



**Arab American University**

**Faculty of Graduate Studies**

**Investigating the Compatibility of Higher Education  
Institutions Programs with the Requirements of the  
Labour Market in Palestine**

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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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## Thesis Approval

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This Thesis was Defended Successfully on 10 /10/ 2023, and Approved by:

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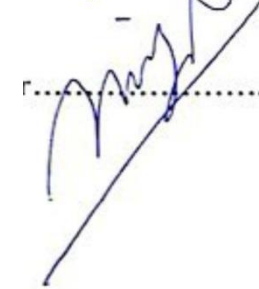
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## Declaration

I, the undersigned, the author of the Master's thesis entitled “Investigating the Compatibility of Higher Education Institutions Programs with the Requirements of the Labour Market in Palestine”, which is submitted to the Arab American University for the master’s degree and I declare that it is the result of my own research, except as indicated, of which none has been offered for a higher degree to any university or other educational institution.

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**Date: 22/07/2024**

## **Dedication**

This thesis stands as a heartfelt tribute to the pillars of my life - my loving family. To my devoted husband Adel, my two remarkable sons, Yazan and Osayd, and my daughter, Dana. Your unwavering encouragement and support have been the bedrock of my journey. You are the wellspring of patience and hope that has guided me through every challenge.

Deep within my soul, I carry the cherished names of my beloved departed parents, and it is to their eternal spirits that this thesis is devoted. It stands as a testament to their everlasting impact on my life.

This endeavor is not solely an academic pursuit; it is a tribute to our dear martyrs, the prisoners, the wounded, and all the Palestinian people who have been struggling for the right to return, liberation and independence in our sovereign state with East Jerusalem as its capital.

May this thesis shed light on the resilience and aspirations of the Palestinian people, and may it contribute, in even a small way, to a brighter and more promising future in our beloved homeland.

**Researcher**

**Samah Ishtaiwi**

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I would like to express my deepest gratitude to my beloved family for their patience and understanding during the countless hours I have dedicated to this thesis. Your encouragement, sacrifice, patience, and belief in my aspirations have been my guiding light.

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I owe special thanks to all the individuals who gratefully participated in the interviews and surveys conducted during my thesis. Their contributions have enriched the findings and added depth to the analysis, allowing for a comprehensive understanding of the topic at hand.

Finally, I am grateful to whoever stood beside me and provided me with his/her advice throughout my studies.

To all the above, I say thank you from the bottom of my heart.

Researcher

**Samah Ishtaiwi**

## **Abstract**

Palestinian higher education institutions face numerous challenges in adapting to the evolving labor market requirements. The aim of the current study was to assess the compatibility of higher education programs with the needs of the labor market in Palestine, in order to address the challenges faced by Palestinian higher education institutions in adapting to the evolving labor market requirements, which lead to increased unemployment and supply-demand gap.

Employing a mixed approach that combines quantitative and qualitative methods, the study was conducted on a sample consisting of (200) graduates, using a questionnaire to collect data. In addition, a personalized questionnaire was developed for conducting interviews with ten experts in the Palestinian Ministry of Higher Education and scientific research (MOHE) and staff members in Palestinian universities.

The study concluded that the reality of the outputs of higher education programs was moderate, and that the labour market requirements were high, and the strategy of the ministry of higher education and scientific research was moderate.

The results showed that there is a direct positive relationship between the outputs of higher education programs and their appropriateness to the requirements of the labour market and the strategy of the Ministry of Higher Education and Scientific Research. It has also been shown that the Ministry of Higher Education and Scientific Research strategy plays a mediating role in the relationship between the outputs of higher education programs and the appropriateness of labour market requirements.

The study concluded that there were no statistically significant differences at the level of significance (0.05) between the averages of the respondents' points of view about the outputs of higher education programs, and the compatibility of the requirements of the

labour market, and the strategy of the Ministry of Higher Education in Palestine due to the variables: (gender, age, occupation, educational qualification, specialization, and workplace).

In light of the findings, the researcher suggested several recommendations, which include updating the curriculum to include technical and soft skills, providing practical training and experiences, collaborating with the private sector, offering training programs and workshops, monitoring performance and career guidance, promoting scientific research and innovation, evaluating of matching strategies to align the outputs with the labour market, strengthening communication with the public sector, and developing mechanisms to track and evaluate graduate employment.

**Keywords:** Higher Education Programmes Outputs, Labour Market Requirements, Strategy of the Ministry of Higher Education and scientific research, Palestinian Universities.

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**Abbreviations**

AAUJ	Arab American University
PNA	Palestinian National Authority
MOEHE	Minister of Higher Education and Scientific Research
WBG	West Bank and Gaza
UNRWA	United Nations Relief and Works Agency for Palestine Refugees in the Near East
PCBS	Palestinian Central Bureau of Statistics
QIF	Quality Improvement Fund

## **Chapter One**

### **Research Framework**

This chapter is the summary of the research framework of this study that included the research problem, significance and justification of the study, objective of the study, questions of the study, methodology, tools and obstacles of the study, limitations of the study, definitions of the study and previous studies.

#### **1.1 Research Problem:**

During the technological advancements and transformations sweeping the global job market, higher education institutions in Palestine find themselves struggling to accurately anticipate and adapt to the ever-changing demands of employers.

The Palestinian National Authority has invested in education for future development and competitively attempted to provide a qualified workforce for the labour market. To that end, the Minister of Higher Education and Scientific Research (2017) adopted “the Education Sector Strategic Plan 2017-2022” which contains an objective that reads " to improve vocational and technical education and higher education by connecting their outputs with the local, regional, and international labour market".

The growth of the number of higher education graduates, in quantitative terms, apart from quality, has caused a surplus of supply in the Palestinian labour market. Such a phenomenon requires further investigation to identify the gap between the supply and demand of qualified graduates to the labour market and examine the factors that influence interaction and compatibility between educational institutions and the labour market.

This study stems from the need to explore the extent to which the alignment between universities' strategies and the Minister of Higher Education and Scientific Research (MOEHE) Strategic Plan 2017-2022, and to analyze its compatibility with the future requirements of the labour market, thus fostering a more harmonious relationship between academia and the professional world. This, in turn, will not only benefit individual graduates but also enhance the overall economic growth and development of Palestine.

### **1.2 Significance and Justification of the Study:**

**Relevance to the Palestinian Context:** Palestinian universities are embarking on a thrilling mission to transform and adapt their strategies to meet the ever-changing demands of the job market. The significance of this study lies in its quest to address the gap between the universities educational strategies and the pressing needs of the labour market in Palestine. By enhancing the quality and relevance of education, the research ultimately contributes to supporting the socioeconomic development of Palestine.

**Improving the employability of Palestinian graduates:** By examining the compatibility between higher educational programs and labour market requirements, the thesis aims to identifying challenges and opportunities faced by Palestinian universities in preparing students for the labour market, and potential areas of improvement and propose recommendations to bridge the gap. This research can eventually contribute to enhancing the quality and relevance of education, assisting graduates in securing employment opportunities, and ultimately supporting the socioeconomic development of Palestine, thus, to enhance the employability of Palestinian graduates.

**Policy Implications:** The outcomes of this thesis can have practical implications for policymakers, educational institutions, and relevant stakeholders in Palestine. The research findings can inform policy decisions and educational reforms to better align higher education programs with the needs of the labour market, leading to improved graduate employability and economic growth.

**Contribution to Knowledge:** This thesis contributes to the existing body of knowledge by exploring the specific context of Palestine and addressing the compatibility of higher educational programs with the labour market requirements. It adds valuable insights and empirical evidence to the field of education, labour market dynamics, and skills development in Palestine.

### **1.3 The Objective of the Study:**

The main objective of this research study is to explore and analyze the extent to which the strategies of the universities correspond to the evolving requirements of the labour market, and highlight its impact on achieving socio-economic and human resource development in Palestine, specifically, this study aims to:

1. Identify the reality of the outputs of higher education programs in Palestinian universities.
2. Identify the degree of compatibility of the outputs of higher education programs with the needs of the labour market.
3. Identify the strategy of the Minister of Higher Education and Scientific Research to harmonize the outputs of higher education programs with the needs of the labour market.

4. Identify the nature of the relationship between the strategy of the Minister of Higher Education and Scientific Research and outputs of higher education programmes and the compatibility with the needs of the labour market.
5. Explore the role of the strategy of the ministry of higher education and scientific research as a mediator of the relationship between the outputs of higher education programs and the degree of compatibility with the needs of the labour market.
6. Identify the differences between the averages of the respondents in terms of the outputs of higher education programs and their compatibility with the labour market and the strategy of the Palestinian Minister of Higher Education and Scientific Research from their point of view due to the following variables: (sex, age, occupation, specialization, educational qualification, place of work).

#### **1.4 Questions of the Study:**

This research study seeks to identify factors that influence employability of graduates from universities by concentrating on the following main research question: Do the strategies of Palestinian universities, correspond to the future requirements of the labour market in Palestine, and what are its potential socio-economic consequences?

Specific questions of the research study are formulated as follows:

1. What is the reality of the outputs of higher education programs in Palestinian universities?
2. What is the degree of compatibility of the outputs of higher education programs with the needs of the labour market?
3. What is the impact of the outputs of higher education programs in terms of their dimensions (academic guidance, educational content, support for graduates through

continuous education, language and technical skills programs, creativity and innovation programs in scientific research) on the degree of compatibility with the needs of the labor market?

4. What is the impact of the outputs of higher education programs in terms of their dimensions (academic guidance, educational content, support for graduates through continuous education, language and technical skills programs, creativity and innovation programs in scientific research) on the strategy of the Ministry of Higher Education and Scientific Research?
5. Does the strategy of the Ministry of Higher Education and Scientific Research mediate the impact between the outputs of higher education programs and the degree of compatibility with the needs of the labor market?
6. Are there statistically significant differences between the averages of the respondents regarding the outputs of higher education programs and their compatibility with the labour market and the strategy of the Palestinian Minister of Higher Education and Scientific Research from their point of view due to the following variables: (gender, age, profession, specialization, educational qualification, workplace)?

