



Arab American University

Faculty of Graduates Studies

**Strategies to Ensure Compatibility between Vocational
Education and Training Outputs and Labor Market
Needs**

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**This thesis was submitted in partial fulfillment of the
requirements for the Master's degree in
Strategic Planning and Fundraising**

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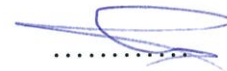
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Declaration

I admit that I prepared this thesis that is presented to the Arab American University to get a master's degree. And what it contained was a result of my own study, except for what was mentioned. It had not been submitted to get any degree from any other university or institute.

Student name: Maha Saleh Hasan Al-Bataha

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Date: 05/07/2022

Dedication

I'd like to dedicate my work to...

My great parents, who have never stopped giving in countless ways,

My beloved sisters and brother, who always stand by my side,

My friends who encouraged and supported me,

And all the people who gave me positive energy.

Abstract

The study addresses a problem that has emerged recently, namely the gap between VET outcomes and the need for the labor market. The study aimed to create a strategy to harmonize the outcomes of vocational education with the need of the labor market. In order to achieve the objective of the study, the study used the quantitative analytical approach. The study population consisted of two groups: workers in institutions providing VET, and employers in the Palestinian market who have direct contact with these institutions.

The study found that there is a weakness in updating and publishing statistics on education and the labor market in Palestine. The study also showed that there was no clear impact of demographic variables among graduates on their personal, social, professional and development skills alike.

One of the study's most prominent recommendations was the need to work to implement the appropriate strategy of available possibilities that would maximize the harmonization of vocational education outcomes with labor market needs. In addition to focusing on the implementation of the establishment of the National Authority for VET and activating its role to promote the reality of VET. Besides, it was recommended to focus on creating a common system among institutions based on VET and the labor market, through which mutual feedback is provided between vocational training workers and employers.

Key words (vocational education and training, labor market, strategy, compatibility)

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Chapter 1: Introduction

1.1. Background

A country's educational system is one of the most important tools for shaping the future. One of the most important measures to ensure the success of the education system is to support the new generation during the transition of the new generation to the operating system. Academic education is often the focus of attention around the world, and many countries have therefore developed a highly academically oriented and highly successful public education system. The organization's studies and procedures for this system have been decisively and successfully promoted. On the other hand, if the employment of young people is seen as a key indicator of the success of the educational system, a different picture emerges. Those States that had developed a dual education system in which the State and the economy shared responsibility for the employment of young people and succeeded in the transition from education to the operating system were found to have been particularly successful. Where learning and education are the way to self-determination and the formation of one's own life.

According to statistics from the Palestinian Central Bureau of Statistics, the problem of unemployment is worsening among graduates of Palestinian higher education for many reasons. In addition to the lack of professional competencies needed by the Palestinian labor market. The need to develop the competencies of the workforce to facilitate their access to the labor market, and to exploit their energies and knowledge to reach growth and prosperity and to keep pace with the rapid change in society has become urgent. This led to the consensus of Palestinian society on the need to meet the challenges facing vocational education and hinder its development. This would make it capable of

providing qualified professional competencies capable of meeting the needs of the Palestinian market and harmonizing supply and demand and thus moving towards economic and social development.

Vocational education is a means of developing individual skills, whether personal skills such as team working, collaborating with others and following instructions. Or management skills such as planning, entrepreneurship and innovation. Or professional skills such as accuracy, quality and speed. Vocational education also prepares graduates to adapt to the rapid changes surrounding the work environment. This increases their productivity and their ability to meet challenges.

Vocational training and education (VET) emphasizes on skills and knowledge required for a particular job functions. It is divided into two kinds, long-term training (two years) to prepare skilled workers which is presented by the institutions of the Ministry of Education and it is called vocational education, and short-term training (5 months-8 months) for the preparation of workers for jobs that need fewer skills which is presented by institutions other than the Ministry of education and it is called vocational training. It represents the shortest way to get the skills needed for a specific job for both males and females.

The training and education institutions in Palestine are categorized by supervision and type of institution to three types:

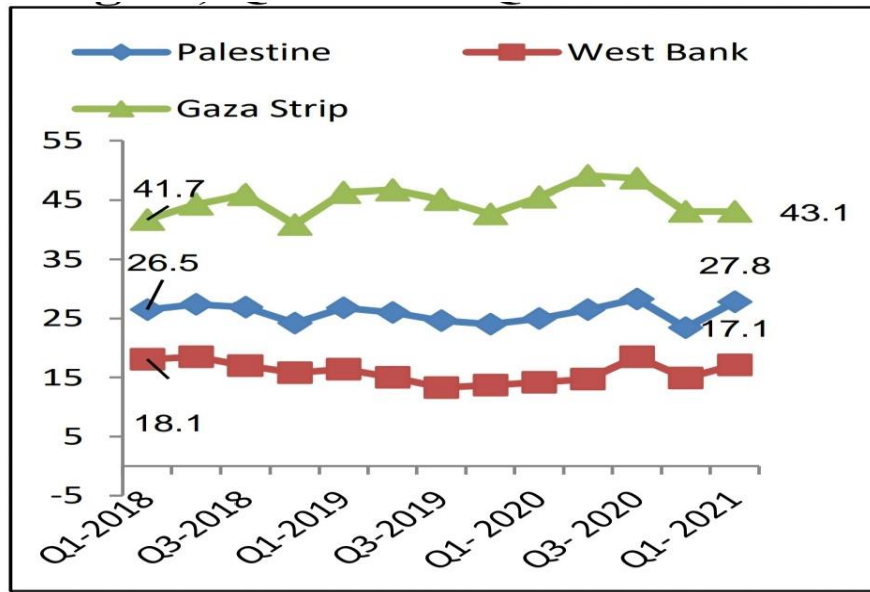
1. Institutions offering formal training programs which include community colleges and Palestine technical Colleges.
2. Vocational secondary schools.
3. Institutions offering semi-formal training programs which include:

- a. Vocational training centers affiliated to the Palestinian Ministry of Labor.
- b. Social centers for the rehabilitation of young people affiliated to the Ministry of Social Affairs.
- c. Vocational training centers affiliated to the UNRWA and specialized associations for long-term training.
- d. Non-governmental organizations (NGOs).
- e. Charitable associations.
- f. Private training centers. (<http://tvvet-pal.pna.ps/>)

1.2. Statement of the Problem

Statistics collected by the Palestinian Central Bureau of Statistics indicate that the unemployment rate in Palestine has fluctuated among labor force participants (age 15 and higher) around the same rate in recent years. Unemployment in 2018 was 30.2%, while in 2019 it was 25%. These statistics also indicate a high unemployment rate among females compared to males. For example, female unemployment was 41% compared to 21% for males in 2019, while it was 51% for females compared to 25% for males in 2018.

It should be noted that the unemployment rate raised during of 2020 to 26% due to many reasons. The Coronavirus Pandemic beginning of March 2020 was the leading cause that affected all sectors as the Palestinian government has taken several measures in addition to an emergency plan to limit the outbreak of the pandemic, thus led to a rise in unemployment rate. At the gender level, the unemployment rate for males was 22.5% compared to 40% for females. (Palestinian Central Bureau of Statistics, 2021)



Revised ILO Standards (ICLS 19th) Unemployment 1 Figure
Rate by Region, 1st Quarter of 2018 – Q1-2021
(Palestinian Central Bureau of Statistics, 2021)

The high unemployment rate among individuals participating in the Palestinian labor force is due to several reasons. Most notably, the disproportion between supply and demand in terms of the number of graduates of each major versus the employment opportunities available. The rapid increase in the number of graduates is a big offer for low demand due to the different requirements of the labor market and its inability to provide jobs appropriate to the quantity and quality of graduates. In addition, the needs of the labor market are different from the previous because of the rapid change of our time. Hence the need to provide strategies to align the needs of the Palestinian labor market with the outcomes of vocational training and education (VET).

1.3. Study Questions

The main question the study is trying to answer is:

What are the main factors affecting the quantity and quality of vocational graduates in the West Bank?

The following sub-questions emerge from it:

1. What are the main factors that affect the student's decision to choose between academic or vocational education?
2. To what extent does the family and society affect the student's orientation towards vocational education?
3. To what extent the family, society and even the student themselves are aware of the importance of vocational education?
4. How quickly a vocational education graduate gets a job compared to an academic graduate?
5. What specialties are understaffed and need to guide students towards them?

1.4. Study Objectives

1. To find out the main factors that affect the student's decision to choose between academic or vocational education.
2. To develop strategies to ensure compatibility between VET outputs and labor market need.

1.5. Significance of the Study

VET aims to prepare semi-skilled workers in various vocational fields. This is through education and practical training in the workshops. VET have become a global focus because it plays a prominent role in meeting the needs of the labour market, reducing unemployment, poverty and social problems. It has become necessary to find strategies that match the outcomes of VET and the needs of the Palestinian labour market. As students who have lack sufficient experience to choose the appropriate specialization related to their interests, which is also needed by the Palestinian labor market. This

forces them to work in areas different from their disciplines, so that jobs in other disciplines remain unfilled.

The importance of this study is highlighted in the following points:

1. This study is a continuation of the efforts made in previous researches and studies that have shown a gap between the outputs of VET and the needs of the labor market.
2. This study is concerned with a **topic interested???** at a global level and its impact on international development
3. Identifying the most important factors that affect the student's choice of study specialization.
4. Come up with recommendations aimed to combine between VET outcomes and the needs of the labour market.
5. Help decision makers take the necessary procedures to harmonize the outcomes of training and vocational education with the need of the labour market.
6. This study is a link between previous and subsequent studies, so that this study can produce results that will benefit researchers in the subject at the later stages.

1.6. Study Hypotheses

1. There is no statistically significant impact on the impact of demographic variables of VET graduates on their personal, social, professional and development skills, from the point of view of those working in vocational education and training institutions.

2. There is no statistically significant impact on the impact of demographic variables of VET graduates on their personal, social, professional and development skills, from the employers' point of view.
3. There is no statistically significant impact on the impact of demographic variables and skills available to graduates of vocational education and training on the realities of vocational education and training and the needs of the labour market, from the point of view of workers in vocational education and training institutions.
4. There is no statistically significant impact on the impact of demographic variables and skills available to graduates of vocational education and training on the realities of vocational education and training and the needs of the labour market, from the point of view of employers.
5. There are no statistically significant differences in the skills of VET graduates: personal, social, professional and development between vet workers and employers.
6. There are no statistically significant differences in the reality and needs of the labour market between workers in vocational education and training institutions and employers.

1.7. Study Terminology

▪ **Academic education:** An educational program of scientific, human sciences, entrepreneurship business (previously commercial), technology and shar'ia streams. It is consisting of three grades which are 10th grade, 11th grade and 12th grade. (Annual Statistical Book, 2018/2019)

▪ **Vocational education:** One of the paths of secondary education. Students enrolled in are subjected to the secondary examination in various vocational disciplines. Those who pass through it have the right to continue education to higher levels in specific university disciplines. This type of education in some Arab countries is called technical education. In Palestine it is presented by the institutions of the Ministry of Education. (Arabic Glossary for TVET Terms, 2009)

It is also defined as an educational program designed for learners to acquire specific knowledge, skills and competencies that enable them to perform a particular job or work. Such programs can consist of work-based elements such as apprenticeships and dual-system education programs. The successful completion of these programs results in the acquisition of professional qualifications suitable for the labour market and recognized by the competent national authorities and/or in the labour market. (ISCED, 2011)

Vocational Training: It is a path in which the student have training in one of the vocational disciplines. This training has different durations depending on the nature of the training and does not have a curriculum in advance. There is no minimum qualification for trainees. In Palestine, this training is provided at vocational training centers of the Ministry of Labor, Social Affairs, Development Institutions, Charities and Private Cultural Centers. (<https://tvvet-pal.pna.ps/>)

▪ **Employer:** A person who work in an establishment that is totally or partially belonging to him\ her and hires or supervises the work of one or more waged employees. This includes persons operating their projects or contracting

companies provided they employ a minimum of one waged employee. Shareholders are not considered employers even if they are working in it. (Dictionary of statistical terms used in the center, 2020)

▪ **Work:** All activities performed in economic units by persons of any sex, in order to produce goods or services for consumption by others, or for own consumption. It excludes activities that cannot be performed on one's behalf by another person, including all self-care activities, learning and activities for one's own recreation as well as all other activities that do not involve production goods or services for one's own or for other units' consumption, such as begging and stealing. (Statistics of work and of the labour force, ILO)

▪ **Unemployment:** A description of the situation of all individuals aged 15 years and over who did not work at all during the reference period, who were not absent from a job, were available for work and actively seeking a job during the reference period by one of the following methods newspapers, registered at employment office, ask friends or relatives or any other method. (Dictionary of statistical terms used in the center, 2020)

▪ **Labour Market:** The environment in which employees seek to sell their services, and employers seek to rent them, in exchange for agreed terms and conditions. It is also known as the system of relationships between the supply of people available for work, and the employment opportunities available. (Annual Statistical Book, 2018/2019)

▪ **Work Force:** All persons aged 15 years and over who are either employed or unemployed. This includes employers, paid workers, self-employed persons, as well as unpaid family members. (Dictionary of statistical terms used in the center, 2020)

Chapter 2: Literature Review

There are many institutions in Palestine that work in the field of vocational and technical education and training, which are working under the form of either private licensed cultural centers or public schools. These institutions provide training programs in several sectors that are needed in the Palestinian labour market such as automobile maintenance, beauty, carpentry, blacksmith, management, fashion design, computer, languages and other fields where huge financial investments are not required. Although, the percentage of students who study in those institutions are very small.

Based on a figure published by the Central Statistics Authority concerning the enrolment percentage of individuals aged 15 years and above who attended of training courses during 2017 from Palestine by region and sex, the proportion of graduates of vocational education was 1.3 males compared to 0.7 females, and a total of 1.0 of the both sex in Palestine.

That is an indication that people in Palestine don't pay attention to the importance of the vocational training, especially within youth who don't have interests in academic education. Also, the negative impression toward vocational graduates is one of the factors most affecting youth decision while thinking about vocational training despite of the rapidly growing demand for skilled labor.

The main goal of improving the vocational training is to create highly skilled workforce that characterized by strong knowledge, entrepreneurship and creativity. In addition, to decreasing the unemployment rate and create employment opportunities regardless of gender in a necessity. Also, to improve the society culture about the vocational training graduates. That can be carried out through increasing the awareness toward the

vocational training and its importance on behalf of both economic and social levels. As a result, many people can have their own projects and independent income sources including special need people.

The aim of this research is to fill the gap which is finding the best strategies to ensure compatibilities between VET output and the labour market needs. During the literature review, few previous researches related to the topic were found which are:

2.1. Students' Attitude Towards VET:

A study entitled Vocational interests among Palestinian students by Mohammed Namourah in 2016, made to identify the vocational interests among Palestinian students and explore factors that can affect vocational interests. The vocational interests was evaluated using a 42-item index scale based on Holland's (1997) RIASEC model that was administrated to three hundred and thirty-three secondary school students at southern Hebron district. The study used the qualitative research approach and a questionnaire was used. The population of the study was limited to the students of the secondary school in southern Hebron distinct during the 2015/2016 academic year. The study found that Palestinian students had a moderate level of vocational interests. Of the students surveyed, 70.4% revealed vocational interests. The results demonstrated significant statistical differences in the vocational interests' scores among the students according to their gender, stream, family birth rank, and parents' educational level. Academic achievement emerged as a significant predictor of vocational interests. (Namourah, 2016)

2.2. VET Efficiency:

A study by Mahmoud K. El-Jafari in 2010, entitled Efficiency and effectiveness of Palestinian vocational education and training, aimed to identify the factors that influence high school graduates' choice between VET and general education. Also to evaluate the demand for VET after students have completed high school on the one hand, and labor market demand for VET graduates on the other hand. The study found that the choice of joining VET Institutes or academic education at the age of 18 has been found to be totally determined by economic and financial factors. Students seek to acquire several skills and competencies in due time. As long as the determination of the income and salary depends on the graduates' productivity, he/she will acquire sufficient skills and competences as proxies for his /her productivity. These measures could empower and increase the competitiveness of VET graduates in skilled labor markets. (El-Jafari, 2010).

2.3. VET Effect on Economy:

A study entitled The Role of Technical and Vocational Education in promoting sustainable development in the Palestinian territories by Dr. Abdel Fattah Nasrallah, which was based on the descriptive analytical curriculum with the aim of diagnosing the current state of technical and vocational education in Palestine and identifying the basic requirements for its development to suit the needs of the labor market in light of cognitive development, which contributes to the promotion of sustainable development. Secondary sources were used for research, such as books, scientific journals, publications, reports and periodic statistics. The study aimed to identify the role of technical education in promoting sustainable development in Palestine by studying the reality of vocational and technical education in Palestine. It found that the curriculum

and disciplines offered by higher education institutions do not develop to suit the requirements of the labor markets in light of technical and cognitive development. In addition, there are no studies to predict the disciplines required in the labour market. There is no control over educational institutions when opening specialties that do not meet the needs of the market, and encourage them towards technical and vocational specialties. It also found that the low proportion of females entering vocational education was due either to social considerations to the trend of vocational disciplines, particularly to women, or because of the lack of specializations offered to females in vocational schools and middle schools. Moreover, it founds that the high proportion of unemployed graduates, especially among females, increases the economic and social burdens of current and future generations in Palestinian society, which in turn will have a negative impact on development. (Nasrallah, 2018)

In 2017, Madalina Popescu and Monica Roman have made a study aimed to evaluate the direct effects of vocational training, which is a popular active labour market policy in a European developing country such as Romania. It was entitled Vocational training and employability: Evaluation evidence from Romania. The study evaluated the direct effects of vocational training on employability in Romania. The main result reveal that the training has a positive but modest upon employability in Romania. Participation increases employment chances by 15%. It is most successful for women and for people living in urban areas. Measures for increasing the impacts of the vocational training program in Romania are identified in terms of better targeting and profiling the trainees and closer adjustment of the program to the specific needs of the labour market. (Popescu & Roman, 2018)

Randa Hilal and Simon McGrath have prepared an article entitled *The Role of Vocational Education and Training in Palestine in Addressing Inequality and Promoting Human Development* in 2016. It used a combination of qualitative and quantitative methods for a larger data. Data was collected using a VET graduate survey, interviews, focus group discussions, case studies of key VET institutions and a review of available documents. The article showed that VET in Palestine serves many of the poorest and most disenfranchised in Palestinian society in a context of profound structural obstacles to wellbeing achievement. It shows a very positive story of how VET has helped highly disadvantaged young Palestinians, particularly young women, to make progress on their human development. (Hilal & McGrath, 2016)

2.4. VET and Gender:

Gender segregation in vocational education and training (VET) in different occupations is observed in many European countries. This occupational gender segregation depends on other factors such as the initial occupational aspirations of adolescents. While many researches **has** mainly focused on individual-level explanations and on the family context, a study made by Malin & Jacob investigates the influence of local VET and labour markets on adolescent boys' and girls' occupational aspirations. More precisely, the study focused on the occupational structure of local VET, labour markets and the competition for VET opportunities. Using data from the German National Educational Panel Study of youth in grade 9 (age 15/16), the study found that boys' aspirations are oriented towards occupational opportunities in the local labour market and that they vary with competition. Girls' aspirations are less likely to be gender-typical – neither female nor male – if there is low competition. However, with higher competition, girls

also orient their aspirations towards occupational opportunities. Even if effect sizes of local context are small. (Malin & Jacob, 2019)

A study entitled Analyze the reality of learning and vocational and technical training in Palestine from a gender perspective by Hiba Jetawi in 2016, aimed to analyze the reality of learning and VET from a gender perspective in learning and vocational training institutions in the West Bank and Gaza Strip. The study followed the descriptive and appropriate approach to the course of this study, through qualitative and quantitative tools, namely interview and resolution. The study community included all students from government vocational schools, vocational training centers and government technical colleges in the West Bank and Gaza Strip. The results of the interview showed that the directors of vocational institutions consider that the specialties and programs offered to females are appropriate, and the demand for the specialties of the community and the work is still large, and this demand is linked to the culture of society, which continues to restrict the enrolment of females in new disciplines. The management of these institutions did not have the objection to putting forward the idea of gender in the process of training and training, but not as a main course, but in the form of a single lesson. (Jetawi, 2016)

2.5. The Reality and Problems of VET

VET faces several difficulties and challenges. Most students who choose the VET don't do this because they like it. On the contrary, they feel embarrassed because of the compulsory separation between the academic education and VET according to the students' grades in the preparatory stage. Also, the ignorance of VET concept and its role community building either by the students or by the members of the community

because the absence of the guidance and career counseling. Moreover, there is no close link between the curriculum and the practical reality of the profession. Furthermore, the educational programs which are offered are not suitable for the market needs. Therefore the graduates are not well-qualified. (Halabi, 2018)

