getting employment in any specific trade or profession. In this regard, TVET programs in Bangladesh show little interest in developing policy-frameworks for promoting skilled-trainees to participate in such attachments and this claim has also been supported in a qualitative research conducted by Siddiky and Uh (2020) which identified the skill-gap between the skills required by the industries and the skills offered by the country's TVET institutes. Overall, their research defined the skill-requirements for enhancing the employability ratio as well as synergetic collaboration with the industries where these skills must be developed through the TVET schools. Furthermore, sufficient conclusions of the research (Siddiky & Uh, 2020) also defined that the industry engagement in designing and upgradation of the job-market responsive TVET curricula, implementation of the dual-structure TVET with a strong emphasis on the employable-learning must be included in industry-institute collaborative policy-plan. Pursuant to this, non-availability of well-structured or planned workplace learning for the TVET educated learners in Bangladesh reveals the lack of collaboration between the TVET institutions and the industry (Dewan & Sarkar, 2017).

By reviewing the literature on Bangladeshi TVET system, the highlighted issues of weak industry-institute collaboration and skill-gap, my research would contribute to the Pakistani stakeholders' understanding of the TVET, in effort to develop flexible TVET system, as opposed to the Bangladeshi situation. Next section, now examines the Nepal case.

2.4.2. TVET in Nepal

In the long history of TVET system in Nepal, the biggest challenge is the lowest ratio of female representation in technical education (MoEST, 2018). This can be said a major obstacle to the females' access to the TVET learnings and limited capacity intake consequently hindered girls' transition from school to work. In non-traditional TVET courses, with no or limited quotas allocated for the female students, humanities has become a default choice of profession for most of the Nepali females (MoEST, 2018).

The patriarchal society and prevailing traditional practices and beliefs against females in Nepal, cannot be overlooked as these societal norms can intervene and operate at multiple levels to hinder and limit the hopes, choices and opportunities of the Nepalese females. A policy-paper by Paudel (2019) argues that lower investment in females' TVET sector, unsatisfactory labour market conditions and their mobility limitations affect females' participation in TVET fields both directly and indirectly. Study (Paudel, 2019) further unfolds that like other Asian developing countries, Nepal too, is committed reach to the targets of SGDs by 2030. Hence, the country is more focused to the SDG # 4 that stresses 'inclusive as well as equitable quality education for all', explicitly emphasizing the need of quality and affordable TVET system to substantially enhance the Nepali youth's educational participation and to acquire relevant skills for their future employability. His study proposed both the public and private institutions to launch high-quality TVET disciplines to promote female-representation in the TVET sector allowing them to complete the TVET courses which could further lead their employment transitions. According to the study-findings of Paudel (2019), Nepal arguably needs to prepare its youth as a skilled and a competitive labour-force through workable appropriate policies for promoting equal gender access to the TVET that could substantially contribute to the country's economy and sustainable development.

What has emerged from the above-reviewed literature is that TVET in Nepal seems marked by feeble policy implementations which requires gender-transformative strategies to improve the unprivileged-group's access to TVET learning. Next comes the Indian TVET situation.

2.4.3. TVET in India

In India, the predominant narratives of the TVET depart from an understanding that the country can be said cladding with pronounced problem of public's low perception for TVET. In this context, the survey (Gupta, Saha, Sharma, & Jha, 2021) argues that TVET in India is viewed as 'second-class' education and is often stigmatised as the last recourse for the low

performers/achievers of the academia or for the people from the low-income backgrounds. Thus, this conceptualization seems making the TVET sector relatively less attractive for the families to send their females to TVET schools. Their research further argued that despite the government efforts to boost the TVET sector, the situation remained same regarding skill-mismatch, inappropriate material of TVET curriculum and gender-segregation.

Being a multi-ethnic country, the Indian government seems facing challenges of gender unequal participation and access to the TVET disciplines, and this issue has been touched upon in the research of Srivastava (2019). Examining the traditional patriarchal society of India, his research elaborated that the rural females are characterised as caretakers of household tasks and duties with minimum time and opportunities to enrol in the mainstream TVET education comparing their male counterpart. Furthermore, persistent gender exclusion and inequities in the TVET disciplines in tandem with the emerging social inequalities have immense repercussions on the right to employability of the marginalized females of the country. However, the current TVET system in India imparted through the ITIs suffers from multiple deficiencies and demands a reformed TVET system endowed with equal employment opportunities and most importantly institutionalised linkage with the industry for the sustainable development of the country. Tackling this situation, the research of Srivastava (2019) proposed the provision of appropriate social-security and reasonable job-market rules and regulations in order to get equitable results.

Reviewing the above-listed literature, the identified issues of low public perception for TVET and gender discrimination more or less, have commonalities with that of TVET system in Pakistan, which will be further explored in my study as well as a common factor of Asian patriarchal society. What follows next, is some more literature exploration regarding women's TVET participation from gender lenses.

2.5. Females' TVET representation from International perspectives

In the context of real world, the paradigm of the modern education seems developing globally with given challenges and problems. This modern education can potentially provide people with tools to resolve the given challenges and problems. It can also potentially help to conquer the new heights, understand new ideas and concepts, reach new values and gain necessary skills and knowledge. Without necessary obtained skills and knowledge, seems next to impossible to achieve freedom thus the countries inevitably require to adapt to changes. It can be, thus, imperative to promote and extend TVET disciplines among the masses without any

discrimination. In comparison to the above reviewed literature and in accordance with the framework for action to achieve the Sustainable Development Goals (SDGs), specifically on education quality and TVET reforms and challenges, it has been found that despite significant development and progress over the past few years, a more profound and persistent gender inequality can be seen in postsecondary TVET where women participation is relatively lower globally, and in both developing and developed countries and as compared to males, females are less likely to participate in TVET technical programs (Rosa, 2017).

With regards to women's low-participation, the same notion has also been further documented in the research-paper of (F. Khan, Aradi, Schwalje, Buckner, & Fernandez-Carag, 2017) on Gulf States, uncovered the potential blocking-stones which continue to reduce females' representation in the TVET as well as employment sectors. Their job-market analysis documented that despite obtaining technical and vocational trainings, the completion rate in TVET disciplines is significantly low for many of the women. Scarcity of technical-education opportunities and options, biased TVET curricula, stereotypical social-norms and job-related gender segregation are the reported deterring factors of the research-investigations of F. Khan et al. (2017).

F. Khan et al. (2017) reported claims of females' low enrolment in TVET educational attainment for development in the Gulf States, in terms of participation and access in TVET. Their work shows that there has seemingly been a serious concern among the stakeholders, policy makers and researchers to ensure an equitable and equal participation of men and women learners for some time. This is reflected in the international framework like the Sustainable Development Goal (SDG) # 4.3, that commits to ensure the provision of the provision of "equal access for all women and men to affordable and quality technical and vocational..... education" (UNESCO, 2015, p. 20).

Similarly, regarding female-learners' representation in the TVET ICT digital disciplines, Wong and Kemp (2018) while interviewing digitally skilled teenagers in UK, discovered that despite technological advancement, female-learners' lack of aspiration to place themselves as future developers in digital spheres, is still a matter of great concern. Additionally, the exploratory-study of Wong and Kemp (2018) sought to comprehend that how gender identities and gender discourses interacted with the digital aspirations and career pathways of the teenage learners. Their study findings elaborated that despite the worldwide consensus on career aspiration among ICT skilled young learners, a limited number of girls was interested to pursue their

careers in technology-oriented courses considering these courses a pathway for males. Their research conclusions further revealed that even though the new generation has apparently grown-up with a better understanding of new technology and gender equality, computerization and digital technological disciplines are frequently categorized as the male-dominated fields as such stereotypical gendered norms appear to be inculcated since the very childhood period which can prove stumbling-block in females' career pathways.

Females' lower participation in technological spheres seems required to dig out the reasons for this low representation. In this connection, females' low participation in TVET-related course like Science, Technology, Engineering and Mathematics (STEM) have been reported by UNESCO & Chavatzia (2017). It reported females' lack of interest in STEM disciplines and their low participation in STEM-oriented courses at their secondary as well as postsecondary levels, and that female's dropout in STEM disciplines at a disproportionately higher rate than the male students. The report (UNESCO & Chavatzia, 2017, p. 10) further mentioned that at postsecondary levels, of the overall enrolment, female students' representation observed only 35% in STEM-related courses. However, despite the high demand of the learners with STEM backgrounds, according to the report (UNESCO & Chavatzia, 2017) gender unequal participation, in terms of females' lowest enrolments in STEM-related disciplines were observable mostly in Information and Communication Technology (ICT), social sciences, engineering, construction, mathematics, manufacturing etc.

Disturbingly, this gender-based disparity in the selection of 'soft' or 'hard' technical and vocational disciplines is not confined just to developing countries. A number of contributive factors account women's low representation in TVET courses globally. These factors include religious, socio-cultural norms and societal gender stereotypical perspectives. For instance, the report of OECD (2019) explored that while defining the role of the females in the society, cultural assumptions and the preconceived conceptions play a vital instrumental part in shaping the decision-making power of the females for their choice and participation in the TVET fields which can exacerbate further inequalities in the employment sectors for these females. By this, major concern of the report (OECD, 2019) was to highlight transition from education to employment across the OECD countries. While, other issues of unjust gender-remuneration, conscious and unconscious biases towards women participation in the TVET departments have been further discussed in the work of Gudyanga, Gora, and Moyo (2019). Their work examined and explored the factors affecting the rural male learners' participation in perceived 'women-oriented' TVET courses in Zimbabwe. In addition, the research (Gudyanga et al., 2019)

revealed that though female learners participate in TVET, still they are relatively more interested in pursuing gender-specific courses rather than traditionally male-dominated courses and vocations. Both these above-reviewed study-works conclude that females more likely take up ‘soft’ or female-oriented technical and vocational courses including cooking, beauty-care, hairdressing, nursing etc, considering these courses fit to their gender identities. However, considering females’ gender roles and as compared to their men counter parts, females mostly avoid taking up ‘hard’ or male-oriented technical and vocational courses including carpentry, construction, engineering etc.

In the light of the above-reviewed literature, persistently minimal representation of the female-learners in the male-oriented TVET disciplines seems to be haphazardly attracting the public attention or actions to formulate policy-plans for this phenomenon. Taking this notion into consideration, research by Struthers and Strachan (2019) had been conducted through interviewing the secondary school’s young female-learners along with the stakeholders from the TVET institutions to gain better understanding of the potential barriers that affected women’s participation in the TVET courses in Queensland, Australia. Their research documented the systematic ideological and social barriers including gender stereotypical societal norms, harassment and intimidation fears, as the primary factors for the female learners’ low representation in the TVET programs. The most prominent finding of the research (Struthers & Strachan, 2019, p. 13) indicated the ineffective and unsuccessful impromptu plans or actions to tackle gender segregation especially in the trades where female-participation percentage is lowest to 2%. To raise this rate, their research proposed a collaborative institute-industry and government policy-plans for sustainable progress. But the detailed policy-plans formulation was fairly limited in their research.

In the similar vein, another semi-structured interviews-based study conducted by Makarova, Aeschlimann, and Herzog (2016) elucidated that low participation of females in Swiss TVET secondary schools is often characterized by societal stereotypical prospects. For instance, according to the study-observations of Makarova et al. (2016) the young females who tried to participate in TVET programs and courses were often being considered naturally less capable or less skilled to perform any task without their male counterpart’s support and assistance. Their study specifically shed light on the various strategies or methods the young females employed to adapt to gender-anomalous academic and occupational environment. Their study contributed to make gender disparity more visible to the practitioners in the labour-market in order to reduce females’ dropout in the STEM fields.

Other identified contributing factors for women's low representation in TVET courses include lack of knowledge and awareness about the benefits of the TVET programs for women's future sustainability, anxiety regarding females' future employability and inadequate financial resources or support. These afore-stated issues have been maintained and further discussed in a study conducted by Rotich, Wanyeki, and Dimo (2020) exploring persistent gender inequalities and occupational stereotypical factors that caused female's low representation in the TVET programs in North Rift Region, in Kenya. Their study findings revealed that gender stereotype made female learners ambivalent in the choices of the TVET profession related courses and thus proved an obstacle to their equal access to the TVET. Thus, understanding the women's participation in TVET disciplines, can be explained by different casual or correlative factors. But the noteworthy thing is that these factors are transnational and there can be differences of factors among/between the countries of global South or global North, yet these different factors are of degree rather than mere a consequence (Rotich et al., 2020).

The above-depicted picture reveals that there is a significant amount of research has been done internationally on the gender and TVET systems across the countries worldwide. The reviewed work highlights the gender-related issues including females' low representation in traditionally men-dominated TVET disciplines, public stereotypical perceptions regarding females' educational and occupational pathways etc, among these above listed countries. In the light of the above reviewed foreign-literature, my research-project will also concentrate on the female-learners' gendered perspectives and associated barriers, which cannot be ignored in the sense of females studying in TVET education, which is currently considered as a men-centric domain in Pakistan.

2.6. Females' participation in TVET and potential challenges in Pakistan

In the general education sector in Pakistan, the status of women's educational inclusion changed a bit after the Malala's shooting incident in 2012 (Aziz et al., 2014). Although, few institutional and educational reforms put in place to achieve gender equity and equality with an objective that in the Pakistani male-dominating society, achieving such goals may not be a utopian project. But, evidenced by the case-study of Wallace (2020) in Pakistan despite governmental persistent efforts to improve, in the year 2020 too, the situation still remained worst ranking Pakistan at 151 out of 153 countries. His study specifically highlighted the structural, economic and social challenges in the education sectors in Muzaffargarh district Punjab, which are significantly contributing to unequal education for the females. Wallace (2020) voiced that the unscrupulous governmental structure and weak policy implications are

the main reason of this gender discrimination. Thus, by putting emphasis on allocating proper gender-responsive budgeting to women education, his study beseeched for a synergetic collaboration of the foreign and the local governmental bodies to bring a transformative change to create more equitable and inclusive education for the Pakistani women.

Like general education, gender disparity can unequivocally, be noticed in the technical and vocational education sector in Pakistan having an impact on females' participation in TVET education which is why, the TVET sector could not outspread at the same pace and encounters potential challenges for the females (Raza & Ibrahim Khalid, 2017). Few major challenges with studies-review are elaborated as below:

2.6.1. Socio-cultural factors

In Pakistan, despite the governmental actions and plans, the number of females' representation in TVET disciplines remains relatively low and several social and cultural factors can be said responsible for this. To explore these factors in detail, R. Khan, Khan, and Khan (2020) conducted a survey-study in Islamabad and Rawalpindi regions in Punjab, Pakistan. Their study specifically highlighted factors including traditional beliefs, toxic stereotypical cultural attitudes regarding females' subservient status and familial roles entrenched in Pakistani society affecting females for commencing or pursuing their professional educational choices and careers. Such type of socio-cultural factors are the contributors to disempower women casting great influence on various dimensions of the females' lives which cannot easily be controlled hence, these are the hardest and time-consuming factors to be changed. From this perspective, major study-findings of R. Khan et al. (2020) accentuate the parental motivational roles in configuring educational directions and eliminating gender inequality.

These deeply ingrained socio-cultural norms, can often prove to be stumbling blocks in females' occupational trajectories. Likewise in Pakistani rigid patriarchal culture, women can face countless challenges to pursue their professional ventures due to the dearth of access to resources, financial dependency and inequalities in terms of opportunity provision. This grave reality is documented in the study of Yaqoob (2020) denoting the hegemonic men-dominated structures which inhibit women to make their occupational decisions with full freedom and always make them feel inferior to their men counterpart. and confine them to limited traditional occupations. To address this issue, according to her, Pakistani females require occupational motivation to transform from a financially disadvantaged female to a strong and self-efficient entrepreneur. Study-conclusions of Yaqoob (2020) further elaborated that taking

entrepreneurial initiatives can significantly contribute to females' self-actualization, passions and self-esteem by demolishing all types of gender inequalities. In the similar domain, reviewing the research of Roomi, Rehman, and Henry (2018) provided a clear indication of socio-cultural factors hindering and moulding the female-entrepreneurial career possibilities and options. Spotlighting the informal institutional elements in particular, their research explored the entrenched gender discrimination and inequalities in the social fabric of Pakistan which are reinforcing female's subordination through their early socialization casting drastic influences in their professional career-choices throughout their life. Regarding this, their research participants illustrated the dismal facts of Pakistani patriarchal structure which constructs gender social-disparities by denying females' access to non-traditional occupations in a way that females, consequently perceive their career opportunities differently from the males. Considering this all, the research (Roomi et al., 2018) brusquely called for a radical change in the current Pakistani normative structure for the females' entrepreneur development and to address the prevailed gender inequalities.

2.6.2. Gender inequality within Pakistani context

Phenomena of gender inequality can also stem from the socio-cultural factors. Gender inequalities in traditional societies can cause devaluing and discriminating women and maximize their household responsibilities which confine their social positionalities and identities to domestic dynamics. Considering the daunting challenge of gender inequality in a rustic area in Punjab province, Pakistan, a mixed-method survey comprising young and aged female-respondents was held by Farooq (2020). Her research maintained the fact that in rural areas females are not allowed to get education or to excel in it and the primary duty considered for the females is to remain intact within the four boundary walls and to perform their household tasks. In other sense, in Pakistani society, according to Farooq (2020) the common religious and culture ascription of males as the families' sole breadwinners and women as mere the caretakers are influential in determining females' equal access to and their participation in the TVET disciplines. Furthermore, The research (Farooq, 2020) conclusively described that in rural areas of Pakistan, the weak consumer base of the economy of the female inhabitants can affect their representation in TVET as female rural dwellers mainly remain engaged in menial occupations. Her research findings further revealed that these deeply embedded gender disparities stem from females' primary cultural socialization where their subordinated roles are set by their families. These subordinated roles of females further inculcate lack of awareness in females and to their basic right to education and occupation. Under this scenario, the research

(Farooq, 2020) proposed a thorough structural reformation for a transformational change for the current situation.

With regards to these family-based gender-inequalities for females, Hussain, Zulfqar, and Ullah (2020) conducted a descriptive case-study in the rustic areas of Multan and Khanewal cities in South Punjab, Pakistan. Their study-findings documented the research participants' perceived education attainment impediments of which the most vocal barriers included economic inequalities and awareness dearth because of low education level. The study-discussions of Hussain et al. (2020) further indicated that to understand the gendered relations and structurally entrenched gender-based discriminations, it is imperative to equally promote both girls' and adult education.

In Pakistani educational context, the most debateable phenomenon of gender inequalities has also been thoroughly discussed in another most recent qualitative work of Masitoh and Pramesti (2020) observing the pernicious gender inequalities and inequities as nostalgic echo of the past centuries which have, ferociously influenced women educational inclusions. According to their work, the ethnic differentiations regarding females' educational and professional participation have anchored deeply the fossilized stereotypical beliefs among Pakistani traditional families that the families prefer to educate their males over the females. The key findings of the work (Masitoh & Pramesti, 2020, p. 251) asserted that, until today, these predominant traditional patriarchal culture, attitudinal customs, religious and societal norms have perceived females as subservient to their males allowing only 10% women to receive high education which ranks Pakistan 148th among 149th states in terms of this unequal treatment towards females. Their research also indicates that, in order for the TVET system to work effectively for its female-learners, the TVET sector requires to transcend these socio-cultural legacies of traditionally-patriarchal system which, consequently can increase women's dependency on their males regarding their educational as well as entrepreneurial choices further leading to female disempowerment.

2.6.3. Women's disempowerment

As described above, women's disempowerment can also be said a dimension of broader gender-based inequality whether in terms of socio-cultural or economic instability or dependency. Disempowerment, in this sense, can be a process to minimise the authority or freedom of any individual to make decisions in shaping his/her own life. Under patriarchal structure of Pakistan, females face numerous impediments in their empowerment, which can

pose long-lasting threats to their occupational viability. Regarding this, Yunis, Hashim, and Anderson (2019) conducted an interpretive paradigmatic research in Peshawar, Pakistan. Critically examining the females social-entrepreneurs, the patriarchal socio-cultural norms, constrained in desired occupations and specific institutional obstacles became the most pronounced themes of their research. These deeply entrenched norms, reported by their study-respondents, refrain these females to pursue men-centric occupations by confining them merely to their domestic roles. Exploring the gendered context in Peshawar city, the research (Yunis et al., 2019) significantly highlighted that by questioning the existing societal norms, entrepreneurship can create social value among females and empower them to recognize their own strength and talents to lead their desired life.

For empowerment to occur, social, economic and personal dimensions of the females seem require a change in positive direction. In other sense, to attain autonomy and decision-making power, that emanate from capacities of practical reason, women need to become active agents for this change. The research (Yunis et al., 2019) however, centred on entrepreneurship with a limited focus on these mentioned aspects. While, another study by Baig et al. (2018) sheds light on the similar domain of females' empowerment in Pakistan. Their study focuses on Southern Punjab in particular, with the objective to investigate the impact of women's empowerment on the rural development in Muzaffargarh, a rustic region in South Punjab, Pakistan. Their study-findings reveal that ensuring adequate education for women enhances their self-esteem and decision-making power that enables them to contribute to the rural development on larger scales. Their study has identified wide access to media, proper education resources and effective policy implications cardinal key steps for improving progress in the rustic sides of the country. Focusing more to women's empowerment, the study (Baig et al., 2018) presents a limited view of the important issue of female employability.

2.6.4. Gender digital divide (GDD)

Under the learning environment of this 21st century, education systems have undergone through a significant changeover substituted by rapid digitalization and dramatic advanced technology which is serving as the powerful engines of progress and innovation (Mare, 2021). Although globalization seems have contributed greatly to the expansion of technology, emerging economies of the countries are often unable to emulate the females' equitable access and inclusion in the technology sectors and this phenomenon refers to as 'digital divide'. This digital divide has a significant gender dimension, specifically in developing countries where women can be said, are deprived of this basic right in the ICT stream. Asserting this notion, a

research-paper of Singh (2017) signified that access to technology resources is not equitably being accessed and benefited by the disfranchised faction of women which has resulted in 'gender digital divide' among the developing societies. Enlightening the structural and psychological barriers, his research particularly notified that in Pakistan, females face severe detachment with the ICT disciplines in comparison to the males and this has created a digital gender divide by imperceptibly anchoring toxic stereotypical perceptions for the ICT-based platforms as being inherently masculine and unwelcoming for the females. Most significantly, the ICT sectors in Pakistan are found to be replicating patterns of gender segregation where males are holding high-potential employment opportunities while the females mostly crowd out low-skilled and low value-added occupations.

In patriarchal societies, females' traditional familial roles can prove stumbling-blocks to the females' technical-education pathways, as according to the research (Singh, 2017) another significant impediment to females' inclusion to the ICT learnings is 'maternal wall' where anticipated time off for the care duties is more scrutinized than males, restrict females' representation. Pervasive gender inequalities and stereotypical norms can significantly contribute to deepen this technology divide for the females in terms of pursuing ICT-supported learnings for female empowerment and their educational inclusion. Pursuant to this, owing to the eruption of the Covid-19, the worldwide imposed lockdown has left the countries with the only option of 'virtual learning' for the education sectors to combat the educational loss-challenges, but the situation seems unmanageable rather intangible to reduce gender digital gaps in few of the developing countries. This acuteness is further manifested in the work of Rajput, Noonari, Bukhari, Dehraj, and Rajput (2020) who explored the devastating impacts of the Covid-19 in widening the education divide in Pakistan proving the biggest challenge for the Pakistani information and technical education system especially in the rustic regions where power supply, scarcity of resources and broader socio-cultural factors, have exacerbated substantial digital divide among the females. Their research demonstrated that profoundly embedded socio-cultural biases of gender segregation already significantly hinder these females to access internet simultaneously, this pandemic has further coupled to aggravating the existing gender inequalities in terms of gender access to technology. In addition to this, female students are not using digital resources to facilitate their technology learnings because teachers are not fully trained and qualified enough to use technology in their instructional practices which results in a significant gap between teachers and the students. Furthermore, in the digital virtual teaching and learning context, the research (Rajput et al., 2020) specifically pointed out

the non-fulfilment of the adopted strategies of the higher educational institutions to dwindle the risk of increasing dropout in this pandemic crisis. However, their research did not touch upon the remedial measures for coping with this evolving situation.

2.6.5. Female-oriented subjects

In technology, gender inequality can be recognized as a critical societal phenomenon. And an ubiquitous culture of marginalizing and discriminating females in technology education can cause females' low participation in science and engineering like subjects. Regarding this, the study of Shaikh, Sahito, and Dehraj (2019) highlighted the stark gender disparities, finding that girls are under-represented in pursuing technical hard programs and courses which prepare learners for highly paid occupations like skilled trading, Science Technology Engineering and Mathematics (STEM) and in other various professions traditionally branded for males' world of work. Their research-article also pointed out that the misalignment of the masculine norms, 'feminine gender role' standards, familial attributes, learning environment, transportation and peer relationships come out as the stumbling blocks for the females to their STEM participation, preferences and progress at their all stages. Apropos to this, traditional patriarchy practices often dictate who should be provided higher technical education and preference of a male-child is often made in such families (Shaikh et al., 2019).

In terms of gender disparities, Figure 2 below presents 'gender breakdown' in the fields of education in Pakistan:

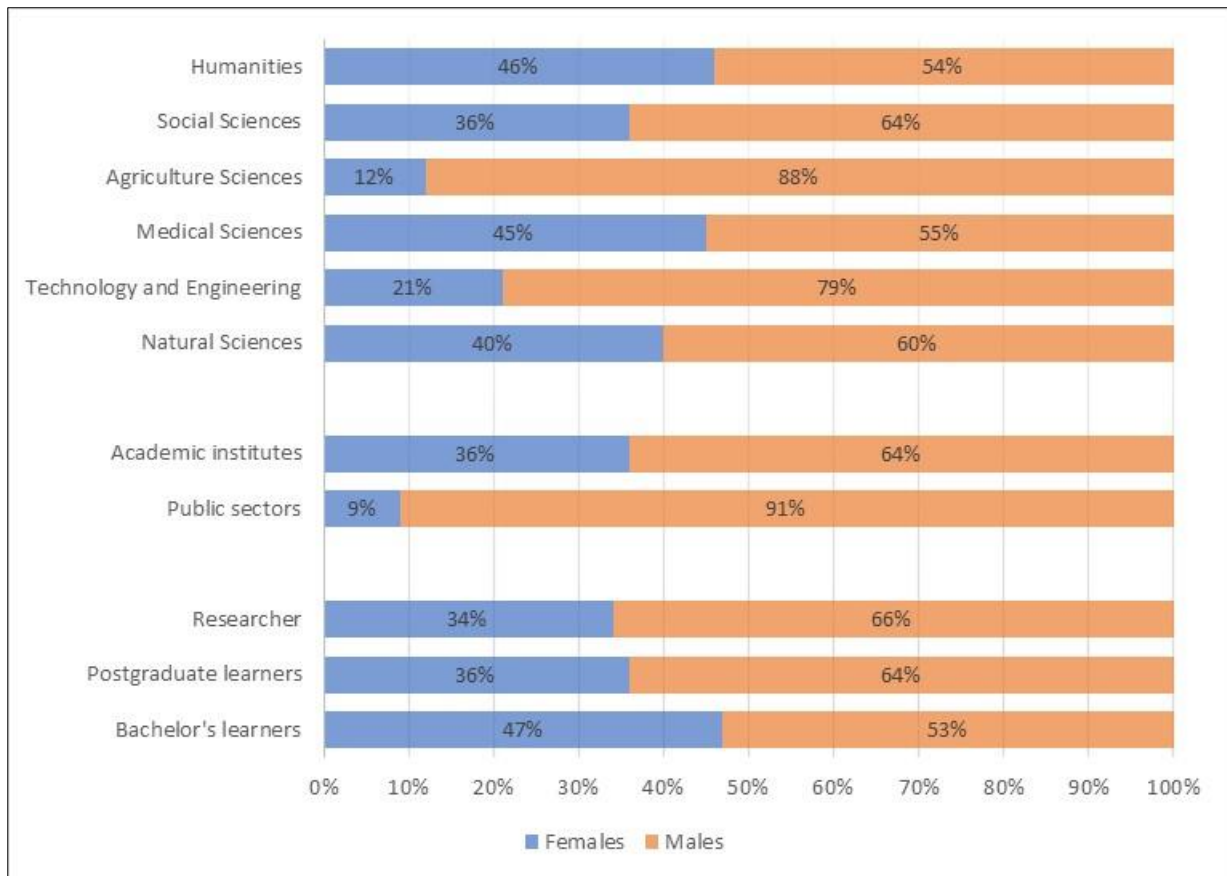


Figure 2 Gender representation in educational fields in Pakistan, Source: (UNESCO, 2019)

The data listed in Figure 2 depicts that gender discrepancies exist in different fields of education in Pakistan. The figures are consistently presenting females' low representation in all disciplines as compared to males. In terms of females' enrolment proportion in public sector, this can be assessed that their representation is miserably lowest to 9% comparing to 91% of males. The table further indicates that in Pakistan, girls are substantially underrepresented in the technical and engineering fields with the percentage of 21.