### **1.5 The Objective of the Study:**

The main objective of this research study is to explore and analyze the extent to which the strategies of the Palestinian universities correspond to the evolving requirements of the labour market, and highlight its impact on achieving socio-economic and human resource development in Palestine, specifically, this study aims to:

1. Identify the reality of the outputs of higher education programs in Palestinian universities.

2. Identify the degree of compatibility of the outputs of higher education programs with the needs of the labour market.
3. Exploring the impact of the outputs of higher education programs in terms of their dimensions (academic guidance, educational content, support for graduates through continuous education, language and technical skills programs, creativity and innovation programs in scientific research) on the degree of compatibility with the needs of the labor market.
4. Exploring the impact of the outputs of higher education programs in terms of their dimensions (academic guidance, educational content, support for graduates through continuous education, language and technical skills programs, creativity and innovation programs in scientific research) on the strategy of the Ministry of Higher Education and Scientific Research?
5. Exploring that if the strategy of the Ministry of Higher Education and Scientific Research mediate the impact between the outputs of higher education programs and the degree of compatibility with the needs of the labor market.
6. Identify the differences between the averages of the respondents in terms of the outputs of higher education programs and their compatibility with the labour market and the strategy of the Palestinian Minister of Higher Education and Scientific Research from their point of view due to the following variables: (sex, age, occupation, specialization, educational qualification, place of work).

### **1.6 Research Hypotheses:**

1. There is an impact of higher education program outputs on the degree of compatibility with the labor market needs.

2. There is an impact of higher education program outputs on the strategy of the Ministry of Higher Education and Scientific Research.
3. There is an impact of the strategy of the Ministry of Higher Education and Scientific Research on the degree of compatibility with the labor market needs.
4. There is an indirect impact of higher education program outputs on the degree of compatibility with the labor market needs when the strategy of the Ministry of Higher Education and Scientific Research acts as a mediator.
5. There are no statistically significant differences at the significance level ( $\alpha \leq 0.05$ ) in the averages of the respondents regarding the outputs of higher education programs and their compatibility with the labour market and the strategy of the Palestinian Minister of Higher Education and Scientific Research from their point of view due to the following variables: (gender, age, profession, specialization, educational qualification, workplace).

### **1.7 Research Methodology**

This study aims to explore the role of university programs on the labour market in Palestine by analyzing the relationship between the independent variables in terms of jobs held, employer's satisfaction and graduate satisfaction.

This study used a mixed methodology that includes both quantitative and qualitative approaches. It involved literature review to obtain secondary data and designing questionnaires and conducting interviews to gather primary data.

The study population comprised of a simple random sample of the statistical society consisted of (1) (200) graduates from the 14 Palestinian universities. (2) Ten university employers and experts in tertiary education, as represented by the Min the Minister of

Higher Education and Scientific Research policymakers, academic researchers as well as independent researchers, to determine their assessment, insight, and perspectives.

After reviewing previous literature, a questionnaire is developed and used as a primary research instrument. The questionnaire introduces, at the beginning, its title and purpose and invites respondents to fill out the form. The questionnaire contains four parts. The first part includes personal questions about the respondent himself, such as gender, age group, job rank, workplace, and period of work. The second part addresses the skills and attributes obtained by university graduates and questions to measure its impact in terms of jobs held, employer's satisfaction and graduate satisfaction. The answer is classified according to Likert-type scale by specifying the degree of basic skills ratings by graduates from 1 least to 5 highest.

Data is collected through a questionnaire survey. Structured interview was used through introducing a particular set of predetermined questions in the third part of the questionnaire with the same order. Before the questionnaire is distributed, a pilot test is used, where 10 respondents are selected and the survey is sent as a first sample, in order to experiment and amend the model based on the results of the pilot test and to ensure its reliability.

The questionnaire is distributed to (200) university graduates, and (10) academic experts by e-mail or face to face, to ensure that the survey represents the entire research sample. To ensure their response, another email was sent after a week to remind the respondents who did not fill out the questionnaire to get the maximum number of respondents.

Data is collected, tabulated and analyzed using SPSS Application software to produce the results. Data will be processed and presented in tables to be discussed before revealing the relationship between the independent and dependent variables

### 1.8 Delimitations of the Study:

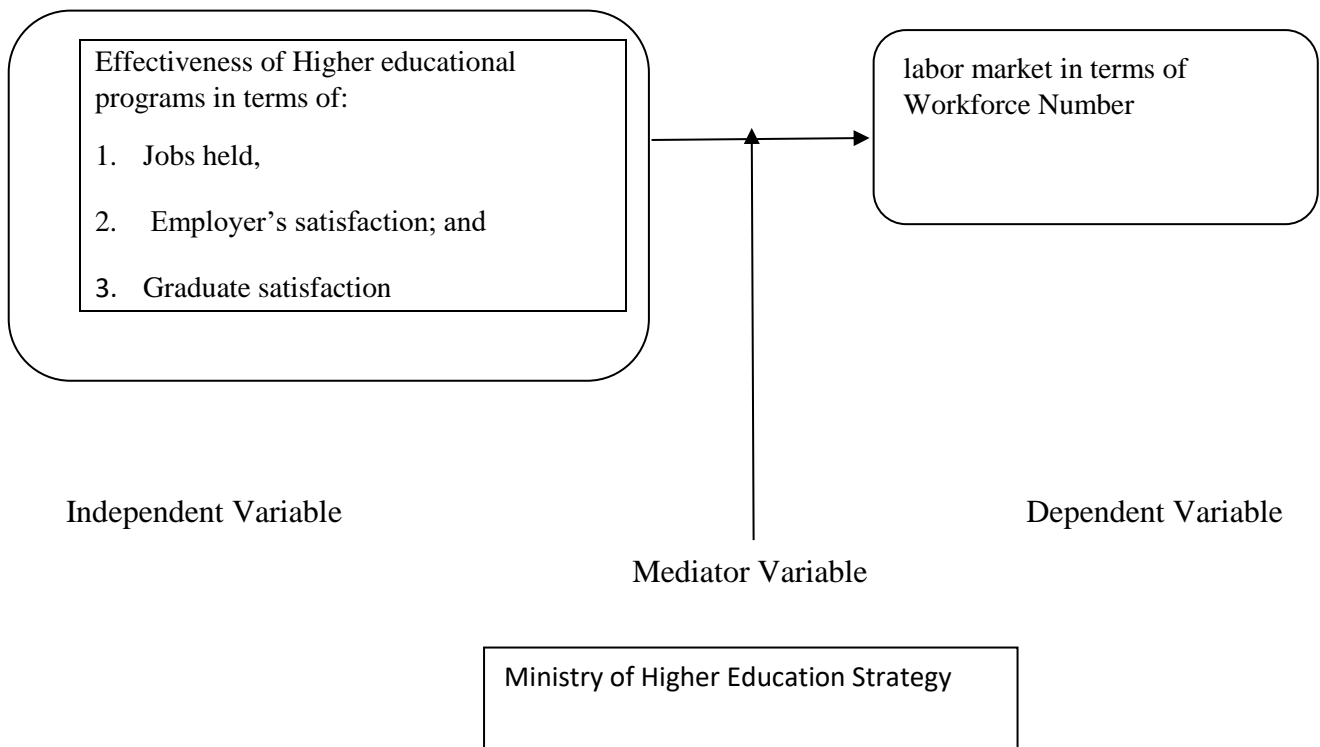
Due to the limitations, this study focuses mainly on the universities in the West Bank as a model of the Palestinian higher education institutions.

The study the study period will cover the years 2015-2022.

The study population will be the graduates of 14 West Bank universities. The inability to include graduates from the Gaza Strip is due to several factors that hinder data collection, including political and logistical challenges.

Experts from the Minister of Higher Education and Scientific Research are selected.

### 1.9 Theoretical Framework



## **Chapter Two**

### **Literature Review**

#### **2.1 Introduction**

This study will explore the effectiveness of universities programs in terms of jobs held, employer's satisfaction and graduate satisfaction as independent variables and identify its relationship with labour market work force number as a dependent variable, and its linkage with the Strategic Plan of the Ministry of Higher Education and scientific research (MOHE) as mediator variable.

Certainly, alignment between university academic programs and the strategic plan of the Ministry of Higher Education contributes to improving the performance of universities, ensuring the quality of its outputs in meeting the needs of the labour market, ultimately emerging stronger and efficiently responding to global challenges and future trends of education sector worldwide.

The Minister of Higher Education and Scientific Research adopted the Education Sector Strategic Plan 2017-2022 which targets: "By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent work and entrepreneurship". Therefore, one of the objectives of the Strategic Plan aims to: " improve vocational and technical education and higher education by connecting their outputs with the local, regional and international labour market" (MOEHE, 2017).

The Palestinian Ministry of Higher education and scientific research, through the Tertiary Education Project, supported by the World Bank and the European Community, established the Quality Improvement Fund (QIF) with the objective of assisting higher education institutions to "provide support to improve the quality of

Palestinian tertiary institutions and programs in order that they are relevant to the job market and economic development of Palestine; made competitive with international standards; and capable of developing income-generating programs” (World Bank, 2019).

The incompatibility of higher education performance with the demands of the labour market is considered among the causes of the unemployment crisis in different countries. Growing literature has examined employability and education-job mismatches in different countries and the interrelationships between human capital and social capital.

### **1.1.2 The Palestinian Higher Education System**

This chapter will explore the structure and strategies of the Palestinian Higher. Additionally, it will closely examine the plans of universities, analyzing their components and objectives. Furthermore, it will elaborate on the challenges that these universities face when implementing their plans, recognizing the hurdles they encounter along the way.

### **2.2 Higher Education Institutions’ Structure:**

The Palestinian higher education institutions have significantly increased over the previous decades. They commenced in the 1950s with two-year colleges that concentrated on providing technical education and training on teaching methods, among others, under the United Nations Relief and Work Agency (UNRWA). However, six universities were founded between "1971 –and 1979" as part of the Palestinian efforts to preserve the national identity and resistance and to meet the increasing demand of

students to pursue their education in their homeland; hence they have been a political and social power under the Israeli occupation (Tempus Program of the European Union, 2012).