There are also problems faced by VET teachers, most notably is the lack of incentive programs and poor student participation in the programs offered. In addition, students enrolled in VET suffer from a general weakness in scientific subjects and English in general and few job opportunities in some disciplines. Moreover, there is a lack of material and moral appreciation for the vocational teachers and a lack of training courses that help to renew and develop the skills of them. (Ala'jez, 2008)

2.6. VET Outcomes and Labour Market Need:

In a study entitled the suitability of technical and vocational education outcomes to the needs of the Saudi labour market from the point of view of businessmen by Saleh bin Nasser al-Anas conducted in 2020. It aimed to identify the views of businessmen about the potential and qualifications of graduates of technical and vocational education institutions and their suitability for the requirements of working in their systems. In addition to knowing the needs of businessmen from the professional and industrial manpower provided by technical education institutions in Saudi Arabia. The study used the analytical description method through the survey method of the research community by distributing a questionnaire to the views of businessmen and their views on the potential, qualifications and competencies enjoyed by graduates of vocational and technical education and their suitability for the requirements of the labor market. The study found that the outcomes of vocational education are weak and unable to meet the

needs of the labour market as well as their inability to adapt to its environment. This was the result of a lack of interest on the part of educational and training institutions in the practical aspects. In addition to the weakness or lack of information regarding the labour market, particularly information services on job opportunities and requirements, and accurate indicators of employment offered, which play a major role in determining current and future labour market needs. The study also showed that graduates of vocational education face job challenges resulting from over-employment conditions, long working hours, high economic costs and the availability of a large number of labour. The study also pointed out that there is no clear real cooperation by the sectors of the labor market in providing educational and training facilities with indicators and developments that help to develop the curriculum and training. In addition to the low level of participation of the labour market sectors in planning the required disciplines. (Alnas, 2020)

In 2017, an article entitled *A Decomposition of Local Labour-Market Conditions and Their Relevance for Inequalities in Transitions to Vocational Training* by Steffen Hillmert, Andreas Hartung and Katarina Webling, aimed to determine to what extent individual transitions to VET in Germany have been affected by local labour-market conditions. A statistical decomposition approach is developed and applied, allowing for a systematic differentiation between long-term change, short-term fluctuations, and structural regional differences in labour-market conditions. To study individual-level consequences for transitions to vocational training, regionalized labour-market data are merged with longitudinal data from the National Educational Panel Study, and multivariate transition-rate models are fitted. The results indicate that structural differences between regions have had significant effects on the transition behavior of

school leavers, whereas temporary crises have been of only minor relevance. Moreover, different groups have been affected to different degrees by varying labour-market conditions. We also highlight the usefulness of our decomposition approach for a broader set of applications. (Hillmert, Hartung & Weßling, 2017)

Sundos Zayed have made a study to explore the Compatibility of the vocational governmental training centers outputs with the needs of the labor market from the perspective of training providers, and diagnosis of the existing gap between the outputs of the vocational training system and the labor market, and find out its causes, and to develop proposals to bridge this gap. It used a descriptive analytical approach, and method of mass survey of the study population, consisting of eight vocational training centers under the supervision of the Ministry of Labour in the West Bank. The study concluded that vocational training in Palestine does not respond to the needs of the labor market because of the lack of appropriate training programs available to the needs of the labor market and the need to update introduction of new ones, the system of guidance and counseling available is inefficient and need to be activated, the lack of trainers development in a manner that commensurate with the modern scientific and technological development, the need for the development of the necessary equipment for training are similar to those used in the labor market, the lack of community support sufficient to vocational training centers and alumni, and non-participation of labor market institutions in guiding and preparing training programs, and lack of activation of a market information system and use it effectively, and therefore does not achieve the goals that found for them in an active relationship and communication between vocational training centers and the labor market is weak and non-sustainable

relationship. And training service providers and employers do not take advantage of the possibilities available to them all. (Zayed, 2014)

Also a study entitled Labour market study: training needs and the gap of harmonization with education and vocational training in Palestine by Randa Hilal in 2013, aimed to identify and analyze the harmonization gap and the quantitative and qualitative training needs of the trained workforce in the various economic sectors. The study was based on the field survey descriptive approach and qualitative analysis. The study included quantitative and qualitative analysis of the labour market and the needs of economic sectors related to the specialties available in vocational education and training institutions. It also included an analysis of the realities of graduates. This was done through the study of literature, statistics, field study of facilities, survey of vocational education and training institutions and the conduct of qualitative group meetings for shareholders of the vet system. The study showed that vocational education and training institutions (governmental and non-governmental) in the West Bank provide training in less than 50 specialties. On the other hand, employers have expressed their need for other untrained jobs, amounting to more than 100 jobs. It also indicated that the geographical distribution of available VET institutions and specialties did not cover all market needs. In addition, the study showed that the specialties available to females are no more than two thirds of what is available to males. That is, there is a gap in access to vocational education and training based on gender. (Hilal, 2013)

Ola Alzeir has conducted a study entitled The Role of Technical and Vocational Training in Creating Job Opportunities for Trainees; Case: Gaza Community College – UNRWA in 2009, aimed to identify the role of technical and vocational training in creating job opportunities for trainees at the Gaza-UNRWA Training College. It also

tried to come up with recommendations to improve and develop technical and vocational training by studying technical and vocational training axes, and linking factors affecting the identification of such areas as: disciplines, curriculum, trainers, techniques and requirements, field training and post-training services. Or related to the personal characteristics of the trainee such as: sex, age, marital status, year of graduation, school field, workplace, nature of work, years of experience and specialization. The researcher adopted descriptive analytical approach, which relies on data collection to describe, interpret and analyze the phenomenon. The results of the study showed a statistically significant relationship between: disciplines, curriculum, trainers, techniques and supplies, field training, post-training services and job creation for trainees at the Gaza-UNRWA Training College from 2003 to 2006. The technical and vocational training hubs adopted in the study were found to have high levels except for post-training services that received the least responses from the researchers. (Alzeir, 2009)

Salah Alzaroo used a combination of qualitative and quantitative methods of data collection including primary and secondary sources, aimed to explore the interaction between the outcomes of the Palestinian governmental secondary vocational education and the labour market from the perspective of graduates, training providers and employers. He also had traced vocational students who graduated during the period 2004-2006 and showed the percentage distribution of them by sex and employment status. The results were as shown in the following table:

Table 1 Graduates' status

Graduates' status	Sex
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	Males	Females	Total
Continue their higher education	51%	57%	51%
Employed	30%	6%	27%
Unemployed and seeking job	13%	20%	14%
Unemployed and do not seeking job	6%	17%	8%
Total	100%	100%	100%

He concluded that the Palestinian secondary vocational education is ineffective, unresponsive and irrelevant to the LM's needs and inputs. The linkage between secondary vocational education and the labour market is weak, superficial and not systematic. (Alzaroo, 2009).

In 2009, the Palestinian Economic Policy Research Institute (MAS) conducted a study based mainly on the analysis of the 2007 general census data, carried out by the Palestinian Central Bureau of Statistics and the study for the West Bank, due to the incomplete introduction of census data in Gaza at the time. It aimed to identify the general characteristics of individuals who graduated from vocational training centers in terms of age, career, marital status, relationship to labour force, academic level and gender. Also to find out which careers need a higher level of training than others made. One of the most notable results was that the concentration of active vocational training graduates was 21.1% higher in business and administrative specialization, with the least in educational sciences and teacher preparation at 8% for males. For females, the highest concentration of pedagogical sciences and teacher preparation was 20.1%, and the lowest was in social and behavioral sciences at 11.7%. The study also found that

69.1% of all male vocational training graduates did not complete their high school. The proportion of female graduates was 51.7%. The study showed that 14.8% of male vocational training graduates work in Israel. The study also found that the private sector received the largest proportion of vocational training graduates with 65.6% for males and 61.9% for females. Compared to 16.3% of males and only 26.8% of females in PNA institutions. (MAS, 2009)

2.7. Knowledge Gap:

According to the previous studies and researches made to assess the current status of VET, its outcomes and its ability to meet the needs of the labour market from various vocational disciplines. These researches focused on the surplus of the academic graduates compared with VET graduates. Also, they discussed the problem that face VET such as the social problems, employment opportunities and appropriate curriculum.

The lack of strategies to align the outcomes of vocational education with the need for the labour market in terms of the quantity and quality of graduates has been shown. Therefore, it was necessary to study the current situation and start from where previous studies in this subject have arrived to promote vocational education through the development of these strategies, which will reduce the surplus of certain disciplines in return for drawing the attention of students to disciplines that are not studied despite the urgent need for them.

Where the strategic plan for the higher education and scientific research sector pointed to the weakness of linking master's and doctoral thesis with the problems of society. That would make it work as an incentive to study this problem, which is considered as

an economic and social issue. Finding strategies that align the VET output with the market need will reduce surplus of some disciplines and increase the number of graduates from other disciplines needed in the labor market.

The study will focus on analyzing the reality of the labour market for VET graduates from the point of view of employers, and from the point of view of VET institutions on the other hand. To eventually develop strategies that align the outcomes of vocational education with the quantitative and qualitative needs of the labour market.

Chapter 3: Main Shareholders who Serve VET in the West Bank

There are many organizations responsible for providing vocational education and training programs in Palestine. They set minimum qualification standards sought by trainers as well as clear conditions and requirements for joining such programs. Graduates are awarded recognized official certificates at the end of the program's time limit during which a fixed and predetermined curriculum is studied.

Vocational training based on competency can be described as an educational and training program oriented to the career and demand. It is based on the specific criteria required by the career in accordance with the needs of the labor market. These standards form the basis for the design of the training program (curriculum), educational materials, the preparation of training workshops and other requirements for completing the training.

These skills and competencies are needed by a vocational graduate because they prepare him to enter the labor market effectively. These are technical, social, human and methodological competencies. This means that the graduate has the knowledge and skills to accomplish a work, the ability to process information to take appropriate action and think logically, and the ability to communicate with others and work in a team spirit.

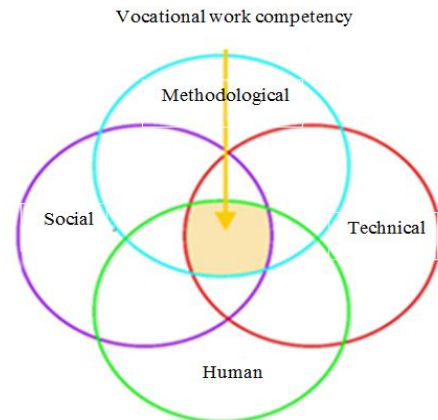


Figure2 Vocational work competency

European Centre for the Development of Vocational Training, 2019

These competencies are acquired through institutions that provide VET.

Technical competence includes the knowledge and skills needed to do a job. This competence allows the worker to have the ability to carry out the activities and duties

assigned to him in his work professionally and efficiently. Methodological competence refers to the ability to process information and respond at work by taking appropriate measures, as well as choosing problem-solving strategies and logical thinking by dealing with charts, searching online and understanding technical terms. Social competence refers to the ability to communicate and collaborate with others at work. It also signifies the ability to work with presidents, subordinates and peers, take social responsibility, understand and accept role distribution, communicate and appear fit for the job. Human competence indicates the worker's attitudes towards his job in terms of a desire to continue learning, independence, self-confidence and responsibility.

The classification of vocational graduates varies according to the type of the institution providing vocational training as described in the figure.

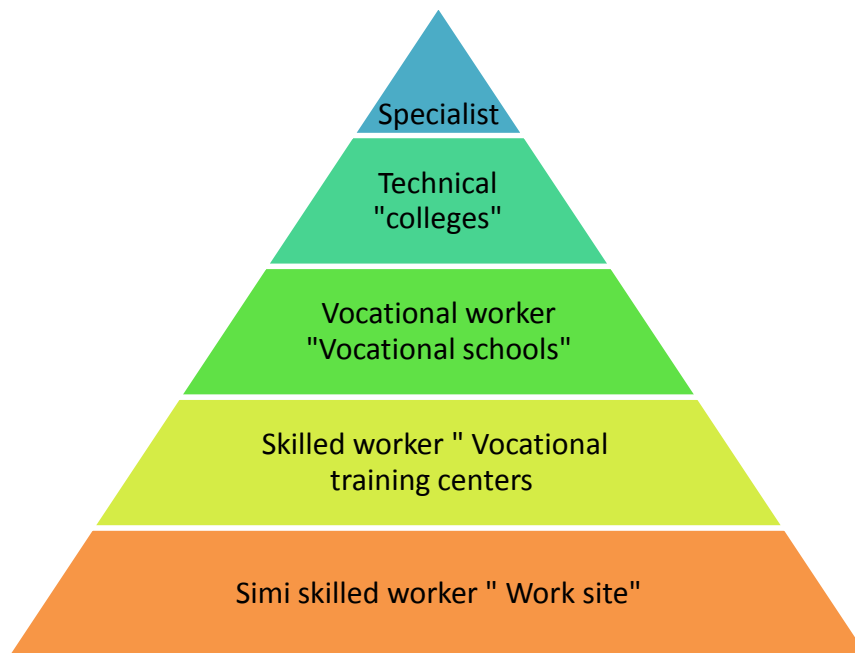


Figure 3 providing vocational training as described

<https://tvet-pal.pna.ps>

The relationship between VET institutions and the labor market has become a priority to be considered in the development of plans and programs of VET institutions. The employer is interested in obtaining highly qualified vocational graduates who meet the needs of the labor market in terms of quantity and quality (number and specialization). Studying their relationship also provides greater employment opportunities for graduates and facilitates their integration into the labor market. This contributes to the focus on providing vocational training students with professional technical skills, materials and tools skills, processes needed to complete the work, professional values and ethics, and life skills, which include communication.

To achieve this, it is necessary to identify the institutions to which VET is linked in Palestine. There are many organizations responsible for providing vocational education and training programs in Palestine. They set minimum qualification standards for trainers as well as clear conditions and requirements for joining these programs. Graduates are awarded recognized official certificates after the end of the program's time limit, during which fixed and predetermined curricula are studied. In this study, we will highlight four types of these organizations which are the main shareholders of VET in Palestine.

3.1. National Authority for Vocational Education and Training:

Based on the Palestinian government's interest in promoting education and vocational training, the Council of Ministers passed a resolution to Law No. 4 of 2021 establishing a national body called the National Authority for Vocational and Technical Education and Training affiliated to the Council of Ministers. This step is to regulate the entry of efficient and professional labour into the Palestinian labour market. It is also a pillar for achieving cluster development requirements that meet the sustainable development

goals. This body is allocated a budget within the state budget. This body is the only party responsible for developing and controlling plans and policies for the advancement of the government vocational and technical education and training sector. It is also responsible for supervising the private vocational and technical education and training sector, with all institutions operating in this sector complying with the legislation, policies and instructions issued by this body. The Authority is managed by a board of directors headed by the Prime Minister, and the membership of: Minister of Labor as Vice-President, Minister of Higher Education and Scientific Research as a member, Minister of Education as a member, Minister of Social Development as a member and Minister of Transport and Communications as a member.

The Authority seeks to achieve the following strategic goals:

1. The formation of a national policy, regulatory and supervisory reference for the vocational and technical education and training sector that upgrades the quality of the sector's outputs.
2. Building an integrated education and vocational and technical system, efficient, effective and flexible, capable of contributing to social and economic development and responding to national trends and policies, in accordance with global standards.
3. Contributing to the development of national human resources, serving to provide employment opportunities for young men and women, reducing unemployment rates and meeting the needs of the local, regional and international labour market for skilled labour.

The functions of this body in accordance with the resolution by law are:

1. Policy-making and development of plans, strategies and programs for the vocational and technical education and training sector.
2. Preparing the necessary legislation to regulate vocational and technical education and training in Palestine, and submitting it to the Council of Ministers in accordance with the law.
3. Issuing the necessary instructions and decisions for the work of the Authority.
4. Preparing the national framework for qualifications in Palestine with partners in the vocational and technical education and training sector.
5. Adoption of the Palestinian standard classification of professions in accordance with the Arab and international professional classification.
6. Establishing specific professional standards for the organization of professional work and professional tests, and issuing certificates under a system issued by the Council of Ministers to this end.
7. Preparing and developing educational and training systems and methodologies at different levels and the mechanism of integrating, preparing and developing vocational and technical education and training programs and curricula, and setting levels of training pertaining to them in accordance with the requirements of the labour market in coordination with those related to the vocational and technical education and training sector.
8. Establishing the foundations and criteria for the adoption and development of professional and technical programs and specialties, and adopting the foundations of admission to vocational and technical education and training institutions.

9. Establishing the foundations and criteria for the appointment and classification of trainers and professional supervisors, organizing and defining their professional ranks under instructions issued by the Board to this end.
10. Preparing and developing the human resources of the Authority and the institutions of vocational and technical education and training in modern specialized areas and educational aspects in accordance with international methodologies and standards.
11. Coordination and cooperation between ministries, government institutions and private institutions related to the vocational and technical education and training sector, and building an institutional partnership with the private sector to ensure the advancement of vocational and technical education and training in Palestine.
12. Adoption of the following vocational and technical education and training programs:
 - A. Vocational secondary education in all its forms and levels.
 - B. Vocational training in all its forms and levels.
 - C. Vocational and technical education.
 - D. Training - continuing education.
 - E. Any other professional programs are developed.
13. Conducting research and studies on the vocational and technical education and training system.
14. Directing funding and financial resources allocated for the education and vocational and technical training sector to stakeholders according to the priorities and policies adopted.

The Authority grants the necessary licenses to government and private vocational and technical education and training institutions and providers, supervises them, organizes their work and evaluates their performance to meet the needs of the labour market in accordance with the regulations and instructions adopted. A fund will also be established in the Authority called the National Fund for Vocational and Technical Education and Training, which aims to provide the necessary support for vocational and technical education, training activities, and skills development by linking funding policies to performance and efficiency standards and responding to the Authority's policies. In fact, the fund aims to fund vocational and technical education, training programs, employment-related training programs, productive work in program development and operational expenditures. In order to ensure the integrity of the procedures followed in the work of the Authority, it is subject to the financial and administrative control regulations in force in all State institutions.

3.2. Palestinian Ministry of Education Institutions:

Although the ministry is aware of the importance of linking the vocational education system to the need of the labour market of skilled graduates in several areas, there is still no system that monitors the needs of the labour market. The Ministry's strategy has focused on the need to integrate vocational education data into the national statistics system.

As a result of the ministry's interest in vocational education, the Ministry has declared 2017 the year of vocational education in order to develop and implement policies aimed at developing vocational education in line with the national policy agenda aimed at supporting sustainable development.

Mission:

Palestinian society that possesses values, knowledge, science and technology and is able to employ that knowledge for liberation as well as development.

Vision:

Building an educational system that contributes to the consolidation of national and human moral values, constitutes an incubator for critical thinking, and develops the foundations of research, passion and knowledge by empowering distinguished educational cadres capable of bringing about positive change in the educational process, contributing to the outcomes of the new educational system in meeting the requirements of comprehensive development, and creating promising economic opportunities that achieve the goals of modern enlightened Palestinian society.

Goals:

The Palestinian Ministry of Education seeks to achieve several goals which are mainly as follows:

1. Providing equal access to the vocational education system for all.
2. Upgrading vocational education outputs quantitatively and qualitatively.
3. Promoting the awareness of male and female students and teachers at all levels of education and community of the importance of vocational education.
4. Developing a professional supervision system based on work-related training and education.
5. Promoting and monitoring the educational, health, psychological and professional aspects that stimulate education, learning and creativity among students in vocational schools.

6. Strengthening human resources to increase the efficiency and effectiveness of vocational schools.

VET at the Ministry of Education institutions: توحيد نمط كتابة العناوين

The vocational education enrolment rose from 2.3% in 2017/18 to 3.04% in the 2018/19 school year to 4.1% in 2019/20. The opening of vocational units in academic schools amounted to 20 vocational units in the West Bank and Gaza in 2018/19 and 42 vocational units in 2019/2020. Likewise, 18 new public vocational schools and 7 private schools were opened until 2019/2020. While non-traditional specialties were opened within the industrial branch (interior decoration, graphic design), professional units opened for females were opened in the hotel branch. Alternatively, the awareness and vocational guidance used in integrating education into the basic stage played a role in introducing vocational education at all levels of society.

In addition, there is a craftsmanship/ vocational course that was first adopted in the last academic year 2018/2019, where students study the same courses with high school students of the vocational branch. However, the evaluation and follow-up mechanism vary, where the student has to present a project that gives him a certificate of vocational competence, enabling him to join the labor market or technical colleges or universities to study a vocational diploma in the same course of specialization. But those who want to attend university are allowed to apply for the high school exam in their required courses. Whereas there were approximately 240 students on this course in 2018/2019, there were approximately 340 students in 2019/2020. It was noted there was a rise in the number of students wishing to join this course, particularly in the industrial branch and home economics.