In traditional societies, social-familial setups can influence females' educational goals and preferences. Regarding technical subjects, families' poor perception can contribute to demoralize girls to try manly subjects considering waste of time and family resources. This phenomenon has been further investigated in the research of Ayub (2017) which averred that parental influence cast a great impact on the females' technical-educational decisions. In the biased framework of Pakistani society, as per her research-verdicts, females feel reluctant to take up technical hard courses thinking as this could disrupt their focus concentration making them feel scratchy regarding their feminine softness. This innate prejudice is continually reinforced in female-learners to stigmatize themselves believing that unlike boys, they are too soft to handle hard technical masculine courses and programs. Further, issues like household

income, lack of parents' awareness and values of education in societies also continue to determine that who will study what and up to which level (Ayub, 2017). This, consequently, excludes girls from technical and engineering training fields and they most likely take interest to enrol in female-oriented TVET courses and their enrolment proportion often varies, "0% in electrics, welding and auto-mechanics, 24% in basic computers while 73% in tailoring and 100% beautician" (World Bank, 2019a, p. 20).

In the similar domain, a recent research in the Punjab region by Parveen, Shah, and Mahmood (2020, p. 545) illustrated that from 2015 to 2020, females' enrolment in technical subjects drastically remained at 0%. They found that these subjects have continued to be seen or deemed as inappropriate and not feminine enough for females to pursue. Their research concluded that parental involvement influences girls' such stereotypical educational choices. The research (Parveen et al., 2020) further suggested that teachers' motivation can impart significant role for breaking these traditional views for taking up feminine vocational subjects.

2.6.6. Faculty-related issues

It has globally been acknowledged that professionally equipped teachers can be a pivotal factor in the educational development of learners. Pertaining to this, teacher education, is important to provide essential knowledge and professional skill set to the students. Studies carried out worldwide indicate that professionally untrained teachers can prove unable to motivate or engage their learners in classroom activities and thus, can lack teaching skills like content knowledge, initiation and evaluation skills. In accordance with these proclamations, the report (UNESCO-UNEVOC, 2018) also denoted another notable but dismal fact that the teachers at TVET sectors mostly lack possessing industrial experience. The report laid much emphasis on the industry considering it an important key source of information for the TVET teachers to establish and organize their instructional modules accordingly. The report further spotlighted the need of professional development for the TVET teachers which should keep these teachers abreast with the new technologies and job-market working experiences. On this account, teachers' continuous professional development (CPD) and teachers' self-efficacy can be said to be interconnected and greatly emphasized that it can enhance the capabilities of the teachers for effective delivery of TVET learnings by increasing learners' full engagement in class-room practices (Jalil, Kassim, & Madar, 2019).

In relation to that, Gul and Shah (2019) conducted a study in the educational institutes in Pakistan which found that teachers' professional development, in Pakistan, continues to be

neglected in the context of teacher-training, pedagogical equipments, teacher self-efficacy and teacher induction. Highlighting teachers related issues, the research (Gul & Shah, 2019, p. 30) further indicates that fewer teacher-training programs have been available, and the existing teacher-training regimes are fragmented, biased, lack professionalism and negligent with proper follow up. Moreover, their research bemoaned that the already existed predetermined instructional systems and procedures proved discouraging the lecturers' emancipatory of critical thinking which also affected the bonding of the lecturers' professional development and their self-efficacy.

In addition, considering the teaching procedures of TVET colleges in Pakistan, governance and policy issues have also refrained the teachers from equipping with right competency skills for quality education delivery. In this framework, the views of 70 principals and 251 teachers of TVET colleges across Pakistan have been collected in a descriptive survey carried out by Naqvi, Ahmad, and Siddiqui (2019). Their survey analysis alleged that scarcity of teacher training has hampered lack of professional interest in improving their skills which also affected the performance of the TVET colleges. During the survey, the college principals and lecturers discovered that NAVTTC provincial based TVET reforms of monitoring and coordination of the instructors' skill trainings were regarded insufficient. Resultantly, this made the teachers demotivated and incognizant of new teaching challenges and unacquainted to use the latest technologies. Hence, they are not incentivized to learn new skills to improvise their traditional pedagogical practices (Naqvi et al., 2019). Another main issue is the inequality among the private and the public education institutions where teachers mostly induct through political connections especially because of federal decentralised education which influences curriculum development greatly (Islam & Asadullah, 2018). This dilemma can further incapacitate the training of the faculties as compulsory measure which is why the TVET teachers seem lack the capabilities to teach with fervour to augment the academic performance of their learners.

Against the back-drop of such revelations, one may come to the conclusion that the instructors in the TVET sectors seem not likely to be productive and effective to deliver their practices, considering the issues they confront. This assumption, is intended to be researched in my study which will examine the perceptions and the experiences of the female-learners in the TVET college also that how these learners are being affected by the existed instructional practices, curricula and learning experiences, as an area which has not been explored in the Pakistani context.

2.6.7. TVET fragmented curriculum

By following new technology trends, today's knowledge-centred global world can be said swung from traditional instructional methods to modern practices that demand in-depth understandings of the new technology. These emerging technologies lay emphasize on more mandates for skilled workforce for vocationalization and for this TVET curriculum content is being reformed and modified as need driven focusing on skill competitiveness of the TVET learners. In terms of syllabuses and curriculum, three prominent education systems in Pakistan are in parallel function. Like Pakistan, in Southern Punjab too, different departments provide different technical and vocational courses and examinations which are entirely curriculum-centred that is archaic and lacks entrepreneurial content and thus, provides mere bookish knowledge (Chamadia & Shahid, 2018). This problem is further researched in the study of Ali, Ahmad, and Shah (2017) who explored the major influencing factors of the present TVET system in Punjab Province, Pakistan. One of the main issues their study significantly indicated, was the outdated syllabi in the TVET schools which still relies on old textbook and does not comply with the needs of the TVET students proving the root-cause of skill-mismatch and employability-failures. As a major contribution, their study identified the most worrisome situation of stereotypical curricula and traditional rigid instructional class-room practices, which instigate rote-learning among the TVET learners and create an entirely teacher-centred learning environment in the class-rooms. Their work recommended a radical change in policy for greater curriculum integration with industry, argued to be imperative to make the learners more productive future-workers in order to cater the most recent demands of the global labour market. By focusing on the employability-affecting factors, their study, however, did not deal with the other important components of TVET syllabi in detail.

Furthermore, non-availability of gender representation in the textbooks can also cause a great challenge for gender equality in the TVET learnings. Concerning this issue, a cross-country content analysis has been conducted by Islam and Asadullah (2018, p. 1) who announced a critical gender-bias in Pakistani schools where females' representation in textbooks was recorded lowest to 24.4% specifically from Punjab textbook board. Their research-analysis postulated that educational institutes are not well-structured and classroom practices along with textbook contents serve as the breeding ground for gender-inequality towards females incarcerated them to just domestic-roles. By highlighting the inaccurate depictions of one gender in the school-textbooks, research (Islam & Asadullah, 2018) contributed to fetch out a new form of gender-stereotype in terms of 'exclusion' to be seriously contemplated by the

education ministries in South Asia specifically to achieve the SDGs regarding gender equality and equitable gender access to education by 2030.

Gender-stereotyped curricula and traditional rigid instructional practices can further instigate rote-learning among the TVET learners by developing an entirely teacher-centred traditional learning environment in the classrooms where the learners' capabilities could not flourish. To further reinforce such hazardous impacts of conventional learning, Zubair, Tatlal, and Butt (2020) conducted a cross-sectional survey which inferred that in Punjab TVET institutions, the implemented traditional-curricula has merely promoted rigid conventional teaching practices thus, proved unsuccessful to produce competent TVET graduates who could fulfil the recent job-market requirements. In comparison to this, their research conceded 'Competency Based Curriculum' as globally gaining traction by aligning TVET institutes with ever-changing labor-market demands, also it serves as the foundation for TVET instructors' professional training and curriculum compliant practical-labs. Research (Zubair et al., 2020) also suggested that by practicing CBC in the classrooms will significantly contribute to develop learner-centric environment into the classrooms.

What emerges from the above reviewed literature is that in Pakistan, like other developing countries, TVET is marked by the concentration the male students in the technical and engineering disciplines whereas female learners are dominating in social care programs and courses (Islam & Asadullah, 2018). Reviewed literature also highlights the grave realities of social prejudice against females' educational and career aspirations in comparison of the males in families, where patriarchal setup frequently encourages male schooling which, consequently perpetuates gender discrimination at an early age in life (R. Khan et al., 2020).

2.7. Summary

In what follows, I first looked at the related trends and complexities in terms of female technical and vocational education in various parts of the world in a variety of contexts. Following that, the above reviewed literature, pictured the factors that predominantly affect the female students' participation and their representation in the TVET programs and courses. These factors included; (1) the cultural factors (reflecting the cultural, traditional and societal norms by which the subservient status of the female learners' families is maintained). (2) The attitudinal factors (these factors include the differences in the capabilities and employment-skills impelled by the family or home socialization, exacerbated by technical and vocational education, career-counselling, work-place experiences, shortage of female role models and

family pressures). (3) Situational factors (which include financial situations, females' positions in their family/household, their settlement place and inadequate care from their family guardians). (4) Institutional factors (which can originate the way technical and vocational institutes organized their TVET programs and courses some of which have infrastructure and well-trained teachers' scarcity, flexible instructional arrangements etc. Against the above-mentioned backdrops, the present study has tried to identify the influential factors affecting the perceptions, choices and participation of the female-students in Multan and Bahawalpur TVET secondary schools for their future employability.

In the chapter that follows, the theoretical underpinning of this study will be discussed.

Chapter 3 Theoretical framework for the study

3.1. Introduction

This chapter sets out the conceptual and analytical framework used for this study. The framework is closely connected to the project's focus on females' gendered identities, the implications of these identities on their lives, and the ways in which they understand these phenomena and view their technical and vocational education. The aim of this project is to explore and examine how a selected group of female learners in the TEVT institutions in Multan and Bahawalpur regions, Pakistan, perceive vocational education in terms of gender equality and equity and what role vocational education may play as a leading pathway towards female's future employability. In this sense, thus, the study is underpinned by social construction theory applied it to how female's social identity interacts with, is reflected in, and is re-constructed by the context of technical and vocational education. In other expression, how a gendered identity, being a female is reflected in the technical and vocational education for the females, in Multan and Bahawalpur TVET colleges recognizing that particular gendered identities are social constructions and are linked to inequalities associated with a broader, patriarchal social structure.

Capability theory has also been chosen for this study. Both the research questions posed for this study and my fieldwork process contributed to these choices of theories to understand as well as to analyse the study findings. To understand and interpret the gendered experiences and practices of my research participants, I realized that I could relate my study findings with social construction theory. While the capability approach, in this study, is used as a tool to discuss or to evaluate the role of technical and vocational education that it may impart to promote gender equality in terms of providing skill education for the professional development of the female learners. This study is grounded in theorizing about the gender inequalities in society, and a normative 'social justice' approach of overcoming these inequalities and inequities, in part by achieving greater equity in education and employment opportunities, in the types of career pathways that females can achieve; and in part by challenging dominant gendered identities in the particular context. Considering the space limitations of this project, it was not possible for me to include all the aspects/features of both these major theories. I, therefore, seek to highlight the relevant theoretical works that were brought to the study.

3.2. Gender identity

Gender identity, according to Risman (2004) must be conceived as social structure, involving particular, gendered, behavioural practices being ascribed to males and females. He highlights how this process sees particular cultural rules and regulations being incorporated into gendered identities, with implicit and explicit norms about all aspects of one's social life based one's gender. Affirming gender conception, he further indicates that gender is socially constructed that consists of individual characteristics or gender identities as connected to societal roles as well as institutional aspects or controlling structures as family, school, tradition, religion etc. For example, he set out an analytical framework which is helpful to denaturalise women and men and shows them as socially produced in particular contexts in time and place. This framework also draws attention to the relations of power and marginalisation, subjugation, oppression and hegemony, that are bound up within differential gendered identities, ideologies and practices (Risman, 2004).

This sort of theoretical approach informed the research questions for this project. A focus was developed on how my research participants perceived the concept of gender in relation to their experiences in education and social life generally, and in the particular technical and vocational education getting they were enrolled in. As Dunne (2007, p. 502) described, "institutional gender relations and boundaries are part of everyday school life through which feminine and masculine identities are constructed and reinforced". Regarding this, the study was interested in whether and how the study participants viewed the educational programs and the gendered identities, as a path-way out of a traditional gender identity. For instance, defining the concept in relation to gender inequalities in terms of providing technical and vocational education, and the concept of power imbalances, financial dependence and family relations for achieving epistemic justice. As the concept of gender has different interpretations and perspectives therefore, throughout collecting and analysing the data for my study, gender is defined as a phenomenon that is socially constructed depicting the females' gendered experiences, practices and expectations in both school and family/society contexts.

3.2.1. Gender as a social construct

Gender, according to Robeyns (2007), can be defined with regards to the social roles and positions that the males and the females hold. A person's gender is primarily determined by physical characteristics which decide their reproductive abilities. Robeyns (2007) described that the physical characteristics of an individual determine whether he/she is a 'male' or a 'female'. As a result, social category of gender is projected into the biological category of 'sex'.

Gender, as a definition is, therefore socially formed. And gender norms, in turn, dictate socially acceptable actions and behaviours, potentially resulting in or reinforcing gender inequality. Robeyns (2007) further claimed that gender is a multi-layered and a complex phenomenon, and that institutions and organizations can also be gendered. For instance, the way teachers treat male and female students in educational institutes, like classrooms may perpetuate gender stereotypes. Robeyns (2007) demonstrated how the gender stereotypes are shaped as a result of socialization and how they can influence a person's accomplishments and aspirations. For this reason, it is essential for exploring the experiences of the female-learners to develop a deeper understanding of gender to examine these experiences as they are mediated by institutions like family, educational institutes and culture.

3.2.2. Gender stereotypes and identities

Since, gender is a 'social construct', thus, certain expectations and perceptions towards males and females do occur, as according to Ellemers (2018) in our daily lives, we are used to of thinking of males and females in various ways with stereotyping the concepts of capabilities and the opportunities of both genders in society. These certain expectations and perceptions can be known as the gender roles and these are based upon fixed stereotypical suppositions about the male's or the female's nature and characteristics that, again, are determined by the specific society or culture.

In traditional patriarchal societies, people's perceptions about women are often entwined with stereotypical notions and beliefs regarding females, and their education or employment, including perceptions that women are 'too weak' or 'too emotional' to be able to do high profile jobs ((Ellemers, 2018). With masculinity, Ellemers (2018) further delineates, male-persons are expected to become the house-hold protectors holding the power of decision-making; while females are anticipated to perform traditional 'feminine responsibilities and roles of being care-taker of their families and fulfilling their kitchen duties. In the similar context, females do not challenge gender order by "doing masculinity" because of their expected roles, and seeking male-centric educational or occupational opportunities can tag them as 'rebellions' or 'other' gender, therefore, women are constantly required to escalate their abilities and performance to be valued in this male-dominated world (Ellemers, 2018).

In the male-dominated environment, men are always believed to portray self-reliance, confidence and dominance while females are stereotyped and being capable of no more than having so-called mothering traits. Thus, if women try to portray masculine traits, they will be

seen as transgressive. Nussbaum (2001) notes how females, in many parts of the world suffer as a result of their gender. Society stifles the females' rights and agency by perpetuating the gender stereotypes that result in females being marginalized by such gendered hierarchies. Here, one noteworthy point is that the concepts or ideas of masculinity and femininity are not something diametrically opposed. Instead, they both interact in the hierarchal relationship, where, masculinity is mostly described as the process of creating superior males (Nussbaum, 2001). The social system, thus, in itself creates the expectations and perceptions of the males being powerful and dominant in that particular society with entrenched patriarchal structures. However, the expectations and perceptions regarding masculinity may differ based on how powerful these patriarchal structures view themselves in a given culture over time.

In addition to this, Nussbaum (2001) claimed that the gender norms and gender roles, which emphasize that what is anticipated/expected, coerce how a person behaves in the society, despite his/her ability or wish to act differently. These expectations contribute to the perpetuation of gender inequalities in the society. Females, on the other hand, may also reproduce gendered ideas and desires. Females' adherence to the societal norms and customs, for example, may lead to discrimination against other females. Females' secondary roles can be viewed as normal and embraced as elements of culture and tradition are internalised in daily activities.

This assertion is further reinforced by the theorist, Bourdieu (2001) that masculine superiority is being maintained and embodied into individuals' habitus, in compliance with the patriarchal ideals and values. This again, is preserved by various agents with a society, including family, states, educational systems and other type of social institutes (Bourdieu, 2001). Most notably, the symbolic forces which come with the man dominance and superiority, cannot be exerted without the participation from the particular people who are being controlled or dominated. With this naturalization of the male domination, Bourdieu (2001) further argued, many females are socialised into accepting their status as being dominated and acknowledge it as natural. In this way, when it comes to perpetuating patriarchal ideals as normal, females can become active participants in their own oppression (Bourdieu, 2001).

Bourdieu (2001) also recognized that at recent times, patriarchy requires further recognition because patriarchy, does not impose itself with that much intensity that was once assumed. Societies are becoming conscious of patriarchal systems and structures, which can be affected by implying policies regarding gender equality and providing better educational opportunities

for the females. But, Bourdieu's concept of masculine superiority and dominance, however, is still useful and valuable as he claimed, "because the basis of symbolic violence lies not in mystified awareness that just requires to be enlightened, but in disposition attuned to the system of domination and supremacy of which they are the products" (2001, p. 41). For this, Bourdieu (2001, p. 42) went on arguing that only a radical transformation of the social state of development of the dispositions which lead the dominated to take the dominant's view points on the dominant and on themselves will break the victims of symbolic domination's collusion with the dominant.

To conceptualize gender in the Pakistani context, these gender stereotypes tend to distort the females' self-perceptions of abilities and capabilities to achieve success in professional domains where men traditionally and culturally predominate (Islam & Asadullah, 2018). This creates a crystal-clear and a sharp divide between the family related socialization and the community related socialization that emerges as females grow up and are introduced to the people outside of their families such as the teachers, peers or other adults (Berger & Luckmann, 1966). The power of tradition and socio-cultural family backgrounds all have negatively influenced the young women's professional education choices. Furthermore, these existing ethnic differentiations have deeply anchored fossilized gender stereotypes that societies prefer men's education over women (Islam & Asadullah, 2018). Gender roles and perceptions are learned through the socialization mechanisms, and this further revealed their stance that women's personality characteristics in hard technical courses and tasks are not the common or habitual female attributes and thus, they have more difficulties to prove their competencies in technical discourses (Ellemers, 2018). Consequently, women have been oriented to more general courses and consciously resist to participate in masculinized technical fields considering it a direct threat to their identities as feminine bearing a realization that these fields are appropriate just for men. It is clear that, these gender identities are socially constructed, are a result of primary socialization, and are the outcome of traditional concept of gender that is deeply embedded in the institutional practices as well as the learners' self-conceptions. This assertion is articulated by Harber (2014) who describes how the cultural environment of institutions is a prime factor in constructing subjugated learners' identities and self-conceptions. Since this research-project aimed to explore the gendered perceptions and experiences of female-learners in TEVT college, the notion of gender equality will be discussed next.

3.3. Conceptualizing gender equality

According to UN Women (2001, p. 1) that gender equality can be defined as males and females having equal rights, obligations and the opportunities; but equality does not say that males and females would become equal or same, equality, rather indicates that males and females' rights, obligations and opportunities, and their capacity to realise these rights, obligations and opportunities, will not be determined by 'whether they are born as a man or a woman'. In other words, gender equality requires that both males and females' needs, desires and their preferences are taken into account, acknowledging the uniqueness of various groups of both the gender without any gender discrimination (UN Women, 2001). This refers to the issues such as discriminatory societal attitudes and norms towards the females.

In education, gender equality is closely associated with 'practical gender needs' stressing the notion of education provision paying attention to the socio-cultural relations that constraint equal access to participate in learning and achievement. However, in most cases, the term of equal access or gender equity cannot fully translate gender equality. As, gender equity is a term that is not clearly defined or easily measured as I wrote above as well that several issues are related to this term (gender equity) when it comes to measurement and evaluation. Thus, in order to explain, why gender discrimination or inequality in this context, could not be solved to simply enrol the equal number of males and females in the schools, the critical feminist researchers, focusing on the developing countries, have also proposed 'gender equity' method as a substitute paradigm (Unterhalter, 2008).

Gender inequalities within education are also reinforcing the notions of social inequalities in terms of gender differentiations also legitimating these inequalities in social discourses and practices. Therefore, the educators are inevitably required to include rights through education to attain substantive gender equalities in education (UN Women, 2001). The importance of rights through education becomes more relevant when we review the evidences of severe inequalities that women are continuously facing in the employment sectors. Whilst, the scenario, in terms of women's paid work has changed to a great extent still, in the field of education, gains made by females are undermined by deeply anchored gender inequalities. This has given a continuing advantage to men to enjoy more in the occupational world even in the contexts where males perform substantially less well in technical education as compared to the females (Ellemers, 2018). According to Unterhalter (2008) to attain substantive gender equality and equity in education, necessitates tackling the gender ideologies that compel to enjoy the full array of equality and freedom which are valued in capabilities and rights approach. This

firstly, requires viewing females as right-bearers rather than deliverers of progress or development, and to extend our interest to assess how female's education impacts on others and on themselves in wider perspective.

This project set out to look into the notions of equal access to TVET by exploring the gendered experiences of the female-students, and how these perceptions and experiences affect the development of agency, desires and well-being. It is not sufficient just to increase the number of females studying in TVET disciplines, but also to understand their social and educational experiences and the impact of TVET learning on their future employment. Thus I found capability approach can be useful, as this approach emphasizes the expansion of an individual's desires, opportunities and abilities to lead a life as he or she values to have.

I will now briefly discuss the capability approach that provides concepts for this study.

3.4. Capability Approach (CA), key concepts

Capability, Sen (2001) illustrates, can be defined as an individual's ability to perform valuable acts or to come up to a valued state of being. Sen further states that capability represents alternative amalgamation of things that an individual is capable to perform or to be. According to Robeyns (2007) CA is a wide-ranged approach which can be put to use to evaluate an individual's prosperity and social arrangements. Sen (2001) also postulated that when evaluating justice, poverty, development or inequality, the emphasis should be on to examine what a person can 'do' or can 'be'. Sen (2001) further encouraged the extension of freedom and resources for the development of worthwhile beings and acts. Such opportunities may be limited due to various complexed social, cultural, economic, educational or historical factors and these have an impact on how every individual can perceive or realize his needs and wants in life. Since CA covers all the facets of an individual's wellbeing, this approach also serves as a criticism of interventions that focus exclusively on the mental states like happiness or contentment evaluation approaches. At its heart, it is an examination of the opportunities and options available to a person who wants to live a life he has reason to value (Sen, 2001). Owing to above presented concepts of the approach, CA is adopted for this research-project as a basis of review to contribute to the TVET learning in female's empowerment and gender equality. In this project, wellbeing, adaptive choices, expectations are the key concepts of CA to be contemplated/considered briefly, as seen through the CA lens, these concepts would help to understand the gender issues and females' experiences in the TVET learning.

Economic resources can be said a pivotal factor especially when it comes to have access to the actual opportunities like education, rights and employability. The unfair and inequitable division of these resources are specifically evident when it comes to gender related inequalities particularly in marginalized societies where females are still deprived of positions, social status or rights of self-development and decision making in education and professional choices caused by deeply anchored traditional, cultural and social hierarchies and practices (Nussbaum, 2001).

3.4.1. Education, gender and CA

Education holds an important place in capability approach and can be viewed as the basic capability affecting greatly the development as well as the expansion of the other capabilities (Unterhalter, 2008). Similarly, as per the arguments of Robeyns (2007), in this globalized world, capabilities should be given a prime focus, because this can greatly help men and women to contemplate and to understand the true meaning of being educated and its connection to the concept of development. Thus, in the context of the capabilities, education can contribute to interpersonal potential resources and effects that can enable both genders to utilize benefits of education by helping others and hence contribute to societal good, progress and a democratic freedom. I, therefore, believe it can be beneficial to present the perspectives of Sen (2001) regarding three important and potential roles that education may impact on the individuals' life and these perspectives can also be correlated with the opinions and the responses of my interviewees.

The first role that education has for the people is its 'social or instrumental role' because education can contribute to the enhancement of personal skills, knowledge and critical thinking which thereby can stimulate public dialogue and debate (Sen, 2001). This perspective includes multiple capabilities of education that can develop the practical and academic qualifications of the learners that further lead to employability, and their realization of their capabilities. Specific content of educational policies is required to measure or evaluate these potentials. In a capability approach, the concept of functioning can be correlated with well-being, and these relate in a way that when we are to evaluate the well-being of the individuals, we need to look at their opportunities or their capabilities which they have for leading a life they value. Individuals cannot dream to have a quality life without an educated mind. People can do many things and they can be in many states of being if they experience people have conducive environments that enhance their capabilities. The challenge, here, is always on the individual's ability to realise or transform their potential capabilities in the conditions that they encounter.

This requires a role for education that can be facilitative for the transition from capabilities to their realisation.

The other important role that education has is ‘distributive or empowering role’ which, according to Sen (2001) provides opportunities to the marginalized and disadvantaged social groups that enable them to organize themselves critically, politically and socially. Political and critical education to understand the social and political barriers to the realisation of capabilities, and the need to organise to transform and transcend these impediments.