Oslo Accords of 1994 had a significant impact on the education sector in Palestine, with the transfer of the education sector from Israeli occupation to the Palestinian National Authority (PNA). The Palestinian Ministry of Higher Education and Scientific Research was established in 1996 as an official body in charge of the development of the education sector at all levels. Building the organizational structure, recruiting the staff, improving a management system, and developing a unified Palestinian curriculum were among the priorities and functions assumed by the Palestinian Ministry of Higher Education (MOEHE) (Sanaa, 2014).

The Palestinian Higher Education Law No. (11) of (1998) stipulates the right of every citizen to higher education and enacts the legal status and framework for the organization and management of the higher education sector, it, therefore, provides much needed structure to tertiary education institutions in Palestine.

According to the Law (11), (1998), Higher education institutions are classified based on their educational programs into:

a. Universities that include at least three colleges and offer the following:

- 1) Intermediate diploma programs through separate community colleges.
- 2) Educational programs that lead to a Bachelor's degree.
- 3) Postgraduate programs that lead to a Higher Diploma, Master's degree, or Doctorate.

b. University colleges that offer:

- 1) Academic, professional, or technical educational programs that lead to a Bachelor's degree.

2) Professional or technical programs lasting two or three years that lead to an Intermediate Diploma.

c. Community colleges that offer professional or technical programs with a minimum duration of one academic year, leading to an Intermediate Diploma, Professional Diploma, or Technical Diploma. (Palestinian Higher Education law, 1998).

Today the Palestinian higher education system is comprised of 51 accredited higher education institutions, of which 34 are in the West Bank and 17 in the Gaza Strip, recruiting 14.600 employees. The higher education institutions are legally classified into three types; 16 traditional universities, of which ten are in the West Bank, six in the Gaza Strip; 16 university colleges, of which 11 are operating in the West Bank and 5 in the Gaza Strip; 17 community colleges which 11 in the West Bank and 6 in Gaza Strip. In addition to two universities for open education, namely Al-Quds Open University (with 22 branches in Palestine; 17 in the West Bank & 5 in Gaza Strip), and the Arab Open University (Palestinian Ministry of Higher Education & Scientific Research, 2021).

Types of the Palestinian higher education institutions classified according to the of the period of its establishment and type of Institution (Abou-Dagga, Alyan & El-Holy, 2014)						
	Before 1970s	During 1970s	During 1980s	During 1990s	From 2000 Until now	total
Traditional Universities		6	1	3	6	16
Open University *				1	1	
University College	1	1	1	8	5	16
Community College	2	4	3	5	3	17
Total	3	11	5	17	15	51

These different types of institutions give the people of Palestine access to a variety of educational services and knowledge that they can use to progress socio-economic indicators, such as poverty reduction, job creation, and increased standards of living.

Statistics show that in the academic year 2020/2021, there are about 214,765 enrolled students, of whom 132,586 are females, and 82,179 are males (PCBS. 2021).

The Palestinian higher education institutions offer nearly 1000 academic fields that include: Education, Arts and Humanities, Social Science & Journalism, Business, Administration & Law, Natural Sciences, Mathematics & Statistics, Information & Communication Technologies, Engineering, Manufacturing & Construction, Agriculture, Forestry, Fisheries & Veterinary, Health & Welfare, Services, and other specializations (PCBS. 2021).

### **2.3 Strategies of Higher Education System:**

The Palestinian Higher Education system is a relatively young system that has undergone significant changes and challenges over the past few decades, leading to the need for a strategic plan that addresses the challenges and opportunities that come with this transformation.

Moving from a complicated situation of prolonged occupation and a state of neglect, the Minister of Higher Education and Scientific Research (MoEHE) has struggled, during the early years, to create mechanisms for planning, budgeting, and coordinating the education process while dealing concurrently with student growth and the chronic crisis of occupation. In his analysis of the early days of the Ministry of Education, Mahshi (2001) noted that the Ministry was grappling with how to provide quality education in emergencies and crises.

Recognizing that strategic planning is necessary for universities to remain competitive and provide quality education, the Palestinian National Authority, since its inception in 1994, give special attention to anticipate and plan. Hence, the Minister of Higher

Education and Scientific Research (MoEHE) formally began a participatory process in early 1997 to prepare a rationalization plan for the higher education sector for the years 1997 to 2001. The first Five-Year Education Development Plan (2001-2005) was introduced with five goals, namely: to provide access to education for all children; to improve the quality of education; to develop formal and non-formal education; to develop management capacity in planning, administration, and finance; and to develop human resources across the education system (MoEHE,2006).

Other strategic plans were set up successively to cope with the significantly increasing need for tertiary education. It aspired to maintain the quality and relevance of the Palestinian education system and to meet the changing demands of the global economy, the latest of which is the five-year Education Sector Strategic Plan 2017 – 2022 was adopted. It established three broad general objectives, which includes “ensuring safe, inclusive, and equitable access to quality education at all levels of the system; developing student-centered teaching and learning pedagogy and environment; and enhancing accountability and results-based leadership, governance, and management.” (Minister of Higher Education and Scientific Research, 2017).

The Palestinian national policy agenda prioritizes adapting vocational and technical training and education to development and labour market needs. Therefore, the current Palestinian Higher Education Strategic Plan emphasizes that “the universities and colleges represent the continuation of the learning process for students to be well-prepared for the job market and daily life.” It includes linkages between the education sector with other sectors. Mainly, it affirms its correspondence to” the rapidly changing labour market, technology development, urbanization, migration, political uncertainty, environmental and natural disasters, lack of natural resources, demographic challenges,

increasing unemployment, poverty, increasing disparity and risks threatening peace and security.” (MoEHE, 2021).

The Israeli occupation and political unrest have had a long-lasting impact on strategic planning in Palestinian universities. They are more likely to focus on immediate and short-term goals, rather than long-term objectives. Additionally, universities are heavily reliant on external funding sources, which can be difficult to obtain in times of political unrest which restricts the universities’ ability to support or conduct long-term planning initiatives. This has resulted in a lack of effective long-term planning in Palestinian universities, which has had a significant impact on the way they are able to meet their short-term objectives regarding meeting the future requirement of the labour market.

Despite the challenges, Palestinian higher education system has been managing accreditation and quality assurance of university education to students and playing an essential role in the development process. By developing strategic plans that focus on increasing access to higher education, improving academic quality, promoting innovation and entrepreneurship, enhancing internationalization, and strengthening partnerships between universities and industry, Palestinian higher education institutions continue to overcome the challenges and contribute to the development of Palestine.

#### **2.4 Strategic Plans of the Palestinian Universities:**

Strategic planning and the quality of performance of higher education institutions are closely interrelated. The success and development of any educational institution are consistent with the extent of implementing systematic and strategic planning that considers the internal and external environment of the institution while identifying its mission, vision, and future objectives (Abu Snaineh, 2017).

Palestinian universities in the West Bank have been trying to catch up with the global practices related to strategic planning, thus adopted, in this regard, the philosophy of total quality and its applications along with various mechanisms to achieve improvement and development in the educational services. They adopted an approach which includes developing the organizational and infrastructures, modifying administrative policies and improving the teaching methods, with a view to enhancing quality more than quantity in education system. However, the Palestinian universities remained inadequate in achieving all the above in the context of an inclusive strategic plan; developing a comprehensive vision, philosophy, strategic goals, and short-term strategies that consider the international standards.

Executing vital preparation in Palestinian colleges is fundamental for accomplishing their objectives and adding to the advancement of Palestine. Notwithstanding, the degree of executing key arranging changes relying upon a few elements, including the accessibility of subsidizing, institutional limit, and political shakiness, among others. The accompanying area will reveal insight into the well thought out courses of action in the West Bank colleges:

It is evident that the Palestinian universities have been implanting, to some extent, strategic planning, with a view to improving the quality assurance of education and research, expanding academic programs, developing their infrastructure, and enhancing the learning environment for students. Thus, that they succeeded to play a vital role in shaping the strategic vision and mission of higher education in Palestine.

## **2.5 Relevance between Strategies of Higher Education System and the Strategies of the Palestinian Universities:**

This chapter identifies the current practice of strategic planning by the Palestinian universities and investigates its relevance with the strategic objectives of the Strategic Plan of (MOHE) as far as outcomes through the knowledge and skills of qualified people the universities produce to the labour force.

Strategic planning is a fundamental component of effective management since it determines the organization's progress, direction, efficiency, and productivity. It requires identifying different areas of processes that need improvement (e.g., leadership, information, and analysis, strategic planning, staff development, operations, business outcomes, customer satisfaction) (MOEHE, 2017). These areas are linked to the organization's main objectives (customer satisfaction, stakeholder satisfaction, employee satisfaction), and responsibility towards society" (Al-Rasheed, 2004).

"Educational planning is the application of rational, systematic analysis to the process of educational development with the aim of making education more effective and efficient in responding to the needs and goals of its students and society". (Coombs, Philip. 1970). There are five major approaches to educational planning, which are: the social demand approach; the manpower requirement approach; the education-output ratio method; the aggregate method; and the comprehensive Approach (anwaarahmadgulzar.blogspot.com).

The Ministry of Higher Education and scientific research has developed and implemented its successive strategic plans to reform and improve the educational sector in Palestine. To that end, the Education Sector Strategic Plan 2017-2022 was adopted, identifying many objectives, including the target 4.4, which stipulates: "By 2030,

substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent work and entrepreneurship”(MoEHE, 2017).

Target 4.7 of the Education Sector Strategic Plan 2017-2022 stipulates that "By 2030, ensure that all learners acquire knowledge and skills needed to promote sustainable development, including education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and culture's contribution to sustainable development" (MOEHE, 2017).

Having reviewed the strategic planning in the Palestinian universities, the researcher considered the websites as the main source of information whereas the strategic plans and academic programs are considered the main component to compare and analyze its relevance with the strategy of the Ministry of Higher Education.