The Ministry also adopted the course of apprenticeships, where the students have to train for two days a week in the labour market, and then continue to study in vocational schools three days a week. The ministry has approved this course in three vocational schools: Hebron School, Nablus School and Sila Al-Dhahr School in 2019/2020, and is working to increase the number of schools applying this route due to the importance of some sectors in the provinces and the increase of demand for students from these schools.

The Ministry offers vocational education in four branches: agricultural branch, hotel branch, home economics branch, including beauty, fashion and clothing detailing, and the industrial branch. The industrial branch includes 26 specialties, most notably communications, air conditioning and cooling, space and construction, graphic design, interior decoration, car electricity and others. This is implemented in 39 vocational schools spread across the West Bank governorates as well as 13 vocational units in the Gaza Strip.

The number of students in vocational branches in 2018,2019,2020,2021 was 1501, 1793, 2393 and 2703 respectively based on the statistics from the Ministry of Education.

Main achievements: توحيد نمط كتابة العناوين

In the pursuit of the goals set, the Ministry, despite the challenges it faces, has been able to realize numerous achievements in the vocational education sector, including:

1. Developing and reforming the supervision and follow-up system in vocational schools and technical colleges in 22 schools.
2. Activating and developing partnership and networking between public and non-governmental vocational education institutions and labour market institutions,

including the signing of memorandums of understanding with chambers of commerce in several provinces.

3. Increasing the integration of students with disabilities into schools and vocational units by aligning the school's educational environment with the individual needs of people with special needs.
4. Raising the level of qualification of teachers and mentors of vocational schools and colleges in line with the educational qualification strategy and the application of training programs for workers (specialized) in vocational education and supporting staff in accordance with the strategy of vocational and technical education and training.
5. Generalizing the national apprenticeship strategy in several vocational schools.
6. Evaluating and developing all vocational and technical education curricula, educational programs and curricula according to the needs of the labour market based on the level of efficiency or goal orientation at 25% of the set target.

Main challenges and obstacles: توحيد نمط كتابة العناوين

The Ministry faces several challenges to achieving the goals set, most notably:

1. Lack of funding for the maintenance and rehabilitation of vocational schools, due to the lack of donors' support and the financial crisis experienced by the Palestinian government.
2. Inability to supply the necessary equipment for the rehabilitation and development of vocational schools because of Corona pandemic- induced import difficulties, which resulted in the suspension of total imports.
3. Failure to establish a national framework for the professional and educational qualifications of the staff working in this sector.

4. Lack of infrastructure to develop the vocational education sector.

Relation with labor market:

The vocational education sector has a strong relationship with the employment sector, and this link has created close cooperation between the Ministry of Education and the Ministry of Labor to develop policies to regulate and develop the sector in an effort to align the skills and competences of graduates of vocational education with the requirements and current and future needs of the labour market. Thus far, however, this cooperation has not been able to find appropriate ways to match the outcomes of vocational schools with the needs of the Palestinian labour market.

The ministry is keen to activate and develop the partnership and networking between government and non-governmental vocational education institutions and labor market institutions. In addition, it seeks to evaluate and develop all vocational and technical education curricula, educational programs and curricula according to the needs of the labor market.

3.3. Palestinian Ministry of Labor Institutions:

The Palestinian Ministry of Labor seeks to establish a labour market information system that aims to link all enterprises related to the labour market into a single computer system. In so doing, it develops Palestinian human resources and provides qualified and trained workers consistent with global standards in order to meet the current and future needs of the domestic labor market primarily and global markets in the second degree. It also aims to formulate policies for education, training and employment systems and to help individuals choose the type of education and training appropriate to their capacity and labour market needs, thereby harmonizing supply and demand in the labour force.

This can be achieved by providing detailed data and indicators on the needs of the Palestinian labour market from different professions, human resources and training skills. The data provided on the training system in Palestine include training centers, trainers and training programs as well as guidance services and awareness-raising mechanisms of the importance of human resources planning. Thus, the provided data contribute to inform the planning of the policy of vocational education and the labour market in Palestine.

Mission:

Participating in the preparation of human resources in basic levels of work by training new entrants, raising the competence of practitioners through a high quality organized training environment by adopting the principle of partnership with relevant parties, and contributing to policy development.

Vision:

Towards high quality vocational training that meets the needs of the local labor market and competes in foreign markets, and that has access to organized professional work so that it contributes to economic and social development.

Goals:

The vocational training system seeks to achieve a range of objectives at the individual and community level, most notably:

1. Developing the national vocational training system, which affects the harmonization of supply and demand in the labour market.
2. Providing trained manpower, qualified technicians and technicians who are able to contribute to the development and maintenance of infrastructure,

industry, agriculture and services, and increase the effectiveness and relevance of vocational training to the needs of the labour market.

3. Expanding the inputs and outputs of vocational training in quantity and quality.
4. Developing a modern vocational training system in line with international standards in the area systems and governance and consistent with the laws and legislation governing its work.
5. Giving individuals the knowledge and skills required by their specialization in accordance with the accepted standards and foundations in the labour market and achieving the flexibility required in the ever-changing labour market.
6. Preparing individuals who are able to deal with modern technologies and develop their willingness to learn and develop continuously, and who are highly aware of the labour market and its changes.
7. Keeping pace with changes in the labour market resulting from economic fluctuations through special training and continuing education programs that increase access to employment on a permanent basis.

VET at the Ministry of labor institutions:

The Ministry of Labor provides vocational training programs in various disciplines through 11 vocational centers spread over several cities in the West Bank with 151 employees divided between administrators and trainers as well as more than 230 special vocational training centers. These centers offer vocational training in more than 30 disciplines in a variety of areas between crafts and office occupations. These include graphic design, interior design and decoration, sanitary and electrical extensions,

secretarial services, architectural drawing, modern automotive technology, carpentry, blacksmithing, aluminum works, maintenance of agricultural machinery and many other specialties.

The number of vocational graduates who turned out from the Ministry of Labor training centers was 1,666 in 2019/2020 while 1,654 trainees were enrolled for the 2020/2021 training year, with 61% male compared to 39% female. Furthermore, there were a large number of graduates from the special centers.

Main achievements:

Vocational training is one of the most important files in the labor sector. It accounts for more than 60% of the budget allocated to this sector. Despite high unemployment and a shortage of skilled labour in the local labour market, the Ministry of Labour, in cooperation with its partners, continued to provide and expand vocational training services. Several ministry centers have been in operation. Also, it has expanded the licensing of private vocational training centers and increased the number of their training programs. The Ministry has made several achievements related to vocational training over the past three years, mainly during 2020. The most important of which can be summarized as follows:

1. The number of specialties in government centers has increased almost annually in an effort to meet the growing needs of the labour market.
2. Building new centers in several cities through the development budget of the Ministry of Labor.
3. Developing existing centers and working on their expansion in cooperation with the Ministry of Education and with the support of the KFW Development Bank.

4. Following-up and supervising private training centers, in addition to licensing 123 new vocational centers.
5. Holding several workshops and training courses with the aim of increasing the efficiency of the outputs of vocational training centers and building the capacity of trainers.
6. Developing a range of supporting training materials aimed to develop the capabilities of trainees.

The Ministry's strategic plan carried out an environmental analysis (SWOT) regarding the VET sector. It is summarized as follows:

Table 2 Internal environment analysis:

Strengths	Weaknesses
1. There are memorandums of understanding for vocational training with a number of countries such as Jordan and Tunisia.	1. Incomplete work on important elements such as vocational standards and vocational classification.
2. Building and operating new vocational training centers and developing workshops through donor support (Islamic Bank, KFW).	2. The shortage of staff in vocational training centers and the lack of capacity.
3. Raising the government-approved development budget for vocational	3. Weak coordination and follow-up mechanisms for labour market

training.	information.
4. There are modern curricula for 17 vocational training programs.	

Table 3 External environment analysis:

Opportunities	Threats
1. The government is directing its focus on supporting youth, VET and employment to create sustainable development.	1. Absorption of the VET graduates in .the Israeli labor market.
2. Increased demand for training programs.	2. The inferior society's view of VET.
3. Availability of financial support from international donors and organizations.	3. Weak legislation and regulations relating to VET.
	4. The absence of a national mechanism to continuously identify the needs of the labour market.
	5. The inability of the domestic market to absorb labours.
	6. A decrease in the level of international funding.
	7. Continued spread of Corona virus.

Main challenges and obstacles:

Main obstacles that the vocational training face are summarized as follow:

The number of graduates of vocational training remains below the level that the Ministry of Labor aspires to achieve for many reasons, the most important of which are:

1. Corona virus pandemic and its negative impact on the training process in general and practical training in workshops in particular as a result of closures, irregular working hours and difficulty in movement.
2. Lack of infrastructure to increase the number of government and private training centers.
3. Lack of the available material and the dim possibilities for securing them.
4. Lack of legislation to regulate professional work and the absence of a vocational training law that addresses all aspects of legal, administrative and executive work.
5. Poor awareness of the importance of vocational training and its demand.
6. Failure to regulate the relationship (especially financial) with the financiers of vocational training projects.
7. Fragmentation, poor association and incompleteness of the institutionalization and governance of the vocational education and training system.
8. Lack of effective structures and processes to monitor and evaluate the labour market and identify its needs.
9. The continuing shortage of human resources of trainers, supervisors and administrators in vocational training centers.
10. Artisans are reluctant to work as trainers due to low salaries and high income in the market.
11. Lack of an approved reference for professional standards for various programs and training sectors.

Relation with labor market:

The Ministry was keen to continue studying the labor market and its needs. In fact, it participated in the preparation of a study entitled "Training needs in micro, small and medium enterprises operating in the West Bank 2020," that aimed to study the needs of the labor market in partnership between the Ministry of Labor, the Federation of Agricultural Chambers of Commerce and the German Craft Chamber project. Many of the labour market needs have been identified from certain trades and occupations, including computer use and applications, languages development, tourism and hotel management, agriculture and others. It found that there is a need to focus more on practicality in vocational training, the introduction of training courses that meet the requirements of the labour market, the need to follow up on vocational training graduates after graduation, and the need for periodic studies to identify changing labour market needs.

3.4. UNRWA Institutions.

The UNRWA vocational education program provides practical training for the youth of Palestinian refugee in industry and services to meet the needs of society and achieve development. Its institutions offer three types of courses:

1. Business (vocational) courses that last one or two years.
2. Semi-professional technical courses lasting two years.
3. One or two-year rehabilitation program courses.

UNRWA also offers short-term training courses of 8 to 40 weeks focusing on improving the technical skills of refugees and providing a basic level of technical knowledge to untrained persons. These courses are organized on custom basis in response to local needs in cooperation with governmental and non-governmental

organizations. UNRWA operates 10 centers across Palestine, including two in the West Bank: Qalandia Vocational Training Centre and Ramallah Women's Training Center (Al-Tira) in Ramallah. The others are in Gaza Strip. These centers offer about 22 programs. To have admission to the centers, a candidate is required to successfully complete the ninth or tenth grade study for some disciplines that award the diploma degree and are classified within the framework of vocational training centers, or the trainee must have a general secondary school certificate for some disciplines that award the diploma and are classified within the community colleges.

Mission:

To prepare and implement various and specialized vocational programs that meet the needs of local and regional markets by taking into account and keeping up with developments in the job market in order to provide the young generation of Palestinian refugees with the knowledge, skills, competencies and directions that increase their competitiveness for the desired jobs.

Vision:

To provide excellent vocational education and training that prepares graduates who are eligible for employment opportunities in local and regional markets that enable the Palestinian refugee community to live a decent life.

Main Strategic Goals:

The VET program's efforts focused on achieving the following strategic objectives:

1. Achieving the vision by providing outstanding VET by preparing qualified graduates who are given priority in the employment opportunities available in the labour market.

2. Maintaining the continuity of a constructive relationship with employers in order to provide employment opportunities for graduates and to update training programs in accordance with the needs of the labor market.
3. Providing educational opportunities for poorer males and females to enroll in VET by increasing the number of school seats in UNRWA centers as well as adopting new specialties with additional external funding.
4. Providing appropriate programs for females and encouraging them to join vocational programs.
5. Training programs comply with the system of vocational institutions and keep pace with technological development.
7. Improving the quality of training through continuous technical supervision of various training programs by specialists.
8. Preparing and implementing various professional programs that meet the needs of the local market.

VET at UNRWA institutions:

Ramallah Women's Training Center (Al-Tira) offers two levels of vocational education to students. One of which lasts over a school year in addition to a three-month field training period in external institutions, through which students use the skills and information they have acquired during their studies and develop positive attitudes towards work. At the end of the study and training period, the student is awarded a diploma. Teaching includes fashion design, beauty and hairdressing, porcelain and photography.

The second level lasts for two academic years, requiring successful high school diploma. It includes practical and field training of varying duration, depending on the

nature of the specialization, and to two consecutive months of training in relevant national institutions. This level includes several disciplines under three programs:

1. The Administrative and Financial Sciences Program, which focuses on giving students skills related to administrative, financial, accounting and marketing work. The program includes disciplines, including office management and automation, business management, marketing and product management, and hotel management.
2. The Program of Engineering and Applied Arts focuses on giving students the capabilities to integrate into the industrial market and keep pace with urban development while maintaining a distinguished academic level. The program includes specialties, including architecture and civil, land surveying and graphic design.
3. The Health and Social Sciences Program, which focuses on providing students with the opportunity to enter health and social professions to fill the deficit in the fields of various health and supporting social professions. The program includes specialties, including kindergartens, secretarial work, medical records, physiotherapy and nursing.

Qalandia Vocational Training Centre offers 17 specialties in the various professions needed by the local labour market, ranging from telecommunications, electricity and maintenance specializations of all kinds to others. To join these programs, 10th, 11th and 12th grades are required to be successfully completed. The duration of the study for these programs is one academic year followed by 3 to 6 months of practical training in enterprises, companies and factories except diesel and mechatronics, which require two-year study period.

Whilst 658 graduates turned out from Ramallah Women's Training Center (Al-Tira) and Qalandia Training Centre in the 2018/19 academic year, 1,098 students enrolled in the next academic year of 2019/20.

Main achievements:

UNRWA has achieved high employment rates for graduates from both colleges with an employment rate of 84.56% for graduates in the 2017/18 school year. This demonstrates the competence and excellence of the graduates as well as the need of the labour market for available specialties.

UNRWA has also been keen to continue partnerships with companies, community service institutions and ministries associated with the disciplines offered, to develop curricula and to provide a suitable student training environment. Amongst them is the Jerusalem District Electricity Company, which works with the staff of the Qalandia Center for the development of courses for electricity specialties and gives priority in the recruitment of graduates of the center over other applicants. In addition, UNRWA networked and built a partnership with the Palestinian Ministry of Health, civil defense institutions and Paltel Group.

VET program continued to focus its efforts on meeting the needs of skilled and technical labour for the local and regional labour market and on raising the level of participation of employers and graduates of vocational training centers in making decisions affecting vocational and technical training courses. Priorities are also taken care of to increase technical and professional capacities to raise the competence of training and vocational teaching staff.

Main challenges and obstacles:

Although UNRWA centers are interested in providing a high level of vocational training, there are constraints facing these centers. Most notably are the financial pressures faced by UNRWA, the limited availability of places despite the increasing number of applications each year, the need for trainers to train to keep up with the development of equipment and professional requirements, and the training equipment available for some professions is outdated compared to those used in the labour market.

Relation with labor market:

It is necessary to link educational institutions to the labour market to know and meet their needs. However, there is currently no systematic cooperation between UNRWA vocational training centers and employment institutions. Cooperation is conducted in an improvised manner without a solid foundation in the strategic framework. There are also no mechanisms through which the content and training curriculum are regularly updated. Moreover, vocational educational institutions do not receive feedback from operational institutions. Expectedly, although trainees have been provided with training opportunities in an actual work environment for several months, this duration is not enough to fully prepare the trainee for the job market.

However, UNRWA centers take advantage of the possibilities available to communicate with the labour market in order to ensure that graduates are followed up and mentored. UNRWA has established the Employment and Vocational Guidance Office in its vocational education centers. The office aims to expand the network of relationships with the local market to introduce them to graduates of the agency's colleges to contribute to increasing their employment rate. The Office helps graduates create jobs commensurate with their qualifications and skills by communicating with different economic enterprises and by monitoring the labour market variables. In addition, it

holds several workshops with students expected to graduate to introduce them to the labor market, how to apply for the right job and write a C.V. through the use of experts in this field. Based on statistical studies conducted by UNRWA, its graduates have no difficulty in obtaining appropriate work, because teaching materials are appropriate to the reality of the jobs.

Chapter 4: Study Procedures and Analysis Results

4.1. Methodology and Procedures

The first part of this chapter includes a description of the study community, its sample, sample selection procedures, the method of selection, as well as study tools, preparation steps, obstacles to its implementation, confirmation of its sincerity and consistency, a description of the procedures applied, the treatments used to analyze data and information, and extract results.

4.1.1. Methodology

This study was worked in simultaneous and successive steps, using the quantitative analytical approach, because of the different data and information collected in the study. The quantitative approach also gives general information about the sample, and large numbers in terms of coverage.

4.1.2. Study Community

The study community consists two categories:

1. All employees working in institutions providing vocational education and training.
2. Employers (and their representatives) in the area related to vocational education and training who have data with VET institutions to communicate with, who meet the requirements of practical training and are officially registered with the relevant institutions.

4.1.3. Study Sample

A simple random sample and its size was :

- 140 staff members working in institutions providing vocational education and training. Their own questionnaire was distributed, with 130 questionnaires returned, with a percentage of 93%.
- 110 employers or their representatives. Their own questionnaire was distributed, and the number of returned questionnaires, with a percentage of 82%.

The tables below show the distribution of the study for each of the study instruments according to demographic variables.

Institutions Questionnaire

Table 4Distribution of the study sample by age

Age	Number	Percentage
Less than 25 years	6	4.6 %
25 – 34 years	40	30.8 %
35 – 44 years	50	38.5 %
45 years and more	32	24.6 %
Unspecified	2	1.5%
Total	130	100 %

More than one third of the sample (38.5%) were aged 35-44 years, more than a quarter (30.8%) were between 25 and 34 years of age, 24.6% were aged (45 years and older), and 4.6% were aged (under 25 years of age), while (1.5%) were not specified.

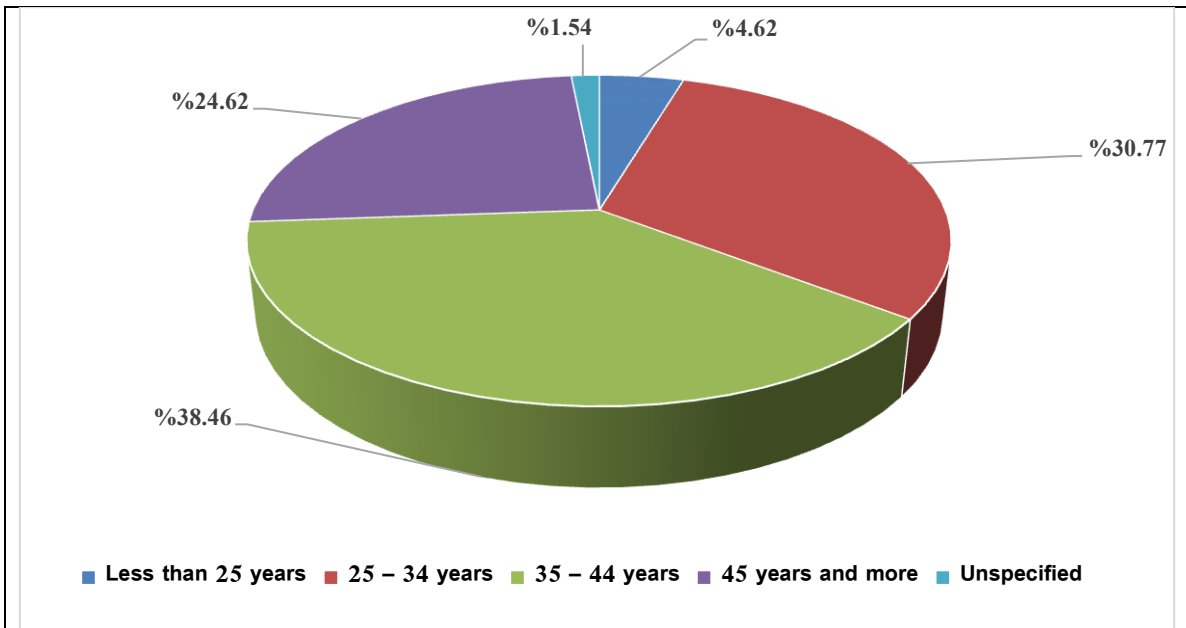


Figure 4 Distribution of the study sample by age

Table 5: Distribution of the study sample by gender

Gender	Number	Percentage
Male	85	65.4 %
Female	45	34.6 %
Total	130	100 %

Males make up about two-thirds of the study sample (65.4%), while females (34.6%).