Another important role of education is its ‘redistributive role’. Education here, enables the educated people of a family or a social group to give benefits to the other members with their knowledge and skills (Sen, 2001). This education, as a pragmatic instrument, can raise the level of people’s knowledge and skills to utilize their relevant capabilities which they find valuable for them and their families.

Robeyns (2007) further argues that men and women have dissimilar capabilities and potentials determined by their respective socio-cultural and economic backgrounds. People with such dissimilar capabilities tend to relate to same opportunities and demands the respective societies hold for their inhabitants, which means that there occurs an unjust divide of resources between the advantaged and disadvantaged group of people. If there will be an unfair or unjust distribution of resources, rights and opportunities in learning skills between males and females, gender-based inequalities would continue to prevail as these inequalities are the main components to create societal injustice in societies. And education can be viewed as a tool to bring a constructive change to the situation.

In this chapter, I began with examining how gender is defined by different scholars in terms of female identities in socially-constructed setups. I also tried to present an overview of the relationship between gender, education and capabilities, in the development contexts, that how TVET education can contribute to empower females.

I will now, move on to the next portion of methodology, where I will explain how I went forward to collect the study data during the field work.

Chapter 4 Research Methodology

4.1. Methodological considerations of the study

In previous chapter, I presented the conceptual framework which drew theories applied for this study. This framing has reinforced/strengthened the development of a qualitative research methodology and design which guided the data collection of my research, also to inform my study questions which warrant an ‘interpretive’ research approach. This chapter, thus, handles the methodological approaches and techniques employed for this study to collect as well as analyse the research-data accumulated in the field. This chapter also presents sampling of the study-participants, field-work procedure, literature and study ethical consideration along with discussion on trustworthiness.

In conducting research, the methodological theory is meant to be helpful for providing directions to select appropriate tools for new data collection and to handle the data with a great professional care and responsibility. I have also found it quite advantageous for me to lean on the key assumptions that are underlying this type of research including the facts that in social world, there are some patterns that create framework for the people’s lives, perceptions, choices and their actions. And these specific patterns can be explored and explained in research studies. These patterns also enable the researcher to look for the elements like defined roles, interconnected expectations as well as power relations that co-exist in a complex social set-up which eventually led I, as a researcher to make thoughtful decisions for the choice of various research methods to collect data for this study.

4.2. Research context

This study is conducted in the technical and vocational institutions in Multan and Bahawalpur cities in South Punjab, Pakistan. These research sites were selected for two reasons. First, both these cities consist of many small levels Technical and Vocational Education and Training (TVET) institutes. But I selected two TVET secondary institutions from these cities that are solely run by the government. The research has been carried out in females-only institutes, given the explicit focus on the project on women’s technical and vocational training opportunities. At the macro-level, this project stems from Article 26 in The Universal Declaration of Human Rights 1948 elucidates, “Technical and professional education shall be made generally available” (Ailaan, 2014), and on long-standing evidence of unequal participation in such education by men and women (World Bank, 2019a). This project seeks to investigate the actual scenarios regarding implementation of the declaration mentioned above

in vocational education institutions in Pakistan which is a signatory of several international treaties related to technical and vocational education. Thus, this research work, in this context, will offer some insight into the experiences of women enrolled in vocational education and the governmental policies and strategies to reach to the stipulated target.

4.3. Study design and paradigm

4.3.1. Qualitative research-design

Research methodology refers to the rationale to select the research paradigm and the research methods. To find a suitable method for the data-collection of the research issue, I preferred to choose a qualitative research design with the aim to gain an insight into the experiences and perceptions of the participants related to the research issue. There is no correct answer as to which approach or method is the best, rather, it is a matter of which one of these best suits to one's research problem (Jacobsen, 2015). If the aim of the study is to collect knowledge in the form of words, a qualitative research-method is the suitable way to go; as this method provides a collection of tools and instruments that enable the researcher to dig deeper into to expose the facets of the people's dynamic reality (Jacobsen, 2015). The purpose of this study is to gain insight into the various respondents' perceptions, experiences and opinions related to the research problem, which is why the qualitative approach was chosen for this study.

4.3.2. Examining the strengths and weaknesses of qualitative research approach

While choosing qualitative approach, I also went through the strengths and weakness of using this approach for my study. Fieldwork, as per the words of Patton (2002) is the central aspect of a qualitative approach. By this he meant to have a direct or personal interaction with the people being examined in entirely their own environment (Patton, 2002). This direct interaction with the people, is the main strength of this approach. In a way to say, the individuals being observed are the ones who can tell the researcher truths regarding a particular phenomenon. Furthermore, qualitative research can be interpreted as versatile in terms of its research-questions, as the questions can be modified during the research process. But this flexibility can also be regarded as a study-flaw. When undertaking the fieldwork and being much flexible in gathering plenty of data, the researcher runs the risk of his project into an endless one. Another downside of using qualitative research method is the possibility for a research impact which might grow between the researcher and the research subject. This shows how the researcher's presence can yield special results.

4.3.3. Research paradigm

I, further, chose this qualitative research design as the ‘interpretative naturalistic approach to the world’ because the researchers who conduct qualitative research, observe people or things in their natural environment in order to investigate, comprehend or to make sense of the events and phenomenon with regards to how people interpret them. These practices contribute to transform the world into a series of written sources, conversational interviews, sound recordings and pictures putting an emphasis on the interpretations of the perceived data. Similarly, my interest, too, focused on how my study-participants themselves, perceive, make sense of, and interpret their experiences of TVET learning, and by using that data and other materials I would make my own interpretation about the actual and potential progress towards the official goals. Taking the objective of this research work into consideration, this report seeks to investigate the perception and experience of the female-learners in the TVET colleges of Multan and Bahawalpur in Pakistan. And in the light of social context in which these female-learners make educational decisions, I tried to examine how these female-students envisioned their educational choices and career ventures from these three angles; the socio-cultural context, TVET education and future-employment ventures and the students’ individual experiences or challenges that the research participants face.

Further, this study comprised of an ethnographic research approach. Though ethnographic researches are highly time consuming for a researcher who is new and unfamiliar to the research settings. But in my case, selecting the qualitative ethnography approach helped me in various ways. Firstly, I willingly chose this approach to live in accordance with my own values in a culture I am already very much familiar with. Secondly, to work systematically in order to interpret the perceived data carefully. Thirdly, to get help in collecting information about participants’ behaviour in a natural setting which was not easy to obtain through quantitative methods. Fourthly, to acquire detailed and “thick descriptions” (Geertz, 1973) of the social life of my participants as epistemologically, full descriptions are preferably more satisfying in comparison of skimpy ones. Lastly, to further improve my own instructional practices for the vocational education. Epistemologically another major advantage of conducting an ethnographic research is that it lets the researcher to apprehend the research-participants’ viewpoints. I also tried to collect actual information of the respondents’ viewpoints in their natural settings rather than to speculate it and I would try to develop sense in my research results. This makes the research ethically so significant and enables the researcher to

understand the participants' motives and actions in order to avoid epistemic injustice or making vague or woolly interpretations of the events or the people in the studied domain.

This study also adopted exploratory qualitative research method based on case study approach with the aim to achieve and explore the study objectives and questions though with no intentions to provide ultimate conclusive solutions to the existing issues but to obtain a detailed, integrated and significant insight of the episodes of real-life as well as to contribute to an individual's awareness and knowledge. Furthermore, it is important to gain an understanding of the research issues and the challenges before providing solutions to them. Therefore, I found exploratory method quite appropriate for this study. Additionally, the case study was employed in order to get in-depth insight and understanding to the contextual conditions that how they influenced female participation in getting technical and vocational education. Furthermore, employing a case study approach, according to my viewpoint, can enable the researcher to interpret the reality that is underlying in the respondents' descriptions also to understand the ideas, experiences and the views more clearly, rather than merely presenting these with principles and abstract theories. Because, case-study offers unique examples from the real world of the individuals they live in, by recognizing the meanings as a factor in cause and effect. For this reason, in order to capture the essence of a study-work, a case study often requires manifold methods and techniques as being a source of evidence. This notion is further elucidated by Cohen, Manion, and Morrison (2018) that a case-study, can prove to be a strong and a valuable method for presenting human scale facts and figures on macro political decision-taking process by incorporating both theory and practice. This case study, thus, provided me an opportunity to employ multiple techniques to investigate the phenomenon.

4.3.4. Philosophical underpinning of the study

This qualitative study also holds interpretivist/constructivist research philosophy formed on the premise that though this study cannot uncover the realities in a complete way, still it can be approximated by presenting reliable and generalizable study results and findings. I will now, present the ontological and epistemological justifications for the chosen paradigm assumed for this study.

Ontological assumptions for interpretivism assert that the social phenomenon and their meanings are continuously being formed from the actions and perceptions of the social actors. As Bryman (2015) suggested that social phenomenon are produced not just through social actions or interaction but these are constantly being revised and modified for an ongoing

meaning construction. I also view the social world through constructive lens, and I deem that these social categories are the product of social interactions. This study primarily focused on the perceptions of the female learners regarding the vocational education and barriers acquiring skill development trainings for their future professional lives. These barriers and issues are often socially constructed as well as based on personal experiences. Therefore, the constructive stance that I held, supported this study.

Epistemological view of interpretivism is based on the idea that to investigate the social world, the social scientists need to comprehend the people's subjective connotations of their social behaviour and action. These subjective meanings can be grasped by honouring the differences among the people as these social differentiations can give rise to distinct ways of knowing a phenomenon. Interpretivism, therefore can be viewed as a 'privileged access to knowledge' as a continuous activity that a researcher requires to perform during the whole research process to interpret the meanings and actions of his participants. The core purpose of using interpretive inquiry for this study was to understand and unveil the multiple layers of the perceptions and meanings represented by the individual participants' actions regarding their integration for vocational education for their employability and future employment.

4.4. Research procedure

The following sub-sections describe the research procedure that was undertaken for the data collection for this study.

4.4.1. Identification process for literature-review of the study

To undertake this project, I tried to follow the six generic steps that Paré and Kitsiou (2017) had identified to conduct the literature review for a study. These specific steps involved:

1. forming of research questions and research objectives.
2. searching for the existing literature for the research.
3. filtering for developing inclusion and exclusion criteria.
4. evaluating the 'quality of primary studies'.
5. drawing out the research data.
6. 'analysing the data'.

Like in any study, I adjusted my research questions and objectives as the depth and breadth of the research literature revealed itself and I tried to examine these against the initial research

questions of my project. The process of formulizing the research questions has been explicitly established and identified in the introduction chapter. However, while conducting the literature review for my study, I made few revisions to my research questions based on the availability of the existing literature as well as the overarching aim of my study.

Building the research questions, I started the process of literature review by identifying some specific keywords on access to, female participation and barriers in TVET. The preliminary key search terms included, ‘technical education’, ‘vocational education’, ‘access’, ‘female participation’, ‘TVET in Pakistan’ and ‘barriers’. After determining these specific key terms, an initial level search has been done in different academic journals and various electronic databases through OsloMet University. Specifically, the literature review has been carried out through sources ERIC, JSTOR, Google Scholar, Education Source and SocINDEX, ProQuest Dissertation and Theses and EBSCOhost (OsloMet University library database). Despite integrating with much of these electronic online databases into OsloMet University library databases (EBSCOhost), that provided my study a one-stop platform to access much relevant literature, I recognized a significant importance of a comprehensive and an exhaustive literature search strategy to locate both published and unpublished study materials, issued briefs and reports through other sources as well. I, therefore, tried to utilize Google scholar, websites of the relevant government. Other essential literature in form of published books and readable online sources was also considered for the literature review of this study while unreadable books I borrowed from the OsloMet University library services.

4.4.2. Eligibility criteria of the literature-review

Most importantly, from the onset, I tried to establish the criteria of inclusion and exclusion which explicitly guided me that which published or unpublished literature was to be considered while exploring or stating the scenario and issues of the TVET systems both globally and in Pakistan. Therefore, given the context of this study, the selected literature met the eligibility criteria including:

1. Study literature must align with overall study purpose and relate to the posed research questions.
2. Study literature must be between 2014-2021(to get recent information).
3. Study literature must be published in English language.
4. Study literature must be peer-reviewed and for academic purpose.

4.4.3. Fieldwork preparations: Access/Gatekeeper/Clothes

Getting access in ethnographic research often proves as a “rude surprise” for a researcher who is unaware of the difficulties she or he might face, specifically while researching about the experiences of females in the “Third World” (Scheyvens & Storey, 2003). Thus, for a researcher, initially these social arenas are closed through physical enclosures as well as social discrimination and causes fair challenges in the process of obtaining access (Waldrop & Egden, 2018). Therefore, some initial negotiation in terms of taking permissions for establishing good relations is inevitably required to enter a research setting. In formal educational organizations, these permissions can be granted by some key personnel, and these personnel are often act as the initial gatekeepers for a researcher.

Fortunately, a colleague at OsloMet provided a contact information for someone, who is working as senior instructor in electrical department of associate engineering students at Government College of Technology Bahawalpur. This contact came to be my initial gatekeeper to block off access to both boys and women TEVT colleges in Bahawalpur and Multan. Before I travelled to my field work in Multan and Bahawalpur cities, I remained in contact with my gatekeeper and discussed the rationale and aim of my project. My gatekeeper helped me to find accommodation in Bahawalpur. The college-principals were also approached and recruited with the assistance of my gatekeeper. I also availed the opportunity to know more about the school history and school environment, as he has been associated with the TVET sector from a quite a long period. During my stay at Bahawalpur, I further experienced that my gatekeeper, being a local citizen of Bahawalpur, acted as an ethnographic informant. My gatekeeper assisted me in unravelling the society and the local culture of the city by sharing his valuable information.

While entering to the fieldwork, a researcher’s personal appearance can be of salient importance for creating good impression. Because, sometimes it may be inevitable for a researcher to dress up in a way that makes him familiar to the research setup. In Pakistan, nearly all government schools and colleges have a strict rule of wearing a uniform. Regarding the uniform, I collected all information from my gatekeeper. The college uniform consisted of a pure-white suit with a long scarf (*Dupatta*), but these scarfs had different colours representing different TVET departments. Taking this all into consideration, and before commencing my field work, I also bought a proper college uniform from a nearest uniform-store in Multan. The core idea behind wearing a college uniform was to be more comfortable and friendly with the study participants so that they would not feel hesitant from me considering me an outsider.

This idea helped to build a rapport between me and the participants especially while conducting the interviews.

4.5. Data collection instrumentation

A research project seeks to provide accurate and credible knowledge about the reality in which we work. To be able to have this reliable knowledge, a researcher requires to employ numerous strategies and techniques in order to understand how to proceed. These different techniques can also be named as ‘methods’ used for gathering and analysing the study data. For this project, the key methods employed to collect the data were the interviews and the observation. In addition, few other techniques and tools of data gathering had also been employed which I would try to explain how these techniques were utilized in the field work also their strength and limitations in the sub-sections below. Furthermore, I have also included a segment on data processing that explained how the data was accumulated and analysed.

4.5.1. Photographing

‘Handing the camera’ over to the research participants often engages them actively to the research activities (Storm-Mathisen, 2018). I also adopted this method for this study and invited my participants to take our pictures for use in this project. I used this method keeping in mind the following purposes. Firstly, to engage my participants to get double reflection or to depict the actual scenario of what was happening in the pictures specifically during the practical activities when analysing the photographs. Secondly, to help to mitigate the power imbalances between me and my participants. Thirdly, to combine the pictures with my fields notes to gain better insight. In other expression, to potentially make some analysis of the photos in terms of what the participants decided to photograph, as another avenue of insight into their experience and their socially constructed ideas of this form of education. Most of the times my participants wanted to take our photos from their own cell phones which I allowed them willingly. I used pictures that depict both male and female institutional inequalities that my student-participants specifically notified in terms of providing limited and outdated training-equipments to female-learners (see Appendix D & E). The pictures I used do not disclose the identity of the participants for privacy reasons.

4.5.2. Developing interview-guide

I devised a semi-structured interview guide with open-ended questions both for the learners and the college heads relevant to theoretical concepts of the study. This study has an exploratory approach, so the interview guide was devised considering firstly, the study nature

by placing more emphasis on the narratives and subjectivity of the participants where the interviews could be conducted in the conversational form. Secondly, to use it as checklist to ensure that all the issues were to be covered and discussed in order to collect similar data from all the participants (Chilisa, 2012). Thirdly, to ensure that the approximate duration of the interviews should not be spanned more than 40 minutes and finally, for further rephrasing and modification in the questions after getting feedback from the pilot interviews.

4.5.3. Sampling

In social research, purposive sampling technique is recognized by its emphasis and focus on people that are selected purposively. In this particular technique “the researchers handpick the cases to be included in the sample on the basis of their judgement of their typicality or possession of the particular characteristics being sought” (Cohen et al., 2018, p. 218). For this study, my choice of employing purposive sampling technique was because this method facilitates the researchers to create a sample which is suitable for their own special requirements (Cohen et al., 2018). In other words, the technique of purposive sampling can be adopted to obtain access to the individuals who are informed about the phenomenon under investigation. This study comprised of relatively small sample closely connected to the study purpose to get deeper understanding of the research issues and the participants’ perspectives. Further, using this sample, the study aimed to represent how young female-learners relate to gender-based issues and their perceptions of vocational education. Thus, I believed that the participants sample ensured me with enough data for contextual description where I conducted the fieldwork to unveil the social realities related to gender and the role of technical and vocational education as a pathway for the learners’ future employment.

4.5.4. Recruiting the study-participants

This study set out to conduct interviews to explore the perceptions and the attitudes of the participants. Considering this, I had to target “a diverse range of people who might have different opinions or perceptions based on their own experiences and context” (Desai & Potter, 2006, p. 5). In this particular project, this amounted to efforts to collect diverse and different point of views from both married and unmarried female-learners. Also, while selecting the participants, it was imperative to observe that whether primary objective of the interviews matched the participants. Therefore, by employing purposive sample technique, I selected 1 college-principal and 10 female-students from Govt. TVET institute 1 (Multan), likewise, 1 college-principal and 10 female-students from Govt. TVET institute 2 (Bahawalpur). Student-participants were from 2nd year and 3rd year. (study-participants’ data details are given

in Appendix A). The reason for selecting student-participants from 2nd and 3rd year was based on the rationale that the senior students have had more experience, so more time to reflect on their experiences regarding gender related issues than the students from 1st year. The qualification of my study-sample was either matriculation or intermediate. I distributed consent forms among female students, and they signed these forms after I explained them the study purpose, interview questions and their withdrawal rights.

College-principals got agreed to participate in their own interviews. These college principals, thus, chose suitable time and place for interview as per their availability and convenience. 5 male-students and 1 male-principal were also be interviewed from boys' TVET college, as just pilot interviews which I had mentioned in the next section. Furthermore, before commencing the interviews, I had to translate interview questions from English to Urdu language in order to have direct communication with my participants because I was aware that language barrier could have limited the conversation thus, my participants' comfort was my prior goal.

4.5.5. Pilot interview

Before commencing my fieldwork in female technical and vocational colleges, I visited boys' college and spent my first 2 days to observe their classrooms, lesson sections, computer and project labs and thus, I arranged a pilot interview with 5 male-students including 1 male-principal from the same technical and vocational college. This pilot interview, basically, was not a part of my study still I took their permission on the consent forms. This pilot interview proved useful in providing me with an experience to use interview schedule also to get feedback to make necessary adjustments, formatting and sequence for the questions for the actual interviews. Most importantly, it enabled me to explore potential gender-based inequalities with regards to providing latest technical-training equipments to male-learners which female-students experienced in TVET learning. These disparities included variety of technical-subjects/courses, offered to male-students and consideration of the use of the latest technical machinery, equipments, and machine-based handmade-models (see pictures in Appendix E).

4.5.6. Interviews

Conversation is viewed as the basic characteristic of the human beings because while talking to each other we pose questions and answers. This conversation leads us to comprehend other people's perceptions, opinions and experiences to discover the world people live in. An interview is regarded as an inter-view where knowledge constructs through an interaction of the interviewee and the interviewer enabling a researcher to interpret the meanings of the world

of others. Qualitative research interviews aim to learn how the individual being interviewed sees or experiences the world around him. It develops knowledge through the contact between the research participants and the researcher. This provides an opportunity to the researcher to better comprehend the viewpoints of the participants regarding the phenomenon being investigated (Kvale & Brinkmann, 2015).

4.5.6.1. Qualitative semi-structured interviews

Interviewing, as I mentioned at start, became my key data collection method in the field because the core purpose of my study was to explore and understand the perceptions of the learners regarding technical and vocational education and potential barriers to learning. These perceptions were context dependant and individual to each participant to unfold the narratives regarding their perceptions and experiences of technical and vocational education for their employability and future employment. Therefore, for this study, I selected to conduct qualitative semi-structured interviews that Cohen et al. (2018, p. 511) described are those interviews “in which the topics and the questions are provided, but the questions are open-ended, and the sequence or wording can be customized to each particular interviewee and the answers provided, with prompts and probs”. My selection for the semi-structured interviews was considering these interviews firstly, as effective sources of data collection (Kvale & Brinkmann, 2015) and secondly, in accordance with the paradigm and the methodological approach to the research questions. Thus, conducting these semi-structured interviews, questions became more accessible and the new ideas and thoughts on the project were also popped up during this process. As a result, I was able to collect useful data that allowed me to obtain information that I would not have regarded as relevant otherwise. This information included the individual’s perspectives, voices and stories which were required to be captured as “ to obtain descriptions of the interviewee’s lived world with respect to interpretation of the meaning of the described phenomenon” (Kvale & Brinkmann, 2015, p. 31). Furthermore, it also served as an important method to collect the sensitive matters which required confidentiality.

4.5.6.2. Strengths and limitations

In the interview sessions, a benefit of employing semi-structured interview is that it allows the interviewer to provide more feedback and to rephrase or repeat the questions if asked for more clarity (Cohen et al., 2018). During the pilot interviews with the male-learners at the grassroots, getting the chance to rephrase or repeat the questions, aided me in creating a clearer interview-guide with more specific questions and easier to comprehend for the participants.

Another advantage of the semi-structured interviews is that these interviews create room for more dialogues and situational questions. As a researcher, this also enabled me to ask follow-up questions and more examples and details during these interviews. However, in this method, according to Cohen et al. (2018) one flaw is that the researcher's versatility in asking questions 'when and how' can lead to different responses, minimizing the comparability of the responses provided by different participants of the research. In the field, I also experienced that getting more open-ended questions and freedom to ask questions in the order that I thought was appropriate based on whom I interviewed, helped the interviews went smoothly. However, since the interview period was short with a risk of being much flexible, it was quite necessary to maintain some structure in order to accumulate the relevant data.

4.5.6.3. Interview setting, procedure and time-scheduling

By using semi-structured interview, following an interview guide, there was scope to document full descriptions of the female participants' technical and vocational learning experiences, concerns and their potential barriers with regards to their future professional life. All interviews were audio-recorded particularly on what they said and how the things got expressed and this allowed me to be focused on the participants. My intention for audio-recording of the interviews was to ensure the conversation accuracy and authenticity most importantly for the data analysis process. In a consistent way, I interposed prepared interview questions with probes aiming to elicit further detailed responses from the participants. Additionally, I planned to conduct 2 interviews in order to provide enough time to the participants so that they could reflect on, and further elaborate the things we discussed in the first meeting. The first round of the interview spanned not more than 25 to 30 minutes. This time management included breaks considering if the participants had to attend to their lessons or to go to the canteen to buy edibles. Conducting interviews in two rounds provided me an opportunity to go deeper into the discussed issues as well as to confirm the interviewees' statements they made before and after the intervals of the interviews. This contributed to verify and to confirm the initial observations. Furthermore, I intended that these interviews would primarily be led by my participants and my personal values and biases should not be revealed and I needed to be non-judgemental and neutral (Cohen et al., 2018).

Further, during interviews, I realized that conducting interviews required much concentration and reflection during the whole process. I, therefore, tried to avoid taking notes because they could distract the interview conversation making is less constructive and this would also make a straightforward transcription and analysis of the study data. I used to make notes during the

breaks or in the morning times. Interviews were conducted in a small assembly room that was no more in the use and was less noisy. Interviews were conducted as per the time convenience and prior permission of the participants. I also interviewed the college-principals of these TVET colleges to know of their own perceptions and opinions about technical and vocational education and skill-training provided to the learners. Furthermore, interviewing these college-heads were anticipated to provide valuable and authentic information regarding the regional TEVT policies, gender issues, traditional and social challenges these particular institutions face and how these challenges affect the overall learning milieu.

4.5.7. Observation

Observations provide researcher an opportunity to collect primary data in a natural way of targeted situations also serve as powerful instrument to obtain deeper insight into the studied situations (Cohen et al., 2018). In qualitative studies, observations place the observers to the midst of the natural contexts of what is explored or investigated and provide access to participants' actions and behaviours. In this project, the observations were based on how the classroom instructional, and the practical sessions were organised; also, to compare my observations of the participants' practices, and their experiences with their reported perceptions in the interviews especially with the official policy and the claims of the college-principals.

Participants' participations during lessons, their class-room behaviours, responses, student-teacher interaction and cooperation particularly during practical work were the focused features of my observation. I used to make notes with an intention to find out the similarities and differences of the class lessons and practical work. I, as a participant-observer, also participated in their practical activities like sewing, needle-work, makeup, hairstyling, etc. My continuous participation with their practical work enabled me to get closer to the participants to observe the language, behaviours and actions of the participants in their natural setting. This natural engagement facilitated to develop a rapport between me and participants. Observing these activities complimented with my interviews and provided detailed analysis for the study findings at micro level.

4.5.7.1. *Collecting informal observations*

Additionally, throughout my field work at these TVET schools, I also tried to gather informal observations during the school assembly sessions and break hours, in the school cafeteria, libraries and computer labs. When I was not conducting the interviews, I used to observe various activities of the participants in these areas; their practicing, presentations, sharing daily

stories, passing jokes and being reprimanded by the teachers for loud noisy laughter. I also availed chance to sit, chitchat and eat with my participants in college-canteen. Further, I used to sit in the teacher-staffroom to make my notes also to observe the activities of the teachers. Though I was less able to organise or compare this voluminous unstructured observational data with the class session obtained observations, still I believed that these eye-witnessed actions were quite relevant, valuable and contemplating for further analysis of the study. This observational data “can be useful for capturing nonverbal behaviours, and behaviours in natural or contrived environments” (Cohen et al., 2018, p. 543). In other expression, this data is much contributing for the contextual understanding and is significantly essential to establish holistic perspectives for the project. The data accumulated from the natural settings, refers to observational data collected from the activities I engaged in, (which I also highlighted above). While, the data collected from contrived setting, refers to the observations which were made while conducting the interviews. Moreover, these observations provided me valuable insight to interpret the meanings expressed by the participants during the conducted interviews. Thus, I tried to rely on this observational data collected all through this thesis.