It is apparently evident that the universities are adopting and implementing strategic planning that helps in steadily achieving its organizational goals, values, and anticipated outcomes. Therefore, several strategic plans of the targeted universities are published at the time of preparing this research study, which go in line with the strategic plan of the Ministry of Higher Education,

The relevance between the strategic plans of the selected universities and the strategic plan of the MOEHE is apparently evident in their achievement which are envisaged in the increasing size of the qualified student body, expansion of high-quality infrastructure, organizational structure, faculties, partnerships, competitiveness, and educational performance, which has gradually grown at the national and regional context.

## **2.6 Challenges Facing the Higher Education System:**

The Palestinian Higher education system is facing numerous challenges. From limited funding and inadequate resources to political instability and conflict affecting, these issues are significantly impacting the quality of education and the ability of students to access it. Moreover, the challenge of retaining talented graduates in Palestine is adding to the complexity of the situation.

Qumsiyeh & Isaac (2012) Argued that the Palestinian higher education and research and development (R&D) has a relatively recent history and faces extraordinary challenges not faced by other countries.

Examining the tertiary education system in the 1990s reveals many problems of efficiency, quality, and relevance, as attributed to a report by the Ministry of Higher Education” (MOHE, 1997). “The Palestinian education system is characterized by poor governance and planning, by lack of an adequate finance structure, by a rapid and at the same time often unjustifiable expansion of study programs, and by indications of a deterioration in the quality of education”. (Hashweh, 1998).

According to the EU’s Report issued in 2012, key challenges facing the higher education sector in Palestine are not limited to “ the weak link or relevance of programs to the needs of the labour market; the competition among universities to attract more students to increase their income; the lack of national and external funding represents a serious negative impact on the quality and relevance of higher education programs; in addition to the low salaries have led staff members to take up extra work, which harms the education and research in terms of its quantity and quality” (Tempus Program of the European Union, 2012)

In the meanwhile, Reach Education Fund published on January 14, 2022, a report entitled: the challenges and obstacles in the West Bank and Gaza Strip's Higher Education System highlighting many challenges which include: the Israeli occupation policies; lack of Infrastructure; poverty and problems with affordability; difficulties in E-learning; and lack of funding and financing (<https://reacheducationfund.com>).

Besides, the Palestinian Higher Education Sector Strategic Plan 2017-2022 identifies many challenges which include graduate unemployment due to differences in higher education inputs, limited integration into the labour market, and a lack of compatibility between adequate development skills and competencies that a graduate should have (The Ministry of Higher Education, 2017).

While analyzing the key challenges facing the education sector, the current Education Sector Strategic Plan includes an indicator “which reveals the extent to which the vocational education curricula entail labour market-based competencies shows that there is a discrepancy between the competencies provided in the curricula and that of the labour market needs”.

The Strategic Plan 2017-2022 illustrates the second challenge as follows: “adapting higher education with its societal mission, development needs, and the issue of unemployment among graduates. This is due to the differences in higher education inputs, clear inclination towards humanities, increase in the numbers of students enrolled in open learning programs, their limited integration into the labour market, and finally lack of compatibility between adequate development skills and competencies that a graduate should have”.

According to the Higher Education Strategic Plan, the 6<sup>th</sup> challenge facing the higher education sector is the failure to link outputs of higher education to labour market needs

due to many factors including high school graduates enrolling in academic programs, the financial deficit, the existence of the parallel education, among others.

Political instability and conflict have been ongoing for decades in Palestine, certainly impact various aspects of life including education. The universities have been particularly affected by these challenges, including closures, arrests, and restrictions on movement. The disruptions caused by the conflicts have led to a decline in the quality of education in Palestinian universities, with many institutions struggling to provide basic services, such as electricity and internet connectivity.

Additionally, the conflicts have led to a significant brain drain, with many educated and skilled Palestinians leaving the country in search of better opportunities. This has resulted in a shortage of qualified faculty, further exacerbating the challenges faced by Palestinian universities. Furthermore, the conflicts have created a climate of fear and uncertainty, with students and faculty members uncertain about their safety and prospects.

The Strategic Plan, therefore, suggests actions to mitigate the effects of this issue, by carrying out the following: “(1) more needs assessment studies and surveys should be conducted concerning labour market needs; (2) students’ awareness of technical and vocational specializations should be upheld; (3) integrating some vocational courses with the undergraduate courses as elective and free elective courses in some programs at universities”.

The Plan, thus, affirms the interconnection with the economic sector and identifies priority area No. 4 “to align educational objectives with labour market expectations in terms of skills that help students move from education to employment, avoiding mismatching with the labour market in Palestine and abroad”.

The Education Sector Strategic Plan 2017-2022 provides suggestions to improve and develop and activate the higher education sector: among other things, strengthening interaction between higher education institutions and the private sector, aiming to uphold practicum through training. Such a thing will also give students the necessary skills to engage in the labour market.

Another suggestion articulates the need to “increase enrollment in technical and vocational education training, especially for female students. This increase has to be adapted to plans based on requirements of the labour market, and carried out in cooperation with the owners of private institutions and factories to provide and encourage access to majors that the labour market needs”.

The Strategic Plan also emphasizes the priority to adapt education, life, and labour market needs. Program No. 7 on higher education identifies the priority to “link the output of higher education with the needs of the labour market, as well as strengthening interactions and cooperation between higher education institutions and the private sector”.

The researcher finds that higher education in Palestine is facing numerous challenges that are hindering its growth and development. The lack of funding, limited access to technology, and political instability are some of the key obstacles that need to be addressed. However, despite these challenges, the resilience of the Palestinian people and their determination to achieve their goals is commendable. To overcome these challenges, it is imperative that the government, private sector, and international organizations work together to provide adequate funding, improve the infrastructure, and create a conducive environment for learning. With the right support and resources,

the higher education system in Palestine can create a brighter future for the students, the country, and the region.

## **2.7 Previous Studies**

AlJamal, (2020) revealed in his article entitled: “Strategic vigilance in Palestinian universities in the southern West Bank and its relationship to achieving competitive advantage from the viewpoint of academics”, that degree of strategic vigilance and competitive advantage in Palestinian Universities in the southern West Bank are high. The researcher recommended that the university should pursue the objectives of the competing universities prior to identifying their goals and should conduct SWOT analysis before developing its strategies.

Kaur, Rajinder & Singla, (2019) conducted a case study entitled: “Performance Measurement of Higher Educational Institutions: An Empirical Study Using Student’s Perception”. The researchers discovered seven factors that will help educational planners and policymakers in developing a more effective system that will benefit academics' overall output in higher education. The study concluded that holistic evaluation model of university/institutions performance is the key to a higher educational organization’s existence.

El Talla et al. (2018) conducted a case study entitled: “The Reality of University Performance According to the Models of Excellence in Palestinian Universities”, which aimed to identify the availability of resources and partnership standards as one of the opportunities for excellence in Palestinian higher education institutions based on the European model. The study provided many recommendations include, inter alia, increasing the interest of students and beneficiaries by providing an educational

environment and appropriate learning and academic programs that meet the needs of the labour market and activating continuing education departments and partnerships with the private sector.

Abdo (2019) conducted a case study entitled: “The degree to which the outcomes of the faculty of business and management match with the actual needs of the Palestinian labour market: A case study of Ramallah Governorate”. The study aims to determine to what extent the outcomes of Administrative and Economic Sciences MBA students in Palestinian universities meet labour market needs. The study found that the MBA program's results meet a medium labour market need, with a percentage of 57.1 percent and an average of (2.8) in the paper. It was also discovered that 52.9 percent of graduates work in their field of specialization. The study recommended that curricula, services, and courses be redesigned to keep up with changes in the labour market and to be more versatile and adaptable to it.

Vichet (2019) conducted a research study entitled “Impacts of educational mismatches in developing countries with a focus on Cambodia’s case’, aimed to investigate what are the factors that influence the unemployment duration, and examines whether education-job mismatches lower individual wages and to explore the impacts of over-education on economic growth. The research concluded that “the Cambodian education system needs to improve its quality to respond to the labour market’s demands. This requires a close working relationship between Ministries, HEI, and the private sector”.

Mansour (2018) in their study entitled: “the qualitative gap between the outputs of higher education and the requirements of Palestinian labour market: reasons and mechanisms of harmonization” demonstrated the magnitude of the imbalance between higher education and the needs of the labour market, and suggested that academic and

training programs should be tailored to the needs of the labour market, with active involvement of labour market consultants, technicians, and experts in the planning process.

A study on employment in the occupied Palestinian territory issued by the International Labour Organization (2018) revealed low level of efficacy and inability of higher education, whether academic or technical and vocational education, to translate into better employability, which appears to be having a negative effect on young people's perceptions of education and its importance to the labour market. The study recommended concentrating on educational goals for generating job-rich growth in the short term while also setting the groundwork for long-term growth.

Abu Snaineh (2017) conducted research entitled: "the Evaluation of the Human Resources Management Practices at Palestinian Universities and Ways of Development" with a view to identifying the extent to which the human resources at the West Bank universities implement strategic planning, job analysis, and evaluation of expertise through the recruitment process, and performance assessment and human resources at the Palestinian Public Universities in the West Bank. The research revealed a low level of practicing the human resources management these functions in an effective and efficient manner.

A research study conducted by Abu Odeh (2016) entitled "the suitability of higher education output to the needs of the Palestinian labour market: A case study of commerce colleges in Gaza Strip" found that unemployment rate among graduates was nearly 62 percent, according to the study sample. It concluded that there was a lack of cooperation among the labour market, universities, and government ministries. Therefore, the study revealed a lack of fundamental research to assess the labour

market's needs in Palestine, as well as a lack of guidance for students to meet those needs. It recommended that the public and private sectors, as well as Palestinian universities, work together to help graduates transition into the labour market.

Al- Dalo (2016) conducted a research study entitled:” A proposed strategy to align the outputs of higher education with the needs of the labour market in Palestine” targeting the graduates of pharmacy programs as a study population. The researcher argued that there is a declining level of acquisition of mental and life skills. The research revealed that there is a significant gap between acquired knowledge and skills and the demands of the labour market. It also found a large disparity in the capabilities of the faculty members and weak relationship among the higher education institutions, civil society organizations and the labour market. Among the recommendations, he suggested enhancing the intellectual and technical skills as well as to provide specialized training programmes to university graduates.