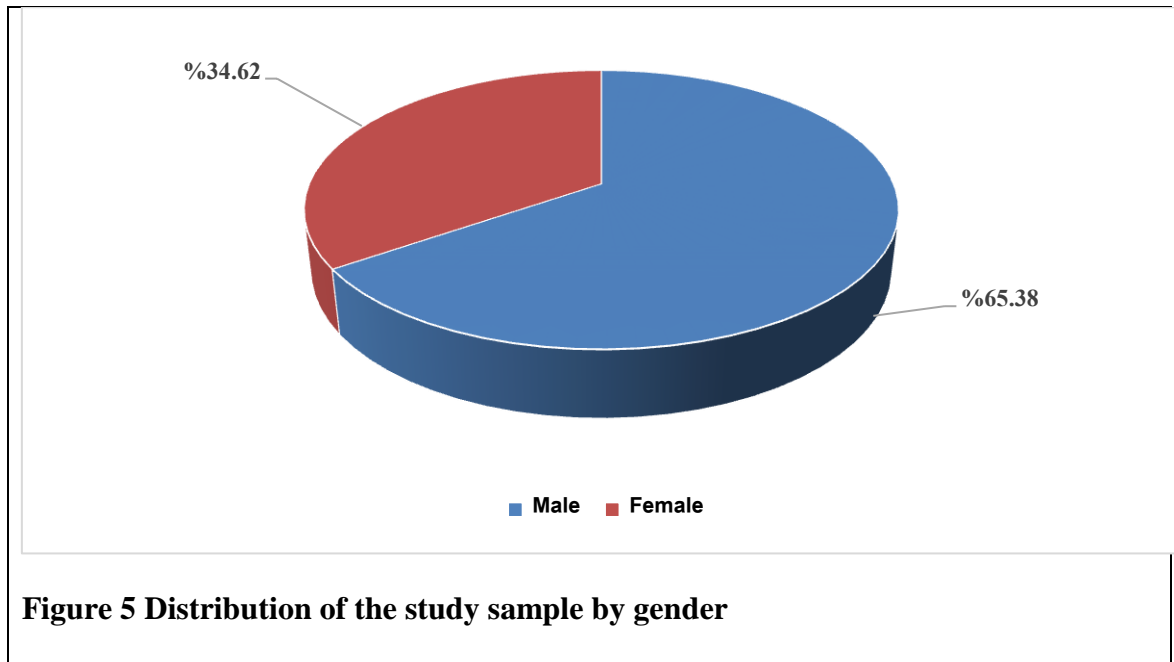


Table 6 Distribution of the study sample by qualification

Qualification	Number	Percentage
Tawjehi and less	5	3.8 %
Diploma	24	18.5 %
Bachelor	80	61.5 %
Graduate Studies	21	16.2 %
Total	130	100 %

About two-thirds of the study sample (61.5%) have a bachelor's degree, 18.5% have a diploma, 16.2% have postgraduate studies, and (3.8%) have a tawjehi or less.

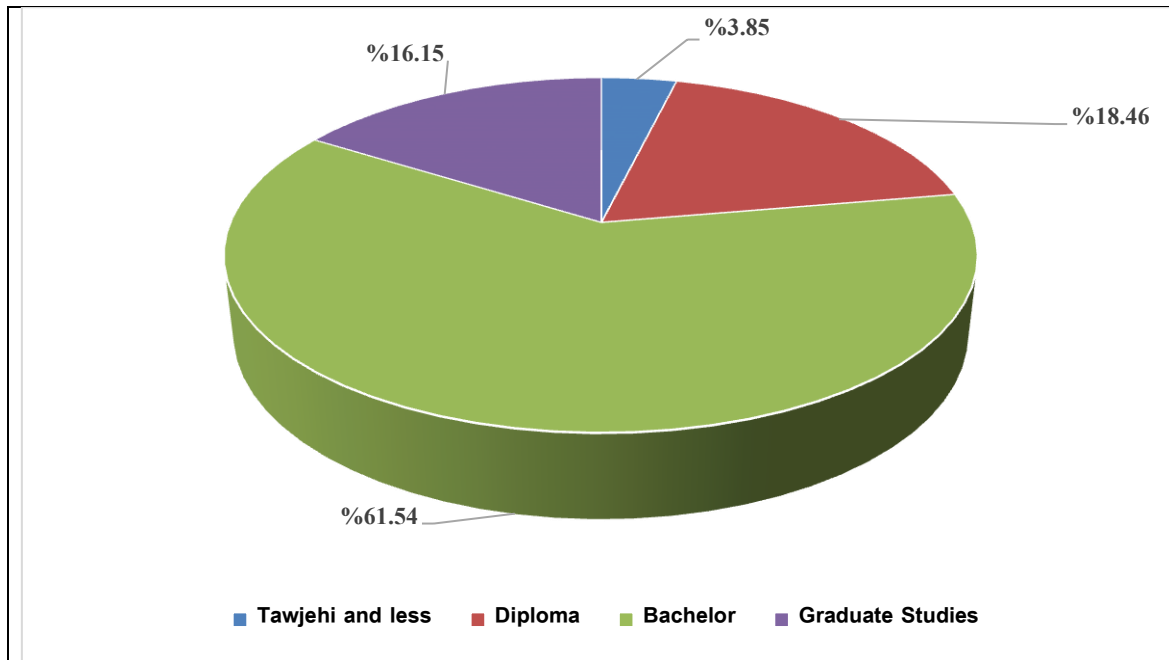


Figure 6 Distribution of the study sample by qualificatio

Table 7 Distribution of the study sample by job title

Job Title	Number	Percentage
Employee at vocational education/ training department	15	11.5 %
School/ center manager	59	45.4 %
Teacher	56	43.1 %
Total	130	100 %

About half of the sample (45.4%) are staffed as center/school manager, 43.1% work as teachers, and (11.5%) are employees of education/vocational training departments.

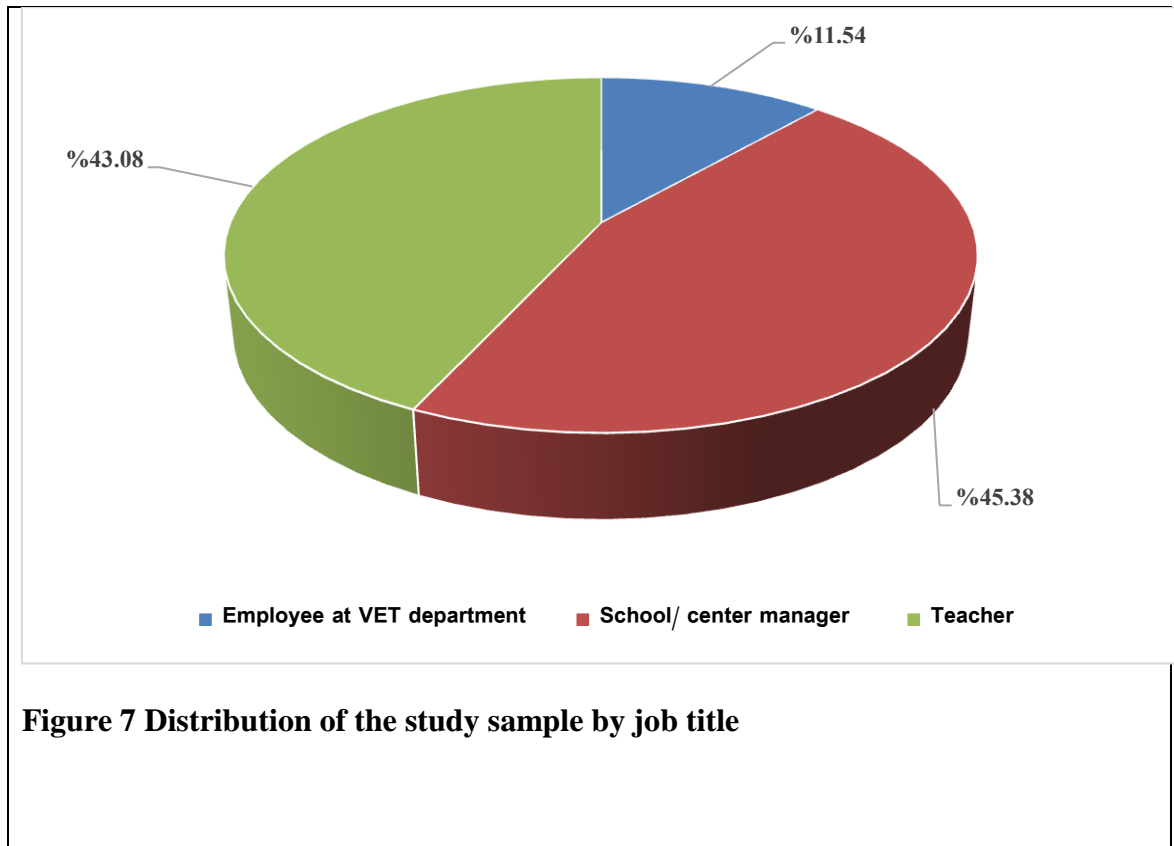


Table 8 Distribution of the study sample by years of experience

Years of Experience	Number	Percentage
Less than 10 years	50	38.5 %
10 – 20 years	53	40.8 %
More than 20 years	27	20.8 %
Total	130	100 %

More than one third of the study sample (40.8%) had years of experience (10-20 years), 38.5% had less than 10 years of experience, and 20.8% had more than 20 years of experience.

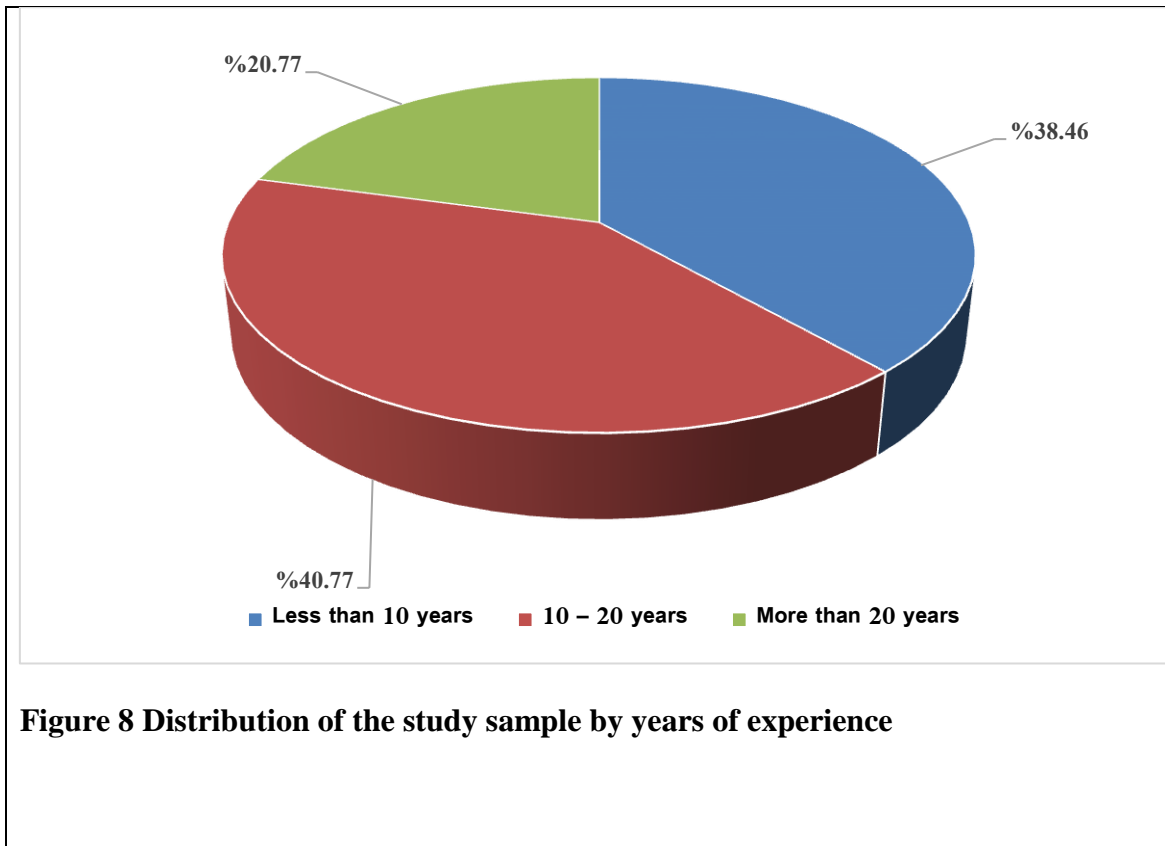
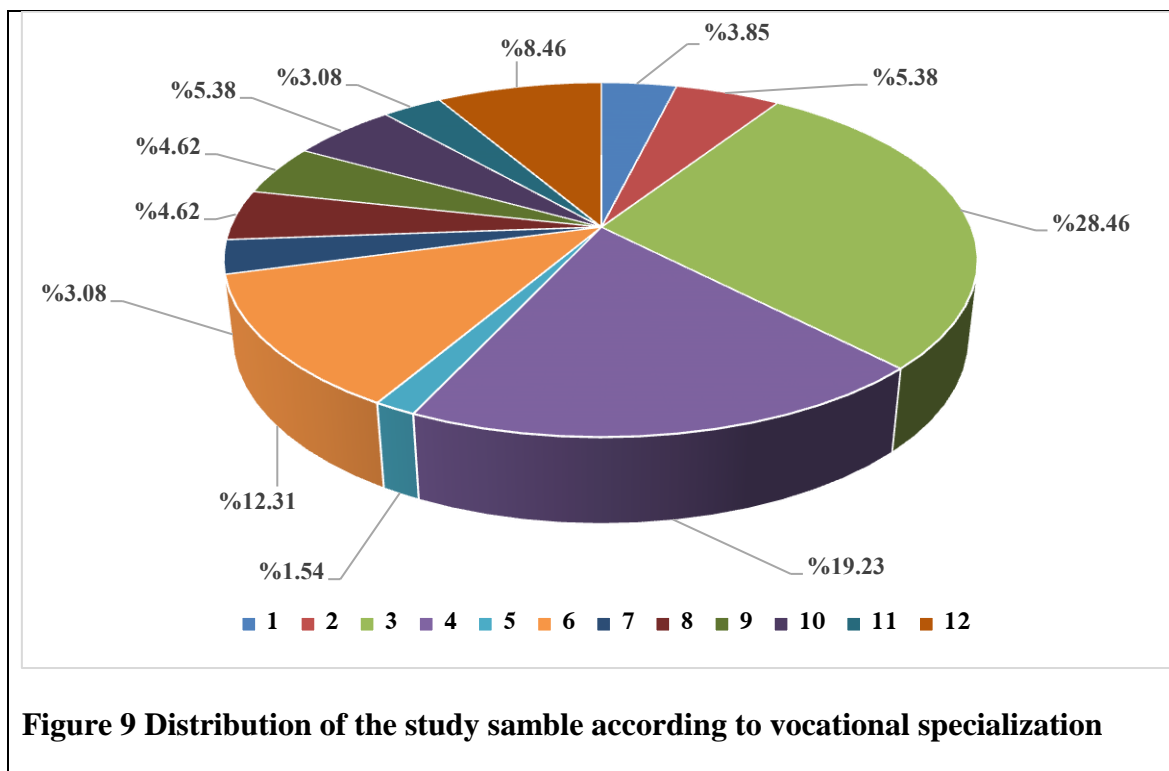


Table 9 Distribution of the study samble according to vocational specialization

Number	Vocational specialization	Number	Percentage
1	Stone, marble and building	5	3.8 %
2	Mechanics	7	5.4 %
3	Electricity and what follows	37	28.5 %
4	Computer	25	19.2 %
5	Aluminum	2	1.5 %
6	Vehicles	16	12.3 %
7	Agricultural	4	3.1 %
8	Makeup and hairdressing	6	4.6 %

Number	Vocational specialization	Number	Percentage
9	Welding and metal formation	6	4.6 %
10	Carpentry	7	5.4 %
11	Hotel services	4	3.1 %
12	Tenth vocational grade	11	8.5 %
	Total	130	100 %

More than a quarter of the study sample (28.5%) were vocational (Category 3), followed by category (4) (19.2%), category (6) at 12.3%, while the lowest percentage was for category (5) (1.5%).



Annex 5 shows the encoding table of disciplines.

Employers' Questionnaire:**Table 10 Distribution of the study sample by age**

Age	Number	Percentage
Less than 30 years	22	24.4 %
30 – 60 years	40	44.4 %
More than 60 years	28	31.1 %
Total	90	100 %

More than one third of the sample (44.4%) were between the ages of 30 and 60, more than a quarter (31.1%) were aged (over 60 years of age) and (24.4%) were aged (under 30 years of age).

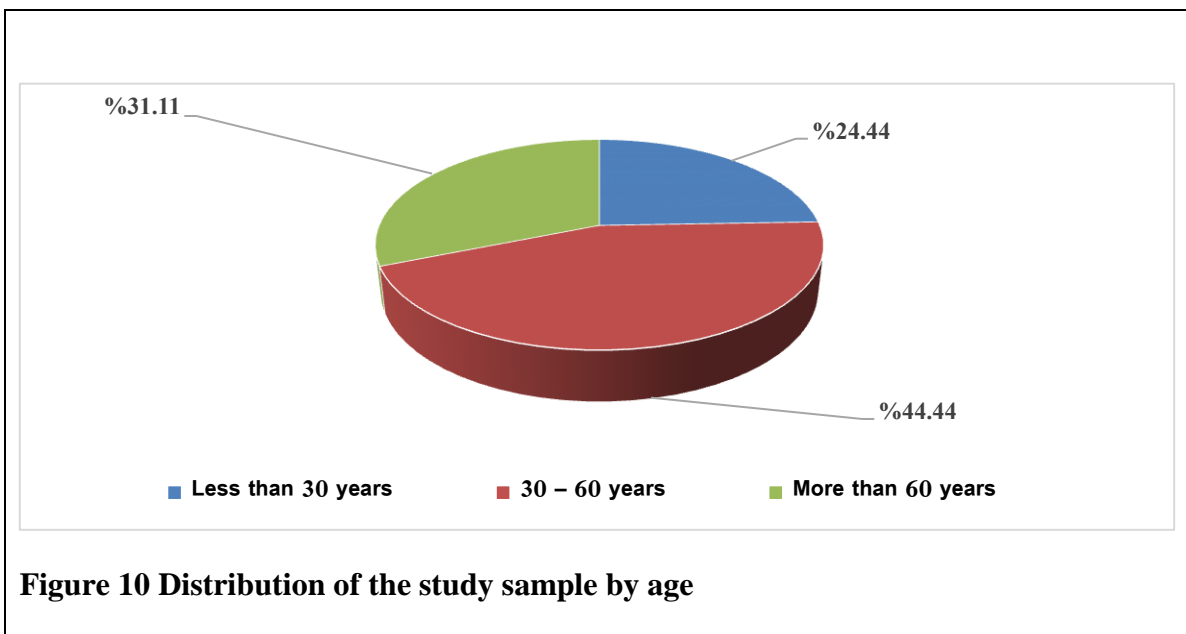
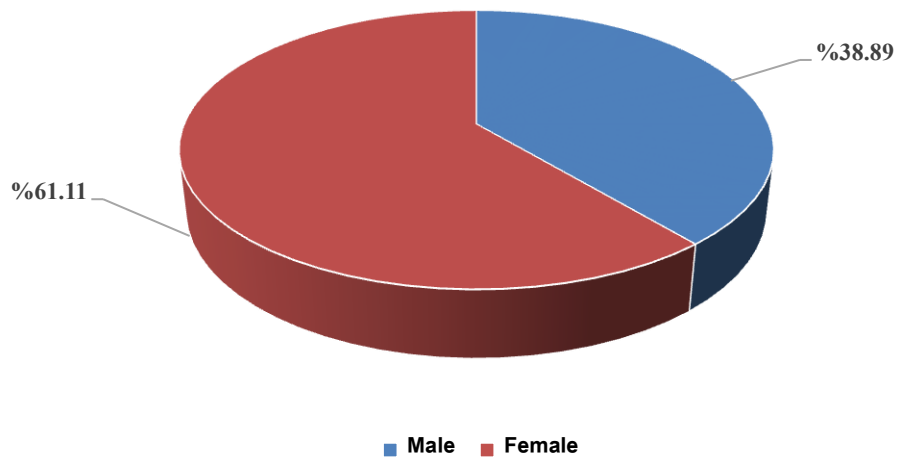


Table 11 Distribution of the study sample by gender

Gender	Number	Percentage
Male	35	38.9 %
Female	55	61.1 %
Total	90	100

Females make up about two-thirds of the study sample (61.1%), while males (38.9 %).