4.5.8. Informal informants

Another method I adopted to gather data was an informal conversation with people in an unstructured fashion. My aim was to have conversation with people other than I was interviewing formally to have a broader look upon the subject. So, one of the days, during break hours, I got a chance to talk to few former female graduates of the same TVET college who came there for job interviews. We had an informal and informative conversation. They shared their academic as well as job experiences and showed me their diploma certificates which I captured in my camera with their permission. I was also invited to the homes of my two participants. Visiting their families enabled me to gather interactional data and to get an insight in their backgrounds, family values and living ways. Notwithstanding, without the knowledge of the cultural and social background of the participants, it would have been difficult to interpret their expressed perceptions and feelings as I was looking for the “thick descriptions” of the gender perceptions. Furthermore, I got chance to attend TVET college ‘Expo Exhibition’, where both male and female students’ handmade models were displayed. Those exhibited handmade-models, depicted significant gender disparities in terms of TVET subjects and resource-provision (see Expo-exhibition pictures in Appendix D & E). During exhibition, I also had general discussions with students and local people as well. This opportunity to stay

outside and talk to students and people gave me valuable information to delineate social as well as the academic life of the learners.

4.5.9. Data analyzation procedure

Collected data of the interviews was audio-recorded and subsequently transcribed into the themes emerged from the study-participants' demonstrations. Interviews were conducted in Urdu language; therefore interviews were transcribed first in Urdu, and then translated into English. One example is presented in Chapter 5, 5.2.

4.6. Trustworthiness in study

Validity and reliability, according to Bryman (2015) are the common criteria to establish or to assess the quality of the social research. For qualitative research work, these criteria need to adapt to the unpredictable and complex nature of the social world. Because social reality is flexible, as Bryman (2015) argues that the quality criteria in the social research should also be flexible. Trustworthiness then, is a term or concept used for qualitative research that does not claim to be focused on identifying absolute and generalisable truths. This is an acknowledgement of their multiple accounts of the social realities and so the need for quality criteria to accommodate this. Similarly, a qualitative research needs to ensure the accuracy of the measures and logical interpretations for the accomplishment of the professional quality in any research. At this point, a question arises that if a researcher is involved in the development of knowledge, then how a study can ensure the accuracy of the gathered data? Thus, to correspond to the criteria of research reliability and validity, I tried to focus on the two aspects of trustworthiness which Bryman (2015) elucidated; 'credibility and transferability'.

4.6.1. Credibility

Two practices can be related to the question of the 'credibility' of the qualitative research findings. The first practice involves using multiple methods to collect data sets. This involves applying several data collection sources in the same research to cross-check the gathered information. In this project, I tried to adopt this practice by collecting data from the interviews, formal (inside the classroom) and informal (outside the classroom) observations, pictures and fieldnotes. This allowed me, for instance, to compare the responses of the interviewees to my observations of classroom practices. In addition, by conducting two interviews with the study participants in two intervals, I was able to check the initial interpretations of the interviews and raise new questions based on my observations and fieldnotes, most significantly 'to assess the data authenticity and the distortion level of the data in order to determine if the gathered

evidences are flawless or not'. This also provided the participants of this study a fair chance to verify/confirm findings and thereby ensure the respondents' validation (Bryman, 2015). Moreover, as I mentioned earlier that I got opportunity to discuss the college history with my gate keeper because he was well familiar with the college settings to share valuable information.

4.6.2. Transferability

Qualitative research, as a typical study of a smaller group of people is more concerned with depth in data rather than breadth (Bryman, 2015). This approach does not readily support generalisable findings for a larger population. Transferability, therefore, is used to make research findings from this type of social research of potential use for studies of similar contexts. Transferability involves 'thick descriptions', including rich descriptions of the socio-economic and cultural conditions of the phenomenon under investigation. This, in turn, allows the readers to understand the researcher's interpretations and conclusions grounded in the particular context, and draw provisional implications for their application to other contexts. In the technical and vocational institutions of both Multan and Bahawalpur cities, I found a very complex context from many perspectives and aspects, which included a deeply ingrained patriarchal cultural and a class-dividend social structure. These features were associated with an unequal distribution of education and disproportionate levels of insecurity in terms of education, employable skill acquisition, employment and professional career possibilities. These contextual aspects were part of the thick narratives of my respondents that how they perceived issues related to gender inequalities in TVET disciplines with regards to their future employability. Thus, defining these patterns, I believe, might also be transferable to the other similar contexts.

4.6.3. Reflexivity

In a social research, reflexivity or self-criticism, is understood as a recognition by the researchers that they neither can separate themselves from the study, nor from what they bring to the study and the particular context; their personal feelings, biases, world-view, perceptions of the context, etc. This had been on my mind throughout the research process because reflexivity helps the researcher to consider those potential prejudices, which might arise in the field (Cohen et al., 2018) and prove a key problem for the study-data quality. But, here arises a question that can it be possible to place aside one's own assumptions, values and beliefs, no matter how self-reflective one is?

Quality of the interviews, according to Kvale and Brinkmann (2015) depends on the integrity and the honesty of the researcher. Within the interview sessions, the power relationship between the interviewer and the individuals being researched is seldom symmetrical. Likewise, within the interview settings, the ethical concerns, such as the researcher's attire, attitude, gender, age, etc, can trigger problems that are not immediately obvious to the researcher, will be discussed further down. For this, Scheyvens and Storey (2003) recommended that a way to reduce the discomfort encountered by the research-participants is for the researcher to consider the power dynamics which exist between the participants and the researcher. Furthermore, Scheyvens and Storey (2003) defined the levels of these asymmetrical power features as 'real' and 'perceived' differences. In the case of a researcher, these 'real' differences are the assigned positions which cannot be altered by a researcher. These fixed positions can be of the researcher's age, gender, financial-status etc, which can have an effect of the data obtained in the field. For me, being comparatively older in age from my study-participants also being a master student from a European university, could have its influences as such fixed and 'real' positions as mentioned earlier, cannot be controlled or changed by we researchers. However, the 'perceived' differences, that can be attached to the general appearance of us, is something which can be changed and managed accordingly. Because, our appearance might trigger problems within the interview-setting, eroding the trust and respect between the researcher and the individuals being investigated. Thus, while conducting the fieldwork, I consistently wore a white uniform and covered my shoulders with a long scarf (*Dupatta*) also mentioned in this chapter above in fieldwork preparation section (see 4.4.3).

While writing and analysing a dissertation, it is also pivotal for a researcher to re-produce the accumulated data in accurately and in a contextual manner. To reproduce the same results, however, difficult still the researcher should make every effort to do so as accurately as possible. In this project, the interpretations of the perceived issues and barriers, that the female learners faced in getting technical and vocational education were connected to my own preconceived ideas or knowledge and personal experience of the topic. For this, conducting a second interview with study participants, aided and allowed me to check my initial interpretations and to explore alternatives that were not what I expected based on my own perspectives brought to the project.

4.7. Ethical concerns

Ethical considerations such as the primary consideration to 'do no harm' were kept in mind throughout this study as ethical matters arise at every step of the research (Cohen et al., 2018)

and are concerned to the study selections, topic, research tools and methods of the researchers. Ethics, according to Cohen et al. (2018) are something that is concerned with what is good or bad and what is right or wrong. It is about the researcher's conduct and what he should or should not do in his or her research. It is also about maintaining or upholding the rights of other people. In qualitative study, there may occur a conflict between the desire to gain information and the value of maintaining the ethical concerns. During the interview sessions, researchers often want their interviews possibly to be much deeper and penetrating. This sometimes, entails the risk of the research participants to be offended. Simultaneously, researchers also want to be respectful, which can also result in empirical materials being collected that are superficial. The researcher, thus, must carefully prepare for any potential ethical problems within this balance.

For this project, ethical clearance and permission, both from the Norwegian Centre for Research Data (NSD) and the principals of the technical and vocational colleges of Multan and Bahawalpur, were sought out at the initial level of the field work. In Pakistan, gender norms and culture are regarded as sensitive and complex issues. Since the topic of my project profoundly concerns to the gender issues, there were certain ethical concerns to be mindful of, such as how to protect the participants' privacy? How to pose questions politely and non-intimidatingly? What impacts can the researcher's presence have on the interviews? or what can save the researcher from being influenced by others? The following sub-sections will shed light on ethical concerns regarding informed consent and confidentiality and reflexivity.

4.7.1. Informed consent

Informed consent is defined as "those practices that allow the individuals to decide whether or not to participate in a research after being told what it is about and what it entails" (Cohen et al., 2018, p. 122). With this consent, the intentions and the purpose of a project are told to the study participants. The participants are further informed about the potential risk of research participation also how their data will be secured during and after the project completion. Thus, voluntary, active and informed consent was given by the research participants whereby, the study purpose, participants' freedom of expression and the rights to withdraw from the project at any point without penalty nor the need to give a reason, were explained and followed. I also asked my participants to sign the consent forms, as a prerequisite set out by the NSD (Appendix F contains this form). In the beginning of the interviews, I also spent time to explain the interview questions to the participants, discussing how their identity would be protected in the use of the data, and periodically checking that they were happy to continue with the interview.

4.7.2. Participants' confidentiality and anonymity

As my participants signed the consent forms, they were fully aware of the confidentiality and the secrecy associated with their involvement in the project. Further, interview data was de-identified by removing all references to the participants from the interview transcripts and using pseudonyms as shown in the sample-table below.

No of Institute	No of Principal	Coding for Principal	No of Student	Coding for Student
Institute 1	Principal 1	Participant-P1.1	Student 1 to 10	Participant-S1.1 to S10.1
Institute 2	Principal 1	Participantt-P1.2	Student 1 to 10	Participant-S1.2 to S10.2

The detailed information regarding study-participants is available in Appendix A. All this coding entailed that any information gathered during the interviews which could identify the study-participants would be kept confidential and stored on a computer authorized by the OsloMet university. I took the photographs and recorded audios of the participants after getting their prior permission. Furthermore, throughout the project, I tried to protect my participants from any burden of power imbalances they might experience while being interviewed as “power imbalances between researcher and the researched are common place, especially in the global south” (Desai & Potter, 2006, p. 34). In this respect, I spent some weeks alongside participants in the education setting prior to conducting formal interviews, to reduce this barrier. Before I commenced any of my interviews, I, repeatedly, made it clear to each participant that I would not attach their names to any direct quotes or information in my dissertation. In interviews, I reminded the participants that they need not to answer any question if they did not want to, and was sensitive to their reactions to the questions.

Reciprocity, as another pertinent aspect of ethics, was also employed for this project. I reached out the study-participants again to explore other possibilities of gathering information which was not obtained earlier also discussing the initial findings with the participants not only helped in validating some of the findings but also improved our mutual understanding of the findings.

Chapter 5 Research data presentation, analysis and findings

5.1. Introduction

The previous chapter dealt with methodology of the study, while in this chapter, the collected data from the field work is presented and analysed according to the questions posed for this study. As outlined in the Methodology chapter, a qualitative ‘Thematic Analysis’ has been used for the analysis of the data collected from the semi-structured interviews based on open-ended questions.

Since this research is a case-study, in order to answer the posed research question 1, the study participants were asked about their perception and choices regarding enrolling in the TVET disciplines. Amidst the interviews with the study-participants, several complex and diverse narratives emerged. This diversity in the perceptions and opinions of the female-learners provided insight into the ways these learners envisioned the TVET’s role in their lives and manifested the complexities of navigating straight through the social structures and institutional pathway. Analysis of the participants’ narratives is derived from both the female-students as well as the principals of the TVET colleges of Multan and Bahawalpur cities in South Punjab, Pakistan. The participants provided illustrative examples of their experiences and choices at different junctures all through their TVET learnings.

The collected data from the interviews demystifies that why female-learners compute a marginalized TVET status alluding the dominant societal opinions that greatly influence these learners’ perceptions and choices of TVET disciplines leading towards, and exploring their future employment ventures, which also shape the narratives of these learners. Furthermore, these narratives also raised questions regarding how the societal-characteristics like socio-economic status, gender norms and social networks affect the way female-learners formulate their educational or professional aspirations. Data-findings, thereafter, were discussed by spotting what is exposed by the current body of the literature.

RQ1: What are the perceptions of female-learners enrolled in TVET institutions about their vocational learning and future employment?

This chapter, thus, starts the study-data analysis by identifying two key themes in the interview data, in relation to the participants’ narrations: 1 economic development, 2 moral development. These emerged themes will be further overviewed in the sections below:

5.2. Economic development

Economic progress, is something more qualitative and it has meant different things to different people. Quality improvements, innovation, risk reduction and entrepreneurship, all are emphasized in economic development to put an individual's economy on the high-growth trajectory. Though growth without progress or development is obviously possible in the short or medium terms, economic development provides conditions for long-term economic growth. Economic development can be defined as the expansion of economic actors' aptitudes or capabilities through the development of the capacities and these actors can be the individuals, institutions and industries. Economic development was the topmost among the given responses. The study-participants, affirmed in different ways, the reason that their perception and choice of getting enrolled in the TVET disciplines was to increase their employability chances from these TVET programs and courses.

For instance, Participant-S1.1 specifically stated this:

آپ کو معلوم ہے کہ جب میں نے اپنی سابقہ اسکولنگ / (گرائمر اسکولنگ) مکمل کی تو ہم طلبا نے کوئی بنیادی یا ضروری مہارت نہیں سیکھی۔ لہذا ، اگر ہم کچھ تکنیکی یا پیشہ ورانہ تعلیم حاصل کریں گے اور کچھ مہارت حاصل کریں گے ، تو مجھے لگتا ہے کہ ہم اس تعلیم کو جاری رکھنے سے پہلے ہی پیسہ کما سکتے ہیں۔ یہاں تک کہ دوسرے طلبا ، جو براہ راست ٹی ای ای ٹی اسکولوں سے اپنی تعلیم جاری رکھنا چاہتے ہیں وہ بھی پیسہ کما سکتے ہیں۔ لہذا ، میرے لئے ، میرے خیال پیسہ کمانے اور رہائشی معیار کو بہتر بنانے کے لئے ملازمت کی مہارت حاصل کرنے TVET میں مدد کر سکتا ہے

You know! when I completed my previous schooling/ (general schooling), we students did not learn any basic or essential skills. So, if we would go through some technical or vocational education and acquire some of the skills, I think we could earn money even before we continue this education. Even other students, who want to carry on with their education straight from the TVET schools can also earn money. Therefore, for me, I think TVET can help in acquiring employable skills to earn money and to improve the living standard

The above excerpt of Participant-S1.1, presented a comparison between the general education with that of the technical and vocational education indicating that they were not exposed to the necessary skills from their previous fields of learning. This had led their choices for TVET disciplines to attain employable skills. Participant-S1.1's this reflection revealed that TVET learning can be more profitable for individuals to develop employable competencies for

economic sustainability. Participant's this assertion is further evidenced in the research of Siddiqui et al. (2019, p. 262) reporting that comparing with academic stream-line, technical and vocational education can provide better employment opportunities to the people. The ending quote demonstrated the participant's strong inclination to raise her economic status through this education. This assertion is aligned with the reported claims of Ullah et al. (2017) who opined that majority of the youth perceives technical and vocational education to acquire occupational skills to make themselves economically functional and to accelerate their economic status/development by enrolling themselves into income generating TVET courses.

Another Participant-S1.2 also mentioned this:

According to my perception, TVET courses can provide us basic skills to fend for ourselves at any stage of our lives without being dependent on our families. For instance, I have not yet completed my school, still I am able to do small things and can manage to earn some money to fulfil my small needs. I would say that technical and vocational education and skill-trainings courses whether completed or not, can provide we women necessary skills to fend for ourselves to some extent.

The response of Participant-S1.2 here, declared the importance of TVET learning in terms of acquiring essential skills. But a prominent and a significant desire for economic independence or economic empowerment can also be interpreted from this response. Economic independence is more concerned with the females' participation in the world of work. This entails the requirement to develop opportunities for the females and to eliminate the obstacles hampering their meaningful involvement to work. Females' economic empowerment involves having access to, or influence/control over the resources of survival on long-term grounds, also enjoying material benefits that come with that access and control. The dimension of economic empowerment poses few questions that require to be considered here. Can TVET, in its current form, translate into the economic gains for the female-participants of this project? Will these females be equipped to find work which they are interested in?

Regarding this, an insightful response was received from another Participant-S2.1 when she expressed:

Before I got enrolled to this course, I was told by my husband that in this conservative environment of Bahawalpur, it is very difficult for the married women to find any office job because there is a mindset that married women have lot of other domestic duties which can hinder them to perform well in the job-sectors.

Women get diplomas but rarely find dignified posts in office-jobs. So, if for any reason, I could not be able to carry on with my course from here (TVET school), I think, I would go for some entrepreneurship to earn money to support my family

From this illustration of Participant-S2.1, a depiction of the patriarchal structure of the Pakistani society in general can be viewed where traditionally men-branded occupational fields compel women to concentrate in pursuing their ‘feminine’ occupations. To my interpretation, for many females, educational and occupational choices entail weighing their perceived social norms and benefits to the family life. It can be said that one of the main reasons why the traditional familial culture does not encourage females to choose traditionally male-dominated occupations could be that these professions do not allow women to balance their work and family obligations more flexibly. This, according to Struthers and Strachan (2019, p. 5) “reveals labor-market inequality, which is essentially an outcome of the existed oppressive factors in traditional society where gender-based segregation has a long-term impact of men-dominating culture and women’s dual position as an employee and primary caregiver” Because, in comparison to the males, women are expected to make professional sacrifices for their family needs. Additionally, married-females’ chances to find work in the traditionally male-dominated sectors, as per my study-participant’s declarations, are restricted, limiting their motivations as well as their access to the employment opportunities because of the stereotypical imagining females as housekeepers. On probing, Participant-S2.1 further added that society does not believe in females’ work thinking that females cannot work full time due to household responsibilities, therefore, men-dominated high-profile jobs are carried out by only men. Capturing Participant-S2.1’s narrative “*rarely find dignified posts in office-jobs*”, closely relates the account with the research-conclusions of Yunis et al. (2019) which portrayed the bitter reality of the Pakistani conservative institutional structure where the females are relegated to lower-ranks in male-dominated job sectors and females’ liberal status is seldom enforced in practice. The interview-analysis also demonstrates that the higher expectation for a family-flexible workplace and aspiration for an employment with high working-hours demand spurred these females to change their career-choices away from the men-centric occupational fields.

Conversely, this can be an alarming situation because as per these participants’ views, that due to their household responsibilities and limited economic resources, they do not give proper time to their studies at home. Thus, these types of learners are most likely interested to enrol in

TVET courses for acquiring some income generating skills but the chances of quitting their studies at any level can exceed.

Another Participant-S3.1 responded in a similar direction:

I am enrolled in DDM (Dress-Designing and Making) 6 month's duration course. I chose this short course for two reasons, firstly, I already know stitching. I learned stitching and embroidery from my aunt when I was 11 years old. Secondly, I am the eldest in my sibling and I have a lot of other domestic responsibilities. I stitch clothes for my locality women and children. I use that money to pay my college fee, also I contribute to my father for paying school fees of my three younger siblings. That is why I cannot take up long duration degree programs neither I have enough resources to afford this.

The response of the interviewed Participant-S3.1 demonstrated that one of the main reasons of getting enrolled in TVET disciplines was to acquire basic economic benefits through these TVET programs and courses. Regarding enrolling to the TVET disciplines, Participant-S3.1 promulgated in affirmation by expressing the same views that she was attending this TVET course to acquire necessary skills to get income generating employment, also to support the families. And this is not limited to just male students, but through these income generating skills, female learners are keen to pursue their small entrepreneur activities to support their families and poverty reduction to some extent. These demonstrations of the respondents were consistent with the conclusive views of Yaqoob (2020) who reported that females' initial entrepreneur activities can be highly motivational to improve their professional pathways to contribute to the family economic wellbeing.

In sum, these study-participants affirmed this reality by reflecting on their experiences while they were interviewed. The college-principals of the TVET institutes were also interviewed and their responses regarding their perception about TVET were almost according to what the learners intimated.

In this regard, Participant-P1.1 had this to share:

In Pakistan, where our government wants us to move forward, and it keeps encouraging technical people. So, if we make our students to acquire skills through technical and vocational programs, I believe that they would contribute a lot to their family as well as to the development of the country

This account of Participant-P1.1 focused on the beneficial aspects of TVET for the learners. By highlighting the importance of TVET, the participant suggested that TVET can become a place, which provides its learners with a broad range of technical knowledge and skills in order to develop their professional and social lives. Participant's these words also supported the research-claims of Alam (2015, p. 15) that argued, "TVET refers to education and training that prepares people for an employment and makes them more productive in various economic fields".

Another Participant-P1.2 also gave the same official opinion when she mentioned:

To me, technical and vocational education can impart competencies allowing the girls to become self-employed to be enough supportive to their families or to get income generating jobs after completing their particular courses

These two examples from the accounts of Participant-P1.1 & Participant-P1.2 demonstrate how their understanding aligns with that of Participant-S1.1 and Participant-S1.2. In both cases, the narratives revealed that technical and vocational education has been perceived as the primary reason and motivation of the female learners for their economic development. To get income raising employments through acquiring the relevant vocational skills is consistently being a serious thought/aim of the participants.

5.2.1. Moral development

With regards to the research question 1, the researcher identified another theme in the data analysis, centred on respondents' perception of the TVET as some sort of moral development. Some of the respondents mentioned that TVET has its imbedded moral significance and implications. As Participant-P1.2 specifically stated:

Let me tell you that females who go through different courses of training here in our college, are getting trained to be sociable, how to work in society, how to deal with other people, how to behave at job places, etc. This is one of the reasons that most of the women join these TVET schools to get formal trainings to get some sort of moral behaviours that we could exhibit later at our workplaces

Participant-P1.2 further continued:

Morality, in my opinion, is an automated process of the technical and vocational training in our country Pakistan. Once students pass through these TVET programs and they might have equipped with high confidence and employable skills, they

would behave good in their interactions with others. These skill-trainings, I personally believe, can be highly supportive for enhancing students' moral development

Interpreting the above-made reflections, it can be said that TVET learning can inculcate other values and cognitive skills among the learners which would prove highly beneficial for their future employable world. This revelation is further confirmed by the report of World Bank (2019a) which mentioned that TVET can develop multiple different skills for the overall development of its students.

In the same connection, another Participant-S3.2 shared a similar viewpoint when she had this to express:

I am of the opinion that getting a job does not provide some one alone economic progress, but it can also contribute to develop personal skills. Through these training-courses we can gain self-confidence, strong decision-making and these have the tendency to raise our moral values and capabilities which prove to be highly beneficial for our work lives ahead

She went on saying:

Skilled females will also be capable to provide the needs of their immediate neighbouring people and would be held in high esteem, actually a dignitary. Because I have seen that economically disadvantaged mostly get engaged in committing different social vices. Therefore, I believe that these vocational trainings are quite helpful to raise moralities (Participant-S3.2)

From these descriptions of Participant-S3.2, multiple contributive roles of technical and vocational skill-trainings can be analysed. Interpreting this quote, the participant seemed to have an awareness to critically value this role of education. Through TVET learning, the learners can undergo into a continuous cognitive skill learning process, posing constant challenges to a learner's understanding of what constitutes an appropriate social behaviour. Such behavioural skill-trainings can further develop skills like social problem-solving, decision-making and searching for dignified alternative ways to achieve social goals. Participant-S3.2's these reflections can also be accorded to the study-affirmation of Ali et al. (2017) that skill-education is considered pivotal for the personal growth of an individual because it enables a person to be significantly contributive to his community.

Quite similarly, Participant-P1.1 also expressed her thoughts like this:

After passing through these TVET courses, I strongly believe that females become well-trained to be capable which means these TVE trainings encompass moral development, interpersonal and intrapersonal relationships for the students. As far as code of ethics for the learners are concerned, emmm... [she pauses], socialization processes and the disciplinary measures in school are bound to cast positive and healthy moral effects on the learners' behaviours to have positive social interaction with the other members of society

From the reflections of Participant-P1.1, it could be summarized that TVET is perceived as the major contributor for the students' economic and moral development. Many of the study-participants agreed that TVET programs could serve as a means to provide employable skills to the students enabling them to fit skilfully in the society, and to develop both 'interpersonal and intrapersonal relationship' among society members. Interview finding accentuates with the study-arguments of Ali et al. (2017, p. 390) that 'TVET education not only enhances workable skills, but also help the students to develop values and attitudes to become informed citizens and productive workers'. Talking about TVET skill-trainings, narratives like '*personal skills, self-confidence, decision-making, capabilities*' etc showed the participants' clear conviction for giving significant importance to be skilfully educated. These narratives of my study-sample can also be understood in terms of the perspectives of Sen (2001) regarding the three potential roles of education that it imparts on the learners' lives (see Chapter 3, 3.4.1). The study-participants, directly or indirectly, put stress on the individual benefits and effects of technical and vocational trainings regarding personal, moral and financial enhancement for their future work-life. From the participants' responses, it could also be concluded that economic and moral development have a close connection because once the moral resonance gets high, it would concomitantly facilitate the economic progress. This reality was also echoed by UNESCO-UNEVOC (2018) where the report emphasized a change in the economic development paradigm stressing the idea that TVET programs and courses can be highly benefactory because these programs not only provide young women employable skills but also a decent life devoid of any moral or social decadence.

To respond the same research question 1, student-participants were further asked to express their perceptions, opinions and views about enrolling in the TVET courses and programs in their respective cities, Multan and Bahawalpur. Two more themes had emerged from the

gathered data based on the participants' responses. These emerged themes include: 1 TVET as a last resort/last alternative. 2 Low societal perception for TVET programs. These emerged themes are explored further as below:

5.2.2. TVET as a last resort

Regarding the perception of TVET education among public, a significant emerged theme from the study data revealed that usually parents or the guardians send their females to vocational schools considering these institutes as a last resort or best suited to their females. When asked if the participants willingly enrolled to the TVET programs and courses, many of the student-participants responded in negative manner. And that was because of the low public perceptions and attitudes for TVET schools and skill-training programs also for the learners who were enrolled there. Therefore, as TVET programs and courses are tailored for skill-acquisition, families in both Multan and Bahawalpur cities, do not perceive TVET as a noble and dignified venture to attract their attention. Furthermore, learners' low academic attainment was also reported by the student-participants of this study as a reason preventing them to pursue their desired general secondary education and to choose TVET as the last alternative for them. In other words, these student-participants seemed coerced for their educational selections.

An interviewed Participant-S4.1 stated this:

We are two siblings, me and my brother. We passed our matric examination in the same year, but my brother scored good while I passed with average numbers. I attend to this vocational college while my brother goes to engineering college because my parents want him to become an engineer. But for me, ah... [she sighs], they think vocational subjects sufficient for girls to learn some basic skills. I did not like this, but I had no other choice [utters in low tone]

This affirmation of Participant-S4.1 included twofold interpretation. First, this narrative could be an indication towards the significant ramification of societal disesteem surrounding the TVET where public, including parents prohibit their wards from enrolling in the TVET disciplines regarding TVET as the career-tracks for those with limited academic qualifications. This assertion affirms the study-claims of Paudel (2019) that TVET stream is branded as 'second-class' education and associated mainly to the unprivileged. Thus, economically low admission standards to the TVET courses, as well as the restricted opportunities or chances for further higher education and personal growth, might also fuel this perception. Worse, this belief sometimes can demoralize the learners to move up the desired educational and professional

ladder ended up by acquiring mere rudimentary skills. Second, this narrative may also help to capture the actual normative context of male and females' imbalanced and discriminative educational and occupational scenario of Pakistan, where the traditional society stereotypically associates technical arenas as best suited merely to males. As a result, females are subjected to even more discriminatory practices, and thus, they find no other option and limit their educational choices and preferences. Report (UNESCO, 2015, p. 45) also confirms this reality that "gender imbalance in education is often a reflection of societal gender stereotypes and prejudices". Lucidly, family and the associated menial duties or obligations can often serve as external 'push' factors from choosing educational programs for their career-pathways which females cannot pursue independently. This discovery also endorses the study-judgements of Wallace (2020) that in the patriarchal fabric of Pakistan, parents want their girls to be restricted to their domestic responsibilities and do not support their technical education as compared to their boys.