CARE International (2015) conducted research to identify skills gap among workers and entrepreneurs, with special emphasis on Palestinian youth and women, in relation to domestic labour market demands as viewed by the private sector. The report argued the presence of skill-gaps among Palestinian graduates from higher education institutions. It concluded that all stakeholders recognize the growing issue of a skills gap, and the need for efforts to produce a more detailed picture of the condition of the Palestinian labour market and required skills in the future.

In her case study entitled "Social Capital and Employability in Palestine: Challenges Facing Higher Education," Asma Al-Sharabati (2015) investigated the factors that contribute to the unemployment of Palestinian university graduates (Palestine Polytechnic University). Traditional human capital accumulation is inadequate to

deliver employment, according to the analysis of the interview results. The findings of the case study indicated that any university in a country like Palestine should broaden its educational responsibilities by adopting a social capital curriculum centered on the development of communicative links between local communities, the university, and workplaces.

Affoneh (2014) conducted his research to analyze the education system after the establishment of the Palestinian authority from 1994 to 2009 and explored the obstacles to educational quality and how to address it. The researcher concluded that there is widespread agreement that the standard and quality of education in Palestine is deteriorating, absence of a clear philosophy of education and confusion of policies. He recommended that all Palestinians should be engaged in national debate to discuss this important issue and ensure comprehensive reform and modernization in the Palestinian education system.

Abu Sadder (2013) concluded in his thesis entitled “The Strategic Planning of Human Resources in the Palestinian Academic Institutes/ An-Najah National University as a Study Case”, that the strategic planning methodologies for human resources in universities has not been implemented, and if they exist, they are neither effectively achieving the desired results, nor the strategic objectives of the university.

Another thesis conducted by (Al-Louh, 2007) to identify the obstacles of implementing strategic planning in the Palestinian universities in the Gaza Strip, has revealed that requirements to ensure success of the strategic planning process are available with an appropriate level but still needs improvement. The researcher recommended developing the management information systems, organizational structures, and the capacity of the administrative team, among others.

Mohammed Migdad (2011) explored the importance of tracking and monitoring graduates of Palestinian Tertiary Educational Institutions (PTEIs) to provide a wider and much clearer understanding of labour market needs in his research study "Unemployment Among the Graduates of the Education System in Palestine." According to the data gathered, there is no structured system in place to monitor and track graduates at higher education institutions in the West Bank and Gaza Strip. Such activities are few and far between, occurring only at a few universities. He recommended the Tertiary Education Institutions in Palestine to structure its efforts and organize it accordingly.

Corominas et al. (2010) conducted a case study to investigate Catalonia's public higher education system in terms of the learning model's ongoing development over the last ten years, its fit with the needs of the skilled labour market, and graduates' returns in terms of work quality and employment after graduation. According to the findings, there is still a gap between the competencies needed in jobs (as determined by graduates) and the level of competence-based learning gained at university. Mismatch poses a challenge to get the right a job or implies a challenge to improve it.

Khader (2006) in his research study investigated the extent to which policies of the Palestinian Minister of Higher Education and Scientific Research affect the unemployment rate among Palestinian graduates. He concluded that higher education policies and procedures have an impact on the unemployment rate among Palestinian graduates, and they have the potential to boost the situation if the political situation remains stable and economic conditions remain favorable. Developing vocational studies, establishing huge overseas complementary projects, and conducting further research on the Palestinian labour market were among the recommendations.

El-Jafari (2004) conducted a study to look at potential sources of funding for university education in the West Bank and Gaza Strip, as well as ways to improve university self-funding and reduce budget deficits. The study's findings showed that Palestinian universities are unable to meet the labour market's needs. Furthermore, universities lack the facilities and funding needed to perform applied research and offer sufficient consulting and technical services to the public and private sectors in order to gain their support.

Labour Force Survey Results in 2019 released by the Palestinian Central Bureau of Statistics indicated that 52% is the unemployment rate of youth graduates (19-29) years who hold associate diploma certificate and above, 68% for females compared with 35% for males in the occupied Palestinian territory (Groenewold et al., 2020).

Following a literature review of previous studies, it became evident that realistic and clear strategies for achieving synergy between higher education outcomes and the needs of the labour market could not be established due to a number of factors, including the necessity of the educational system's structure and services, quality standards, and performance metrics, to be reflected in its ability to keep pace with the requirements of the labour market and ensure better job opportunities for graduates.

The current study is distinguished by its focus on the theoretical and practical side, with special focus on the case of the West Bank Universities as a model for Palestinian higher education institutions. Therefore, it incorporates variables that have never been studied before, which provides more specificity and significance to delivering new results and recommendations to decision-makers and higher education policymakers in Palestine.

The findings and recommendations derived from this study offer invaluable insights that can shape future strategies and policies, paving the way for a more prosperous and harmonious connection between academia and the job market.

## **Chapter Three**

### **The Labour Market in Palestine**

Understanding the dynamics of the labour market is essential for policymakers, employers, and job seekers alike as it affects employment levels, wages, and working conditions. This chapter will discuss the current situation of the labour market in Palestine, the labour force uses and limitations, the relevance between educational outputs and labour market and the challenges it experiences, including the political conflict, limited job opportunities, skills mismatch, as well as the economic and political instability.

#### **3.1 Definition of Labour Market:**

The labour market is an essential component of any economy. It refers to the supply of and demand for labour. Therefore, it is the place where employers and employees interact in the process of buying and selling labour services, and it includes all types of jobs, from low-skilled to high-skilled, and all types of workers, from full-time employees to part-time or temporary workers (Corominas et al., 2010).

Kenton (2002) argues that the labour market refers to the supply and demand for labour and jobs, so that employees provide supply and employers provide demand, and considers it a major component of any economy, as it is and is intricately linked to markets for capital, goods, and services. It helps in creating a skilled workforce that thrives with competition and economic expansion and development.

(Al-Tallaa 2005) defines the labour market as a society that includes business owners or representatives of companies, and individuals looking for jobs from the old workers

with experience or from the young fresh graduates.

Ammara (2012) defines the labour market as a process of continuous dynamic interaction between the two sides of supply and demand, where the supply side is represented in the outputs of the higher education process, while the demand side is represented in the sectors that benefit from the presence of these outputs in many different practical fields, until equilibrium between supply and demand is achieved.

Besides, Mutwalli (2014) argues that the labour market as an organized economic process in which labour supply and demand interact, while, (Ahmed, 2019) defines the labour market as a geographical or hypothetical place that combines the supply and demand sides of products of different types with the workforce working to provide services in accordance with their capabilities, skills, experience, and specializations that are required by the operating organization or employer.

Understanding the components of the labour market is essential for policymakers, employers, and job seekers alike to make informed decisions about employment opportunities and workforce development. Here are some of the key components of the labour market: (Corominas et al., 2010)

1. Labour supply: This refers to the number of workers available in the labour market who are willing and able to work in a particular market. Labour supply is influenced by factors such as population growth, education and training, retirement rates, and social norms.
2. Labour demand: This refers to the number of workers that employers are willing to hire at a given wage rate. It is influenced by factors such as economic growth, industry trends, technological advancements, government policies and regulations.
3. Wages and salaries: This refer to the compensation paid to workers in exchange for

their labour services. It is influenced by factors such as supply and demand for labour services, worker experience and productivity levels, education and training levels, cost of living, and government policies.

4. Employment opportunities: This refers to the availability of job openings in a particular market. Employment opportunities can be affected by factors such as economic growth, industry trends, technological advancements. and government policies.
5. Education and training: This refers to the level of education and training required for different types of jobs in a particular market. Education and training can affect both labour supply and demand by influencing the skills and qualifications of workers.
6. Government policies: This refers to laws, regulations, and programs implemented by governments that affect the labour market. Examples include minimum wage laws, unemployment insurance programs, and job training initiatives.

Zakaria (2020) divides the labour market into two types: the main market, which is characterized by large capital and high production capacity, and the secondary market, which is characterized by low wages and unfavorable conditions.

(Massoud, 2012) divided the types of labour market into four sections: the government sector; the private sector; the foreign sector; and, finally the irregular labour market sector, which is characterized by the low level of education of workers, the low level of wages, the simplicity of production tools and methods, the low costs of job opportunities and capital, and the absence of the need for expensive technology (مسعود، 2012).

The researcher concludes from the literature review that labour market is the place

where the exchange process takes place between workers with skills, capabilities and experience, and employers in accordance with the characteristics of the available job and the university majors owned by the researchers, and in a way that meets the needs of institutions, whether in the public, private or non-profit sectors.

The researcher believes that the diversity of the labor market types provides flexibility and positivity to the economic characteristics of the Palestinian society, which contributes to increasing the number of graduates who can be accommodated in these markets; thus it reduces the unemployment rate among them and helps achieve harmonization between the outputs of higher education and the requirements of the labour market.

### **3.2 Labour Force Uses and Limitations:**

The labour force is a term used to describe the segment of the population that is actively engaged in the labour market. This includes individuals who are employed, as well as those who are actively seeking work. The labour force is an important measure of the health of the economy and the quality of the education process (Abu Rokba, 2021).

Good education systems are one of the main determinants of increasing human capital productivity and promoting entrepreneurship and technological progress. Despite the unprecedented growth in the higher education sector, there is a large percentage of graduates who struggle to find jobs. A recent employer survey showed that 87% of the employers surveyed face difficulty in finding qualified skills and talents to fill vacancies in their companies, which constitutes a challenge for all related parties (Izabllle, 2021).

The labour force has a significant impact on economic growth, as it provides the workforce needed to produce goods and services that are necessary for the functioning

and well-being of a society. The labour force is used in several ways, such as:

- Employment statistics: labour force is used to calculate statistics, such as the unemployment rate, labour force participation rate, and employment-to-population ratio.
- Economic indicators: Labour force data is used to assess the overall health of the economy and to identify the trends and patterns of forecasting future economic conditions.
- Planning and policy development: Governments and businesses use labour force data to make decisions about workforce planning, education and training programs, and labour market policies, as well as wages and benefits for workers.