**Figure 11 Distribution of the study sample by gender****Table 12 Distribution of the study sample by qualification**

Qualification	Number	Percentage
Tawjehi and less	30	33.3 %
Diploma	27	30.0 %
Bachelor	26	28.9 %

Qualification	Number	Percentage
Graduate Studies	7	7.8 %
Total	90	100 %

One third of the study sample (33.3%) have tawjehi or less, 30.0% have a diploma, 28.9% have bachelor's degree, and 7.8% have postgraduate studies.

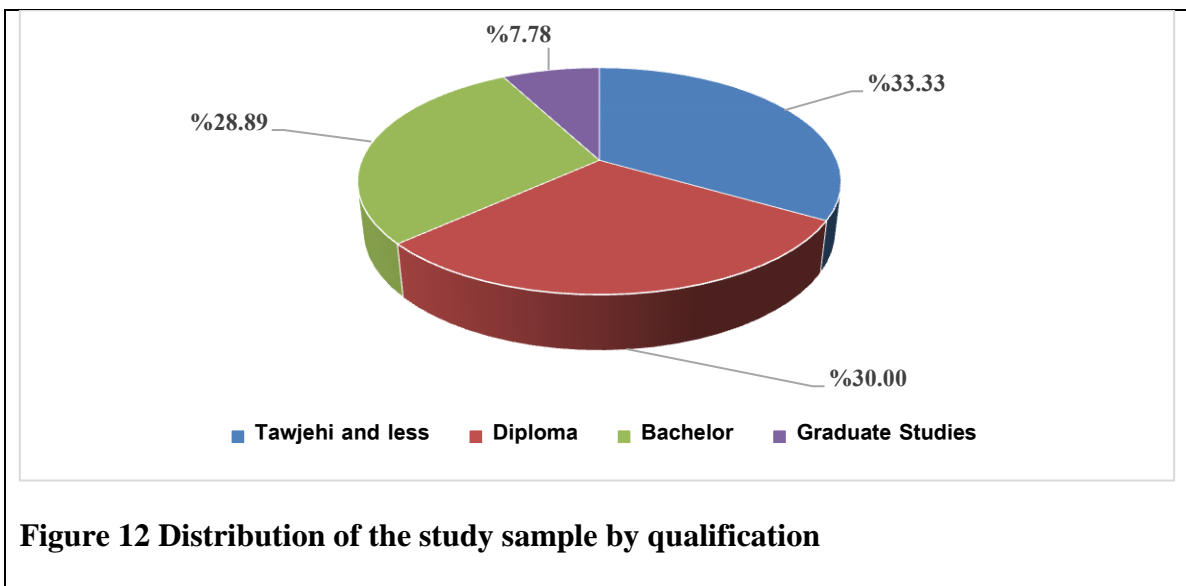


Table 13 Distribution of the study sample by living place

Living Place	Number	Percentage
Camp	25	27.8
Village	12	13.3
City	53	58.9
Total	90	100

More than half of the study sample (58.9%) live in cities, 27.8% live in camps, and (13.3%) live in villages.

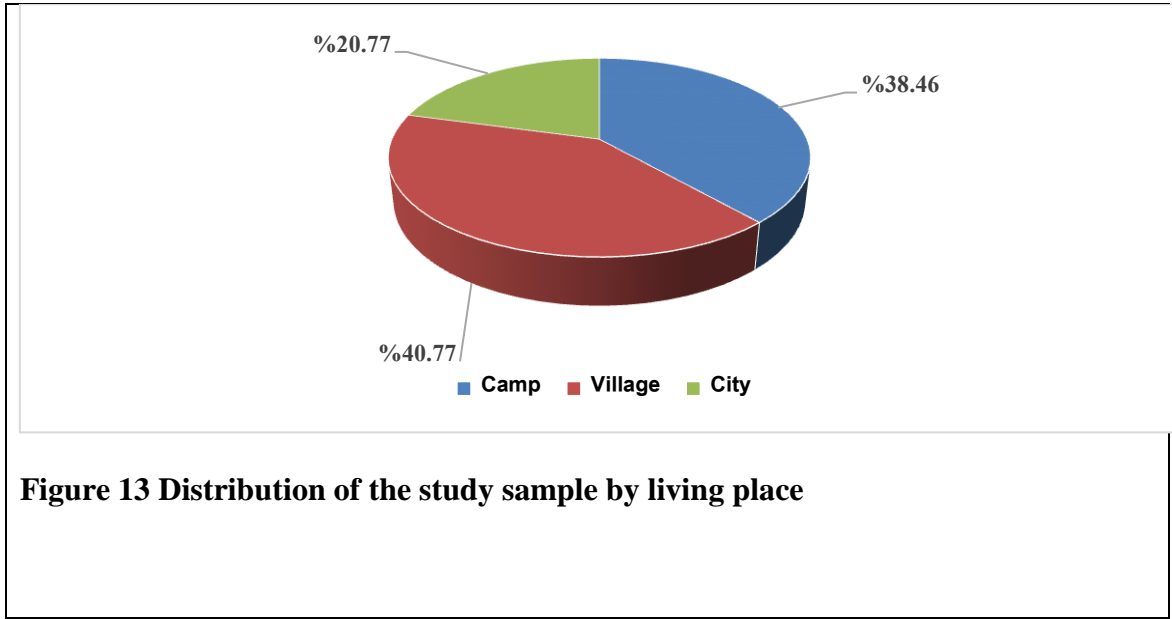


Table 14 Distribution of the study sample according to the field of work of the institution

Number	The field of work of the institution	Number	Percentage
1	Stone, marble and building	3	3.3 %
2	Mechanics	6	6.7 %
3	Electricity and what follows	3	3.3 %
4	Computer	22	24.4 %
5	Aluminum	3	3.3 %
6	Vehicles	10	11.1 %
7	Agricultural	22	24.4 %
8	Makeup and hairdressing	8	8.9 %
9	Welding and metal formation	3	3.3 %
10	Carpentry	10	11.1 %

Number	The field of work of the institution	Number	Percentage
11	Hotel services	3	3.3 %
12	Tenth vocational grade	6	6.7 %
13	Sales and marketing	3	3.3 %
	Total	90	100 %

About a quarter of the sample of the study (24.4%) for the field of work of the establishment (4), the same percentage (24.4%) for the field (7), followed by (11.1%) for each of the business areas (6,10), and (8.9%) for domain (8), (6.7%) for both areas (2, 12) and (3.3%) for each area (1, 3, 5, 9, 11, 13).

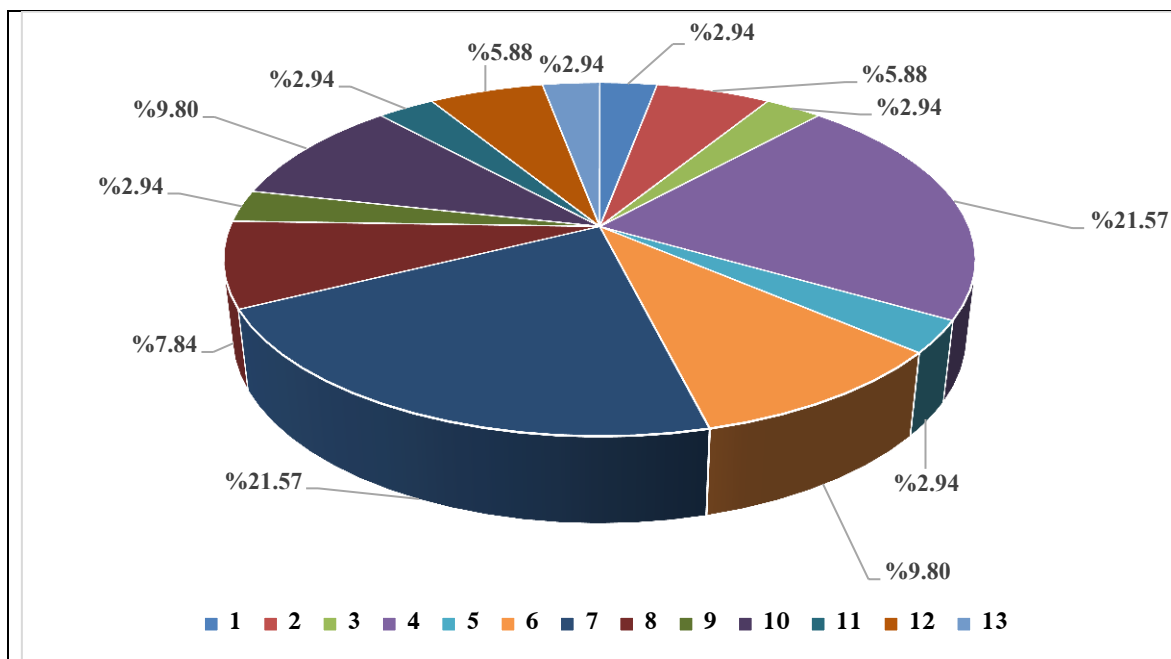


Figure 14 Distribution of the study sample according to the field of work of the institution

Annex 5 shows the encoding table of disciplines.

Table 15 Distribution of the study sample according to the age of the institution

Institution age	Number	Percentage
Less than 20 years	46	51.1 %
20 – 40 years	33	36.7 %
More than 40 years	11	12.2 %
Total	90	100 %

More than half of the study sample (51.1%) of their facilities (under 20 years of age), more than one third (36.7%) of their facilities were between 20 and 40 years of age, and (12.2%) were aged (over 40 years).

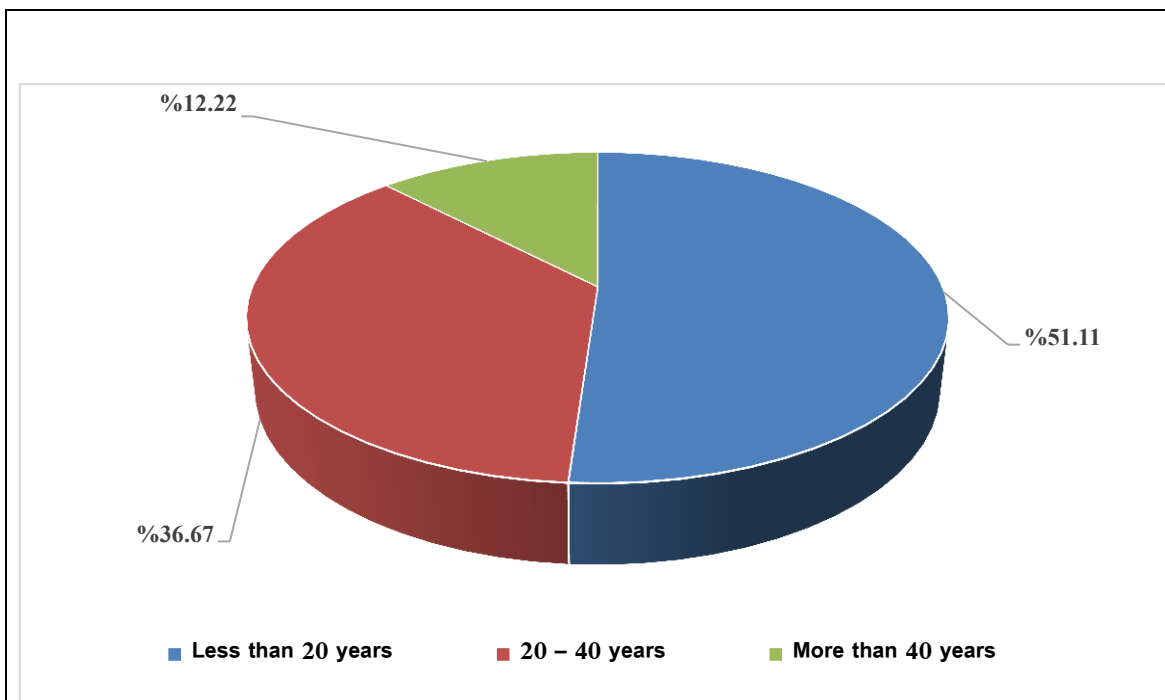
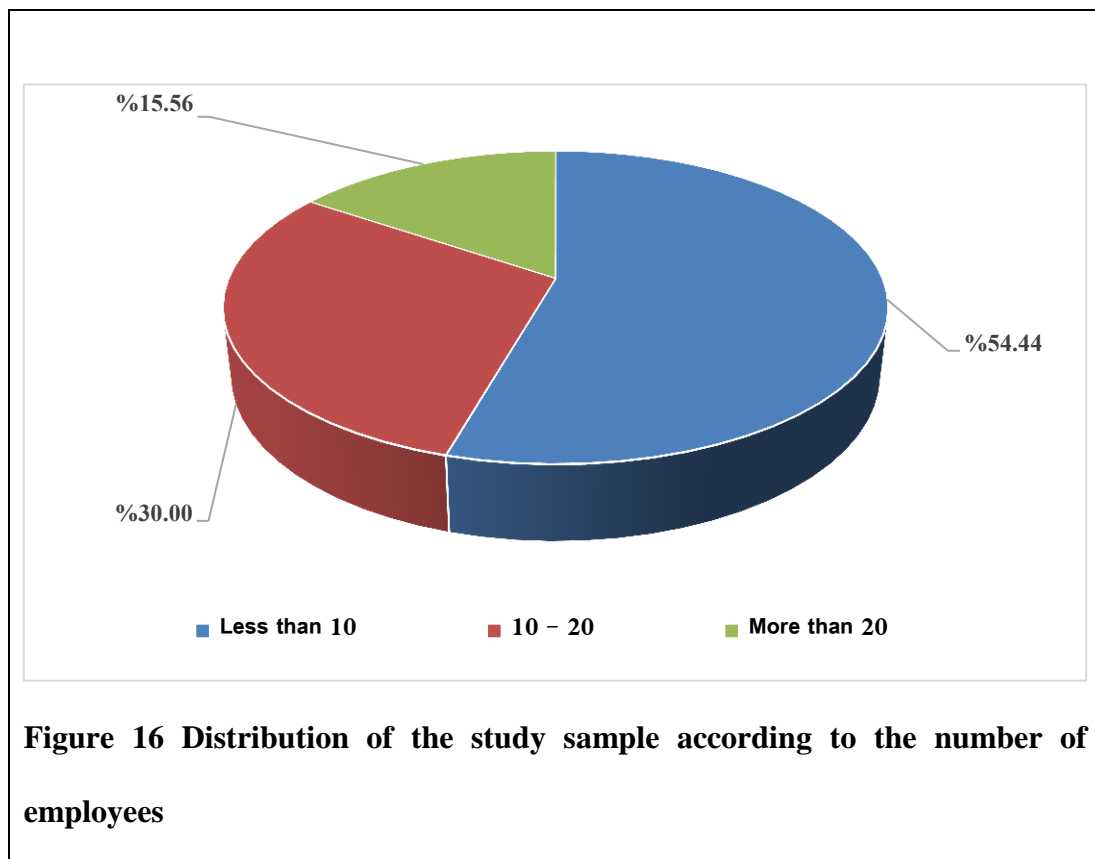
**Figure 15 Distribution of the study sample according to the age of the institution**

Table 16 Distribution of the study sample according to the number of employees

Number of employees	Number	Percentage
Less than 10	49	54.4 %
10 - 20	27	30.0 %
More than 20	14	15.6 %
Total	90	100 %

More than half of the study sample (54.4%) has fewer than 10 employees in their institutions ,(30.0%) the number of employees in their institutions ranges from (10-20) people, and (15.6%) more than 20 people work in their institutions.



4.1.4. Study Variables

The variables of this study were divided into two types:

- Independent variables: the reality of education, vocational training and the needs of the labour market.
- Dependent variables: variables that are affected by independent variables, namely, the skills of graduates of vocational education and training.

4.1.5. Study Tools

Two questionnaires were built for this study, the Institutions Survey and the Employers' Survey:

1. Institution questionnaire: This questionnaire is made up of three sections: the first section includes personal variables (age, sex, scientific qualification, job title, years of experience), the second section is 39 paragraphs spread over four sub-areas of the field of skills of graduates of vocational education and training (personal, social, professional, development), and the third section is 19 paragraphs distributed in the field of the reality of education, vocational training and the labour market (the reality of vocational education and training, labour market needs).
2. Employers' questionnaire: The first section includes personal variables (age, sex, scientific qualification, job title, years of experience), the second section is divided into four sub-areas of the skills of graduates of vocational education and training (personal, social, professional and development), and the third section is 14 paragraphs distributed in the field of education, vocational training and the labour market (the reality of vocational education and training, labour market needs).

4.1.6. Credibility of Study Tools

The sincerity of the instruments has been verified through the sincerity of the content or content, i.e. the extent to which each instrument represents the aspects of its measurement, which was done during the process of designing the instruments, and judging them by specialists in the subject matter of study, statistics and scientific research.

4.1.7. Stability of Study Tools

The stability of the tool shows to what extent the scale gives close readings each time it is used, using the Kronbach Alpha coefficient during data analysis, the value of stability transactions for each instrument is as follows:

Institutions questionnaire: The value (Kronbach Alpha) of the tool as a whole was 0.964; that is, the study tool is highly stable, the table below shows the stability factor for sub-areas, and annex (1) shows institutions questionnaire.

Table 17 Stability factor for the skills areas of graduates of vocational education and training for the institution questionnaire

Domain	Stability factor
Personal skills	0.917
Social skills	0.842
Professional skills	0.940
Development skills	0.869
Skills of graduates of VET	0.964

Employers' questionnaire: The value of the tool as a whole (0.949) was (0.949); that is, the study tool is highly stable, and the table below shows the stability factor for the field: the skills and sub-areas of vocational education and training graduates. Annex (2) shows the employers' questionnaire.

Table 18 Stability factor for the domain of skills of graduates of vocational education and training for the employers' questionnaire

Domain	Stability factor
Personal skills	0.955
Social skills	0.963
Professional skills	0.957
Development skills	0.936
Skills of graduates of VET	0.948

The table below shows the stability factor for the real-life of education, vocational training, the labour market and its sub-areas.

Table 19 Stability factor for areas of VET and the labour market for employer questionnaire

Domain	Stability factor
The reality of VET	0.919
Labor market needs	0.930
The reality of VET and the labour market	0.925

4.1.8. Study Procedures:

The study was worked through a number of steps:

- Literature review and previous studies on vocational training and education.
- Build the two study tools and examine their credibility and stability.
- Select a random sample from the study community, distribute the study tools to each sample, then collect and compute the tools.
- Quantitative analysis of sample data to answer study questions and examine their hypotheses.

4.1.9. Data and Information Collection:

The process of collecting data and information began after obtaining the approval of the Ministry of Education, the Ministry of Labor, and UNRWA to conduct the study through direct contact with direct officials of the education and vocational training sector in these institutions after submitting a document facilitating the task issued by the Arab American League to end the process of collecting information. Annex (3) shows the book of facilitating the mission issued by the Arab American University, and annex (4) the book of facilitating the mission issued by the Center for Educational Research and Development in the Ministry of Education.

4.1.10. Study Obstacles

1. Difficulty in communicating directly with the study community as a result of preventive measures during the Corona pandemic.
2. The study community was divided into two categories. Two questionnaires have been adopted, each addressing a particular group. Therefore, it was difficult to link their results.
3. Difficulty communicating with employers.
4. The study community did not respond significantly to the mobilization of the questionnaire.

5. The lack of comprehensive reports in some institutions with regard to education and vocational training.
6. Poor updating of statistical data on the Palestinian Central Statistics Bureau website.

4.2. Study Results

The results of the study were presented and discussed in the sequence of its questions, where the literature related to vocational education and training was reviewed, and this review was used to discuss the results of the study, and its recommendations.

With regard to statistical processing, after collecting the questionnaires, the options in the second section had been given certain grades, where the answer strongly agree (7) grades, agree (6) degrees, agree to some extent (5), neutral (4) degrees, oppose to some extent (3), strongly oppose (2), strongly oppose (1). The following measure of paragraph order has been adopted for the field of skills of vocational education graduates and for sub-areas in this area.

6.3 And above: Very high

5.44 - 6.3: High

4.58 - 5.44: Fairly high

3.72 - Less than 4.58: Fairly low

1.8 - Less 3.72: Low

1- Less than 1.86: Very low

4.2.1. View Results:

To answer the main study question, and sub-questions, I extracted numbers, percentages, arithmetic averages, and standard deviations of different areas. Then its hypotheses were examined using appropriate tests for each hypothesis.

The main question the study is trying to answer is:

What are the main factors affecting the quantity and quality of vocational graduates in the West Bank?

To answer the main study question, the following sub-questions were answered:

The results of answering the first question, which states :What are the main factors that affect the student's decision to choose between academic or vocational education?

To answer this question, average and standard deviations in the area of personal skills of VET graduates were presented from the point of view of both VET institutions and employers.