In the similar connection, another Participant-S4.2 had this to quote:

My husband is a tailor with a very low income. He cannot afford to hire workmen for his shop. Thus, he wanted me to be enrolled in this course (Domestic-Stitching), so that I could help him to expand his shop after finishing this course. But I was interested to do Bachelor's in Science. But because of my husband's limited sources and my other domestic responsibilities I had no other option than choosing this dead-end

This quote of Participant-S4.2, on one hand, illuminated that her educational aspiration was affected because of her family financial background. Given her desire to obtain Bachelor's in Science degree, she also realized that her family could not afford or support her to do so, she seemed withdrawn from her educational ambitions and decided to enrol in vocational program to fund her family via this education. It is worth noting that, Participant-S4.2 had developed the capability to struggle or aspire, but the degree to which she could do so was limited. This is because of several conversion factors, including minimal financial-resources, gender differences and norms. On the other hand, this assertion of Participant-S4.2, according to my interpretation, also conveyed the traditional concept or idea that females perceive their educational and occupational choices and preferences as a 'part of' instead 'apart' from their respective family decisions and activities. Participant-S4.2's this quote further indicated that when females tend to choose some particular educational sphere as a career-option for them,

their socio-cultural norms restrict them to make such decisions independently, rather females are expected or required to contemplate and understand how their individual decisions could affect their respective familial roles, responsibilities and conditions. Females' educational and occupational ventures, consequently, are not only thwarted by the social expectations regarding females' traditional roles, but also make the females deprived of the occupational chances and opportunities.

Noticeably, these proclamations are in tandem with the study-pronouncements of Ayub (2017) that the biggest challenge that TVET sector is facing in Pakistan is its low prestige from the people because of their negative perception for technical and vocational educational programs. The responses of the participants revealed that most of the family-guardians and parents in Pakistan, want and dream that their male-children would become doctors, engineers, lawyers etc, and these parents prefer to send their boys to the academic systems rather than the vocational ones. This low recognition for TVET is because their parents and guardians perceive that trades like seam-stressing, knitting, tailoring, hairdressing etc are considered to be preserved or best suited to their female-children who are not able to pursue their further higher education whether because of family's weak economic backgrounds or for scoring low academic grades.

Another Participant-S5.1 concurred when she expressed this:

I did not want to join TVET college, I wanted to do engineering or something better than this course. Because such degrees (engineering, doctorate etc) are much valued by our society in contrast with diplomas offered by these TVET colleges. But I am a girl from a low-profile family, so I inherited this field as my only option. I, ehhh.... [sighs in low tone] sometimes, see this education as my career-stopper

Here again, the provided illustration of Participant-S5.1, aided me to delve deeper into the Pakistani normative structures for the females by allowing my interpretations to dissect or evaluate the complex criteria and rules which add obligatory dimensions to the Pakistani socio-cultural setup, thus, influencing the public perceptions of the certain roles these females are expected to perform. The data can be understood in terms of earlier findings of Roomi et al. (2018) and Baig et al. (2018) which elucidated that the influence of the social forces is so powerful that it leads the disadvantaged women to readily accept their subordinate status and to preserve the stereotypical unfair social structures and the families' dominance over their females' educational preferences. Interpreting the narrative "*But I am a girl...I inherited this*

field”, demonstrates gender societal stereotypes to educate girls differently from sons, compelled to occur discrimination in the case of Participant-S5.1. Due to socio-cultural values and norms, her family continue discriminating between her or other females and males in her family. There was, thus, established socio-cultural values and norms of confining these females to the narrow down their educational or career aspirations.

Furthermore, the narratives of TVET as a *‘dead-end’* (Participant-S4.2) and *‘career-stopper’* (Participant-S5.1) are quite similar with the narrative of *‘last resort/last alternative’* which emerged from the learners’ sentiments articulating their career stagnations. This further divulged that these adapted choices and preferences had limited their opportunities and aspirations for their future development and diminished their rights and freedom. Noteworthy, quote of Participant-S5.1 significantly reflected that TVET diplomas are stereotypically less-valued among general public. This recognition is further evidenced in views of Bibi and Mansoor (2018) affirming that *‘low-certification’* is the most prominent reason of TVET’s this devaluation. Consequently, this gives a biased negative perception to the TVET disciplines as an alternative learning opportunity especially for the underprivileged-background female learners or the school dropouts. These types of learners wish to join the work-force directly. My sample’s such negative attitudes towards TVET considering it as *‘career-stopper’* can influence the decision preferences of these female-learners whether or not to take up the technical and vocational disciplines which could shape the progress of the *‘human resource policies’* of a nation. Thus, as a consequence, female learners with the low academic grade or from weaker economic backgrounds deem these TVET learnings as their *‘last choice of schooling’* for the TVET’s low public perception and employment insecurities.

5.2.3. Low societal perception of TVET programs

Many of the student-participants’ expressed views indicated that in South Punjab regions there is a weak public perception for the TVET and skill-training institutions. The study-participants also elucidated that the parents and the guardians are not keen to send their children to these skill-training institutions. This raised few questions in my mind to ponder over that why this phenomenon still persists?, does the general public, including parents not have a clear understanding of the TVET system and its ultimate outcomes?. Or is there no comprehensive or serious exposure to the stakeholders’ *‘success stories’* which could boost the TVET image in terms of work prospect or the students’ future career? The reasons for this low recognition of TVET education could be multiple, for instance, under Pakistani educational context, as per the research-pronouncements of Nooruddin (2017), by putting much emphasis to the general

education, TVET sectors in Pakistan have always been unjustly ignored since its very inception which is why TVET is regarded as having a low standing in the country. TVET diplomas are not considered equivalent to master's degree level, until the TVET graduates undergo for additional postgraduate qualifications. Generally speaking, the salary-scale can also differ for the TVET graduates from those of posted in State civil-services creating discrimination of the technical and vocational programs. Above all, the lack of transparency or disclosure regarding pupils' potential income-generating job opportunities in TVET disciplines can have a negative effect on the parents' perceptions. Thus, because of this low societal acceptability for TVET, the youth also does not take these technical and vocational schools and training programs seriously. The student-participants continued that the diploma holders of these schools do not receive dignity or necessary respect which they deserve. Also, they do not get recognition as possessing manpower skills that could contribute to the country development.

Regarding this, Participant-S7.1 had this to voice:

I come from an adjacent town of Multan and there my relatives and other town-dwellers look down upon the TVET learning considering it non-progressive in terms of money-making. They think TVET students as 'Small level people'. My relatives often say, "ish..., do you want to become a low-paid labourer?" This, phew..... [sighs long], somehow, makes me feel so bad and discourages me that why did I choose this course for me [expresses dolefully]. But, at the same time, I realize that this was the only option that I had

Interpreting this excerpt of Participant-S7.1, an important point can be found, that image of the TVET schools can have significant effect on the learners who choose to follow their vocational courses. In the case of Participant-S7.1, she depicted stereotypical negative perceptions of the community of her home-town and how they devalue vocational learnings by using disgraceful remarks for the skill-professions, which less-encouraged her to choose this educational stream. This finding is in conformity of the study-claims of Bibi and Mansoor (2018, p. 38) which affirm that in traditional societies, 'TVET education is often tagged with low-class workers because of the fixed-mindset and odd cultural conventions'. Furthermore, this can be interpreted as, in part, a reflection of the limited and inadequate funding as well as the academic resources or chances and lack of social prestige associated with the TVET courses, public discourages their wards from pursuing these programs. The stigmatization of TVET in Pakistan is linked to the high status given to academic-intellectuals and high-paid, more dignified jobs.

This low social status and prestige of TVET in the community reinforced by the families, such that students hesitate to pursue TVET as a first choice considering it a subordinate stream. There are many pupils who are less interested in academia for any reason, and want to excel in ‘hands-on’ educational stream. Public perceptions can either support or discourage the learners when it comes to making decisions regarding pursuing further education in TVET domains. At this point, the research claims of Ayub (2017) corresponded the interview-findings which reported that among Pakistani community, including families have statistically a consequential influence on their children’s decisions to take up the TVET disciplines. Worse, the societal stigma attached to the artisans or the craftsmen (who are skilful in using hands) has resulted in the abolition of such trade-schools.

Participant-S7.1 further elucidated:

Emmm....., even in this city (Multan), TVET programs are not highly valued or recognized or I would say, not well accepted and our society is not well embraced to it. For me, exposing the public is necessary. So, I think this low social acceptability for TVET is the reason that TVET schools are being ignored by our federal government, especially for we females who don't like to choose this line, and this is a very serious issue

While, in this next half of excerpt, Participant-S7.1 seemed made a comparison between her home-town with that of Multan city and found the similar situation regarding TVET image among the general public. By further probing, her words indicated that Multan is relatively a developed city even then TVET has not gained extensive exposure in this city among the public and the parents so the TVET programs might not as much impressive as these should be. This, according to Participant-S7.1, affects females’ participation in TVET education. Study of Gupta et al. (2021) also confirms participant’s this assertion that the perceptions and attitudes of the parents, who place a great importance to academia, prove a significant hurdle in acquiring TVET learnings. Similar assertion is aired by Aziz et al. (2014, p. 3) who argue that regarded as a marginalized educational stream-line in Pakistan, only about 1 percent population like to enrol in TVET education. Furthermore, interpreting Participant-S7.1’s narrative “*exposing the public is necessary*”, emphasized her urge for the governmental bodies to increase their efforts to disseminate TVET information to raise awareness by promoting its vitality among the general public and parents who still prefer academic education and devalue the TVET disciplines for their wards. These findings relate to the research-acknowledgements

of Chamadia and Shahid (2018) that government's low capacity to promote the explicit benefits of TVET and its valuable and established career-trajectories for sustainable development, contributes to the challenges of fostering this important alternative form of education among the masses.

Supporting the rationale of TVET's low societal status, another Participant-S6.2 shared similar views when she lamented:

People give a very low value to the TVET schools because they think that TVET students are not intelligent enough to go to the secondary schools or universities. So, parents mostly want their children, especially their boys to become doctors, engineers, lawyers, accountants etc, to boost their family income. So, these parents do not want their kids to become tailor, beautician, carpenter or other things that we students are learning here in this school

This reflection of Participant-S6.2 again seemed to confirm a wider, popular stereotypical perception associated to TVET disciplines. Moreover, these sorts of comments suggest that TVET programs are disproportionately patronized by the learners with relatively low intellectual capacities, such as school-drops or the illiterates. Students who enrol in TVET programs and courses are, in this way, stereotyped and seen as less-intelligent to pursue other academic disciplines. Such negative perceptions and views have created detrimental 'inroads' into the Pakistan's second 'cycle institutes', general public or even the tertiary institutions which are required to train the learners in TVET courses. Ironically, these views are from the people who are ideally placed to debunk such stereotypical views. This realization, according to my interpretation, appears to have arisen as a result of the country's persistent graduate-unemployment crisis, which has grown as endemic due to an overemphasis on solely academic learning system.

The views of Participant-S6.2, regarding the negative perceptions for TVET stream, are more focused and based on the type of employments undertaken by the TVET learners with a stereotypical image such as, a 'low profile' job for a 'low grade' mechanic, further fuel negative feedback for TVET. In other expression, in industry, professional and vocational graduates are restricted to artisans, carpenters, joiners, welders, painters etc, who often work as the subordinates to their peers who are mostly holding general academic higher qualifications. According to Participant-S6.2's perspective, most families think that the area of technical and vocational professions offer low returns. In terms of economic status or salaries, as maintained

by the participant's words, the types of employments available for their wards are not promising. Thus, in comparison to living-skill TVET subjects, parents tend to put more emphasis to academia routes for their wards to increase their family-income. This also alienates the learners from vocational courses making them less-enthusiastic for these courses.

Conclusively, the above-presented affirmations of these student-participants indicated that peoples' attitudes and perceptions for the TVET schools and programs are not highly encouraging which could be attributed to social unacceptability and low TVET status. These findings are in line with the established conclusions of Bibi and Mansoor (2018) that the reason of the female learners' low representation in the TVET programs is mainly due to the TVET's low societal perception or acceptability in comparison of academic education. This low social status of TVET, thus, has made the TVET programs less-attractive rather discouraging and demotivating for the public and the learners to patronize. The student-participants' declarations portrayed the gloomy realities divulging that parents' (including general public) negative perceptions about the viability of their wards' potential professional careers through TVET educational stream remain ingrained and challenging to alter from the old notches. All stakeholders, presumably, disregard the TVET skills as subpar and unprofitable in terms of technical and vocational abilities. Simultaneously, this situation reveals that these stakeholders seem have little exposure to the value of professional image of TVET skill-education and its significant contribution for the country's development by producing highly skilled, knowledgeable and competent labour. However, in this regard, the operational suggestions for rebranding the negative image among the public, as aired by an interviewee above, also buttressed the study-assertions of Omar et al. (2020) which significantly posited that positive information delivery mechanisms can play a motivational role to persuade a wide range of stakeholders' preferences for the TVET disciplines. Such strategic campaigns if carry out, thus, could become a benchmark for the rejuvenation of the moribund status and esteem of the TVET.

RQ2: Which barriers do female-students face in acquiring TVET qualifications that can improve their employability and lead to employment?

To answer this question, student-participants of this research were asked to express their opinions and views about the barriers militating against providing or getting technical and vocational programs and courses in their respective TVET colleges in Multan and Bahawalpur. In this study, several barriers to the provision of quality TVET were noted by the researcher

which, very profoundly, affected the smooth supply of TVET programs and courses to the female students. Critically, the study found significant gender inequality as the foremost barrier and challenge in terms of inadequate infrastructure, equipments and practical-based work, traditional female-oriented courses, a gender digital divide and traditional-styled instructional method.

5.3. Gender inequality

While interviewing regarding the challenges female-students face during their TVET learning in these institutes, a significant theme emerged from the student-participants' narrations. Gender inequality in TVET disciplines seemed having few representational issues and problems because it indicated disparities and prejudices that existed in the TVET educational contexts, which typically comprised cultural and institutional behavioural-patterns as well as stereotypes closely associated with the concept of gender. "Practical-drills are not for girls", upon examining these remarks of a Participant-S2.1, it became evident that these female-learners had preconceived stereotypical misconceptions about their educational expectations. As Unterhalter (2008) maintained that expectations or assumptions on what is suitable or available for a male and for a female to examine often destabilizes the equality or equity objectives in education.

This notion was spotlighted more clearly when a Participant-S6.1 expressed her disappointment and lamented this:

My brother is studying in same college in boys' wing. I notice that in our comparison, they have more activity-based trainings also they have latest toolkits and equipments in their practical labs. Above all, my brother uses to tell me that their teachers put more emphasis on their practical drills because of which they are getting experiential learnings which they can utilize after they would enter in job-markets. Isn't this unfair to we females? Our government must look into this inequality and should provide physical facilities in women TVET colleges on equal basis.

From this demonstration, an unequal distribution of education can evidently be analysed that males' educational opportunities are frequently endorsed in traditional societies. By highlighting the unfair division of the instructional tools and teaching practices, the participant-S6.1 had depicted the actual gendered scenario of the TVET system of their schools. Participant-S6.1's expectations from the government to abolish this sort of gender inequality

is in agreement with that of the verdicts of Unterhalter (2008) which echoed that gender equality must be regarded as an integral part of the education and must be incorporated in the ‘communal setups’ in order to establish a synergetic collaboration between the ‘outliers’ and the traditional power culture to confront or challenge the fundamental ‘suppositions’.

Another interviewed Participant-S8.1, also supported the views of her fellow-student (Participant-S6.1) and said this:

My cousin studies in technical college. I feel so sad when I see a huge difference of learning tools and training-sessions in both male and female colleges. TVET colleges for male-learners give more focus to skill-based drills, while in our college, theoretical work is more emphasized. The only reason for this is the non-availability of practical labs and latest tools. That is why we females lag behind our male counterparts both in educational and professional spheres.

Through analysing the narratives of these student-participants, a common apprehension emerged that there is a perpetual gender inequality in terms of provision of ‘physical facilities’ in the TVET disciplines. Many of the female-interviewees, most significantly became vocal about the inequitable practices they experienced every day in school and classrooms considering these a blocking stone to their skill-acquisition for future employability. Furthermore, narratives like ‘activity-based trainings, practical-sessions, skill-based drills’ were repeatedly highlighted by my study-sample and are aligned with the study-findings of Ali et al. (2017) which confirmed that practical trainings are quite imperative and highly motivational for acquiring employable-skills for the learners to become more productive workers for the job-markets.

5.3.1. Inadequate instructional materials and practical-trainings

This study revealed that insufficient provision of learning material and resources was the major barrier militating against providing technical and vocational skill-training programs in Multan and Bahawalpur TVET colleges. Most noteworthy thing is that technical and vocational institutes require well-equipped labs, basic tools, machinery, vocational training-materials and equipments for practical-work and demonstration. In this term, student-participants of this study identified the inadequate availability of the learning tools and materials by these TVET colleges and the federal government.

In this regard, Participant-S8.2 had this to utter:

Here, in our college, we do not have fully equipped labs for doing practical work. Sewing machines are outdated and other helping tools are also missing. Most of the times, many of us have to bring our own sewing-toolkits from our homes, or sometimes, I need to borrow tool-kit from others. Therefore, I do not take much interest in these practicals. Because, I believe that it is not helpful to develop employable skills when we do not have enough tools to practise individually

This quote of Participant-S8.2 indicated her low level of interest and motivation towards learning which she closely linked to the lack of the provision of necessary equipments and tools in the practical-labs of her TVET school. My observations seemed to confirm this when Participant-S8.2, including other female-students, during their classroom drills, mostly goofed off and remained busy in chatting. Quite few of the students, who had their own tool-kits, made attempts to do the assigned activity and filled out the worksheets on their own. The other groups slowly but uninterestingly, engaged in the activity by borrowing the tools from their other classmates. But this happened, only when their teachers came up to take a round of their work or to assist them in the activity. Furthermore, insufficient availability of practical tool-kits made it difficult for the huge-sized class to engage in practicals especially in Beautician course which I also photographed (see Appendix D). Due to the lack of sufficient equipments, teachers mostly used the chalk-boards to draw the patterns from the textbook which, eventually, stopped the students to do the practical-drills independently and they let their teachers to do most of the activity work. Students turned their faces looking towards the boards and the book the whole time and filled out their activity worksheets by copying the work of the teachers. So, this became clear from the quote of Participant-S8.2 that the TVET colleges have inadequate instructional tools and equipments to the point that the learners were required to bring their own equipments from home.

Another Participant-S9.1 bemoaned while expressing this:

Like boys' TVET college, we don't have enough tools to practise, therefore, we only learn that is available in the text-books. This is the reason that we have to copy the patterns from the writing-board or sometimes cram the book-material

Interpreting this quote, on one hand, indicates an unequal distribution of the resources in male and female TVET institutes. As the narrative of Participant-S9.1 “*Like boys' TVET college.....*” highlighted the inequality that she experienced in terms of non-provision of the training facilities in her own school comparing with that of the male-schools. While, on the

other hand, because of this non-availability of the necessary tools and equipments, according to Participant-S9.1's affirmation, transformation of theories into practice seemed almost unachievable which keep inculcating rote-learning among these learners instead of knowledge development. Furthermore, these traditional instructional implementations, as exemplified from the classroom observations, were characterized though by the presence of the curricula components but unescorted by constructive teaching strategies. Such classroom lessons, in other words, were trammelled by the students' low level of classroom activity-engagement, their group-work cooperative learnings, limited interaction between student/teacher and minimal questioning skills while concluding the classroom practical sessions. From the teaching demonstrated in the observed lessons of the classrooms, it was apparent that these TVET teachers predominantly had entirely teacher-centred which greatly influenced the classroom practices of these teachers and resulted in low-motivation from the students. Moreover, the study of Jalil et al. (2019) is in lined with this interview-findings claiming that the students' participation for the TVET subjects increases only if the learners are fully aware of both the teaching and learning styles.

The same assertion was made by another Participant-S10.1 when she voiced this:

Our teachers, sometimes have to put lot of efforts to explain the concepts they teach us, and this is because of the non-availability of the tools and equipments in college practical-labs. As a result, we have more theoretical and fewer practical sessions. This can be a serious problem for us because I believe, emmm.... [she pauses thoughtfully], without practical training, how we would be confident to acquire job-market skills and competencies.

Capturing this account of Participant-S10.1, it became clear that these TVET colleges have inadequate infrastructure and equipments which they thought quite important for their practical skill enhancement and future employment. The participant opined that these learners are less-confident about their abilities which reduces their resilience. Perception of the institutional system, in general, plays an pivotal role here as well. The lack of instructional resources, labs and materials for practical-drills restrict these learners' capabilities and confidence in terms of attaining employable-skills to reach to their occupational goals. This reflection is further evident in study (Dewan & Sarkar, 2017, p. 16) that education-system lacks job-oriented trainings which has significantly affected students' employable-skill acquisition. In case of Pakistan, the research-convictions of Raza and Ibrahim Khalid (2017) supported my interview

analysis that TVET in Pakistan has not yielded the anticipated results due to the lack of adequate learning facilities and pedagogical deficiencies and proved unsuccessful to produce graduates who are either employable or self-employed. This indicates that graduates from these TVET colleges do not have the required skill-standards to be acceptable into the workforce. This can also greatly contribute to the stigmatization of the TVET in the developing states like Pakistan. the study-investigations of Nooruddin (2017, p. 136) are also in compliance with the interview-analysis which evidently affirmed that “TVET sector in Pakistan is at disadvantage because its labour cannot capitalize in both international and local job-markets due to the fact that TVET curricula-content and technological equipments do not match the foreign and domestic demands, also TVET teachers lack necessary technical expertise”.

Statement of a Participant-S5.2 was also in conformity with that of Participant-S10.1, when she stated this:

You have asked me a very good question. I am studying Fabric-Painting and Fabric-Designing. We have a large number of students in our class, but limited practical material is available in the labs. At least, each student should have a hand on experience during the practical components. Because of this reason, teachers do not too much focus on practical works. I tell you, since I had come to this college, we had attended quite limited practical classes which I can easily count on my fingertips. Hmmm... (she pauses), this is the main reason that most of my class-fellows had left the college before they completed their courses. This also affects TVET image if this problem will continue to persist.

Participant-S5.2 indicated her desire for more practical drills by providing sufficient instructional tools. She claimed that specific TVET courses, which these female-learners were undertaking needed more practical activities in order to become skilled enough in these departments. This assertion is further highlighted in research (Alam, 2015) which alluded that TVET institutes strongly require to give significant importance to tools and equipments to make their learners competent and skilful. Most noteworthy point here was that, throughout the interviews, this was aptly evident by the student-participants that they lacked work-based skills due to the non-availability of latest tools and equipments. This finding confirms the study-claims of Aziz et al. (2014, p. 3) declaring that in Pakistan, drastically about 75% TVET learners lack job-oriented skills. Furthermore, Participant-S5.2 also pointed out that a shortage of instructional tools and equipments resulted in a reduction in the amount of training available

in these public TVET schools. The scarcity of the pedagogical materials, equipments and practical-trainings impacted on the practical work undertaken, (which according to my study-sample is an important component of vocational education and training), affected the quality of education, consequently, resulted in students' dropout before the completion of the TVET programs they were enrolled in for. The research discoveries of Ludwig-Mayerhofer et al. (2019) also corroborated this fact by declaring that the provision of regular skill-trainings can have huge effect on the learners enrolled in the TVET programs as learners' motivations to pursue these programs or to leave the TVET institutes, all significantly depends on these training-based activities.

Furthermore, drawing on the views of participant-S5.2, there also found a call for not only equipping the practical labs with the latest tools and equipments but also for an ongoing teacher-training and 're-training' to ensure that the TVET learners must be prepared for the new labor-market. While interpreting the participants' demonstrations, another discovery popped up as the issue of class size. It was discovered that the broad class-size did not equate the availability and the provision of the training tools. This also made it difficult for the instructors to hold all students' attention during demonstrating, particularly the practical lessons. To my interpretation, this significant constraint also indicates the lack of an appropriate and accepted methodology in TVET teaching and learning. In addition to traditional lecturing, the teaching of the TVET subjects necessitates to adopt a range of teaching techniques and methods to accommodate teaching justly in a large class-size. It was also evident that the TVET instructors did not adhere to these variety of instructional methods.

Participant-S5.2 also suggested that they undergo merely theoretical education with no sufficient practical experiences, such that, many of the students left these TVET institutes armed only with theoretical knowledge and insufficient practical skills. On all these points, the views of participant-S5.2 are in agreement with the standpoints of Jamil and Iqbal (2020) that if this essential component of practical-skill is missing from the TVET learning, then TVET graduates could have very little chances to obtain and maintain employment.

5.3.2. Female-oriented courses

Exploring gender inequalities in terms of provision of TVET education to female-students, and describing infrastructural barriers and challenges, another theme 'female-oriented courses' was emerged from the narratives of the participants. By photographing and observing class-room

activities, this can be said an outcome of an empirical data on the types of courses made available for the female-students in these TVET institutes involved in this study.

Regarding traditional female-oriented TVET courses, Participant-S10.2 uttered this:

I am enrolled in cooking and baking course. But I am not in this course by choice. I wanted to take Mechanical Maintenance diploma. When I told this to my mother, she forbade me saying these hard and machined-based manly-courses are not suitable for girls. And I think she is right to a great extent because after my certification, I will have to remain at home to serve my husband and his family

The above-made statement of Participant-S10.2 reflectorized the traditional patriarchal structure of Pakistan, where females' individual choices and preferences are to be said accepted, rejected or controlled by society itself. Interpreting the narrative "*she forbade me.... for girls*" reveals that "how gender norms and structures reinforce gender inequality also enforce masculinity and femininity codes, as well as conceptions of what constitutes appropriate or normal for males and females" (Robeyns, 2007, p. 3). A notable point here is that these social structures refer to the situations where people adapt to the hegemonic and dominant social forces whereby, people, consequently become the actors of the same harsh and oppressive means they have been exposed to. Participant-S10.2's narrative "*And I think she is right....*", is a reflection of socially acceptable behaviours that are instilled in females throughout their socialization process of which, family is the major foundational force (Farooq, 2020, p. 387). The influence of these forces is so strong that it leads the disadvantaged people to readily accept their subordinate status and to preserve the unfair social structures. This notion further accentuates the arguments of Nussbaum (2001) that in oppressed communities with social and cultural hierarchal structures, gender-related disparities still exist and keep denying their educational and occupational rights and choices. By making these claims, Nussbaum (2001) meant to elucidate that the subjective choices and preferences of the people are not only individually made but these are also moulded and shaped by the respective societies. Through further probing, I also found a clear notion that these females are pushed by their families to pursue the conventional careers (as mentioned above by Participant-S10.1), over the so-called non-traditional or non-female careers. Outwardly, these actions probably could have diminutive effects. But, inwardly, as these behaviours occur repeatedly, they inculcate very powerful thought and beliefs into the women that females are not as strong or worthwhile as males, thus, they are not expected to take up the male courses. This recognition is also

demonstrated in the paper of UNESCO & Chavatzia (2017) that gender discrimination usually stems from homes where parents' preferences and expectations stereotypically promote technical educational and occupational fields only for their boys. This eventually indicates that the females' least interest and lack of self-confidence towards these men-oriented disciplines are closely linked to their parents' attitudes, beliefs and to great degree, their different expectations and goals they have set for their sons and daughters. Parents may communicate their expectations and thoughts to their children by sharing their opinions and beliefs considering their wards' capabilities, gender values or limitations and the complexities of different courses. Therefore, the unequal social and cultural relations and circumstances, reported by my study-participants, created unequal chances and opportunities for them affecting greatly and deeply their perceptions, beliefs and hopes in this context. Response of Participant-S10.1 also revealed that these adapted choices and preferences had limited her opportunities and aspirations for her future development and diminished her rights and freedoms. Under such situations, these females stereotypically develop subjugated domestic-servants' identities (Islam & Asadullah, 2018), therefore, have to reconcile to their fate and role given to them by the community or their family. Thus, accepting their roles with their respective predicaments, may lead them to make choices which are not life enhancing or valuable.