When the labour force is growing and productive, it can contribute to economic growth through:

- Increased output: When the size and productivity of the labour force increase, businesses can produce more goods and services, which can drive economic growth by increasing output and expanding the economy.
- Innovation: A skilled and educated labour force can drive innovation and technological advancements, which can improve productivity, create new industries, and stimulate economic growth.
- Improved competitiveness: A highly skilled labour force can make a country or region more competitive in the global economy, as it can produce goods and services more efficiently and at a higher quality than other countries or regions.
- Increased consumer spending: When workers are employed and earning income, they have more money to spend, which can stimulate economic growth by increasing consumer spending and demand for goods and services.

Despite its usefulness, here are some limitations to the labour force as a measure of

economic activity:

- Excludes certain groups: The labour force only includes individuals who are actively seeking work or who are employed. This means that individuals who are not actively seeking work, such as retirees or individuals with disabilities, are not included in the labour force.
- Limited information: The labour force data only provides limited information about the quality of employment, such as wages, benefits, and working conditions.
- Inaccuracies: The labour force data can be subject to inaccuracies, such as underreporting or misclassification of individuals who are not actively seeking work, which can affect the accuracy of employment statistics.

Besides, when the labour force is shrinking or unproductive, it can have a negative impact on economic growth. This can be caused by several factors, such as:

- Skill gaps: A lack of skills or qualifications among workers can limit productivity and hinder economic growth.
- Unemployment: High levels of unemployment can reduce consumer spending and demand for goods and services, which can slow economic growth.
- Aging population: An aging population can lead to a shrinking labour force, which can limit economic growth by reducing the number of workers available to produce goods and services.

Despite these limitations, the labour force remains a critical measure of economic activity and plays a critical role in the functioning of the society at large. It is used by governments, and businesses to make decisions about workforce planning, policy-making for promoting economic growth, social mobility, and individual well-being.

### **3.3 Relevance between Educational Outputs and Labour Market**

There is a growing recognition in Palestine of the need to align educational outputs with the requirements of the labour market. As it was mentioned earlier, the Palestinian economy faces challenges related to limited resources and restricted access to markets, which can make it difficult for businesses to find skilled workers.

In order to address this issue, there is a need for higher education institutions in Palestine to offer programs that are tailored to the needs of the labour market and provide students with the skills and knowledge necessary to succeed in today's economy.

(Issan, 2006) considers that what is meant by the harmonization between the outputs of higher education and the labour market is to provide the labour market with qualified graduates who are capable of self and continuous learning, and who possess the knowledge, skills, and competencies that help them to integrate into their work as required by the labour market.

It is noted that there are several previous studies that reflect the interest of researchers and academics in studying higher education institutions from various aspects, which indicates the importance of their role in bringing about the required positive change in society, by measuring the compatibility of their outputs with the labour market (Dagher, 2016).

Hijazi (2016) concluded in his research that there is a widening gap between the outputs of higher education and the needs of the labour market as a result of the challenges that higher education faces such as globalization, free trade, the speed of technical communication and the increase in unemployment rates, in addition to the nature of economic policies and their repercussions on Higher education sector.

AlBarhami (2022) concluded in her research paper that everyone seeks to obtain a university degree that helps them enter the labour market and obtain a prestigious job. However, the stagnation of development, service or investment projects affects the outputs of education and training. The study recommended to strengthen cooperation between local, regional, and global universities to benefit from the methods and experiences of reconciling the labour market with the outputs of higher education.

(Abu Odeh, 2016) in his research on "the suitability of higher education outputs and the needs of the Palestinian labour market - a case study of colleges of commerce in the Gaza Strip" concluded several results, including the lack of substantial studies to determine the labour market needs by universities.

In the recent period, the Palestinian labour market has witnessed dramatic transformations and radical developments, which led to a widening gap between the outputs of higher education institutions in Palestine, and the requirements of the Palestinian labour market. This was confirmed by the study conducted by AlDalou (2016) under the title "A proposed strategy to match the outputs of higher education with the needs of the labour market in Palestine". The results show the existence of a large gap between the education acquired in universities and the needs of the labour market, and the weak interrelationship between the higher education sector, civil society institutions, and the labour market.

Therefore, many research studies argue that the outputs of the Palestinian higher education institutions are not compatible and do not respond appropriately to the requirements of the labour market. As a result, there is a surplus in the number of graduates who are looking for work. Moreover, do not possess the necessary skills and experience, in return for the existence of a demand for a highly skilled and experienced

workforce.

This situation represents a serious structural challenge to the government and the private sector alike, which requires improving the quality of learning and provide students with more modern and necessary skills, especially in the field of information technology.

Researchers argue that there should be increased coordination and cooperation between institutions of higher education and stakeholders in the public, private or civil sectors, so that they can see the curricula and enable professors and students alike to see the technologies used in production and be informed about the needs of the labour market. This would give opportunity to modify the curricula and update the academic programs and specializations to suit the requirements of the productive sectors, thus the desired interdependence between university outputs and the requirement of productive sectors will be achieved.

There is some evidence to suggest that the outputs of higher education in Palestine are not always fully aligned with the requirements of the labour market. While there have been efforts in recent years to improve this alignment, challenges remain related to limited resources, political instability, and other factors.

In recent years, there has been an emphasis on science, technology, engineering, and mathematics (STEM) education in Palestine, as these fields are seen as critical for driving innovation and economic growth. Universities and colleges in Palestine are offering degree programs in areas such as computer science, engineering, and biotechnology, among others.

Since harmonization has become a strategic challenge for the Palestinian society, its achievement embodies a collective responsibility that requires integrated national efforts involving all relevant parties, whether at the level of government, civil society,

the private sector or international donors.

Overall, there are opportunities for improvement through targeted policies and investments in education and training. By working together with employers and industry associations, higher education institutions can help ensure that graduates have the skills needed to succeed in today's rapidly changing economy.

### **3.4 Impact of the Higher Education Challenges on Labour Market**

The challenges facing higher education institutions can have a significant impact on the labour market in Palestine. The mismatch between the skills and qualifications of graduates and the needs of employers can lead to high levels of unemployment, particularly among young people. This can have negative economic and social consequences, including reduced productivity, increased poverty, and social unrest.

According to the World Economic Forum (WEF), by 2025 more than half of all employees worldwide will need to be upskilled or reskilled to take on new roles driven by automation and new technologies. prize. Meanwhile, 40% of employers, globally, they face difficulty in filling new positions in their facilities (Izabllle, 2021).

A recent study indicates that “the digital skills gap comes at a cost. 14 G20 countries could miss out on \$11.5 trillion cumulative GDP growth. (RAND/Salesforce). The study shows that by 2030, the talent shortage and skills gap in the U.S. alone is expected to total a loss of \$8.5 trillion.” (PwC) (Samir, 2022).

Arab Monetary Fund’s report issued in 2020 identified the most prominent determinants and characteristics of the Arab labour markets. With regard to the situation in Palestine, the Report indicates that is characterized by high rate of labour supply as a result of the high growth rates of the population and the labour force, compared to the slowdown in

the growth of demand for labour resulting from several factors, including weak investment, limited ability to generate new employment opportunities, and modest levels of production, which resulted in exacerbating the problem of unemployment, especially among youth and university graduates (Unified Arab Economic Report, 2020).

The labour market in Palestine is relatively small, with a high unemployment rate and a limited number of job opportunities. This is due in part to the ongoing political and economic challenges facing Palestine, including restrictions on movement and access to resources, which can limit opportunities for job creation and economic growth.

Reports of the General Population, Housing and Establishments Census 2017 have shown that the number of operating economic establishments in Palestine reached 158,573 establishments, with 108,471 establishments in the West Bank and 50,102 establishments in the Gaza Strip.

According to the categories of establishments' size in the public, private and non-profit sectors in Palestine, reports show that 88.6% of the establishments are small with 0-3 workers, 7.4% of establishments accommodate 5-9 workers, and 2.6% employ 9-10 workers, while 1.4% of the establishments employ more than 20 workers (Palestinian Central Bureau of Statistics, 2018).

Unemployment generally refers to the situation in which an individual who is able and willing to work is unable to find a job or has lost their job involuntarily. (Al-Taqa, 2008) defined the concept of unemployment as the involuntary cessation of work for the loss of employment (Al-Taqa, 2008). As for the International Labour Organization, unemployment was defined as “every word or deed that includes the unemployed labour force despite their readiness to do it, and to search for it in return for a salary, or to work

for their personal account, and they have the age that qualifies them to achieve earning and production (International Labour Organization, 2006).

Data from the Palestinian Central Bureau of Statistics indicate that the unemployment rate among participants in the labour force (15 years and over) was about 26% in the second quarter of 2022. The number of the unemployed reached about 357 thousand in the second quarter of 2022, by 223 thousand in the Gaza Strip and about 134 thousand in the West Bank (Palestinian Central Bureau of Statistics, 2022).

According to Nasri Abu Jaish, the Palestinian Minister of Labour, the Palestinian Government has taken several measures regarding the education sector and the labour market. This include cancelling 120 majors and created 60 new ones, because the Palestinian market does not need these specializations, and there are no job opportunities for them (Abu Jaish, 2021).

Higher education institutions in Palestine have contributed positively to meeting the high demand for qualified workforce. Statistics indicate that in the academic year (2020/2021) the number of new students who joined educational institutions reached 57,112 students, of whom 34,408 are females and 22,704 are males. This raises the total number of registered and regular students in higher education institutions to (214,765) male and female students. Meanwhile, in (2019-2020) number of graduates reached (41,137) male and females (Ministry of Higher Education and Scientific Research, 2020).

What is of concern is that demographic projections indicate that the Occupied Palestinian Territory is on the verge of major changes in its demographic composition that will lead to a doubling of the population over the next 35 years to 9.5 million in 2050 (United Nations Population Fund, 2016); (International Labour Organization,

2018).