1. Workers in vocational education and training institutions

Table 20 Personal skills of VET graduates

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
1	Have the self-confidence to make the right decisions at the right time.	4.47	1.546	63.9 %	Fairly low
2	Has autonomy at work without constantly seeking assistance.	4.35	1.514	62.3 %	Fairly low
3	Solves the problems faced at work.	4.52	1.474	64.7 %	Fairly low
4	Take responsibility for the	4.61	1.635	65.9 %	Fairly high

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
	work and the institution.				
5	Work under pressure.	4.58	1.665	65.5 %	Fairly high
6	Shows the ability to work outside of office hours.	4.49	1.546	64.2 %	Fairly low
7	Has a decent look while in the workplace.	4.77	1.602	68.2 %	Fairly high
8	Has honesty and Secretariat.	4.48	1.541	64.1 %	Fairly low
9	Compliance with the directives and instructions issued by officials.	4.48	1.541	64.1 %	Fairly low
10	Performs the tasks assigned to him thoroughly according to the requirements of the job.	4.69	1.584	67.1 %	Fairly high
11	Has planning skills and set clear and specific goals.	4.61	1.444	65.9 %	Fairly high
12	Has the skill of managing time to get the work done on time.	4.48	1.541	64.1 %	Fairly low
13	Has the responsibility to provide feedback on his work and the problems he faces for his officials.	4.63	1.510	66.2 %	Fairly high

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
Area 1: Personal Skills		4.55	1.099	64.4%	Fairly low

Table (17) above shows averages, standard deviations of personal skills paragraphs and scope, and the value of the averages of paragraphs ranged from (4.35) to the paragraph "has independence to work without continuously seeking assistance" at a minimum, and (4.77) The paragraph " Has a decent look while in the workplace " at the highest level; that is, the answers of the respondents ranged from somewhat low to somewhat high, and in general, the field of personal skills received an average (4.55); at a fairly low rank.

2. Employers

Table 21 Personal skills of VET graduates

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
1	Have the self-confidence to make the right decisions at the right time.	4.63	1.712	66.3	Fairly high
2	Has autonomy at work without constantly seeking assistance.	4.59	1.741	65.6 %	Fairly high
3	Solves the problems faced at work.	5.07	1.871	72.5 %	Fairly high
4	Take responsibility for the work and the institution.	5.09	1.640	72.8 %	Fairly high

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
5	Work under pressure.	4.63	1.402	66.3 %	Fairly high
6	Shows the ability to work outside of office hours.	4.83	1.750	69.1 %	Fairly high
7	Has a decent look while in the workplace.	5.46	1.552	78.0 %	High
8	Has honesty and Secretariat.	5.10	1.649	72.9 %	Fairly high
9	Compliance with the directives and instructions issued by officials.	5.28	1.622	75.5 %	Fairly high
10	Performs the tasks assigned to him thoroughly according to the requirements of the job.	4.84	1.682	69.3 %	Fairly high
11	Has planning skills and set clear and specific goals.	4.70	1.751	67.2 %	Fairly high
12	Has the skill of managing time to get the work done on time.	4.63	1.712	66.3 %	Fairly high
13	Has the responsibility to provide feedback on his work and the problems he faces for his officials.	4.59	1.741	65.6 %	Fairly high
Area 1: Personal Skills		4.93	1.389	70.5 %	Fairly high

Table (18) above shows the averages, standard deviations of personal skills paragraphs and their area, and the averages of paragraphs ranged from (4.59) to the two paragraphs "has autonomy to work without constantly seeking assistance" and "has the responsibility to provide feedback About his work and the problems he faces for his officials" minimum, and (5.46) of the paragraph "has a decent appearance while in the workplace" at the highest level, i.e. the answers of the respondents ranged from somewhat high to high, and in general, the field of personal skills an average (4.93).

The results indicate similar views of both VET workers and employers in paragraphs with the highest average and lowest average of personal skills paragraphs, although the values of these averages differ and are higher among employers (4.93) than those in VET institutions (4.55).

The results of answering the second question, which states: To what extent does the family and society affect the student's orientation towards vocational education?

And the results of answering the third question, which states: To what extent the family, society and even the student themselves are aware of the importance of vocational education?

To answer these questions, the averages and standard deviations in the area of social skills of VET graduates were presented from the point of view of both vocational education and training institutions and employers.

1. Workers in vocational education and training institutions

Table 22 Social skills of VET graduates

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
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#	Paragraph	Average	Standard deviation	Percentage	Degree of response
1	It is easy for graduates to engage in the labor market.	4.77	1.518	68.2 %	Fairly high
2	Has communication skills with the surrounding environment.	4.48	1.536	64.0 %	Fairly low
3	Has a spirit of cooperation with the team.	5.12	1.384	73.2 %	Fairly high
4	Understands the principle of role distribution and applies it at work.	4.97	1.174	71.1 %	Fairly high
5	Accepts the idea of a president and subordinate at work.	5.25	1.371	75.1 %	Fairly high
6	Has the ability to manage a group of individuals within the facility.	4.93	1.415	70.5 %	Fairly high
7	Has an appropriate approach to providing guidance to those who head them.	4.98	1.367	71.2 %	Fairly high
Area 2: Social Skills		4.93	1.003	70.5%	Fairly high

Table (19) above shows the averages, standard deviations of social skills paragraphs and their scope. The value of the paragraphs' averages ranged from (4.48) to a minimum of "has communication skills with the surrounding environment", and

(5.25) for the paragraph "accepts the idea of a president and subordinate at work" at a higher level; that is, the answers of the respondents ranged from somewhat low to somewhat high. In general, the field of social skills received an average (4.93); at a fairly high level.

2. Employers:

Table 23 Social skills for VET graduates

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
1	It is easy for graduates to engage in the labour market.	4.66	1.819	66.6 %	Fairly high
2	Has communication skills with the surrounding environment.	4.43	1.768	63.4 %	Fairly low
3	Has a spirit of cooperation with the team.	4.54	1.749	65.0 %	Fairly low
4	Understands the principle of role distribution and applies it at work.	4.43	1.749	63.4 %	Fairly low
5	Accepts the idea of a president and subordinate at work.	4.60	1.822	65.8 %	Fairly high
6	Has the ability to manage a group of individuals within the facility.	4.47	1.730	63.9 %	Fairly low
7	Has an appropriate approach to providing guidance to those	4.37	1.738	62.4 %	Fairly low

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
	who head them.				
Area 2: Social Skills		4.50	1.601	64.4 %	Fairly low

Table (20) above shows averages, standard deviations of social skills paragraphs and their scope. The value of the averages of paragraphs ranged from (4.37) to the paragraph "has an appropriate method of providing guidance to those who head them" at a minimum, and (4.66) The paragraph " It is easy for graduates to engage in the labour market." at a higher level; that is, the answers of the respondents ranged from somewhat low to somewhat high. In general, the field of social skills received an average account (4.50); at a fairly low level.

The results indicate a difference in the views of both VET workers and employers in paragraphs with the highest average and lowest average social skills paragraphs, and in general the answers of workers in VET institutions ranged from somewhat low to somewhat high, and in general, the field of social skills received an average (4.93); at a fairly high level. While employers' answers ranged from fairly low to somewhat high, in general, the field of social skills earned an average (4.50); at a fairly low level. In other means, the average field for workers in vocational education and training institutions is higher than that of employers.

The results of answering the fourth question, which states :How quickly a vocational education graduate gets a job compared to an academic graduate?

To answer this question, averages and standard deviations in the professional and development field of VET graduates were presented.

1. Workers in vocational education and training institutions

Table 24 Professional skills of VET graduates

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
1	Deals with charts and drawings.	5.01	1.486	71.6 %	Fairly high
2	Understands English technical terms and their use.	4.92	1.367	70.4 %	Fairly high
3	Uses professional devices and tools in the best way.	5.17	1.353	73.9 %	Fairly high
4	Has theoretical knowledge of the field of work.	5.17	1.479	73.9 %	Fairly high
5	Uses catalogs where necessary.	5.12	1.201	73.3 %	Fairly high
6	Follows occupational safety and health procedures.	5.38	1.366	77.0 %	Fairly high
7	Defines the specifications of the tools and devices necessary for the work.	4.82	1.444	69.0 %	Fairly high
8	Understands the meaning of work-related symbols and abbreviations.	5.27	1.287	75.4 %	Fairly high
9	Accurate at work.	5.21	1.322	74.5 %	Fairly high

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
					high
10	Takes into account work quality standards.	4.85	1.415	69.4 %	Fairly high
11	High productivity during working hours.	5.11	1.319	73.0 %	Fairly high
Area 3: Professional Skills		5.09	1.082	72.9 %	Fairly high

Table 21 above shows averages and standard deviations of professional skills paragraphs and scope. The averages for paragraphs ranged from (4.85) at a lower level of "work quality standards" and (5.38) for the paragraph "following occupational safety and health procedures" at a higher level. In general, the field of professional skills has an average of (5.09) at a higher level.

Table 25 Development skills for VET graduates

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
1	The graduate has the ability to learn e-learning.	4.80	1.355	68.6 %	Fairly high
2	Offers innovative ways to do work.	4.83	1.313	69.1 %	Fairly high
3	Keeps pace with developments in the job.	5.07	1.421	72.5 %	Fairly high

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
4	Learns new skills associated with the work.	4.79	1.396	68.5 %	Fairly high
5	Looking online to follow the latest developments in the job.	4.88	1.358	69.7 %	Fairly high
6	Deals with the advanced devices and tools that work requires.	5.02	1.279	71.8 %	Fairly high
7	Self-initiated.	5.03	1.245	71.9 %	Fairly high
8	Employs modern technology at work.	4.78	1.432	68.6 %	Fairly high
Area 4: Development Skills		4.90	0.976	70.1%	Fairly high

Table (22) above shows averages, standard deviations of development skills paragraphs and scope, and the value of the calculation averages of paragraphs ranged from (4.78) to the paragraph "Employs modern technology at work" at a lower level of "Self-initiated" at a higher level. The answers of the respondents are somewhat high. In general, the field of development skills has an average account (4.90); at a fairly high level.

2. Employers:

Table 26 Professional skills of VET graduates

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
1	Deals with charts and drawings.	3.97	1.869	56.7 %	Fairly low
2	Understands English technical terms and their use.	4.02	1.767	57.5 %	Fairly low
3	Uses professional devices and tools in the best way.	4.56	1.800	65.1 %	Fairly low
4	Has theoretical knowledge of the field of work.	4.57	1.768	65.3 %	Fairly low

5	Uses catalogs where necessary.	4.24	1.86819	60.7 %	Fairly low
6	Follows occupational safety and health procedures.	4.29	1.967	61.3 %	Fairly low
7	Defines the specifications of the tools and devices necessary for the work.	4.41	1.641	63.1 %	Fairly low
8	Understands the meaning of work-related symbols and abbreviations.	4.89	1.487	69.9 %	Fairly high
9	Accurate at work.	4.58	1.729	65.5 %	Fairly high

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
10	Takes into account work quality standards.	4.77	1.736	68.2 %	Fairly high
11	High productivity during working hours.	4.40	1.695	62.9 %	Fairly low
Area 3: Professional Skills		4.43	1.474	63.3%	Fairly low

Table (23) above shows averages, standard deviations of professional skills paragraphs and scope. The value of the averages of paragraphs ranged from (3.97) to lower level for “deals with charts and drawings” and (4.89) for paragraph “understands the meaning of symbols and abbreviations related to work” at a higher level. That is, the answers of the respondents ranged from somewhat low to somewhat high. In general, the field of professional skills received an average account (4.43); at a fairly low rank.

Table 27 Development skills for VET graduates

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
1	The graduate has the ability to learn e-learning.	4.48	2.046	64.0 %	Fairly low
2	Offers innovative ways to do work.	4.64	1.546	66.4 %	Fairly high
3	Keeps pace with developments in the job.	4.91	1.403	70.2 %	Fairly high

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
4	Learns new skills associated with the work.	4.59	1.817	65.6 %	Fairly high
5	Looking online to follow the latest developments in the job.	4.86	1.378	69.4 %	Fairly high
6	Deals with the advanced devices and tools that work requires.	4.42	1.689	63.2 %	Fairly low
7	Self-initiated.	4.84	1.564	69.3 %	Fairly high
8	Employs modern technology at work.	4.63	1.679	66.3 %	Fairly high
Area 4: Development Skills		4.67	1.376	66.8%	Fairly high

Table 24 above shows arithmetic averages, standard deviations of personal skills paragraphs and scope, and the value of the calculation averages of paragraphs ranged from (4.42) at the lowest level for the paragraph "Employs Modern Technology at Work" and (4.91) Paragraph "Keeps pace with developments in the job" at the highest level. That is, the answers of the respondents ranged from somewhat low to somewhat high. In general, the field of development skills received an average account (4.67); at a fairly high level.

The results indicate a difference in the views of both VET workers and employers in paragraphs with the highest average and lowest average for occupational skills

paragraphs. The answers of VET workers were fairly high, and in general, the field of professional skills earned an average (5.09). While employers' answers ranged from fairly low to somewhat high, overall, the field of professional skills earned an average (4.43). In other means, the average field for workers in vocational education and training institutions is higher than that of employers.

In the area of development skills, the views of both those working in vocational education and training institutions and employers are similar in the paragraphs with the lowest average. In the paragraphs that received the highest average, there is a difference between them. The answers of VET workers were fairly high, and in general the field of development skills earned an average account (4.90) at a fairly high level. Employers' answers ranged from fairly low to somewhat high, and overall the development skills field got an average (4.67) at a fairly high level. In other means, the average field for workers in vocational education and training institutions is higher than that of employers.

The results of answering the fifth question, which states :What specialties are understaffed and need to guide students towards them?

To answer this question, averages and standard deviations in the reality field of VET graduates and labour market needs were presented.

The reality of vocational education and training

1. Workers in vocational education and training institutions

Table 28 The reality of vocational education and training

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
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#	Paragraph	Average	Standard deviation	Percentage	Degree of response
1	The capacity of vocational centers and schools is suitable for the number of students enrolled	4.61	1.444	65.9 %	Fairly high
2	Provides adequate curricula for all disciplines.	4.48	1.541	64. 1%	Fairly low
3	Offering specialties that suit existing jobs.	4.63	1.510	66.2 %	Fairly high
4	Provides qualified trainers and teachers to graduate professional competencies.	4.77	1.518	68.2 %	Fairly high
5	Training methods provide an opportunity for vocational qualification for graduates.	4.48	1.536	64. 1 %	Fairly low
6	Institutions ensure that graduates have professional qualifications that enable them to enter the labour market.	5.12	1.384	73.2 %	Fairly high
7	The government's budget meets all the needs of the vocational education and	4.97	1.174	71. 1%	Fairly high

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
	training sector.				
8	Donor support for the sector is an essential part of work continuity.	5.25	1.371	75.1%	Fairly high
9	Vet-based institutions communicate with graduates and invite them to development workshops.	4.93	1.415	70.5 %	Fairly high
10	Institutions conduct training workshops for teachers in order to keep pace with the development of the profession and its requirements.	4.98	1.367	71.2 %	Fairly high
Area 1: The reality of vocational education and training		4.82	0.947	68.9 %	Fairly high

Table 25 above shows averages and standard deviations in the reality and scope of VET paragraphs. The value of the paragraphs' averages ranged from (4.48) to the paragraph "providing adequate curricula for all disciplines", "Training methods provide an opportunity for vocational qualification for graduates" and (5.25) for the paragraph

"Donor support to the sector is an essential part of work continuity" at a higher level. In other words, the answers of the respondents ranged from somewhat low to somewhat high. In general, the real-life field of vocational education and training has an average (4.82); at a higher level.

2. Employers:

Table 29 The reality of vocational education and training

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
1	The capacity of vocational centers and schools is suitable for the number of students enrolled	4.03	1.618	57.7 %	Fairly low
2	Provides adequate curricula for all disciplines.	4.06	1.712	58.0 %	Fairly low
3	Offering specialties that suit existing jobs.	4.22	1.497	60.4 %	Fairly low
4	Provides qualified trainers and teachers to graduate professional competencies.	4.40	1.688	62.9 %	Fairly low
5	Training methods provide an opportunity for vocational qualification for graduates.	4.63	1.659	66.3 %	Fairly high
6	Institutions ensure that graduates have professional	4.51	1.671	64.5 %	Fairly low

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
	qualifications that enable them to enter the labour market.				
7	Vet-based institutions communicate with graduates and invite them to development workshops.	4.26	1.809	60.9 %	Fairly low
Area 1: The reality of vocational education and training		4.30	1.368	61.5 %	Fairly low

Table 26 above shows the averages and standard deviations of the paragraphs of the reality and scope of vocational education and training. The value of the averages of paragraphs ranged from (4.03) to the paragraph "The capacity of vocational centers and schools is suitable for the number of students enrolled at a minimum, and (4.63) for the paragraph "Training methods provide an opportunity for vocational qualification for graduates". In other hands, the answers of the respondents ranged from somewhat low to somewhat high. In general, the real-life field of vocational education and training has an average (4.30); at a low level.

The results indicate a difference in the views of both VET workers and employers in paragraphs with the highest average and lowest average VET reality paragraphs. The answers of VET workers were somewhat high. In general, the reality field of VET earned an average (4.82), at a higher level. While employers' answers ranged from fairly low to somewhat high. In general, the reality field of VET earned an average (4.30) at a

lower level. In other means, the average of this field for workers in vocational education and training institutions is higher than that of employers.

Labour market needs

1. Workers in vocational education and training institutions

Table 30 Labour market needs

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
1	The infrastructure of schools and training centers is commensurate with the reality of the work.	5.01	1.486	71.6	Fairly high
2	Graduates get jobs commensurate with their specialties.	4.92	1.367	70.4	Fairly high
3	Employers communicate with the institution to provide them with their needs for specialties.	5.17	1.353	73.9	Fairly high
4	Graduates provide feedback to the institution about their working conditions.	5.17	1.479	73.9	Fairly high
5	The curriculum used covers all the needs of the job.	5.12	1.201	73.2	Fairly high
6	The number of graduates is	5.38	1.366	76.9	Fairly high

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
	suitable for the jobs opportunities available.				
7	Graduate specialties are suitable for employers' demand.	4.82	1.444	68.9	Fairly high
8	Employers communicate with vocational schools and training centers to attract graduates.	5.27	1.287	75.4	Fairly high
9	The institution receives feedback from employers about the performance of its graduates.	5.21	1.322	74.5	Fairly high
Area 2: Labour market needs		5.12	1.142	73.2	Fairly high

Table (27) above shows averages, standard deviations in labour market needs and area paragraphs. The value of the averages of paragraphs ranged from (4.82) to the paragraph "Graduate specialties are suitable for employer demand" at a minimum, to (5.38) for the paragraph "The number of graduates suitable for available employment opportunities" is higher. That is, the answers of the respondents were somewhat high, and in general, the area of labour market needs received an average (5.12); at a fairly high level.

2. Employers:

Table 31 Labour market needs

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
1	Vocational centers/schools provide the needs of the labour market of specialties.	3.93	1.599	56.2	Fairly low
2	The capacity of the labour market is sufficient to provide employment opportunities for graduates.	4.18	1.771	59.7	Fairly low
3	Institutions related to vocational education and training communicate with employers to find out their need.	4.18	1.639	59.7	Fairly low
4	The skills and competencies of graduates are tailored to the requirements of the job.	4.43	1.723	63.4	Fairly low
5	The skills of the graduates acquired are commensurate with the reality of the job.	4.33	1.676	62.0	Fairly low
6	Graduates need additional skills and training to get involved.	4.72	1.854	67.5	Fairly high

#	Paragraph	Average	Standard deviation	Percentage	Degree of response
7	Employers provide institutions that provide vocational education and training with feedback on the performance of their graduates.	4.33	1.716	62.0	Fairly low
Area 2: Labour market needs		4.30	1.436	61.5	Fairly low

Table (28) above shows averages, standard deviations of labour market needs and area paragraphs. The value of the averages of paragraphs ranged from (3.93) for the paragraph "Vocational centers/schools provide the needs of the labour market from specialties" to (4.72) for the paragraph, " graduates need additional skills and training to get involved" at a higher level. That is, the answers of the respondents ranged from somewhat low to somewhat high. In general, the field of labour market needs received an average (4.30); at a fairly low level.

The results indicate a difference in the views of both VET workers and employers in the labour market needs paragraphs with the highest average and lowest average. In general, the answers of VET workers were somewhat high and the reality of VET received an average (5.12); at a fairly high level. While employers' answers ranged somewhat lower and, the reality of VET received an average (4.30); at a fairly low level. That is the average field for VET workers is higher than that of employers.

From the previous testing it is noticed that the professional and social skills have the highest impact from the point of view of VET institutions workers the professional and social skills

have the highest impact. While the point of view of employers the personal skills have the highest impact.