Furthermore, conceptualizing gender in the context of Pakistan, these stereotypes appear to misrepresent women's self-perceptions of their capabilities and capacities to succeed in technical spheres where males both historically and socially predominate. These incorporated gender stereotypes, described by my study-participants, influenced females' vocational choices considering men fit for technical and occupational world, and women for traditional domestic and maternal roles. This reality can be accorded to the study-affirmations of R. Khan et al. (2020, p. 39) that these gender-disparities make females to "feel undervalued and because of this powerlessness, females in patriarchal communities, accept these stereotypical beliefs which further perpetuate gender discrimination".

In the same direction another Participant-S7.2 voiced the problem like this:

I am a female that's why I cannot go for such technical programs. We females are too soft to take these manly subjects. Secondly, I have not seen any female in my family who has ever taken technical courses neither I have any machine-use

experiences. And above all, our weak bodies will not allow us to deal with heavy machines. This suits only to males, so I preferred this (Cooking) course.

This response of Participant-S7.2 reveals a preconceived stereotypical females' tendency of underestimating their feminine roles. In traditional societies, the influence of such preconceived beliefs and tendencies are developed and further reinforced in familial environment where gender-specific expectations and roles are prescribed in a way that these stereotypes reproduce in the females' own ideas and behaviours at their very tender age (Ellemers, 2018). Females, as a result, start internalising these behaviours, accept these gendered social hierarchies and their manifestation in the area of work, thus, females start entering in stereotypical women-centric educational disciplines. This notion is further elucidated by Makarova et al. (2016) that the influence of these societal stereotypes is so strong that women, if want to pursue manly-trades, society continue to label them as 'weak-sex', and this imparts negative effects on females' abilities, consequently, these societal and cultural stereotypes continue impeding females to enrol in male-oriented educational disciplines (Struthers & Strachan, 2019). By interpreting this excerpt, another point popped up that some TVET programs and courses, such as cooking, hairdressing, dressmaking etc are stereotypically associated to the females, especially who are socially and culturally less gifted. In Pakistan, for instance, such females are derogatorily being referred to coiffure, cuisine and couture to follow their feminine legacy. Participant-S7.2, further stressed the idea that her primary or family related socialization did not include her direct contact with technical and machine based practical tasks that established gender stereotypical vision presenting lower feminisation enrolment rate for the technical programs and courses viewing as 'other' gender.

Participant-S7.2's narrative "*This suits only to males*", further demonstrated her beliefs that society assumed that females cannot participate in mechanical-streams that males can do more competently. I understood that this was ascribed to the stereotypes Participant-S7.2 thought herself to be inferior. She was willingly under suppressed state because of social-construction of gender, that limited her access and preferences for male-oriented TVET disciplines. Patriarchy, as a social-system, disseminates male power over female as natural. Besides, in developing countries, textbooks continue portraying females' improper image as being passive and weak-sex, which has also propagated stereotypes in society (Islam & Asadullah, 2018). This phenomena is further evidenced in the study of Mutarubukwa and Mazana (2017) which elucidated that in TVET sectors, gender-biased instructional materials and textbook-contents are keep delineating a masculine portrayal of TVET that females with their feminist

characteristics are regarded as incapacitated to take up the technical subjects and this stigma refers to a characteristic which leads to widespread societal refusal or disapproval and a disparaging social discrepancy, resulting in a tainted social identity. Additionally, Participant-S7.2's narrative *"I am a female that's why I cannot..."*, also reflected that she was under patriarchy domination with strong beliefs and convictions that females cannot choose men-centric educational streams. Structural and cultural norms prove barriers for her motivations and engagements in learning contexts, and she found herself unable to resist against these patriarchal practices, consequently felt reluctant to avert these. Because such hesitations stem from her lack of exposure to these technologies because of societal norms as females are limited to their prescribed traditional roles as caregivers. This recognition is further elaborated by Roomi et al. (2018, p. 168) "due to the fact that females are raised and socialized differently than males, causes these females to view their educational and occupational options differently", thus, their capabilities and their contributions tend to be underestimated by themselves, their families and other institutions. Research (Farooq, 2020, p. 387) also contends that such "social elements play a critical role in characterizing male as a powerful and domineering entity, whereas female is portrayed as weak and docile".

This stereotypical notion can be viewed in the elaboration of a Participant-P1.1 when she observed that:

There is a common tendency in Pakistani families that they want their sons to take technical and engineering disciplines to be financially supportive to their families. That is why in women TVET colleges we usually offer limited range of technical courses because we know that like parents, even girls are also reluctant to choose other hard or mechanical subjects.

Participant-P1.1's reflections suggest that female learners are likely least interested to take hard technological courses, but this also indicated that females' decisions for not choosing hard courses for themselves, are also influenced by socially constructed gendered identities which are reinforced at their home by their parents. Here, it is noteworthy that, these stereotypical conceptions keep regenerating within the institutions as well. This accentuates the research-assertions of Islam and Asadullah (2018) that school environment can be a 'breeding-ground' for gender bias preconceptions. Inwardly, Participant-P1.1's verdicts were the acknowledgment of the fact that schooling can also lead to the reproduction of the established patriarchal ideas and practices. To further explore this, I found it useful to recall the notion of Bourdieu (2001)

regarding ‘field’ and ‘cultural capital’. Following formal educational institutes, is the field in which the societal hierarchal structures can regenerate or continue to persist. In the context of the gendered hierarchy inside the formal schools, thoughts and ideals can be replicated based on the ‘cultural capital’ brought from one’s own home environment. Thus ‘fields’, as sites of the dominant positions, and the patriarchal values may persist in the ‘habitus’ because of the ‘cultural capital’ that is inherited from the home settings (Bourdieu, 2001). The interview results, thus, appeared to contradict the Pakistan Government’s vision-mission pronouncement of NAVTTC & Sabina (2019, p. 5) which described TVET education as a key driver of socio-economic growth for its all learners. Despite the policy’s focus on fostering equitable access to, equality and relevance of TVET, it lacks a specific strategy for increasing enrolment in TVET schools by enhancing and extending variety of technical courses offered. Here, general perception of institutional system is also essential to be analysed because the learners’ options seemed constrained by their perceptions of the dearth of resources like labs, tools for practicals and the number of technical subjects offered by the TVET schools. In this respect, Participant-P1.1’s response made it clear that these institutes offer limited technical courses to their female-students which has resulted in learners’ low participation probably because of limited TVET course-choice. This finding accentuates research-pronouncements of Gudyanga et al. (2019, p. 3) that “girls and boys are taught different subjects, boys are encouraged to take up technical subjects, and girls are expected to pursue domestic-science subjects, this reveals already existed institutional gender discrimination”.

While reflecting on the above-stated words of Participant-P1.1, “*girls are also reluctant...*”, it occurred to me that some females-students might avoid taking technical and mechanical subjects because they are self-conscious or feel embarrassed about showing their interests in these non-traditional subjects to others. In other sense, it can be speculated that females might be more aware of their public personas, and they want to be viewed as feminine. Here findings can be accorded to the study-verdicts of Struthers and Strachan (2019) which assert that girls find these non-traditional subjects incompatible with their own feminine identities or capabilities, consequently they feel fear of being labelled if they take up such courses. Thus, these females may find it more difficult to identify with technical disciplines as a technical identity may conflict with or contradict a woman identity with what females are usually expected or supposed to do. As a result, gendered discourses, specifically those stereotypically associated with the masculine characteristics, can have negative impact on females’ preferences and aspirations regarding taking up technical disciplines for themselves.

Throughout the analysis of the interview data, the influence of the family was clearly a strong contributor to personal choices of these female learners. Interview findings supported the conclusions of Parveen et al. (2020) that in Pakistani male-dominant society, males most likely take the financial responsibilities of their families therefore they usually choose technical programs and courses, while due to the parental involvement, female enrolment trend is comparatively low for these courses. The narratives like ‘hard courses, machine-based, manly subjects’, highlighted gender stereotypical norms set by the society and families for the females. These incorporated gender stereotypes through families, described by my study-respondents, influenced their vocational preferences and choices considering men suitable for technical and occupational world and women for traditional domestic and maternal roles.

Furthermore, some of the participants pointed out another important notion that their primary or family related socialization did not include their direct contact with technical and machine related practical courses. Participant-S7.2 s’ quotes “*females are too soft*” and “*our weak bodies*” were significant in her narrative and centred on these females’ own individualistic interpretations of self-stigmatization. Study-participants’ these pronouncements are in agreement with that of the theoretical affirmation of Bourdieu (2001) that in accordance with patriarchal norms and beliefs, females’ subservient roles are deeply and naturally embedded into the females’ habits which are further maintained by numerous social agents such as families and educational structures. These habits, according to Bourdieu (2001) are exercised with the consent of these subjugated bodies, making these females to recognize their subservience as a natural outcome of patriarchal systems. Furthermore, in attempting to explore what these respondents experienced that to achieve gender equality is a major challenge and their answers also exemplified the biological difference of males and females Thus, these notions further depicted the fossilized stereotypical societal norms that construct and perpetuate tendencies among females in terms of their body-entitlements. These interpretations substantiated the research-articulations of Masitoh and Pramesti (2020) who have used ‘*male chauvinism*’ to portray masculine superiority-based ingrained stereotypical beliefs among the Pakistani indigenous community which considers women bodily-weak and incapable of doing any manly tasks and makes females restricted to merely menial duties. This seems the most important cultural factor which my study-participants’ accounts disclosed their passive intentions and hesitation for taking up the technical hard TVET courses. These assertions are also spotlighted in the research of Ayub (2017) clarifying that neither conventional nor the western technical and vocational education systems in Pakistan provided females equal

opportunities to enrol in technical disciplines because in Pakistani society, a woman cannot be imagined to become a technician, and therefore, only male learners attended these technical institutes for getting professional technical education.

Thus, study-interview findings as well as the literature, both indicated to the loss of female's autonomy within the families, reduction to a female's bodily existence and her lack of self-confidence, are merely the consequences of the perceptions that technology-subjects are just a male-domain.

5.3.3. Gender digital divide

Demonstration of the female-oriented courses, created room for another theme to be emerged; 'Gender digital divide' which can be described as the gap between gender opportunities to access ICT and its utilization. Regarding provision of digital technology ventures from these TVET colleges, interviewee Participant-S3.1 expressed her dissatisfaction that:

We have limited computers available in labs. We do not have long duration computer courses. We are just taught the basic computer skills. Teachers do not spend more time in explaining other components of digital competencies

Here, from this divulgence of Participant-S3.1, another manifestation of the lack of resources and technological equipments in these TVET schools can be interpreted. This revealed that the TVET instructors are limited to merely pass the rudimentary skills to their learners instead of arousing their critical abilities for further explorations through their pedagogical practices, secondly, as per the study-declarations of Rajput et al. (2020), also causing to widen the existing education divide in Pakistan.

Another Participant-S6.1 echoed almost similar assertions:

Because of limited practicals, we do not get individual ICT trainings. Even we have not been taught how to make electronic CVs. Neither we are assigned project-based tasks as boys are taking in male TVET college. Even we have not been taught how to make electronic CV. This is the reason that we girls lack ICT self-efficacy

While these reported disclosures revealed an inconsistent relationship between these female-learners' digital skills and their use of computers in their TVET school. Participant-S6.1's standpoint seemed based on her experiences indicating that the existed institutional gender-inequalities had hampered GDD. Thus, Participant-S6.1 continued further:

Our teachers need to make the education ministries to pay attention to this serious problem in women TVET colleges. Because I believe that these digital platforms can be highly supportive for us to get our desired jobs because the more we use these, the more we get to aware of the recent job opportunities and become able to raise our social status

These GDD free technology education, as pointed out by Participant-S6.1, can offer greater opportunities to empower the disenfranchised women groups. As per my interpretations, although having access to TVET as a resource, is an important condition to acquire empowerment for the females yet, it is insufficient in its own. In other expression, empowerment through TVET learning cannot be calculated just by access to or enrolment percentage of TVET, but by its potentiality to impart capabilities which female-learners have reason to appraise. Conceptualizing empowerment thus, focuses on opportunities for female-learners to lead a life they actually and wishfully want to. This perspective is quite important because it requires the institutional or governmental bodies to concentrate not only on increasing accessibility to TVET but also on evaluating the outcomes (Sen, 2001). Participant-S6.1's words "*raise our social status*" articulated an awareness in particular, a critical consciousness among them regarding empowering their marginalized identities which can potentially be achieved if this GDD in technology-learnings, as maintained by Mare (2021) will be further analysed and taken into serious consideration to improve by the government bodies. The quote above, captured the resistance of the female-learners who desperately wanted an epistemic justice and place to situate their self-identities, particularly in socio-cultural contexts where female empowerment requires to be contextualized in a different way providing different scenarios to achieve gender-fairness. Therefore, the key components of the participants' interviews consisted of their desire to have gender-friendly learning milieu in the TVET schools. These articulations of Participant-S6.1 seemed to be constrained by the institution's structural dynamics. The basic premise of this study, thus, is that if this GDD is by-cause of 'nurture', this is then compulsory for the education policymakers to nurture gender-sensitive, particularly gender digital equity to eliminate GDD and to engage more girls' participation in digital technology-based programs. Moreover, while contextualizing the interview results with the research verdicts of Singh (2017), it has become probable that to invigorate female-learners' capabilities can impart significant role to boost up the female-learners to equitably take part in ICT digital learnings for their future economic development.

Another noteworthy thing is that nearly all participants were unanimous while reporting their experiences regarding GDD both in institutional as well as in familial contexts. This claim was further enhanced in the verdicts of a Participant-S9.2 when she expressed sorrowfully this:

I am studying Beautician course and I don't have my own computer at home. My father has bought a computer for my brother because he is studying electronics. We cannot afford another computer neither the connectivity expenses nor I am allowed go to the colony internet-cafe. Also, according to my parents, my brother needs computer more than me. This is why I cannot get acquainted with the latest beauty-trends except relying merely on bookish information

Gender stereotype perhaps, can be a widely adopted factor for this GDD. These gender norms embody all sorts of economic challenges and barriers for females. For instance, cost of a computer or any electronic device and its connectivity or credit etc might influence the access to it for both the genders as well, but nonetheless, females with less educational opportunities and due to their subservient familial roles, become financially more dependent. As a result, females feel discriminated in comparison to their brothers who enjoy every right in family, this significantly affects females' educational and occupational demands and decisions (R. Khan et al., 2020, p. 39). Furthermore, females often have fewer access to both at home and public internet spots to explore entrepreneurial ventures through these digital sources. This finding is concurrent with the research-affirmations of Wong and Kemp (2018) that comparing to girls, families provide their boys more supportive atmosphere and chances to use internet sources at home or outside. This makes girls' interaction with technology-products less-autonomous which results in hindering their abilities to develop their comfort and interests for digital technology-based discourses. Accordant with the study-acknowledgements of Wong and Kemp (2018) such gendered discourses are reinforced by both family and educational institutions which cast negative impact on the females' career aspirations. Participants in this project can be seen, to some extent, have their thoughts and abilities are trapped or chained by the Pakistani socio-cultural norms that determine their actions, restrict their mobility and access to the ICT. Lack of familial support and approval affect their decisions and choices. The self-imposed decision-making constraints regarding ICT educational and professional preferences are inextricably linked to the social expectations which are deeply entrenched in these participants. Furthermore, from the ICT employment perspectives, women require to start thinking beyond the box. On probing, student-participants revealed that Pakistani women are instilled with a mentality that imprints inherent "Do's" and "Don't's" within their beliefs and

actions in terms of socialisation into gendered-identities. As a consequence, females are discouraged from considering a career in the ICT sectors as they perceive potential employment in the sector to be difficult which is a male-centric domain. This study, further confirms the findings of the interviews leading to the interpretations that GDD is a socially constructed phenomenon rather than an economic problem as economic barriers and impediments are driven mainly by societal gender norms. However, to which extent these economical barriers and GDD are interconnected, can be somehow, interpreted or determined through this drawn-data with absolute certainty. Further research, thus, may also further contribute to provide a deeper and better understanding of the interplay of these two factors.

Thus, in summarizing this subsection, student-participants' perceptions of digital learnings as specifically man-oriented fields, most likely demoralize these learners to improve their digital employable-skills. Due to this GDD, participants felt reluctant to use digital technologies thus, tended to opt for copious reading and learning materials, assignments and knowledge provided merely in the books.

5.3.4. Traditional-styled instructional methods

Contemplating the GDD challenges for the female-learners in TVET disciplines, another important theme appeared through the participants' narratives and that was traditional-styled instructional learnings and inappropriate trainings. Under this specific area, the study-participants expressed their acute dissatisfaction regarding the instructional methods in terms of providing proper skill-training to get employable competencies. The female-participants pointed out that under the old TVET instruction, these learners got very little chances and possibilities to construct their own learning because most of their instructors regarded their learners as holding no knowledge, thus, the instructors' work was merely transmitting the knowledge rather than providing opportunities for students to construct knowledge.

This is reflected in Participant-S8.2's reflections as follows:

Did you notice the chalk-system in our classrooms? I feel that we are still being treated and taught like the primary-school children. No communication skills are there at all. This is unfortunate that our government TVET colleges still use these old instructional methods. But then I realize that because of inadequate training equipments, we are forced to be taught like this. You tell, within this environment how can we develop employable skills?

This observation of Participant-S8.2 indicated that these TVET learners felt like they were being treated like small children who needed to simply receive information and knowledge being provided. This participant was the same one who acknowledged that the capability of being vocal is lacking in these traditional class-room practices. Participant-S8.2 affirmed that these students lacked freedom of expression in the class and the teachers seemed hampered the development of voice capability by discouraging the students from asking questions, even though the students did not comprehend certain aspects of their course-content. Such experiences can limit the females' desire to engage in the class-room activities and stymie their capability to grow a voice. Participant-S8.2's such proclamations are aligned with research-contentions of Gul and Shah (2019) which signified that if the pedagogical practices are offered to the learners in such obsolete environment with outmoded instructional methods and tools, their anticipated career opportunities or ventures will not be realized.

Another Participant-S10.2 demonstrated this:

During my activity-class of domestic-tailoring, our teacher only focuses on the patterns that are presented in the course-book. I am always denied by my teacher to give suggestions or to draw other patterns which I sometimes find simpler and easier than those of the book. This is frustrating that we have to go with theory-based learning rather than learning by doing on our own

Interpreting this quote, provided some novel insights that due to the paucity of modernized instructional environments, TVET in these colleges, has been equated with general teaching/learning education systems with an emphasis on paper certificates rather than specific employability skills. Career progression will certainly be ridiculed when the students' skills or talents are not applicable to the today's job-market. From this understanding, it is also discovered that to maintain the potentials ingrained in the TVET, require a quality and updated learning environment, instructors, labor-market knowledge, relevant employable skills and established standards of gender equality. This observation can be understood in light of the research finding of Siddiky and Uh (2020) regarding the need for upgrading and integration of the TVET content with the recent job-market demands, with a strong focus on the employable-skill learning are significantly needed for TVET progression. It goes to further affirm that TVET learnings would be as successful and good as its learning atmosphere wherein the TVET learners are trained. Student-participants of my study understood the focus of teaching in the

TVET programs as being focused solely on completing the course rather than acquiring the requisite knowledge and the required skills for the work-place.

This point is well illustrated by Participant-S7.1 who noted:

Our teachers teach us to perform better mostly during our written exams by employing only those formulae which are stipulated in the textbooks. And teachers insist every student to adapt these. However, this cannot be the criteria to determine the exact levels of our knowledge and work-skill mastery especially in science or ICT courses. According to me, majority of us could do better if exposed to practical-based or problem-based effective learnings which could enhance our capabilities

Participant-S7.1 highlighted the teaching methods in common use by her teachers. She further revealed that her teachers were mainly employing classroom-lectures, and theory-oriented methods which hindered their acquisition of work-related skills, especially in ICT and other applied science program courses. Participant-S7.1 seemed reassured when pointed out that traditional-styled methods only allowed these students to pass their written exams and coursework by receiving maximum theoretical lessons and with minimal practice-based drills required in work-fields. Participant-S8.2 and Participant-S10.2's references to '*chalk-system*' and '*theory-based*', were indicative of the over-dependency of the traditional-styled lecture methods in TVET sectors in Pakistan. Additionally, Participant-S8.2's reflections that they were "*taught like the primary-school children*", can be interpreted as strong evidence of a traditional teacher-centred transmission mode of instruction. This further implied that because of the old-styled teaching methods, these female learners were not exposed to the new competencies of the recent world of work these learners needed to acquire. This had adversely demotivated these females to keep abreast with new employable skills of the job market in relation to these learners' particular specialization fields. Drawing on the insights from Jalil et al. (2019) which submitted that pupils' motivations are significantly and closely linked with the teachers' instructional styles, we can see how participants in this project were demotivated by the dominant mode of pedagogy used by their teachers in traditional class-rooms of these TVET schools. The participants seemed lacking exposure to the new technologies which negatively influenced the acquisition of the relevant employment skills.

Interpreting these narrations, this further, became clear that the instructional ineffectiveness has limited their critical-thinking capacities within them which thus, further perpetuates

unequal technology access, skill-mismatch and their future employment opportunities. The participants appeared to agree that teacher-oriented methods as predominantly practised in the Pakistani TVET sectors, promote memorizing of the learning contents which, therefore, may not thoroughly allow the TVET students to develop skill-relevancy for work-ready. “*We could perform better if.....enhance our capabilities*”, participant-S7.1’s quote demonstrated a dire demand for the instructors who should embrace student-centred or constructive pedagogical approach. Gudyanga et al. (2019, p. 2) further elucidates that “TVET can be an education system where practical subjects must be included which can generate skills and competencies to prepare its learners for world of work”. As this type of practical learning, alluded by participant-S7.1, could support self-efficacy and motivate them to master the saleable skills which might not be gained through teacher-centred traditional instructional methods where students use to sit to listen to the long hours’ theory-oriented lectures as passive listeners.

In the procedure of analysing the proposed solutions aired by the study-participants above, I further learned that these female-participants were knowledgeable enough in assessing these traditional pedagogies and expected their teachers to be well-equipped as well as well-trained while handling their teaching methods to create work-oriented milieu for these female learners.

The college-principals, when asked about the instructional pedagogies, confirmed that their whole hired teaching-staff by the federal government was academically qualified and well equipped to teach TVET courses effectively. These college-principals further stated that the teachers use innovative instructional pedagogies to enhance the learners’ skill-acquisition. Conversely, to my surprise, Participant-P1.2 stated this:

Our teachers occasionally have to employ traditional instructional methods due to the system we are currently operating hahaha..... [laughs out loudly]. Under this system, emmm.... [pauses for short], little attention is paid to organizing and up grading of the taught information, teaching material and curricula. Most of the content was found to be updated back to 10 years

Participant-P1.2, appeared to blame the over-reliance and over-dependence of the traditional-styled teaching methods on the inability of the management for designing such practice-based learning curriculums of TVET that do not allot much time for theoretical contents than practical drills and exercises. Reflecting on the words Participant-P1.2 “*updated back to 10 years*” I understood that few of the stipulated modules under the ICT and electrical courses were not valid anymore compared with the recent times. To my interpretation, a significant practicable

percentage of the taught information in the TVET content was outdated and unrevised from the last ten years, consequently, no longer coordinated to the recent job-market needs. Under these archaic premises, TVET sectors seemed following the consumerism systems which disempowered female-learners' capabilities. This recognition further highlighted the hegemony of the top-down TVET educational policy paradigms which promote rigid teacher-centric instructional approaches in TVET sectors in Pakistan. In accordance with this, the study of Zubair et al. (2020) also avowed that the 'hidden curriculum' in Pakistani TVET, encourages traditional training-techniques which force the learners to reflect or act uncritically. Their study further found that TVET learning theories predominantly focus merely on bookish transmission rather than the learners' employable transformation. Keeping this situation in view, the aforementioned proposed solution of Participant-S7.1 (that she needed practical-based skill trainings) was an indication that her suggestion could equitably be applicable only if the educational policy programs of these TVET colleges would be taken into serious consideration. This further formed the foundations to pose my research question 3.

RQ3: How TVET policies can encourage more equitable-employability opportunities for the females?

In the recent times, development actors in the TVET sectors have had focus to make policy programs to upraise employable career opportunities among the TVET wards. With this consideration, this study-work sought to ascertain whether the female-students of Multan and Bahawalpur TVET colleges were equitably undertaking industrial attachment during their school trainings or not. Thus, while conducting interviews and attempting to figure out this, an important program brought up to light.

5.4. Career-counselling program

TVET is meant to provide its learners with the necessary and right skills for successful occupational adoptions (UNESCO & Chavatzia, 2017), but no learner, however, can learn all of the skills required in all areas of occupations. The TVET practitioners, therefore, can be expected to play a significant role to observe and track the TVET learners' conduct, attitudes, inclinations and activities within the school environment to ensure proper and accurate skill-alignment. These observed attitudes and actions of the students facilitate the TVET practitioners in counselling, guiding and advising the learners for their skill and occupational choices. This counselling further helps in ensuring that the learners are enrolled in accurate and suitable callings for productive performance and long-term retention of skills. This particular

program could also be interlinked with gender awareness, learners' self-efficacy and confidence-development. During my whole fieldwork, I found that despite having clear visions, female-students had uncertain thoughts towards how to reach to their future goals and objectives.

As Participant-S10.1 commented like this:

For me, I have a clear goal about my future employment, but I lack self-confidence that overcomes me, and I do not know how to reach to my goal and how to get rid of discrimination which I have experienced several times during my studies here

Response of Participant-S10.1 suggested a widespread and extensive crisis among these female-learners' confidence and beliefs regarding their achievement of their long-term goals and objectives. This might also indicate that these female-learners perceive or encounter obstacles and unjust institutional practices in education, skill-learning and employability-guidance which hold these females back, leading them to believe that their career aspirations are unattainable.