In Palestine, there is a growing demand for higher education that is responsive to the changing economic, technological, and social landscape. As the Palestinian economy continues to face challenges related to limited resources and restricted access to markets, there is a need for a skilled workforce that can adapt to new technologies and industries (Palestinian Central Bureau of Statistics, 2019).

When there is a skill gap, it can have several effects on the labour force and the economy as a whole:

- **Reduced productivity:** When there is a skill gap, workers may not have the necessary skills to perform their jobs at the highest level of productivity, which can result in lower output and decreased economic growth.
- **Unemployment or underemployment:** If workers lack the skills that are in demand in the labour market, they may be unable to find employment or may be forced to accept jobs that are below their skill level, resulting in underemployment.
- **Increased training costs:** Employers may need to invest in training programs to provide workers with the necessary skills, which can be costly and time-consuming.
- **Higher wages for skilled workers:** When there is a shortage of workers with certain skills, employers may need to offer higher wages to attract and retain skilled workers, which can increase labour costs.
- **Decreased competitiveness:** If a country or region has a significant skill gap, it may be less competitive in the global economy, as it may not be able to produce goods and services at the same level of efficiency and quality as other countries or regions.

Research attributes the skill gap or the poor alignment between the outputs of higher education and the needs of the labour market to several challenges, including:

First: weak evaluation processes for programs and majors in Palestinian universities, and lack of flexibility in licensing, accreditation, and quality control standards. This challenge has led to a mismatch between the university outputs and the changing requirements of the labour market (Sectoral Strategy for Higher Education and Scientific Research 2021-2023).

Second: The Palestinian market is saturated with the same specializations which leads to an increase in the unemployment rate. The unemployment rate among individuals (20-29 years) with an intermediate diploma or bachelor's degree was high, as this rate reached 53% in 2021, with 35% in the West Bank and 74% in the Gaza Strip (Palestinian Central Bureau of Statistics, 2022).

The Palestinian Bureau of Statistics indicates that a university graduate needs a period of 10-25 months to obtain the first job opportunity (Palestinian Central Bureau of Statistic). This is due to the weak absorptive capacity of the labour market. The Palestinian labour market witnesses the entry of about 40,000 people annually, a third of whom are young people, at a time when it cannot provide more than 8,000 job opportunities as a maximum (Palestinian Central Bureau of Statistics, 2019).

According to the Palestinian Minister of Labour, that there is a gap between vocational education and academic education, as the interest in vocational education is 8%, compared to 92% to academic education. He pointed out that the Palestinian government cancelled 120 specializations and introduced 60 new ones because the Palestinian market did not need these specializations and there were no job opportunities for them (Abu Jaish, 2021).

The third challenge is related to limited funding and resources. This can make it difficult for institutions to keep pace with rapid technological change and provide

students with the latest tools and equipment, resulting in a skills gap between graduates and employers' needs. Universities experience accumulated financial deficits for years, and lack of investments. This creates challenges that hinder their ability to respond to the requirements of labour market (Shaheen: [www.birzeit.edu](http://www.birzeit.edu) )

(Abu Rokba, 2021) argues that the funding crisis in universities leads to low faculty salaries. In addition, the lack of communication between universities and labour market, and the failure to provide a computerized database on the requirements of the labour market. Accordingly, specializations are offer and curricula are update, if this data includes the needs of the Palestinian labour market sectors.

Fourth: another challenge is related to the structure of the labour market itself. Many businesses in Palestine are small or micro-enterprises, thus lack of diversity in the labour market limited opportunities available in certain fields or sectors. (Gagman, 2019) argues that there is a high rate of unemployment among graduates of Palestinian universities for obvious reasons, including that the desired economic development, which creates job opportunities for graduates, is constrained by the restrictions of the occupation, and the possibility of development made possible by the continuation of this situation.

Fifth: (Abu Rokba, 2021) argues that one of the most prominent challenges is the focus primarily on specialized skills, and the few entrepreneurial skills that the Palestinian labour market needs. Such as analytical and critical skills, the ability to write accurately, clearly and logically, language skills, computer use, report writing, and scientific research skills. In addition to personal skills: such as the ability to work together, the ability to solve various problems, the ability to organize and define roles, and the ability to persuade.

Sixth: Many specialists argue that the Palestinian universities are not qualified to bridge with the requirements of the labour market because the curricula are based on memorization and indoctrination, and do not provide the practical skills required for the labour market.

Seventh: admission policies contribute to deepening the gap between the outputs of higher education and the needs of the labour market. Universities have resorted to addressing the crises of poor funding and growing expenditures to investment and competition to attract students without any scientific and methodological determinants. These policies led to a quantitative increase in the number of graduates in the Palestinian labour market.

Eighth: Ongoing political instability and conflict can disrupt academic programs and limit opportunities for collaboration with international partners. This can make it difficult for higher education institutions in Palestine to offer high-quality programs that are responsive to the needs of the labour market.

In response to these challenges, the vision of the Ministry of Higher Education, contained in its plan for the year 2021-2023, states: “Achieving higher education that is characterized by quality, comprehensiveness, flexibility, and the ability to absorb various changes in the field of employment and reflect them on the specializations offered”. In addition, it focuses on aspects of applied scientific research related to the needs work and its institutions.

The Ministry of Higher Education has identified the first strategic goal in its 2021-2023 plan, which states “improving the quality and quality of higher education outputs by ensuring the quality of the mechanisms used to provide service in higher education institutions, starting from the enrolment process and ending with reaching higher

education graduates, and ensuring that they obtain The required level of skills and competencies required and their compatibility with the requirements of the labour market”.

Minister of Higher Education and Scientific Research, Prof. Mahmoud Abu Muwais acknowledged that there is still a gap between the outputs of higher education and the needs of the labour market, in terms of competencies, knowledge and skills. He stressed that the ministry is working on four levels to bridge this gap and achieve sustainable development.

- Development of university plans to align with the needs of the market.
- Involvement of the government, private and civil sectors in developing study plans for universities.
- Opening qualitative programs, the most important of which are complementary programs and "dual studies" that depend on achieving integration between academic study and linking students in the work environment.
- Establishment of a national authority for technical and vocational education, and the Nablus University for technical and vocational education (Abu Muwais, 2021).
- (Samir, 2022) argues that there is a consensus on the need to address the crisis of skills gap in almost all countries, through focusing on reform and development of the education sector with a view to realizing compatibility between the skills provided and the demand for them. In the labour market, he indicated that what is required is to provide the market with the skills required in the fourth phase of the industrial revolution, i.e. building the capacity of new generations with basic learning skills.
- Based on the foregoing, the researcher argues that improving the quality of educational content provided by Palestinian universities mainly affects facilitating the employment

process and increasing the capacity of the local labour market to absorb graduates. It increases the ability of graduates to engage in the regional and international labour market, thus contributing to a decrease in the unemployment rate among graduates.

Evidently, the researcher highlights the need to provide training programs and build the capabilities and improve the skills that help graduates speed up their recruitment in the labour market. Therefore, it is necessary to reconsider the role of government agencies towards the unemployment crisis experienced by graduates. This is done through the establishment of a government agency, program or national forum that is interested in developing the necessary policies to address this problem, especially among graduates.

The researcher also deems it appropriate to establish a voluntary fund to ensure providing the necessary financial resources for sponsoring and encourage entrepreneurial interventions and ideas, which would eventually reduce unemployment rate in general and among graduates in particular. It is also possible to establish business incubators that provide financing to support small entrepreneurial projects for young people, especially the new graduates.

The researcher therefore finds that solutions to harmonize the outputs of higher education with the labour market are much more needed than ever. In this regard, it is highly important to maintain relations and contacts with university graduates and seek their opinions as well as the opinions of employers to assess the level of quality of their capabilities in the light of the needs Labour market.

## **Chapter Four**

### **Study Methodology and Procedures**

#### **4.1 Introduction:**

Study's methodology and procedures are considered the major axis through which the applied aspect of the study is accomplished, and through it, the data required to conduct the statistical analysis are obtained to reach the results that are interpreted in the light of the study literature to the subject of the study. Thus, achieving the goals that it seeks to achieve through this study. This chapter deals with a description of the curriculum and the study community. As well as the study tool used, its preparation method, how it was built and developed, and the extent of its validity and reliability.

#### **4.2 Methodology**

This study aims to identify the effectiveness of university programs on the labor market in Palestine by analyzing the relationship between the independent variables in terms of jobs held, employer satisfaction, graduate satisfaction, and the dependent variable, which is the number of the workforce.

Based on the nature of the study and the objectives it seeks to achieve, the researcher used a mixed methodology of quantitative and qualitative approach which include comprise of:

1. Secondary sources: which are Arab and foreign books and references related to the subject of the study, in addition to periodicals, articles, research, previous studies and Internet sites that dealt with the subject of the study.

2. Primary sources: the researcher resorted to collecting primary data through a questionnaire and interviews, as the main tools for research, designed specifically for the study, as it was distributed to a random survey sample consisting of (200) **respondents from** graduates from 14 Palestinian universities, 10 experts working in the Palestinian Ministry of Higher Education, and (10) people working in Palestinian universities.
3. Historical methodology is also used to understand the history of the phenomenon from 2010 until 2022, whereas data appropriate to the theoretical question being posed will be recaptured, analyzed, and reflected on the present situation to make future predictions while investigating the extent to which university programs correspond to the needs of the labour market.

#### **4.3 Procedures**

The study used the descriptive-analytic method to investigate the compatibility of higher educational programs with the requirements of the labour market in Palestine.

#### **4.4 Population**

The study population consisted of all graduates of Palestinian universities in the West Bank. Inability to include graduates from the Gaza Strip is due to several factors that hinder data collection, including political and logistical challenges. The study population also included (10) experts in the Palestinian ministry of higher education, and (10) employees in Palestinian universities.

Based on scientific foundations, for surveys with probability samples, the method of systematic random sampling was chosen, and calculate the sample size through the

Thomas Thomson equation, considering the margin of error of 5%, and the statistical significance at the level of 95%.

#### 4.5 Sample of the Study

The study sample consisted of (200) graduates from (14) universities. Their selection was determined using the available sample method. Table (4.1) shows the characteristics of the demographic sample members.