4.2.2. Results of Examining the Hypotheses of the Study

The results of the study hypotheses examination are as follows:

Hypothesis 1: There is no statistically significant impact on the impact of demographic variables of VET graduates on their personal, social, professional and development skills, from the point of view of those working in vocational education and training institutions.

Table 32 Results of the examination of the first hypothesis

Model	df	Sum of Squares	Mean Square	F	Sig.
Regression	4.867	6	0.811	0.923	0.481
Residual	107.244	122	0.879		
Total	112.111	128			

Linear Regression test was used to examine the impact of demographic variables of VET graduates on their personal, social, professional and development skills, from the point of view of vet staff. The results showed no statistically significant impact at the $0.05 \geq \alpha$ level.

Hypothesis 2: There is no statistically significant impact on the impact of demographic variables of VET graduates on their personal, social, professional and development skills, from the employers' point of view.

Table 33 Results of the examination of the second hypothesis

Model	df	Sum of Squares	Mean Square	F	Sig.
Regression	2.050	7	0.293	0.269	0.964
Residual	89.334	82	1.089		
Total	91.384	89			

Linear Regression test was used to examine the impact of demographic variables of VET graduates on their personal, social, professional and development skills from the employers' point of view. The results showed no statistically significant impact at the $0.05 \geq \alpha$ level.

Hypothesis 3: There is no statistically significant impact on the impact of demographic variables and skills available to graduates of vocational education and training on the realities of vocational education and training and the needs of the labour market, from the point of view of workers in vocational education and training institutions.

Table 34 Results of the examination of the third hypothesis

Model	df	Sum of Squares	Mean Square	F	Sig.
Regression	127.618	10	12.762	1114.120	0.000
Residual	1.352	118	0.011		
Total	128.970	128			

Linear Regression test was used to examine the impact of demographic variables and skills available to VET graduates on the realities of vocational education and training

and labour market needs, from the point of view of vet workers. The results showed a statistically significant impact at the $0.05 \geq \alpha$ level. This effect is the age and personal, development and professional skills of graduates of vocational education and training.

Here is the regression equation for the impact of the areas of this model:

Reality of vocational education and training and labour market needs = (0.023) age for workers in vocational education and training institutions + (0.123) personal skills of vet graduates + (0.396) development skills for graduates of vocational education and training + (0.548) professional skills for graduates of vocational education and training

From the previous equation, the most influential variables were professional skills (0.548), followed by the development skills of VET graduates at 0.396, and then the personal skills of VET graduates at 0.123, followed by age for vet graduates at 0.023.

While there was no impact for other variables and skills.

Hypothesis 4: There is no statistically significant impact on the impact of demographic variables and skills available to graduates of vocational education and training on the realities of vocational education and training and the needs of the labour market, from the point of view of employers.

Table 35 Results of the examination of the fourth hypothesis

Model	df	Sum of Squares	Mean Square	F	Sig.
Regression	36.243	11	3.295	2.773	0.004
Residual	92.694	78	1.188		
Total	128.937	89			

Linear Regression test was used to examine the impact of demographic variables and skills available to graduates of vocational education and training on the realities of vocational education and training and labour market needs, from the employers' point of view. The results showed a statistically significant impact at the $0.05 \geq \alpha$ level, which was influenced by the qualification of employers, the age of the establishment and the personal skills of VET graduates.

Here is the regression equation for the impact of the areas of this model:

The reality of vocational education and training and the needs of the labour market = (0.251-) qualification for employers + (0.284-) the age of the establishment + (0.084-) personal skills of graduates of vocational education and training

From the previous equation, the most influential variable was the age of the establishment at 0.284, followed by the scientific qualification of employers at 0.251-, and then the personal skills of VET graduates at 0.084. While there was no impact for other variables and skills.

Hypothesis 5: There are no statistically significant differences in the skills of VET graduates: personal, social, professional and development between vet workers and employers.

Table 36 Results of the examination of the fifth hypothesis

Paragraph	Job	Number	Average	Standard deviation	T test value	df	Sig.
Area 1: Personal Skills	Employers	90	4.93	1.38815	2.245	218	0.026
	Workers in	130	4.55	1.09895			

Paragraph	Job	Number	Average	Standard deviation	T test value	df	Sig.
	VET institutions						
Area 2: Social Skills	Employers	90	4.50	1.60074	-2.433	218	0.016
	Workers in VET institutions	130	4.93	1.00280			
Area 3: Professional Skills	Employers	90	4.43	1.47399	-3.877	218	0.000
	Workers in VET institutions	130	5.09	1.08156			
Area 4: Development Skills	Employers	90	4.67	1.37539	-1.437	218	0.152
	Workers in VET institutions	130	4.90	.97602			
Vocational	Employers	90	4.65	1.01331	-1.515	218	0.131

Paragraph	Job	Number	Average	Standard deviation	T test value	df	Sig.
education and training skills	Workers in VET institutions	130	4.85	0.93287			

The hypothesis examined: "There are no statistically significant differences in the skills of VET graduates: personal, social, professional and developmental between VET workers and employers using t-test. The results showed statistically significant differences between the skilled in personal, social and professional skills; because the statistical significance is less than 0.05; for the benefit of employers in personal skills, and for those working in vocational education and training institutions in social and professional skills.

Hypothesis 6: There are no statistically significant differences in the reality and needs of the labour market between workers in vocational education and training institutions and employers.

Table 37 Results of the examination of the sixth hypothesis

Paragraph	Job	Number	Average	Standard deviation	T test value	df	Sig.
Area 1: The	Employers	90	4.30	1.368	-3.334	218	0.001

Paragraph	Job	Number	Average	Standard deviation	T test value	df	Sig.
reality of vocational education and training	Workers in VET institutions	130	4.82	0.947			
Area 2:	Employers	90	4.31	1.437	-4.697	218	0.000
Labour market needs	Workers in VET institutions	130	5.12	1.142			
The reality of vocational education and training and the needs of the labour market	Employers	90	4.30	1.204	-4.432	218	0.000
	Workers in VET institutions	130	4.96	1.000			

The hypothesis examined: "There are no statistically significant differences in the reality of vocational education and training, labour market needs and sub-areas between VET workers and employers" using t-test. The results showed statistically significant differences between the respondents in the area of the reality of vocational education and training, the area of labour market needs and the overall area; because the statistical significance is less than 0.05; for the workers at vocational education and training institutions.

From the above we can confirm the hypothesis that says: Availability of specialties and vocational schools and centers does not cover all sectors needed in the market.

4.3. Main Study Results:

1. The results of the study indicate that there is no clear impact of the demographic variables of VET graduates on their personal social, professional and development skills from the point of view of vet workers as well as employers. This contradicts the findings of a study (Malin & Jacob, 2019), which noted that sex has a clear impact on students' orientation towards vocational education and training, and found that males are more oriented to the sector. It is also somewhat at odds with the results of the Study conducted by (Jetawi, 2016), where the study suggested that there are female-friendly professional disciplines but cannot be functioned as a major course because males are more oriented to professional disciplines.
2. The study found that the reality of vocational education and training is greatly influenced by the professional skills of VET graduates, followed by development skills, and then personal skills and the least influential is the age of those working in vocational education and training institutions from the point of view of the workers in these institutions.

From the point of view of employers, the study showed that the most influential variables are the age of the enterprise, then the scientific qualification of employers, the least of which is the personal skills of graduates of vocational education and training.

This corresponds to what a study (Ala'jez, 2008) indicated, which spoke of students' acquired skills and influenced by the content of the curriculum taught to students.

Chapter 5: Conclusion – Recommendations

5.1. Conclusion

In view of the analyzed data, the findings of the study were as follows:

1. There is a weakness in updating and publishing statistics with regard to education and the labor market in Palestine.
2. There is no correlation between institutions providing vocational education and training and employers; therefore, there is a gap between the outcomes of vocational education and training and the need for the labour market.
3. There is no clear impact of the demographic variables of graduates on their personal, social, professional and development skills.
4. The lack of mutual feedback between vocational education and training institutions on the one hand and employers on the other hand has resulted in a surplus of certain disciplines. In contrast, there is a deficit in other disciplines in the labour market.
5. There is need for a strategy, where its main objective is to align the outcomes of vocational education with the need of the labour market.
6. Of paramount importance is the need for a system that can link institutions providing vocational education and training. Such a system is worth being promoted and developed.
7. Equally important and desperately needed is the government intervention in determining the quality and quantity of vocational education graduates on the one hand, and launching projects to exploit their skills and competence in a way that helps achieve the eighth sustainable development goal, which aims at providing "decent work and economic growth."

5.2. Strategy to Ensure Compatibility Between VET Outputs and Labor Market Needs.

Based on the results of the study and the need to link the outcomes of vocational and technical education with the needs of the labour market, strategies have been developed to lead to this end. The most notable one can be demand-based supply strategy. It means that the number of students accepted in vocational schools and centers, the disciplines offered to them must be determined primarily on local labour market needs and on the international labor market needs in the second place.

This strategy has a mission, a vision and core values detailed as follows:

Mission: The development of qualified human resources through education and vocational training to meet the labor market needs.

Vision: Every VET graduate has the right to find a job that suits their skills, capabilities and personalities regardless of their age, gender or social status.

Core Values:

Vocational training should follow steady bases which will move it toward achieving its goals within the mission and vision. That will be by applying the following values in all of related activities:

1. Quality: to provide the labour market with highly skilled craftsmen of each specialty.
2. Quantity: to try to fit the number of VET graduate with the available job opportunities.

3. Integrity: to maintain the trust of stakeholders about the skills of graduates gained during training.
4. Innovation: to continuously improve the methods of training and teaching to motivate trainees.
5. Commitment: to give all skills needed for the trainee to be qualified for a specific job.
6. Sustainable Career Opportunities: to ensure that craftsmen understand their opportunities for advancement and growth at every stage of career their development.
7. Credibility: to be regarded as the most reliable source of workforce development resources for labour market.
8. Lifelong: to have the ability to upgrade graduates' skills in a parallel manner with the rapid technological development.
9. Loyalty: to continuously give graduates feedback.
10. Flexibility: to make changes in curriculum and training system in order to suit the market needs.

Strategic Goals and Objectives:

Goal A: Reducing the surplus of graduates from certain disciplines and increasing graduates from other disciplines.

Objectives:

A1: Determine the maximum number of new students admitted to each discipline as needed by the market.

A2: Rely on feedback from the labour market to determine the acceptance of students in terms of quantity and quality.

A3: Encourage the establishment of small businesses to create new jobs.

Goal B: Provide the local market with skilled labour.

Objectives:

B.1. Develop standardized and accredited curriculum at all centers.

B.2. Develop a unified evaluation system to control the quality of education.

B.3. Deliver training courses for teachers in order to increase their professional competence.

B.4. Develop an information system that enables the measurement of employer satisfaction with the performance of graduates.

B.5. Provide permanent training workshops affiliated to the vocational centers.

Goal C: Reduce unemployment rates and create employment opportunities regardless of gender.

Objectives:

C.1. Stop offering specialties of which there is a surplus of unemployed graduates.

C.2. Introduce specialties corresponding to the nature of each region, its need in terms of resources, environment and culture.

C.3. Integrating students with special needs into vocational training schools and centers.

C.4. Regulate the working conditions of vocational teachers to ensure their rights.

C.5. Develop basic principles to encourage graduates to start self-employment.

5.3. Recommendations

The study, based on the findings, made with a set of recommendations for ensuring the compatibility the outcomes of vocational education with the needs of the labour market, most notably the following:

1. Implement a strategy that is appropriate to the available capabilities and able to achieve the harmonization of the outcomes of vocational education with the needs of the labour market as much as possible.
2. Focus on completing the founding of the National Authority for Vocational and Technical Education and Training and on activating its role to promote the vocational education and training.
3. Work to improve and develop training and vocational education strategies in institutions operating in the sector.
4. Study demographic changes, unemployment rates and the numbers of graduates from different disciplines to use in making informed decisions on suspending certain disciplines in specific years in certain regions as a result of flooding the market with these specializations or because of the introduction of new specialties. It is also recommended that the data resultant from these studies be used to determine the numbers of students admitted to specialties according to the capacity of the labour market in a way that does not adversely affect the performance of institutions working in vocational education and training.
5. Studies should be conducted to determine the level of wages and the number of working hours according to the specificity of each job.

6. Government should provide support to small enterprises, promote their products and develop their work by train students to work there and accommodating graduates in these small projects.
7. Create a common system between institutions involved in vocational education, training and the labour market, through which mutual feedback is provided between vocational training workers and employers.
8. Review the content of curricula, teaching hours are to be provided to students of vocational education and training, and continuously develop their skills and expertise.
9. Work to develop student training content to match the skills required by the job market.
10. Find a mechanism to develop the skills and abilities of teachers and vocational trainers, and build the foundations for evaluating and assessing their work.
11. Focus on creating an appropriate training infrastructure.
12. Strengthening the relationship between the theoretical and practical knowledge gained by the student through actual on-job training in the field.
13. Develop the skills and competencies, whether personal or social, of a vocational graduate to adapt to the labour market to enable him or her to compete in the local or global labour market.
14. Focus on vocational skills and the graduate's ability to innovate, including the ability to meet the wishes and needs of the people for whom he or she is working within their available abilities.
15. Study the possibility of adding a vocational subject to the basic classes that will explore the students' tendencies at early stages towards vocational education,

with the aim of working on developing and directing their tendencies and explain its advantages and disadvantages in case they are in favor of vocational education.

Bibliography:

- Palestinian Central Bureau of Statistics. Labour Force Survey (January- March 2021) Round (Q1/2021). Ramallah. Palestine. 2021.
- ETF (European Training Foundation). Palestinian National Report. 5th stage of Torino process. 2019.
- Malin, L., & Jacob, M. (2019). Gendered occupational aspirations of boys and girls in Germany: the impact of local VET and labour markets. *Journal of Vocational Education & Training*, 71(3), 429-448.
- Popescu, M. E., & Roman, M. (2018). Vocational training and employability: Evaluation evidence from Romania. *Evaluation and program planning*, 67, 38-46.
- Hillmert, S., Hartung, A., & Weßling, K. (2017). A decomposition of local labour-market conditions and their relevance for inequalities in transitions to vocational training. *European Sociological Review*, 33(4), 534-550.
- Namourah, M. (2016). Vocational interests among Palestinian students. *International Humanities Studies*, 3(3), 16-29.
- Hilal, R., & McGrath, S. (2016). The role of vocational education and training in Palestine in addressing inequality and promoting human development. *Journal of International and Comparative Education (JICE)*, 87-102.
- Hasanefendic, S., Heitor, M., & Horta, H. (2016). Training students for new jobs: The role of technical and vocational higher education and implications for science policy in Portugal. *Technological Forecasting and Social Change*, 113, 328-340.
- International Labour Organization, Statistics of work and of the labour force, Geneva, 2013.

- El-Jafari, M. K. (2010, November). Efficiency and Effectiveness of Palestinian Vocational Education and Training. In Economic Research Forum Working Papers (No. 571).
- Alzaroo, S. (2009). The Compatibility of the Palestinian Vocational Secondary Education with the Labour Market.
- <https://www.cedefop.europa.eu/en>

المراجع العربية:

- مجلس الوزراء الفلسطيني، قرار بقانون رقم (4) لسنة 2021م بشأن الهيئة الوطنية للتعليم والتدريب المهني والتقني. رام الله. فلسطين. 2021.
- وزارة التربية والتعليم الفلسطينية، تقرير الإنجاز السنوي للعام 2020، رام الله، فلسطين، 2021.
- وزارة العمل. الإدارة العامة للتدريب المهني. تقرير الإنجازات السنوي. رام الله. فلسطين. 2020.
- وزارة التعليم العالي والبحث العلمي. الخطة الاستراتيجية لقطاع التعليم العالي والبحث العلمي للأعوام 2020-2023. رام الله. فلسطين. 2020.
- وزارة العمل. استراتيجية قطاع العمل للأعوام (2021-2023)، " الطريق نحو العمل اللائق وتحسين فرص التشغيل". رام الله. فلسطين. 2020.
- بن ناصر العندس، ص.، & صالح. (2020). مدى ملاءمة مخرجات التعليم الفني والمهني لاحتياجات سوق العمل السعودي من وجهة نظر رجال الأعمال. مجلة كلية التربية، 17(س17). ع93. ج2 (ابريل 2020)، 381-350.
- وزارة التربية والتعليم الفلسطينية. الكتاب الإحصائي التربوي السنوي للعام الدراسي 2018/2019 (احصاءات المدارس ورياض الأطفال). رام الله. فلسطين. 2020.
- الجهاز المركزي للإحصاء الفلسطيني، معجم المصطلحات الإحصائية المستخدمة في الجهاز، رام الله، فلسطين، 2020.

- وزارة التربية والتعليم الفلسطينية. ضمان الجودة في مجال التعليم والتدريب المهني - فلسطين. رام الله. فلسطين. 2020.
- نصرالله, & عبدالفتاح. (2018). دور التعليم التقني في تعزيز التنمية المستدامة في الأراضي الفلسطينية.
- حلبى, & أ. شادي. (2018). واقع التعليم المهني والتقني ومشكلاته في الوطن العربي دراسة حالة (الجمهورية العربية السورية).
- جيتاوي، هبة. (2016). تحليل واقع التعليم والتدريب المهني والتقني في فلسطين من منظور النوع الاجتماعي.
- معهد أبحاث السياسات الاقتصادية الفلسطينية (ماس). تنفيذ الخطة الاستراتيجية للتعليم والتدريب المهني والتقني: متطلب أساسي للاستجابة لاحتياجات سوق العمل. رام الله. فلسطين. (2015).
- الأونروا. دائرة التعليم. الرئاسة العامة. إستراتيجية الأونروا للتعليم والتدريب التقني والمهني. عمان. 2014.
- زايد, & سندس محمد. (2014). مدى انسجام مخرجات مراكز التدريب المهني الحكومية مع احتياجات سوق العمل في الضفة الغربية من وجهة نظر مقدمي خدمة التدريب.
- هلال. (2013). دراسة سوق العمل: الاحتياجات التدريبية وفجوة المواءمة مع التعليم والتدريب المهني في فلسطين.
- معهد اليونسكو للإحصاء. منظمة الأمم المتحدة للتربية والعلم والثقافة. التصنيف الدولي الموحد للتعليم إسكد. باريس. فرنسا. 2011.
- وزارة التربية والتعليم، وزارة العمل. استراتيجية التعليم والتدريب المهني والتقني المراجعة. رام الله. فلسطين. 2010.
- الزير/الحداد, & علا عمر احمد. (2009). دور التدريب التقني والمهني في خلق فرص عمل للمتدربين: حالة دراسية: كلية مجتمع غزة-الاونروا.
- GTZ، مسرد مصطلحات مناهج التعليم والتدريب المهني والتقني، سوريا، 2009.
- الجهاز المركزي للإحصاء الفلسطيني. مشروع النشر والتحليل لإعداد البيانات. ظروف خريجي التدريب والتعليم المهني في سوق العمل الفلسطيني. رام الله. فلسطين. 2009.
- العاجز. (2008). مشكلات معلمي التعليم المهني والتقني في محافظات غزة وسبل التغلب عليها.

- 2020 /<https://tvet-pal.pna.ps>
- التدريب- المهني-الفني /<https://www.unrwa.org/ar/what-we-> 2021.

الطالبة: مها صالح البطحة

القسم الاول: الخصائص التعريفية

أولاً: معلومات شخصية: املأ /ي الفراغات بالمعلومات المطلوبة

1. العمر بالسنوات: ☐ أقل من 25 ☐ 25 - 34 ☐ 35 - 44 ☐ 45 فما فوق
2. الجنس : ☐ ذكر ☐ انثى
3. المؤهل العلمي: ☐ توجيهي فأقل ☐ دبلوم ☐ بكالوريوس ☐ دراسات عليا
4. المسمى الوظيفي: ☐ موظف في إدارات التعليم/ التدريب المهني ☐ مدير مركز/ مدرسة ☐ معلم
5. سنوات الخبرة : ☐ أقل من 10 ☐ 10 - 20 ☐ أكثر من 20

القسم الثاني: مهارات خريجي التعليم والتدريب المهني.

الرجاء وضع اشارة (✓) في العمود المناسب.