Another Participant-S5.2 also stated the same point:

Currently, I am learning skills. But.... (she pauses), I often ask myself whether I have gained confidence to utilize these skills in future or not and how? I am unaware of any career-guiding programs which I often hear that male-TVET colleges offer to their boys. Neither our teachers have ever practised these in classroom

Response like this from Participant-S5.2 is indicative of the reality of the gender-inequality and non-availability of the guiding programs for these female learners. Inequality causes discouragement among the discriminated learners which can further lead to dropout, low trust and reduced confidence, eventually deter these female-learners from enrolling in TVET courses. Participant-S5.2, in this study, expressed her concern that the instructors do not treat these female-students equally. Such discriminatory practices negatively impinge the female-learners' accomplishments as females are denied the opportunity to gain skills and lose their confidence even in the areas where they can feel they are competent. Regarding career pathways, as per my interpretation, these student-participants had their own misconceptions which were not explored or demystified by any guiding program in these TVET schools. This reality is further elucidated by Paudel (2019) that majority of young females have no awareness

of regarding TVET programs and courses, therefore have no knowledge of which particular program offers the best career prospect. Furthermore, in comparison to male-students, no platform was available to raise their awareness and to assist them to their career pathways. Here important point is that it is essential to scrutinize how the TVET education can foster aspirations, especially among female learners, because conceding to Unterhalter (2008) aspirations are embedded in gendered relationships and norms. This is due to the females' future orientation, which is influenced by institutional, cultural and social factors. Participant-S5.2, thus, emphasized the need of educational practices that can promote alternative future imaginations through mentoring, discussions and development of knowledge and employable skills. As a consequence, it is essential to consider that how the TVET education can fuel and stifle aspirations in the life of these female-learners, when thinking about female empowerment. This demanded the TVET to provide opportunities for the learners which could lead them to self-actualization.

Exact views, reverberated by the other Participant-S4.1, were these:

I am hard-working, and I am capable to accomplish at this college, but I want this education to provide me accurate information or networking, a platform that can demonstrate my qualification and talent. I want to be confident about my skills before I enter to the job market

These insightful reflections can be interpreted as evidence that these student-participants were capable of completing their studies and qualifications, but other, challenges associated with larger social dynamics of patriarchy or unjust institutional structures were working against their successful studies. Gender, aligning with the declarations of Sen (2001) has a significant impact on aspirations, goals and career outcomes, that females in TVET disciplines often tend to inquire to themselves questions like; 'Is this specific TVET course appropriate for my career? Do I actually fit for this particular TVET program?' etc. An explanation to this type of frustrations can be that, often learners are not given information or guidance that is customized to their particular needs, instead, they all are provided similar form of counselling. Furthermore, counselling needs can also be different on gender basis. Female participants, in this study-work, indicated a greater need to provide advisors for discussing and exploring career options for them. It has also been discovered here that the learners' educational orientation is linked to the academic skills, motivations for attending the institute, perspectives

about the meaning of education and career goals. As a result, TVET requires to provide clear occupational-tracks that can assist females in making career decisions (Paudel, 2019)

It is conceivable that a learner's counselling requirements, and how that learner evaluates the provided information by the advisors, can differ depending on the learner's educational perspectives, objectives and priorities. On the contrary, the study's findings indicated that participants' TVET colleges did not offer any career counselling to these female-students. The students' responses further disclosed that their instructors seemed unaware or lacking career skills-guidance in delivering training programs. The study-participants (Participant-S10.1 and Participant-S5.2) became vocal that they did not partake in any career-guiding programs which could enable them to become trained specifically in technical courses. This implied that they were not exposed to the new market technologies which they needed to acquire. The participants contended that their main aim to enrol at the TVET schools was to accomplish their qualifications and thereafter, to pursue employments as their ultimate objectives for getting this education. At the same time, these respondents were adamant about the fragile training base of the TVET college that these learners were not being provided career guidance to attain their objectives. Few of the participants pinned the reason of this career guidance scarcity on the traditional social setups.

As a Participant-S2.2 touched upon a sensitive issue by voicing this:

Since it is a traditional patriarchal society, so nothing can be changed as every public TVET institution in Bahawalpur is stereotypically men-centric where TVET colleges do not find these career- guidance programs necessary for we females. Under this conservative environment of Bahawalpur, families, too, rarely allow their girls to undertake any entrepreneur guidance even from outside the schools. Eh... [she sighs], so I do not want to go for this

During interviews with my participants, references were made to “men-centric”, “patriarchal society”, and “stereotype”, as serious concerns when discussing or describing gender norms or gender equality. These stereotypes seemed framed as an outcome of patriarchal structure in Bahawalpur city. For instance, participant-S2.2 reference, “it is a traditional patriarchal society”, reflects that the participant understood that men possess superior status in society. The quote further emphasizes how becoming a male is simpler in Pakistani conservative society, and in that way, it exemplifies how patriarchy is viewed as a barrier to gender equality in every sphere.

A key finding from the interviews with student-participants, is the deeply ingrained stereotypes which have become naturalised into the females as constraints for achieving gender equality. These stereotypes represent beliefs that males and females in Bahawalpur, have inherently different positions in society and all aspects of social life, which arguably determine what is socially or culturally allowed or acceptable for women and men. As such, when Participant-S2.2 observed that getting females out of their homes-boundaries is not always feasible, this can be interpreted as evidence of home structures that require women to seek and be granted permission from men in the household in order to join any guiding-programs. Such socio-cultural constraints, as per the study-claims of Roomi et al. (2018), limit females' networking, knowledge-building, personal and professional grooming chances. Furthermore, since 'fields' comprise both 'dominated' and 'subordinated' positions, the 'dominant' positions are bound to power ties and might be hesitant to shift or avert (Bourdieu, 2001). As a result to this all, gender equality, according to this participant, is considered as a diffuse and a meaningless concept. What emerges is that Participant-S2.2 understood that under the traditional, male-dominated society and social structures, there is no possibility for gender equality. The power of the social and institutional inequalities, contemplating the gendered choices and the traditional norms which are deeply permeated in the Pakistani society, clearly impinge on the perceptions, experiences and expressions of the female employability ventures in this context. Nussbaum (2001) also affirmed this notion by elaborating that social and cultural practices and hierarchies keep denying the women's roles, their social status and their educational or occupational rights and preferences. Given the career-guidance programs, can be sought to female empowerment and to dispel gender stereotypes.

Quite relevant to the above-expressed views, another Participant-S3.2 stated this:

To raise awareness regarding gender equality and to break down traditional stereotypes, it is a primary need to provide direction-guidance for our skill-development. By providing career-counselling programs in our college, I strongly hope that this will empower us to contribute to our country development. Because I think, if we can change an individual, it might change the others

What emerged from above-presented account is the important role of TVET it can play to develop the capability of the practical reason. This is worth mentioning that these interviewed females raised their concern for an immediate need of career guidance platforms to uplift gender awareness against the deeply entrenched stereotypes that exist in the traditional

patriarchal culture of their respective cities. The study-verdicts of Ellemers (2018) also validated the interview discoveries that gender awareness refers to recognition of male-female relationships and the understanding that male and females have different needs. The central idea, however, is of empowering these females by giving serious consideration to their different needs. In this situation, TVET can be seen as a means of enabling these females to lead a life they can hold in high estimation. These guiding-programs, according to Participant-S3.2, can be a primary means of raising consciousness about gender inequalities and break down the stereotypes. What then, was important for me to investigate is the degree to which the TVET was able enough to extend this capability into its female-learners beyond the schools. These female-students, in particular, who come from low socioeconomic patriarchal societies, are desperately in need of such capabilities. From their experiences, the female-learners maintained their claims that TVET discipline is still marked by gendered societal arrangements and thus, the capabilities of these females can be said limited rather constrained by these gender inequalities. For the females in this study, they had not yet reached the point where these females could question stereotypical gender norms that had marked their educational and social perceptions and experiences. Critical agency, thus, is required for these female-learners in order to challenge the deeply anchored patriarchal culture which is pervasive both at homes and in these TVET colleges.

With the similar challenge, another Participant-S8.1 added to her claims like this:

I feel like I'm stuck both socially and academically in what to choose as my future profession. At this stage, the counselling platforms in college could help me to talk to someone, who I can see as my mentor, to assist me to analyse things differently for the betterment of my current situation

Reflection of Participant-S8.1 reflects that her career pursuits were disavowed by frustration due to the lack of opportunity to supplement their career prospects. In a state of bewilderment, these female-students longed for some career assistance to make them able enough to think 'out of box'. As declared in the research by Stehle and Peters-Burton (2019) that the 21st century's highly promoted suggestion was to engage the learners in the critical reflections regarding gender identities by promoting self-realization, self-actualization and to promote communication between genders both in private and public spheres. Therefore, the study-interview data also suggested that communication engagement through TVET support-systems could serve as building-block for the learners as career-counselling programs are a way to

engage in and to promote awareness against the prevailed stereotypes. Major benefits of this collaborative interaction could trigger the explications of the tacit knowledge, accelerate the learners' reflective-capabilities by challenging their own interpretations of their experienced phenomenon and facilitate construction of the new knowledge. This is why capability approach emphasizes the importance to focus on the capabilities rather than measurements. But this, however, was not the case for these female-learners in this report because, from the interview-findings, it became clear that capabilities needed to be developed to fullest extent. For me to become able to state that TVET is not contributing to these females' empowerment because widening the access to the TVET is not sufficient, it must be supplemented through proper mentoring with desirable results, such as the development of valuable capabilities among its learners.

5.4.1. Role-modelling

Exploring further about mentoring, the student-participants' narrative brought me to a highly significant discovery of 'Role-modelling'. Does exposure to any woman role-model, mentor or leader in the field, who other female-learners could relate, influence their decisions for pursuing TVET stream as a career-path and consequently contribute to their TVET programs completion? While interviewing, it became very important to determine if the female-students of these TVET schools had any role model who could ignite their interest in the field, as it was found to be a significant factor. A striking comment aired-through by Participant-S7.1, was this,

Apparently, there is no one who has encouraged me in this academic-path I am currently pursuing; but, Malala is particularly much inspirational to me who I always wanted to follow. Our college must provide women role-models like Malala for us to defy all type of institutional gender disparities we are experiencing. This will contribute to enhance our self-efficacy and self-confidence in our performance which we lack as compare to the male-students

Noteworthy, Participant-S7.1 here referenced *Malala Yousafzai*, acknowledging *Malala* as her role-model. This sort of reference must be understood in terms of Malala's quest for gender equality in education. To further capture the reflections of Participant-S7.1, my interpretation elucidated that role-modelling, as a distinct entity, can prove highly influential for the learners in their career selections and equally beneficial in debiasing learners' stereotypical beliefs of gender differences in TVET subjects' aptitude. From the illustration of Participant-S7.1, it was

identified that whether in subtle or not-so-subtle way, females are often advertently marginalized in TVET fields. Also that, these female-students are not exposed to other women's success stories and experiences. This interview revelation match the study-observations of Mutarubukwa and Mazana (2017) who specifically indicated that females' adversely affected representation in the TVET disciplines is due to several impediments and lack of female role-modelling is amongst those which is further discriminating and marginalizing females in this stream. Females, thus, could only be capable to combat this marginalization, when these females would achieve some critical mass. In other expression, being a symbol might make a female feel unwelcome or that her success would reflect badly on her entire ethnicity. The resulting perfectionism or anxiety, thus, could be debilitating to her performance. Under such conditions, as per the study-promulgations of Paudel (2019) the presence of the other female role-models can enhance social-support opportunities which encourage the female-learners' self-confidence to persist in the educational or career choices.

Most of the career-counselling programs are organised within the school systems. As Harber (2014, p. 160) elaborated that education in institutes can serve both as an effective tool for promoting gender equality and "a place where practical occurrence of gender equality can be possible as a routine matter within schools". Thus, college-principals' verbatims were also sought to find out the availability and the relevance of these guiding programs for the female-students. On asking, unanimous affirmations were collected from Participant-P1.1 like this:

We often arrange career-assistance programs in our college considering these programs quite important for the future outcomes of our students

This affirmation of Participant-P1.1 created a sceptic understanding that at institutional level, these colleges had formal guidance systems to keep their learners abreast with the world of work. On the contrary, by contrasting the interviews with the student-participants, findings showed that the students had significantly, touched upon the paucity of institutionalized mechanism of guidance systems in these TVET colleges, which precluded females to be equitably empowered through proper mentoring. Consequently, females were not exposed to any support systems at all. Thus, in relation to non-availability of the career-counselling programs in these TVET colleges, the extracts of the female-learners' interviews authenticated the research explorations of Chamadia and Shahid (2018) which indicated the plight of the marginalized group of females for inadequate career-guidance platforms in the TVET sectors

in Pakistan which could be commensurable with their future employability accomplishments and economic development.

This chapter examined female-learners' perceptions, experiences and potential barriers in their TVET learnings and the extent to which these have affected their participation in this streamline. Following the reflections of the participants, brought me to an understanding that gender equality cannot be achieved solely through females' access to TVET, but there is much that TVET can do to contribute to the well-being, skill-development, and empowerment of females to provide equitable employment pathways for them.

In next chapter, I will sum-up study key-findings with discussion.

Chapter 6 Summarizing the key findings and Discussion

As, I conducted this study, investigating the TVET perceptions, experiences and the potential challenges faced by the female-students in their TVET learning, followings are the main conclusions I obtained, which I also believe are worthwhile analysing and discussing in the succeeding chapter as well.

6.1.1. Gender inequality

Gender inequality as a perennial problem of Pakistani patriarchal society (Farooq, 2020), is the most pronounced finding of this study. As an outcome of patriarchal culture of Pakistan, social norms and values reinforce gender power imbalance and inequalities in society, which influence females' perceptions, beliefs, rights and preferences. Interpreting the narratives of the study-participants, femininity norms impede females to gain any kind of emancipation. These impediments inculcate gender stereotypes among these females regarding their educational and occupational choices and decisions. In comparison to girls, male-children's schooling and occupational aspirations are frequently promoted and encouraged by the traditional families. As a result, inequalities in education and employment objectives, emerge early in life, reflecting socio-cultural and economic gender differences. Furthermore, multiple domestic responsibilities ascribed to the females, also prove significant hurdles in their educational completion, which is why, as per participants' responses, they are compelled to enrol in traditional TVET diplomas and courses. Females' gender-structured families, unjustly distributed burden of domestic chores that restricts females to explore their educational or professional ventures. Additionally, in the context of female education, cost and resources distribution is another major barrier. Participants' accounts manifested that comparing to males, traditional families less likely invest on their females' education considering it not worthwhile and a waste of resource. This family's gender-based discrimination, demotivate females to pursue their desired academic disciplines. Based on participants' cases, this became apparent that, institutional gender disparities in terms of provision of limited TVET programs, traditional courses and unequal resourcing, have further increased the existed inequalities, which served as the potential barriers to females' norms of employability.

6.1.2. Insufficient training equipments

Absence of training tools and teaching materials proved a prominent discovery of this study. This rendered to the theoretical nature of the TVET teaching which is contrary to the fundamental aim of the TVET learnings. Furthermore, as per my observations as well as the

participants' reflections, where the teaching and training equipments and materials were available, the number of the learners invariably outweighed those useable equipments and mostly grounded.

Inadequate and outmoded learning tools and materials, as greatly emphasized by the participants, specifically in the fields of domestic-tailoring, beautician and ICT disciplines, was another potential barrier in terms of inequality, encountered by female-learners in their TVET learning process. This indicated that the learning material the TVET instructors were teaching, was outdated and did not comply to the recent job-market requirements. This is also constrained by the diminutive interest of the Pakistani education ministries in writing textbooks for TVET, coupled with a lack of documentation and record-keeping skills, causes the instructors to solely rely on the existing bookish information which, most of the times, proves challenging for the instructors to use due to unfamiliar examples which are unfit for the recent situations

6.1.3. Traditional-styled instruction

In terms of professionalism, my submission contended that professionally and pedagogically TVET teachers were not trained well which, ultimately, let the teachers to employ old inappropriate and rigid instructional methods and techniques of information delivery. The pedagogical training courses carried out in Pakistan, in a bid to equipping the TVET teachers with instructional skills were also attested to this. It was also testified by the student-participants when they shared their experiences specifically while attending their practical sessions. Most of the student-participants, in this respect, denoted the incompetency of the instructors for transferring the theoretical technical information into practice. Irrefutably, this proved challenging to empower these female-learners with hands-on technical employable skills.

Key findings also signified that TVET teachers also adopted inappropriate teaching methods which allowed very limited chances to the students to construct their own knowledge. In addition, TVET instructors often regarded the learners as unknowledgeable which is why the teachers' work was solely to impart information in the students. Student-participants further unveiled that the focus of the teaching was merely to pass the national exams at the expense of gaining the requisite knowledge and the needful skills for the world of work.

6.1.4. TVET outdated curriculum

In this exposure, the interpreted conclusions of the study revealed that the TVET curricula observed in the TVET institutions of Bahawalpur and Multan, is archaic and does not

correspond to the current job-market requirements for which these TVET institutions are responsible to develop. To my submissions, what is considered as curricula in these TVET schools, was just the syllabi to cover up for the examinations provided by the federal government. The features of the curriculum content being outmoded, are reflected by the newest technology as well as the needs and demands of the female-learners which are not fully addressed by the existing curriculum.

Furthermore, the TVET curriculum, as another important study key-finding, contained a large proportion of theory-based content which significantly ignored practical lessons to a greater extent. From the narratives of the learners, it appeared that percentage allotted to the practical lessons might not be sufficient for the students to attain saleable skills required to become work-ready. This indicated that under the TVET system of both Multan and Bahawalpur TVET colleges, the female-students, as an outcome of the predominant use of the conventional teaching methods, were over-loaded and over-burdened with increased theoretical lessons rather than practical lessons which could enable these students to construct knowledge leading to employable-skills proficiency.

6.1.5. Lack of career-steering programs

According to my explications, female-learners of these TVET schools were carrying out TVET disciplines without proper career-counselling. The learners were pursuing TVET courses to which the learners attached low value as they were not exposed to any role-models to get inspiration from. Additionally, the TVET teachers, too, seemed lacking career-guidance knowledge which is why they did not pay much emphasis for holding such guiding programs essential for their learners. Interpreting participants' reflections, further brought me to an understanding that the omission of these career-guidance programs in the TVET schools is compounded by the negative attitude of the public towards the TVET learnings accrued to the government inadequate sensitization.

6.2. Discussion on study-findings

This study set out to explore the perceptions, interests and motivations of the female-learners concerning the TVET programs they were enrolled in, in terms of the potential for such programs and their completion of them to substantively contribute to their employability, and so their future employment status. From the study findings, this was found that the female-students of the TVET schools of Multan and Bahawalpur, Pakistan show an ongoing and significant influence of gender-based familial or institutional prejudices and discriminations

shaping their self-perceptions and preferences to participate in TVET disciplines to learn employable-skills to enter to the world of work. Though Pakistani TVET system is threatened with several challenges, one of the most significant issues upon which the other issues stem is gender-based inequalities.

6.2.1. Gender inequalities

One of the weakest-spots of the TVET system, according to the student-participants is its persistent gender inequalities. When collecting and analyzing data from the field-work, the perspectives on how the gender equality and gender are perceived, differ and contradict between the study-participants. Few participants perceived gender inequality as a major roadblock which must be addressed in the near future, while the other few participants acknowledged the problem but did not feel that this required any change. A difference between something natural or biological, and something constructed or cultural, can be found in the participants' responses to how the gender term is perceived.

Long-standing research shows that there have been conventional and non-traditional professions in terms of gender established and maintained over time, as socially constructed gendered identities. According to feminine gender stereotypical roles, females are focused to be 'communal' for instance, taking care of their families and gravitate towards the activities and behaviours which emphasize the interpersonal relations (Srivastava, 2019). Thus, hairdressing, cosmetics, stitching, cooking etc are all common occupations for the females. In this regard, another important point of discussion is that, my sample indicated that what these females initially considered, the support system essentially turned out to be a main roadblock to pursue their desired educational and occupational goals. The lack of family support was attributed to social or economic insecurity and negative perceptions towards the Pakistani male-dominated work environment (Yunis et al., 2019). Thus, owing to family and financial constraints, these females were coerced to return to traditional female-oriented TVET programs and professions. According to masculine gender stereotypical roles, males are oriented to be 'agentic' for example, acquire mastery, explore physical world, competence and gravitate towards the behaviours which emphasize power, prestige and financial benefits. Thus, technical and mechanical occupations are traditionally considered men-centric (Mare, 2021).

Reflections of the participants also conveyed that socio-cultural norms continue to create gender inequalities, where different roles are ascribed to both gender. In addition to these norms, females are subjected to acute gender stereotypes which significantly influence females

educational and occupational prospects. These gender stereotypes impede females emancipation and confine them to their domestic responsibilities. Under this structure, females agreeably develop identities of domestic servants considering them weak, inferior and passive (Islam & Asadullah, 2018), to resist against the power of patriarchal structures. Furthermore, females also feel fear of being stigmatized if they try to challenge this patriarchal supremacy or misdemeanour female respective gender values or norms. As Bourdieu (2001) puts it like, females in positions of power, face double dilemma, if they act like males, females risk losing the necessary entities or qualities of femininity, causing trouble to contradict the natural superiority of males, whereas, if females act like females, they appear incompetent and unsuited to male-oriented occupational spheres.

Through analysing the responses of the student-participants, a common thread was apprehended that gender inequality is present and perpetuated in terms of differences between the 'physical facilities' for males' TVET programs. This came up as a double gendered-disadvantage for females. *"We are not being provided with the latest necessary equipments which are frequently available in boys' labs, why this difference is always ignored by the government? This is the reason that we lag behind male-students in educational sphere from our very starting age"* (Participant-S2.2). This affirmation of Participant-S2.2 indicates the unequal distribution of the physical facilities in TVET schools. *"Like males, we should also be provided latest equipments in labs which is being ignored by the authorities especially in girls' colleges"* (Participant-S4.2). This narrative highlights that girls' TVET institutes are being ignored by the governmental bodies in terms of providing practical-trainings. This assertion further indicates that, this disparity is attributed to the gender-bias governmental policies and the educational system's failure to provide support for the development of female-students' aspirations. This negligence of the authorities is further evidenced in the study-claims of Masitoh and Pramesti (2020, p. 393) which confirm that the Pakistani constitution, though guarantees equal rights to males and females, still government is not playing its potential part to implement policies that would contribute to eliminate gender discrimination in the educational institutes, instead, "Pakistan government policy-language represents only males and potentially prejudiced where gender is always referenced as 'He'," (NAVTTTC & Sabina, 2019, p. 6). Many female-student interviewees, most significantly became vocal about the inequitable practices they experienced every day in these TVET schools and classrooms considering these a blocking stones to their skill-acquisition for future employability. To start with, a variety of institutional and cultural conventions, might affect these female-learners'

educational choices. One of the key-causes of the females' lower representation in technology-related courses are institutional masculine gender-stereotypes that correspond to mainstream cultural depiction of technology-based courses that are portrayed as abstract and unrelated to the females (UNESCO & Chavatzia, 2017). This reality is further echoed in the research of Islam and Asadullah (2018) that textbook-content contains inappropriate gender representation in the Pakistani textbooks-content is the most prominent reason of stereotype that portrays females as weak and passive, which females, continue to accept about themselves as a personality attribute. However, few policy documents have touched upon the subjects of all-inclusive TVET (UNESCO, 2015; World Bank, 2019b). It is, therefore, incumbent on the TVET providers, specifically the educational institutes, to go beyond mere lip-service and keep the government and the industry for exploring the potentials of the TVET education especially and tackling the challenges addressing gender-discrimination in Pakistan. This is consistent with the research-affirmations of Paudel (2019) that TVET's internal environment requires to be changed and must provide a sure way to ensure that none of the individuals is left out to participate to country's economic development. Each TVET program participant must find a niche in the desired sector for sustenance and thereby, can contribute to national growth.

In education, gender equality stresses the notion of equal education provision paying attention to the socio-cultural relations that constraint equal participation to learning and achievement. These socially constructed barriers form ways in which women start internalizing views that they do not need to acquire higher education and that they can meet their basic needs even with minimal education. Similarly, the reported experiences of the student-participants of these TVET schools revealed the urge that for making gender equality more meaningful, mechanisms for equality of opportunity and equality of treatment between male and female require to be ensured. These in turn, rely on non-discrimination commitments of all social actors to ensure the erasure of fossilized societal norms that construct perpetuate inequalities between men and women in terms of their entitlements, contributions and distributions of equal resources. Thus, assessing gender equality, strongly requires to assess the equal availability of fundamental rights, freedom and choices of both the gender.

6.2.2. TVET as last alternative

is the TVET image. This signifies that many students and their parents do not value TVET programs as much as general education. The general public, including parents, believe that TVET disciplines fit only to the financially and academically less-endowed students. This low perception of the public, discourages the learners undermining the value of the TVET taking

this type of education as a ‘dead-end’ or ‘career-stopper’ for themselves. In this connection research (Aziz et al., 2014, p. 3) further confirms that “in Pakistan, TVET education is even more marginalized and approximately 1% of the population enrol to the TVET streamline”. Concerning the female-learners’ perception, choices, motivation and their interests, the analysis of findings indicated that the participants were relatively less optimistic to the TVET learning. The study-results are aligned with the affirmations of the studies (Bibi & Mansoor, 2018; Paudel, 2019; Struthers & Strachan, 2019) where the researchers remarked on the pessimist perceptions of TVET from the stakeholders’ standpoint. Few other researchers also stressed prejudice towards the TVET in the developing as well as the developed countries (Ayub, 2017; Rotich et al., 2020). Here, the point of discussion is that it is these beliefs and understandings of the society members that drive and are reflected in their choices and behaviours. These ideals and convictions serve as the foundation for public perception, and these can be derived from culture, experience or knowledge. They influence societal morality as well as the nature or enforceability of the institution. From the preceding discussion, it appears that values are fundamental attitudes and beliefs in any society and serve as a guide to everyday choices or behaviours. This situation, in my opinion, calls to identify measures and adopt proffering strategies for the value re-orientation of the negative image of the TVET among both the learners and the general public. In today’s Pakistan, as per the interviews interpretation, both learners and parents, with a typical mindset, skip these technical and vocational skill-trainings considering TVET as a ‘second choice’ or a ‘last resort’. Aligning this with the contention of McGrath and Powell (2015, p. 43) that taking TVET as a last option, should not be just blaming students as academically-lockouts or accepting the socio-economic inequalities as given, rather, “it necessitates a serious examination of multidimensional poverty and capability deprivation, as well as what can be done to expand the range of capacities or skills and probability of achieving the valued functionings”. Taking into cognizance importance and veracity that TVET can prove an indispensable effective institute for training skilled-workforce for labour-market and for sustainable personal and community development, TVET disesteemed status can be revitalized (Omar et al., 2020).

Another important point is that in most of the TVET departments, number of trained TVET instructors, for every specialized field, was in short provision. The TVET teachers, as pronounced by my participants, seemed not to be significantly initiative also were less creative. In the aspect of producing and designing of the instructional materials, the teachers were neither trained nor empowered to aid their pedagogical practices. I noticed this while observing few of

the practical sessions when the teachers lacked teaching aids to define the theoretical concepts to the learners. The instructors found it challenging to think-upon the objects they needed to teach particular items. The only thing the teachers used to do, to draw the objects on the writing boards which the learners had to copy from the board. Furthermore, the findings clearly support the argument that without qualified TVET instructors, the practical work (as an essential component of any TVET program), will be limited, to the detriment of graduates' employability as skill-trainings are considered as "a passport to better employment" (Ali et al., 2017, p. 391), therefore, TVET education cannot be acquired without 'hands-on' actual experiences, and this necessitates the utilization of work-oriented skill-trainings (Bibi & Mansoor, 2018). Acquisition of the practical skills necessitates that each student is to be given individual attention and supervision of competent instructors who must be equipped with practical-knowledge and machine-tackling experiences (Alam, 2015) . In other expression, due to the scarcity of trained TVET teachers, individualized teaching becomes very hard, most importantly during the practical-sessions. This can result in affecting the performance of both the instructors as well as the students. Other than that, this also can create a significant difference between the instructional methods and the students' learning motivations and interests to TVET. This affirmation is aligned with the research-submissions of Jalil et al. (2019). Similarly, based on my own observation in Multan and Bahawalpur TVET schools, this greatly influenced the classroom practices of the teachers as teachers, with limited pedagogical competency and experience, predominantly hold old conventional styled teaching which, consequently, prevents constructive learning.

The following excerpt conveyed the reaction of participant-S10.2 against this style of teaching:

We should be taught through activity-based learning. Our teachers should provide us an environment where we could construct our own knowledge by doing and learning

Participant-S10.2 held firm believes about how they should be taught by putting more emphasis for the enactment of practical-based learning instead of theory-based. Behind this excerpt, somehow, there also found a feeble indication of the teachers' misconceptions and underestimations regarding their learners' capabilities of doing their practical-drills independently which further, changed the classroom lessons to be more teacher-centred. Teachers' such conventional attitudes made the students unaccustomed to analyse or think, basically to be actively involved in the 'hands-on activities'. The culture at these TVET schools

made the administration as well as the teachers to handle the curriculum from the teachers' standpoint rather than from the learners'. For example, the teachers at these TVET schools worked without developing conceptual assessment components that could be used to extend time spent for the practical-drills or for the curricula modification. Under such traditionally rigid-styled instructional method, instructors "ignore state of expertise and stick to their antiquated subject matter, thus are reluctant to adopt any change in content" (Gul & Shah, 2019, p. 31). Rather, the focus of the teachers' teaching, according to the interviewees, was merely to teach the theoretical stuff the whole long day with a common goal of covering up the syllabi for the examination date. Thus, following the same schedule, minimal focus was given to the classroom practice and students' learning. These revelations suggested that teachers' guidance does impart an influential role to raise the learners' motivation and their preferences to pursue their technical and vocational disciplines for their future employability. Study portrayed by Parveen et al. (2020) found that the learners' motivations and choices are significantly connected with the instructional practices of the teachers. Moreover, the study (Jalil et al., 2019) is also in line with this research claiming that the students' participation for the TVET subjects increases only if the learners are fully aware of both the teaching and learning styles.

To spur the TVET teachers, as (UNESCO & Chavatzia, 2017, p. 50) allude "teachers' quality, including subject expertise and pedagogical competencies, can significantly influence girls' educational and occupational choices and prospects". Similarly, Pakistani education ministries and the TVET management need to seriously consider to provide professional development trainings along to the TVET instructors along with proper retention planning, such as providing appropriate working-conditions, sufficient instructional physical material and other incentives etc, to combat the aforementioned issues.

This study also focused to get a better understanding of the nature and effects of the curriculum on the classroom instructional practices. From my study outcomes, it became evident that the instructional methods and the institutional support play a vital role for the curricular implementation. And this can happen only if the curriculum would be designed to meet the learners and the recent labor-market demands. This assertion is also supported in research (Ismail & Mohammed, 2015) which puts great emphasis on the inclusion of employability skills in the TVET curriculum to prepare the female-students for the world of work.

School administration also played an integral part for the curricula implementation. Although all the TVET institutions were required by the federal district board to revise and implement the curriculum contents, levels of on-site classrooms and the curricula support for the teachers also varied. Unfortunately, a vacuum of the leadership was found for the teachers' professional development and curriculum periodic reforms at these Pakistani TVET schools (Ali et al., 2017). This, eventually, made the teachers to imply entirely teacher-centred instructional methods in the classrooms. This finding is concurrent with the conclusions of Raza and Ibrahim Khalid (2017) which suggested a systematic and a periodic improvisation of the TVET curriculum keeping the learners' needs in view. Research of Alam (2015) also corresponded with it by putting emphasis on designing TVET curricula through experts to comply with latest change in technology, and to discard all old and irrelevant content (Pakistan Government, 2018).

As far as the presence of the reading material is concerned, it was divulged that a large proportion of the reading material, which was at the teachers' disposal, was outmoded and did not match the recent demands and needs. The TVET instructors seemed lack professionalism (Gul & Shah, 2019), and practical knowledge (Alam, 2015) thus, unperturbed with writing of any books or hand-written notes utilizing their teaching field experiences. The teachers, therefore, solely depended on the reading materials presented in the textbooks. For purposes of my study, further details on the reading materials, had not been captured, since my intentions were to analyse and investigate the challenges the female-learners were facing in their TVET disciplines as a base for formulating the issue under investigation in this project, which I think I achieved.

6.2.3. Challenges to acquire digital skills

In particular, the participants expressed that learning digital skills through these structured TVET institutions in traditional culture, is difficult. As females, they have many other domestic responsibilities and being pulled by these commitments, regarding this, report (OECD, 2019, p. 56) also confirms that performing domestic duties prohibit up to 10.8% females across OECD countries to continue their educational and occupational ventures. Thus, these traditional-mennial duties, make it difficult for them to allocate enough time and money to learn and polish their skills in digital outside the schools. The participants' acknowledgments disclosed that these females are discouraged from participating internet-based activities because these are not seen as the culturally safe places for the girls. Their digital freedom, thus, was limited and restricted by the socio-cultural values. Such socio-cultural value systems in

Pakistani patriarchal society, put restriction on the digital engagement of these females with labels such as “*it’s a waste of money and time*” (Participant-S4.2), and “*internet places are unsafe for girls*” (Participant-S8.1) etc. Study data also revealed females’ low tendency to take up digital technical courses and programs. Amongst the highlighted issues of the low tendency in digital learnings, one significant factor was that they had less opportunities of digital literacy in these TVET venues. As per the narrative of Participant-S3.1:

*If you continuously practice these digital skills, they will become more polished.
Otherwise, you will further lose interest*

This is an indication that Participant-S3.1 wanted to improve their digital skills to be regularly involved in practice-based drills and if they are not engaged with these, they will be less motivated to choose these disciplines. In accordance with this, research-verdicts of Mare (2021) declared that ‘digitalization’ can provide a multitude of opportunities for the women empowerment and can enhance their social and economic autonomy. They can gain social empowerment as a result of their digital competency, which could allow the females to strengthen their social circles and expand social networking to explore occupational ventures for them. It can also instil in them decision-making confidence and determination to work both collectively and independently.

6.2.4. Career-counselling

These career-guidance platforms, as per the study-participants’ reflections, could prove stimulus to analyse and then raise female’s marginalized identities by breaking the stereotypical norms associated to female employability. In other expression, reinforcing the perceptions of the study-participants regarding gender-equality and female-empowerment particularly among female-students, might increase their intentions and attitude towards female employability as a viable choice. One potential discussion of these findings could be that the student-participants of these TVET schools, who perceived that self-employment success is dependent on the presence of the traditional masculine stereotypical roles, considered it difficult to achieve or explore entrepreneurial ventures. Besides, in order to reduce gender variances in the male-conformed occupations like self-employment careers, these guiding programs could indubitably provide gender-neutral characteristics attributed to male and female both. Contrary to my sample’s agreements, the study-findings revealed that the idea that TVET streams provide good employment opportunities and prospects, was widely disagreed. The reason has a lot to do with educational system that exudes industrial-training

and labour-market mismatch issues (Dewan & Sarkar, 2017). Interpretation of the interviews reflected the urge of the student-participants that TVET academic departments must recruit senior females, especially in technical fields to talk about their technical achievements at department colloquial and other important events giving these speakers the opportunity to communicate and mentor the learners. Under the umbrella of these mentorship programs, as the study of (Paudel, 2019) opined that these females could clear their career pathways by discussing directly and openly with the mentors. The female-students' burgeoning demand of organizing career-steering programs from both the government and the TVET school-authorities, indicated that such avenues could raise critical consciousness among these females to develop their self-employment intentions and attitudes by nurturing these females' perceptions of female-equality and empowerment. This, further implied that these career-guiding programs in Pakistan TVET sectors, could come out as discourse-transforming to ensure equitable employment pathways for the females. All these assertions are harmonized with the research-recommendations of Raza and Ibrahim Khalid (2017) which emphasized to collaboratively employ the 'skill mapping' mechanisms for the TVET learners.

Chapter 7 Conclusion

7.1. Study conclusions

This project sought to explore the issues that the female-learners perceived and experienced in terms of their TVET learning for their employability. Institutional gender differences in the TVET learnings were also discussed in this study since technology-based digital programs are still considered as new and emerging disciplines for the females. Low female representation in technology-oriented TVET courses and the learners' high attrition are currently posing serious challenges to sustainable development of associated job-markets. Study conclusions indicate that the issues related to the female TVET skill-learning for achieving employable goals remain a major concern at these TVET schools.

However, the ingrained patriarchal traditions and the resistance towards the concept of gender equality have been identified as the main roadblock to achieve female-students' desired educational and occupational goals. In this regard, the variety of responses given by the study-participants provide a contrast between those who accepted a male-dominated culture as a social construct phenomenon, and those who wanted a change through education and did not want such inequalities to be further maintained. Most notably, the study results show that there exist some women reluctant to reform the current systems which perpetuate gender inequalities.

This project was grounded in theorizing about the gender inequalities in society, and a normative capability approach of addressing these inequalities which included achieving greater equality in technical and vocational education and employment opportunities in the type of career-pathways that these females can achieve and pursue by challenging the epistemic injustices and the dominant gendered identities in particular context.

Another plausible uniqueness of this study-results is demonstrated in the way that I had tried to apprehend the interpretive cases of the study participants' career choices and preferences under the social structures. With and insight into the perceptions and experiences of the participants, the study analysis, on the other hand, also revealed that gender inequalities continue to persist in the TVET structure and system in Multan and Bahawalpur. Despite the opportunities provided by the federal state, TVET schools lack strategic policy-plans targeted to promote employability ventures for their female-students. This implies that an "organizational change, including structural, procedural and cultural can significantly contribute to gender-equal environment" (UN Women, 2001, p. 2). In summarization, the current study-findings basically imply that now it is the time for mainstreaming Pakistan's

marginalized youth, specifically females, into the country's sustainable development processes. As suggested in the study of Rosa (2017) that we can address various factors necessary for development concurrently, and therefore, more efficiently if technologies and systems are skill-fully synthesized with synergetic and employable transformational approaches, rather than simply implemented sequentially or separately. By this, I would conclude with a significant quote from Participant-S3.2 (Chapter 5, 5.4) that summarizes the concept of gender equality, *"if we can change an individual, it might change the others"*.

7.2. Limitations while undertaking the project

All research projects are bound for having some limitations so this research-report, too, had several limitations. This study was restricted regarding geographical scope and focused only Multan and Bahawalpur cities, taking the government TVET colleges as a case study to explore the gender-related issues. Regarding these geographical limitations, there are several technical and vocational institutions established in different regions of Pakistan. Therefore, with regards to data collection, large physical distances between all these institutes and time shortage had inhibited me to visit them. Hence, empirical data for this report has been collected from these two cities and the findings of this study may not necessarily be generalisable to other regions of Pakistan. In addition, time constraints, also limited my research-work. The research field work was limited to 6 weeks due to the winter holidays and 1st term exams in the respective institutions. Although, I was well prepared and tried to spend my time efficiently, still it was cumbersome to get a thorough insight into the complex realities of the participants within this short period of time. However, I feel that I became able enough to enrich the presumptive readers with a better understanding about the phenomenon under this study. Furthermore, research in the female government TVET colleges is extremely scant which posed many difficulties for comparing the findings of my research-work with other similar studies. However, by using qualitative approach, I tried to collect sufficient data to facilitate the transferability of findings and interpretations of the case. Further, in terms of research limitations, I acknowledge that there might be other sorts of experiences of the female employees which this study had not captured. The views of the female interviewees were the retrospective accounts of their experiences that might not be solely related to any specific industry they were working with. Another shortcoming is, although I interviewed the male-students in these TVET institutions, but I did not include their perspectives in this report. It would be, thus, beneficial to include the male-learners' views for the future research. There is also a requirement to investigate the dynamic connection between skill-development and

employability. Moreover, further research is needed into the degree to which the female-learners are competent to exercise agency and to have chances to thrive outside the TVET college. Lastly, the number of the participants in this project, does not equal a total representation of the whole society in Multan and Bahawalpur. Despite this, the interviews, I believe, have provided a valuable insight into the perceptions and attitudes which exist within these two cities of Pakistan.

7.3. Future directions

This project was carried out at the two female TVET campuses of Multan and Bahawalpur cities in the South Punjab province, Pakistan. Countrywide conduct of a research-project, specifically, to the other campuses and TVET schools in other provinces, may yield additional reliable results for extending the scope which necessitates more insight as female employability is a global concern. Furthermore, a countrywide analysis would provide more ethnic groups of learners, including additional in-depth impressions about perceptions and experiences of the students enrolled in the TVET disciplines. Also, as previously said, female-learners' views of gender equality and female empowerment can be more important not only in predicting their employability and interests, but also in launching their self-employment ventures and ensuring its success.

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Appendices

Appendix A: Table of Study-Participants

	Participant	Age	Marital Status	Participant No.
Institute 1	College-Principal	53	Married	P1.1
	Participant	18	Single	S1.1
	Participant	24	Married	S2.1
	Participant	17	Single	S3.1
	Participant	16	Single	S4.1
	Participant	15	Single	S5.1
	Participant	15	Single	S6.1
	Participant	16	Single	S7.1
	Participant	18	Single	S8.1
	Participant	17	Single	S9.1
	Participant	16	Single	S10.1
	Institute 2	College-Principal	57	Widow
Participant		15	Single	S1.2
Participant		17	Single	S2.2
Participant		22	Married	S3.2
Participant		26	Married	S4.2
Participant		23	Married	S5.2
Participant		19	Single	S6.2
Participant		16	Single	S7.2
Participant		16	Single	S8.2
Participant		15	Single	S9.2
Participant		16	Single	S10.2

Appendix B: Interview Guide for the College-principals

Section A: Demographic background.

1. What is your educational background?
2. What is your professional background?
3. As/Being a principal, what are your roles in the institution?

Section B: Principal 's own perception on vocational education

1. Can you tell me about your broad understanding of the concept of 'vocational education', and how this is reflected in the work of your institution?
2. Why do you think vocational education is important generally, and in Pakistan (South Punjab) in particular?
3. What are your views about vocational education as a pathway for women in contemporary society?
4. What are some of the major challenges you experience here in providing vocational education, and how are you trying to address them?
5. What are the main objectives behind offering vocational education courses in your institution?
6. What is your personal experience in vocational education during your professional career?
7. In what ways do you think the vocational education programs here impact on students' future (social, working) life?

Section C: Principal's insights into female participation in vocational education

1. How do you think the provided vocational education program of your institution will increase employment potential in female learners?
2. How do you review vocational education curriculum so that it can match the societal needs and technological advancements for females in particular?
3. What is your review about the awareness amongst the women in your region of the significance of vocational education as vital for country's prosperity?
4. How do you think it is enough to improve students' practical life in her future?

Section D: Challenges of vocational education

1. How is the scope of female employability after passing out vocational program?

2. What type of job placements support programs are being offered in your college?
3. Which career counselling plans have you devised in your institution to increase the employability of female learners?
4. Does the college comply with the technical industry?
5. Does your college offer industrial visit to your students for gaining practical insight?
6. What are some of the major challenges you face here in providing vocational education programs?
7. What is being done to address these challenges?
8. Based on your experience here, what do you think are some of the major challenges faced by women in accessing vocational education programs, and in their experience within these programs once they are enrolled?
9. Are there any particular initiatives in place for women to support their entry into these programs, and / or support their work once enrolled?
10. Are there any particular challenges for women in this area that you are aware of, and that the institution and its program (whether through its systems and organization, its curriculum, its pedagogical practices) is working to address?

Appendix C: Interview Guide for Female-learners

Section A: Demographic background of learners/key informants.

4. Can you tell me about your previous education?
5. What is your role/status in your family?

Section B: Female learners' perception of vocational education

8. Can you tell me what you know about vocational education? (What is it? What does it involve? What sort of things can you study?)
9. What do you think / know about vocational education and getting work /a job?
10. What about for women in particular? How do you think this education is important/necessary for you as female learner?
11. How did you become aware of the vocational education programs/courses in your institution?
12. As a learner in this program/course, what are the best things about the course? What impresses you?
13. What lessons have you learnt in this course and what have you discovered so far?
14. How do you think this particular course/program will benefit you in the future?
15. Do you think it will help you get a job in the future?

Section C: Expectations of female learners from the provided training during vocational education

5. What is your opinion of the training provided to you is satisfactory?
6. How would it help you to develop employment skills?
7. How do you think this will affect your overall development?
8. Could you explain/provide reasons to support your answers?

9. Are there other courses you expect from your teachers to emphasize on while teaching vocational education?

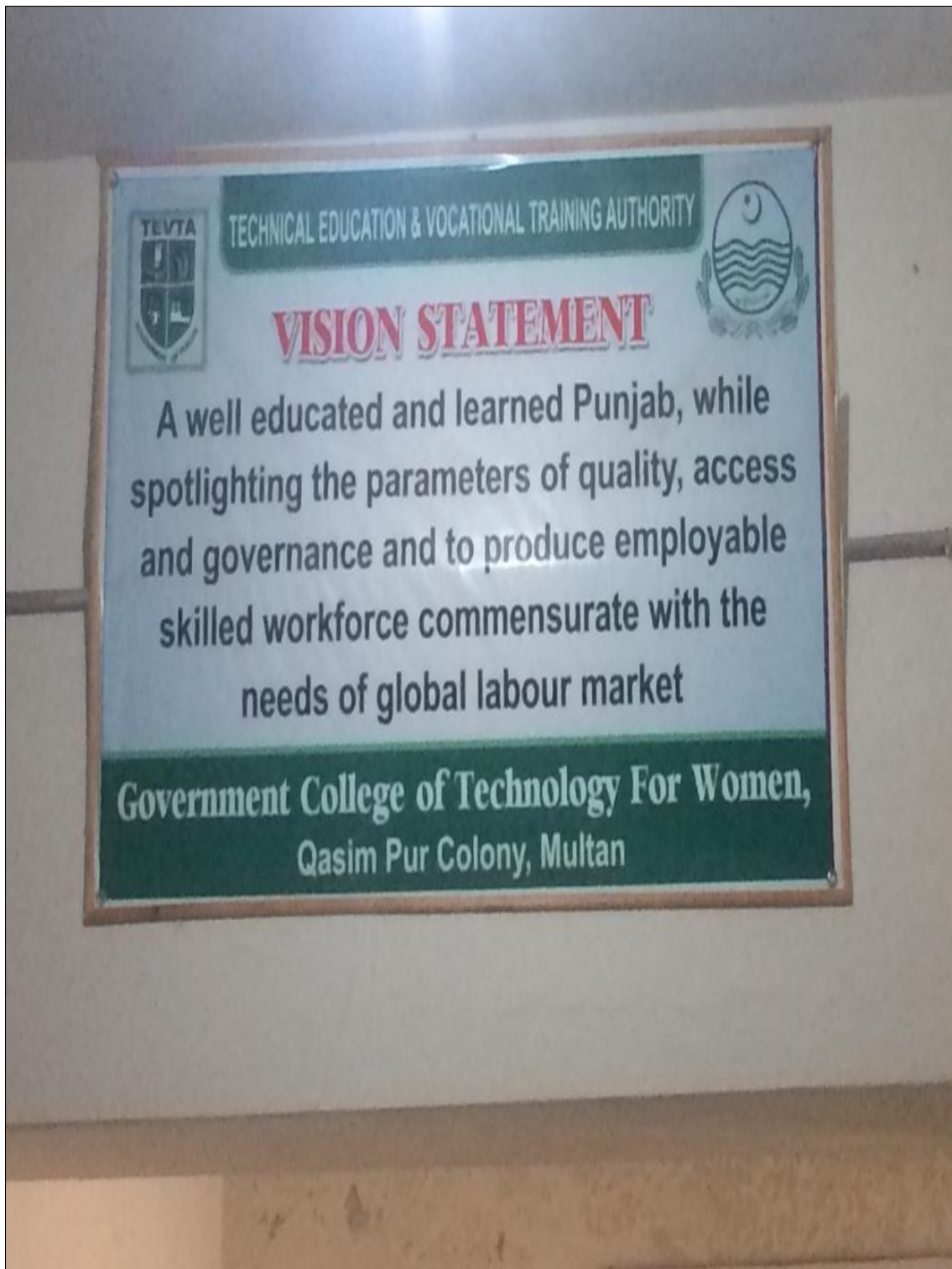
Section D: Challenges of female vocational education

11. What challenges did you face in accessing vocational education, before coming to the institute?
12. How do they influence you?

13. What do you think is the most challenging to provide vocational education to females at institutions?
14. In what ways (socially or academic) does the institute help you to develop your employment skills?
15. Have you experienced barriers based on your gender while studying vocational education?
16. What do you recommend as a way forward to teach female vocational education in your city?

Section E: Local practices in promoting female employability at national level

1. How can learning skills develop your employment skills?
2. Which kind of obstacles you might face in this regard?
3. What practices would you use to address these?
4. What other practices are used in the other institutions of your city/other cities?
5. Is there anything the institution can do differently to achieve learners' social change/development?





Institute 2, Dress-designing making course where most of the sewing-machines were out of order



Institute 1, Domestic-tailoring course with outmoded and rustic sewing-machines



Institute 1, Beautician course class where students brought their own beauty-kits for practicals.



Institute 1, Domestic-tailoring course with insufficient sewing-machines and kits



Institute 2, Needle-embroidery class with insufficient and outdated embroidery-equipments



Expo-exhibition, females' handmade-models, a reflection of limited traditional-domestic TVET subjects offered to female-learners

Appendix E: Pictures from boys' college



Male-learners' handmade-models reflecting institutional gender disparities in terms of providing variety of technical subjects and latest training tools to male-students







Expo-exhibition, technical handmade-models by male-learners



Solar-energy panel made by male-learners



Machine-model made by male-learners

Would you like to participate in the research-project?

“Gender norms of employability: A case-study of females’ technical and vocational education in Multan and Bahawalpur in South Punjab, Pakistan”.

This is a question for you to participate in the research-project where the main purpose is to investigate factors that serve as barriers to female participation in technical and vocational education, and their employment in labour markets. In this letter I will provide you information about the purpose of the project and what your participation will mean to you.

Purpose of the project

This study is a master’s thesis and will be conducted in the cities, Multan and Bahawalpur in South Punjab, Pakistan. Two colleges, Government College of Technology and Vocational Training Multan and Bahawalpur will be invited to participate in the project. Female learners and the college-heads/principals will be invited to participate in interviews about the comprehensive vocational education program in Multan and Bahawalpur.

This study will specifically look at the following themes:

- The experience of women in vocational education.
- Particular challenges, including any socio-cultural norms, that women confront in their access to and participation in vocational education.
- Actual and potential initiatives in Southern Punjab, Pakistan, to promote female participation in and successful completion of vocational education.

The main purpose of this study is to gain insight from participants into the particular nature of female students experience of vocational education. This insight will help to identify and better understand particular challenges faced by women, as a basis for initiatives to address them and improve women’s participation in vocational education, and their subsequent employment outcomes. Other material will be reviewed, including broader government social, educational, and economic policies, as part of this project.

Who is responsible for the research project?

Oslo Metropolitan University, represented by Professor Thomas Griffiths and Professor Kristen Nordhaug, are the institution responsible for the project.

Why are you being asked to participate?

Selection of participants for interview is based on the main aim of this study: to understand the perception of the female learners about their experience of vocational education and their potential employability. Institute heads/ principals are selected to investigate and to review the policies applied in their technical and vocational education institutions.

What does participation involve for you?

This study will be based on first observations of classes, and in-depth interviews with participants. Observation will be used as a preliminary step to develop a general sense of curricular and instructional practices in technical and vocational education courses, and the nature of women's participation in these classes. Participants will be invited to be audio-recorded interviews. The maximum number of interviews will be 15 to 20 and interview will be between 30-45 minutes.

Participation is voluntary

Participation in the project is voluntary. If you choose to participate, you can withdraw your consent at any time without giving a reason. All information about you will then be deleted. There will be no negative consequences for you if you choose not to participate or later decide to withdraw.

Your personal privacy – how we will store and use your personal data

We will only use your personal data for the purpose(s) specified in this information letter. We will process your personal data confidentially and in accordance with data protection legislation (the General Data Protection Regulation and Personal Data Act).

- It is only I, the researcher, and the supervisor, who will have access to some personal data.
- All personal data will be treated confidentially. All information collected in this study will be given code numbers. Data collected cannot be linked to you in anyway. No name or identifier will be used in any publication or reports from this study. The project is scheduled to be completed in November 2020. Your identity in all aspects of the work will remain anonymous.

What will happen to your personal data at the end of the research project?

The project is scheduled to end in November 2020. After the master thesis submission and its examination and approval, I will delete the data.

Your rights

So long as you can be identified in the collected data, you have the right to:

- access the personal data that is being processed about you
- request that your personal data is deleted
- request that incorrect personal data about you is corrected/rectified
- receive a copy of your personal data (data portability), and
- send a complaint to the Data Protection Officer or The Norwegian Data Protection Authority regarding the processing of your personal data

What gives us the right to process your personal data?

We will process your personal data based on your consent.

Based on an agreement with Oslo Metropolitan University, NSD – The Norwegian Centre for Research Data AS has assessed that the processing of personal data in this project is in accordance with data protection legislation.

Where can I find out more?

If you have questions about the project, or want to exercise your rights, contact:

- Oslo Metropolitan University – OsloMet: post@oslomet.no

- Asia Naseem Khan, master student and Thomas Griffiths, supervisor with the e-mails: s336191@oslomet.no/ tomgrif@oslomet.no
- Our Data Protection Officer: Ingrid Jacobsen from Oslo Metropolitan University – OsloMet in the email Ingrid.jacobsen@oslomet.no
- NSD – The Norwegian Centre for Research Data AS, by email: (personverntjenester@nsd.no) or by telephone: +47 55 58 21 17.

Yours sincerely,



Project Leader
(Researcher/supervisor)

Master Student
Asia Naseem Khan

Consent form

I have received and understood information about the project *Gender norms of employability: A case-study of female technical and vocational education in Multan and Bahawalpur in South Punjab, Pakistan* and have been given the opportunity to ask questions. I give consent:

to participate in interviews

I give consent for my personal data to be processed until the end date of the project, approximately in August 2021

(Signed by participant, date)