A. المهارات الشخصية لخريجي التعليم والتدريب المهني:

الرمز	السؤال	بشدة أوافق	أوافق	لا أوافق	لا أوافق	لا أوافق	بشدة أوافق
A1	يتحلى بالثقة بالنفس لاتخاذ القرارات المناسبة في الوقت المناسب.						
A2	لديه استقلالية في العمل دون طلب مساعدة بشكل مستمر						
A3	يحل المشكلات التي تواجهه أثناء العمل.						
A4	يتحمل المسؤولية تجاه العمل والمنشأة.						
A5	يتحمل ضغط العمل						
A6	بيدي قابلية للعمل خارج ساعات الدوام الرسمي						
A7	يمتاز بمظهر لائق أثناء تواجده بمكان العمل						
A8	يتصف بالصدق والأمانة						
A9	يلتزم بالتوجيهات والتعليمات التي تصدر عن مسؤوليه						
A10	ينفذ المهام الموكلة إليه بإنقار حسب متطلبات المهنة						
A11	يمتلك مهارات التخطيط ووضع أهداف محددة وواضحة						
A12	يمتلك مهارة إدارة الوقت لإنجاز الأعمال في الوقت المحدد						
A13	يمتلك المسؤولية في تقديم تغذية راجعة حول عمله والمشاكل التي تواجهه لمسؤوليه						

B. المهارات الاجتماعية لخريجي التعليم والتدريب المهني:

الرمز	السؤال	أوافق بشدة	أوافق	ما أوافق	محايد	لا أوافق	لا أوافق بشدة
B1	يسهل على الخريج الانخراط بسوق العمل						
B2	يملك مهارات الاتصال والتواصل مع البيئة المحيطة						
B3	يتحلى بروح التعاون مع فريق العمل						
B4	يتقهم مبدأ توزيع الأدوار ويطبقه أثناء العمل						
B5	يتقبل فكرة وجود رئيس ومرؤوس في العمل						
B6	لديه القدرة على إدارة مجموعة من الأفراد داخل المنشأة						
B7	يملك أسلوب مناسب لتقديم التوجيهات والارشادات لمن يرأسهم						

C. المهارات المهنية لخريجي التعليم والتدريب المهني:

الرمز	السؤال	أوافق بشدة	أوافق	ما أوافق	محايد	لا أوافق	لا أوافق بشدة
C1	يتعامل مع المخططات والرسومات						
C2	يفهم المصطلحات التقنية الانجليزية واستخدامها						
C3	يستخدم الأجهزة والأدوات الخاصة بالمهنة بالطريقة المثلى						
C4	يملك المعرفة النظرية بمجال العمل						
C5	يستخدم الكتلوجات حيث يلزم						
C6	يتبع اجراءات السلامة والصحة المهنية						
C7	يحدد مواصفات الأدوات والأجهزة اللازمة للمهنة						
C8	يدرك معنى الرموز والاختصارات المتعلقة بالعمل						
C9	يتمتع بالدقة في العمل						
C10	يراعي معايير جودة العمل.						
C11	يتحلى بإنتاجية عالية خلال ساعات العمل						

D. المهارات التطويرية لخريجي التعليم والتدريب المهني:

الرمز	السؤال	أوافق بشدة	أوافق	ما أوافق	محايد	لا أوافق	لا أوافق بشدة
D1	يملك الخريج القدرة على التعلم الالكتروني						
D2	يقدم أساليب مبتكرة في إنجاز الأعمال						
D3	يواكب التطورات في مجال المهنة						

الرمز	السؤال	بشدة أوافق	أوافق	ما أوافق لحد	محايد	لا أوافق لحد ما	لا أوافق	بشدة لا أوافق
D4	يتعلم مهارات جديدة مرتبطة بعمله							
D5	يبحث على الانترنت لمتابعة اخر تطورات المهنة							
D6	يتعامل مع الأجهزة والأدوات المتطورة التي يتطلبها العمل							
D7	يتحلى بالمبادرة الذاتية							
D8	يوظف التكنولوجيا الحديثة في العمل							

القسم الثالث: واقع التعليم والتدريب المهني وسوق العمل

E. واقع التعليم والتدريب المهني:

الرمز	السؤال	بشدة أوافق	أوافق	ما أوافق لحد	محايد	لا أوافق لحد ما	لا أوافق	بشدة لا أوافق
E1	القدرة الاستيعابية للمراكز والمدارس المهنية مناسبة لعدد الطلاب المنتسبين							
E2	توفر مناهج ملائمة وكافية لجميع التخصصات							
E3	تطرح تخصصات تتناسب مع الوظائف الموجودة							
E4	توفر مدربين ومعلمين مؤهلين لتخريج كفاءات مهنية							
E5	تتيح أساليب التدريب فرصة التأهيل المهني للخريج							
E6	تحرص على امتلاك الخريجين مؤهلات مهنية تمكنهم من الالتحاق بسوق العمل							
E7	الموازنة المرصودة من الحكومة تلبي كافة احتياجات قطاع التعليم والتدريب المهني							
E8	يشكل دعم المانحين للقطاع جزءاً أساسياً في استمرارية العمل							
E9	تعمل المؤسسات القائمة على التعليم والتدريب المهني بالتواصل مع الخريجين ودعوتهم إلى ورشات عمل تطويرية							
E10	تقوم المؤسسة بعمل ورشات تدريبية للمعلمين بهدف مواكبة التطور الحاصل على المهنة ومتطلباتها							

F. احتياجات سوق العمل:

الرمز	السؤال	بشدة أوافق	أوافق	ما أوافق لحد	محايد	لا أوافق لحد ما	لا أوافق	بشدة لا أوافق
F1	تتناسب البنية التحتية للمدارس ومراكز التدريب مع واقع المهنة							
F2	يحصل الخريجين على وظائف تتناسب مع تخصصاتهم							
F3	يتواصل أرباب العمل مع المؤسسة لتزويدهم باحتياجاتهم من التخصصات							

الرمز	السؤال	بشدة أوافق	أوافق ما أحد	محايد	لا أوافق	لا أوافق	بشدة أوافق
F4	يقدم الخريجين تغذية راجعة للمؤسسة حول ظروف عملهم						
F5	المناهج المستخدمة تغطي كافة احتياجات المهنة						
F6	عدد الخريجين مناسب لفرص العمل المتاحة						
F7	تخصصات الخريجين ملائمة لطلب أرباب العمل						
F8	يتواصل اصحاب المنشآت مع المدارس المهنية ومراكز التدريب لاستقطاب الخريجين						
F9	تحصل المؤسسة على تغذية راجعة من أرباب العمل حول أداء خريجها						

مهارات إضافية يجب إضافتها للتدريب لزيادة ملاءمة إمكانيات الخريجين مع سوق العمل

* اقتراحات للنهوض بواقع التعليم والتدريب المهني في فلسطين

شكرًا لتعاونكم

الطالبة: مها صالح البطحة

القسم الاول: الخصائص التعريفية

أولاً: معلومات شخصية: املأ/ي الفراغات بالمعلومات المطلوبة

1. العمر بالسنوات: ☐ أقل من 30 ☐ 30 - 60 ☐ أكثر من 60
2. الجنس: ☐ ذكر ☐ انثى
3. المؤهل العلمي: ☐ توجيهي فأقل ☐ دبلوم ☐ بكالوريوس ☐ دراسات عليا
4. المهنة:
5. مكان السكن: ☐ مخيم ☐ قرية ☐ مدينة

ثانياً: معلومات عن المنشأة:

1. مجال عمل المنشأة: ☐ حجر الرخام والبناء ☐ الميكانيك ☐ الكهرباء وفروعها ☐ الحاسوب ☐ أعمال الألمنيوم ☐ السيارات ☐ تجميل وتصفيف شعر ☐ زراعي ☐ لحام وتشكيل معادن ☐ خدمات فندقية ☐ نجارة ☐ عاشر مهني
2. عمر المنشأة: ☐ أقل من 20 سنة ☐ بين 20 - 40 سنة ☐ أكثر من 40 سنة
3. عدد العاملين فيها: ☐ أقل من 10 ☐ بين 10 - 20 ☐ أكثر من 20

القسم الثاني: مهارات خريجي التعليم والتدريب المهني.

الرجاء وضع إشارة (✓) في العمود المناسب.

A. المهارات الشخصية لخريجي التعليم والتدريب المهني:

الرمز	السؤال	بشدة: أوافق	أوافق	م أوافق	محايد	لا أوافق	لا أوافق بشدة
A1	يتحلى بالثقة بالنفس والاستقلالية لاتخاذ القرارات المناسبة.						
A2	يحل المشكلات التي تواجهه أثناء العمل.						
A3	يتحمل المسؤولية تجاه العمل والمنشأة.						
A4	يتحمل ضغط العمل						
A5	ييدي قابلية للعمل خارج ساعات الدوام الرسمي						
A6	يمتاز بمظهر لائق أثناء تواجده بمكان العمل						
A7	يتصف بالصدق والأمانة						
A8	يلتزم بالتوجيهات والتعليمات التي تصدر عن مسؤوليه						
A9	ينفذ المهام الموكلة إليه بإنقار						
A10	يمتلك مهارات التخطيط ووضع الأهداف وإدارة الوقت						
A11	يمتلك المسؤولية في تقديم تغذية راجعة لمسؤوليه						

B. المهارات الاجتماعية لخريجي التعليم والتدريب المهني:

الرمز	السؤال	بشدة: أوافق	أوافق	م أوافق	محايد	لا أوافق	لا أوافق بشدة
B1	يسهل على الخريج الانخراط بسوق العمل						
B2	يمتلك مهارات الاتصال والتواصل مع البيئة المحيطة						
B3	يتحلى بروح التعاون مع فريق العمل						
B4	يتفهم مبدأ توزيع الأدوار ويطبقه أثناء العمل						
B5	يتقبل فكرة وجود رئيس ومرؤوس في العمل						
B6	لديه القدرة على إدارة مجموعة من الأفراد داخل المنشأة						
B7	يمتلك اسلوب مناسب لتقديم التوجيهات والارشادات لمن يرأسهم						

C. المهارات المهنية لخريجي التعليم والتدريب المهني:

الرمز	السؤال	بشدة أوافق	أوافق	ما أوافق لحد	محايد	لا أوافق لحد ما	لا أوافق	بشدة لا أوافق
C1	يتعامل مع المخططات والرسومات							
C2	يفهم المصطلحات التقنية الانجليزية واستخدامها							
C3	يستخدم الأجهزة والأدوات الخاصة بالمهنة بالطريقة المثلى							
C4	يمتلك المعرفة النظرية بمجال العمل							
C5	يستخدم الكتلوجات حيث يلزم							
C6	يتبع إجراءات السلامة والصحة المهنية							
C7	يحدد مواصفات الأدوات والأجهزة اللازمة للمهنة							
C8	يدرك معنى الرموز والاختصارات المتعلقة بالعمل							
C9	يتمتع بالدقة في العمل							
C10	يراعي معايير جودة العمل.							
C11	انتاجيته عالية.							

D. المهارات التطويرية لخريجي التعليم والتدريب المهني:

الرمز	السؤال	بشدة أوافق	أوافق	ما أوافق لحد	محايد	لا أوافق لحد ما	لا أوافق	بشدة لا أوافق
D1	يمتلك الخريج القدرة على التعلم الالكتروني							
D2	يقدم أساليب مبتكرة في إنجاز الأعمال							
D3	يواكب التطورات في مجال المهنة							
D4	يتعلم مهارات جديدة مرتبطة بعمله							
D5	يبحث على الانترنت لمتابعة اخر تطورات المهنة							
D6	يتعامل مع الأجهزة والأدوات المتطورة التي يتطلبها العمل							
D7	يتحلى بالمبادرة الذاتية							
D8	يوظف التكنولوجيا الحديثة في العمل							

القسم الثالث: واقع التعليم والتدريب المهني وسوق العمل

E. واقع التعليم والتدريب المهني:

الرمز	السؤال	بشدة أوافق	أوافق	م أوافق	محايد	لا أوافق	لا أوافق	بشدة أوافق
E1	القدرة الاستيعابية للمراكز والمدارس المهنية مناسبة لعدد الطلاب المنتسبين							
E2	توفر مناهج ملائمة وكافية لجميع التخصصات							
E3	تطرح تخصصات تتناسب مع الوظائف الموجودة							
E4	توفر مدرّبين ومعلمين مؤهلين لتخريج كفاءات مهنية							
E5	تتيح أساليب التدريب فرصة التأهيل المهني للخريج							
E6	تحرص على امتلاك الخريجين مؤهلات مهنية تمكنهم من الالتحاق بسوق العمل							
E7	تعمل المؤسسات القائمة على التعليم والتدريب المهني بالتواصل مع الخريجين ودعوتهم إلى ورشات عمل تطويرية							

F. احتياجات سوق العمل:

الرمز	السؤال	بشدة أوافق	أوافق	م أوافق	محايد	لا أوافق	لا أوافق	بشدة أوافق
F1	توفر المراكز / المدارس المهنية حاجات سوق العمل من التخصصات							
F2	القدرة الاستيعابية لسوق العمل كافية لتوفير فرص عمل للخريجين							
F3	تتواصل المؤسسات المتعلقة بالتعليم والتدريب المهني مع أرباب العمل لمعرفة حاجتهم							
F4	تتلاءم مهارات وكفاءات الخريجين مع متطلبات المهنة							
F5	تتناسب مهارات الخريجين المكتسبة مع واقع المهنة							
F6	يحتاج الخريجين إلى مهارات إضافية وتدريب للانخراط بالعمل							
F7	يعمل القائمون على المنشأة بتزويد المؤسسات التي تقدم التعليم والتدريب المهني بتغذية راجعة حول مستوى أداء خريجها							

مهارات إضافية يجب إضافتها للتدريب لزيادة ملائمة إمكانيات الخريجين مع سوق العمل

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* اقتراحات للنهوض بواقع التعليم والتدريب المهني في فلسطين

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شكراً لتعاونكم

Annex 3

Arab American University

Faculty of Graduate Studies



الجامعة العربية الأمريكية

كلية الدراسات العليا

2021-3-28

الى من يهمة الامر،،

تسهيل مهمة بحثية

تحية طيبة وبعد،،

تهديكم كلية الدراسات العليا في الجامعة العربية الأمريكية اطيب التحيات، وبالإشارة الى الموضوع أعلاه، تشهد كلية الدراسات العليا في الجامعة أن الطالبة مها صالح حسن البطحة والتي تحمل الرقم الجامعي 201812639 هي طالبة ماجستير في الجامعة العربية الأمريكية تخطط استراتيجي وتجديد الاموال، وتعمل على اعداد دراسة علمية بعنوان:

" استراتيجيات موازنة مخرجات التعليم المهني مع احتياجات سوق العمل " تحت اشراف دكتور احمد صدقة ودكتورة روز عثمان نأمل من حضرتكم الاعاز لمن يلزم لمساعدتها للحصول على المعلومات اللازمة للدراسة، علماً ان المعلومات ستستخدم لغاية البحث فقط، وقد أعطيت هذه الرسالة بناءً على طلبها.

وتفضلوا بقبول فائق الاحترام،،،


د. اشرف الميمي

عميد كلية الدراسات العليا



Annex 4



الرقم: و ت / ١٤ / ٨٨
التاريخ: 2021/ 12/5م

لأمن يهمه الأمر.

الموضوع: "تسهيل مهمة باحثة"

يهدىكم مركز البحث والتطوير التربوي أطيب تحية، ويرجو منكم التكرم بتسهيل مهمة الباحثة:

"مها صالح حسن البطحة"

من الجامعة العربية الأمريكية للحصول على المعلومات اللازمة لإعداد دراسة بعنوان:

"Strategies to ensure compatibility between VET outputs and labor market need"

ملاحظات:

- تتضمن الدراسة توزيع استبيان على عينة من العاملين في المدارس المهنية.
- ت/يتولى الباحثة أنشطة جمع البيانات، بتنسيق مع منسق البحث والتطوير والجودة في المديرية.
- الاستجابة على الأدوات البحثية من قبل عينة المبحوثين طوعية.
- نظراً لظروف الجائحة يتم تطبيق أدوات البحث عبر النماذج المحوسبة دون تواصل وجاهي مع المبحوثين.

مع الاحترام،

د. محمد مطر

/مدير عام مركز البحث والتطوير التربوي



نسخة:

عطوفة وكيل الوزارة المحترم

عطوفة الوكلاء المساعدين المحترمين

السادة مديري عامين مديريات التربية والتعليم المحترمين

د. أحمد صدقة المحترم المشرف الرئيس على الدراسة -بريد الكتروني- ahmad.sadaqa@aaup.edu.ps

Annex 5

#	العائلة	التخصصات المهنية				
1	حجر الرخام والبناء	تصميم داخلي				
2	الميكانيك	تكييف وتبريد	التمديدات الصحية			
3	الكهرباء وفروعها	تكنولوجيا مباني ذكية	الكثرونيات صناعية	الاتمة الصناعية	طاقة متجددة	صيانة الالات / صيانة مصاعد
4	الحاسوب	صيانة حاسوب وشبكات	سكرتاريا وأتمة مكاتب	اتصالات	تصميم جرافيك	
5	أعمال ألمنيوم					
6	السيارات	بودي وتجليس ودهان سيارات	اوتوميكاترونيكس	كهرباء سيارات	ميكانيك سيارات	
7	زراعي					
8	تجميل وتصفيف شعر					
9	لحام وتشكيل معادن					
10	نجارة	cncنجارة				
11	خدمات فندقية					
12	عاشر مهني					

ملخص الدراسة:

تناولت الدراسة مشكلة برزت في الآونة الأخيرة وهي الفجوة بين مخرجات التعليم المهني وحاجة سوق العمل، حيث هناك فائض خريجين من بعض التخصصات مما أدى إلى زيادة نسبة البطالة من جهة، وهناك عجز في الأيدي العاملة لتخصصات أخرى من جهة أخرى، وقد هدفت الدراسة إلى إيجاد استراتيجية للمواءمة بين مخرجات التعليم المهني وحاجة سوق العمل.

ومن أجل تحقيق هدف الدراسة فقد تمّ في هذه الدراسة العمل في خطوات متزامنة ومتتالية؛ حيث استخدم المنهج التحليلي الكمي؛ لاختلاف البيانات والمعلومات التي جُمعت في الدراسة، كما أن المنهج الكمي يعطي معلومات عامة حول العينة، ولأعداد كبيرة من حيث التغطية. وقد تكون مجتمع الدراسة من مجموعتين هما: العاملين في المؤسسات التي تقدم التعليم والتدريب المهني، وأصحاب العمل في السوق الفلسطيني والتي يوجد لها اتصال مباشر مع هذه المؤسسات. وتكونت عينة الدراسة من 15% من الأفراد العاملين في مؤسسات التعليم والتدريب المهني، و20% من أصحاب العمل. وكانت نسبة الاستجابة 93% و 82% على التوالي.

وقد توصلت الدراسة إلى أن هناك ضعف في تحديث الإحصاءات ونشرها فيما يتعلق بالتعليم وسوق العمل في فلسطين. ولا يوجد ترابط فيما بين المؤسسات التي تقدم التعليم والتدريب المهني وبين أرباب العمل، وبالتالي هناك فجوة ما بين مخرجات التعليم والتدريب المهني وبين حاجة سوق العمل. وكان سببها عدم وجود تغذية راجعة متبادلة بين مؤسسات التعليم والتدريب المهني من جهة وأرباب العمل من جهة أخرى وجود فائض من تخصصات معينة على حساب عجز في تخصصات أخرى. كما بينت الدراسة أنه لا يوجد تأثير واضح للمتغيرات الديموغرافية لدى الخريجين على مهاراتهم الشخصية والاجتماعية والمهنية والتطويرية على حد سواء.

وكان من أبرز توصيات الدراسة ضرورة العمل على تنفيذ الاستراتيجية الملائمة للإمكانيات المتاحة والتي تحقق المواءمة بين مخرجات التعليم المهني واحتياجات سوق العمل بأقصى حد ممكن. والتركيز على تنفيذ انشاء الهيئة الوطنية للتعليم والتدريب المهني والتقني، وتفعيل دورها للنهوض بواقع التعليم والتدريب المهني. بالإضافة إلى دراسة تحديد مستوى الأجور وعدد ساعات العمل حسب خصوصية كل مهنة. والعمل على توفير دعم حكومي للمنشآت الصغيرة ودعم منتجاتها وتطوير عملها بما يؤهلها لتدريب الطلاب واستيعاب الخريجين للعمل فيها، والتركيز على إيجاد منظومة مشتركة فيما بين المؤسسات القائمة على التعليم والتدريب المهني وسوق العمل، يتم من خلالها تقديم تغذية راجعة متبادلة بين العاملين في التدريب المهني وأرباب العمل.

إلى جانب دراسة التغيرات الديموغرافية ونسب البطالة وأعداد الخريجين من التخصصات المختلفة للاعتماد عليها في اتخاذ قرار بوقف بعض التخصصات لسنوات محددة في مناطق معينة نتيجة لإغراق السوق بهذه التخصص، أو استحداث تخصصات جديدة، وتحديد أعداد الطلبة المقبولين في التخصصات بحسب القدرة الاستيعابية لسوق العمل، بطريقة لا تؤثر سلباً على أداء المؤسسات العاملة في التعليم والتدريب المهني.