**Table (4.1): The Characteristics of the Demographic Sample**

variable	variable levels	Frequency	Percentage
<b>Gender</b>	Female	90	45.0%
	Male	110	55.0%
	<b>Total</b>	<b>200</b>	<b>100.0%</b>
<b>Age</b>	Less than 30 years old	58	29.0%
	30 - 39 years old	106	53.0%
	40 - 49 years old	36	18.0%
	<b>Total</b>	<b>200</b>	<b>100.0%</b>
<b>Profession</b>	Employed graduate	49	24.5%
	Partially employed graduate	27	13.5%
	Unemployed graduate	124	62.0%
	<b>Total</b>	<b>200</b>	<b>100.0%</b>
<b>Specialization</b>	Human, social specialties	107	53.5%
	Scientific specialties	58	29.0%
	Health and medical specialties	35	17.5%
	<b>Total</b>	<b>200</b>	<b>100.0%</b>
<b>Educational Qualification</b>	Intermediate Diploma	58	29.0%
	Bachelor's Degree	134	67.0%
	Postgraduate	8	4.0%
	<b>Total</b>	<b>200</b>	<b>100.0%</b>
<b>Workplace</b>	NGOs	71	35.5%
	Private Sector	82	41.0%
	Public Sector	47	23.5%

The results of the analysis of the study on the **gender** variable indicated that the percentage of males reached 55.0%, while the percentage of females was 45.0%. As for **Age** variable, the results were as follows: 29.0% are Less than 30 years old, 53.0% for 30 - 39 years old, and 40 - 49 years old reached 18.0%. On the other hand, the distribution of the study sample according to the variable of **Profession** shows that there are 24.5% of them Employed graduate, compared to 13.5% Partially employed graduate, while we find that 62.0 % for Unemployed graduate, **Specialization** variable was distributed to 53.3% Human, social specialties, while we find that there is 29.0% for Scientific specialties, and Health and medical specialties reached 17.5%. **Educational Qualification** variable was distributed to 29.0% Intermediate Diploma, while we find that there is 67.0% for bachelor's degree, and Postgraduate reached 4.0%. As for **Workplace** variable, the results were as follows: 35.5% are NGOs, 41.0% for Private Sector, and Public Sector reached 23.5%.

#### **4.6 Instrumentation:**

After reviewing previous literature, a questionnaire was developed and used as primary research instrument to measure the compatibility of higher educational programs with the requirements of the labour market in Palestine. The questionnaire is the main appropriate tool for the field study to obtain information and data that is being filled in by the respondent.

The questionnaire introduces, at the beginning, the title and purpose of the research study and invites respondents to fill out the form. The questionnaire is designed according to the five- point Likert scale by specifying the degree of basic skills ratings from 1 least to 5 highest. The questionnaire is comprised of four parts:

- 1 The first part: it includes personal data of the respondents in terms of (**gender, age group, job, specialization, education qualification, and workplace**).
- 2 The second part: it is designed to measure the skills and attributes obtained by university graduates as an output of higher education programs. It consists of (30) paragraphs distributed in (five fields) as follows: (academic counseling; the educational content; supporting graduates through continuing education; language and technical skills; and creativity and innovation in scientific research).
- 3 The third part: it includes nine paragraphs to measure the compatibility of the educational programs with the needs of the labour market, with a view to measuring the gap between private sector' expectation and satisfaction.
- 4 The fourth section: It is comprised of 5 statements to measure the role and impact of the strategy of the ministry of higher education and scientific research as perceived by graduates, and experts.

#### **4.6.1. Outputs of Higher Education Programmes:**

##### **4.6.1.1. The Validity of the Scale:**

To test the validity of the scale, the researcher used the referee's validity, and the internal consistency validity as follows:

##### **4.6.1.2. The Referee Validity:**

The scale was introduced to a (10) of specialist's referees at Palestinian universities. The items of the scale were modified according to their recommendations. See (Appendix C).

### 5.6.1.3. The Constructive Validity:

The validity of the tool was verified by calculating the Pearson Correlation coefficient for each paragraph of the field to which it belongs with the total score of the field, as well as calculating the correlation of each paragraph with the total score of the tool, and the correlation of the degree of each domain with the total score of the tool, as shown in the table (4.2).

**Table (4.2): Correlation Coefficients of the Items with the Field and with the Total Score of the Questionnaire.**

No.	Corr. with field	Corr. with total degree	No.	Corr. with field	Corr. with total degree
1	.699**	.694**	19	.591**	.490**
2	.803**	.787**	20	.759**	.685**
3	.788**	.767**	21	.829**	.778**
4	.831**	.830**	22	.901**	.830**
5	.754**	.739**	23	.855**	.841**
6	.658**	.608**	24	.797**	.775**
<b>Academic Counseling</b>		<b>.975**</b>	<b>Language and technical skills programmes</b>		<b>.904**</b>
7	.750**	.631**	25	.638**	.760**
8	.802**	.694**	26	.670**	.739**
9	.746**	.587**	27	.703**	.678**
10	.729**	.694**	28	.604**	.595**
11	.784**	.709**	29	.638**	.578**
12	.715**	.656**	30	.656**	.608**
<b>Educational content</b>		<b>.876**</b>	<b>Creativity and innovation programs in scientific research</b>		<b>.795**</b>
13	.815**	.769**			
14	.813**	.787**			

No.	Corr. with field	Corr. with total degree	No.	Corr. with field	Corr. with total degree
15	.809**	.717**			
16	.827**	.733**			
17	.695**	.560**			
18	.821**	.767**			
<b>Supporting graduates through continuing education</b>					<b>.906**</b>

\*\* Statistically significant at the level of significance ( $\alpha \leq 0.01$ ).

The data presented in Table (4.2) indicate that all the paragraphs of each field are related to the total score of its domain and the total score of the scale in a statistically significant way, which means that there is a correlation between each paragraph and its domain, and between the paragraph and the total score of the scale, and this means that there is a correlation between the degree of The field and the total score of the scale, so the study tool has a degree of validity that reassures the researcher that it measures the outputs of higher education programs.

#### **4.6.1.3. Reliability of the Outputs of Higher Education Programs:**

For achieving reliability of the outputs of higher education programs, the researcher calculated the reliability by the method of internal consistency and the equation for Cronbach's alpha, as well as the reliability was calculated by the split-half method, as shown in Table (5.3):

**Table (4.3): Reliability of the Outputs of Higher Education Programs**

Variables	No. of Items	Cronbach Alpha coefficient	Split-Half	
			R	Adjusted Spearman coefficient
Academic Counseling	6	.797	.684	.812
Educational content	6	.848	.677	.808
Supporting graduates through continuing education	6	.885	.792	.884
Language and technical skills programmes	6	.874	.777	.874
Creativity and innovation programs in scientific research	6	.730	.629	.743
<b>Total degree</b>	<b>30</b>	<b>.956</b>	<b>.890</b>	<b>.940</b>

The data in Table (4.3) indicates that the value of Cronbach's alpha coefficient for the total degree of the scale was high, where the coefficient of Cronbach's alpha for the total degree of the scale was (0.956). The corrected Spearman-Brown coefficient was (0.940). This indicates that the scale has a high degree of reliability and is an indication that the scale can give the same results if it is re-applied to the same sample and in the same application conditions.

#### 4.6.2. The Degree of Compatibility with the Needs of the Labour Market

##### 4.6.2.1. The Validity of the Degree of Compatibility with the Needs of the Labour Market Scale:

The validity of the tool was verified by calculating the Pearson Correlation coefficient for each paragraph of the field to which it belongs with the total score of the field, as shown in the table (4.4).

**Table (5.4): Correlation Coefficients of the Paragraphs with Their Field (The Degree of Compatibility with the Needs of the Labour Market Scale)**

No.	R	No.	R
1	.742**	6	.836**
2	.808**	7	.730**
3	.830**	8	.779**
4	.769**	9	.782**
5	.764**		

\*\* Statistically significant at the level of significance ( $\alpha \leq 0.01$ ).

The data presented in Table (5.4) indicate that all the paragraphs are related to the total degree of the field in a statistically significant way, which means that there is a correlation between each paragraph and its domain, so the field has a degree of validity that reassures the researcher that it measures the degree of compatibility with the needs of the labour market.

##### 4.6.2.2. Reliability of the Degree of Compatibility with the Needs of the Labour Market Scale:

For achieving reliability of the degree of compatibility with the needs of the labour market scale, the researcher calculated the reliability by the method of internal

consistency and the equation for Cronbach's alpha, as well as the reliability was calculated by the split-half method, as shown in Table (5.5):

**Table (4.5): Reliability of the Degree of Compatibility with the Needs of the Labour Market Scale**

Variables	No. of Items	Cronbach Alpha coefficient	Split-Half	
			R	Adjusted Spearman coefficient
<b>Total degree</b>	<b>9</b>	<b>.920</b>	<b>.772</b>	<b>.873</b>

The data in Table (4.5) indicate that the value of Cronbach's alpha coefficient for the total degree of the scale was high, where the coefficient of Cronbach's alpha for the total degree of the degree of compatibility with the needs of the labour market was (0.920). The corrected Spearman-Brown coefficient was (0.873). This indicates that the scale has a high degree of reliability and is an indication that the scale can give the same results if it is re-applied to the same sample and in the same application conditions.

#### **4.6.3. Strategy of the Ministry of Higher Education and Scientific Research**

##### **4.6.3.1. The Validity of the Strategy of the Ministry of Higher Education and Scientific Research scale:**

The validity of the tool was verified by calculating the Pearson Correlation coefficient for each paragraph of the field to which it belongs with the total score of the field, as shown in the table (4.6).

**Table (4.6): Correlation Coefficients of the Paragraphs with their Field (the Strategy of the Ministry of Higher Education and Scientific Research)**

No.	R	No.	R
1	.751**	4	.829**
2	.788**	5	.570**
3	.787**	6	.752**

\*\* Statistically significant at the level of significance ( $\alpha \leq 0.01$ ).

The data presented in Table (5.6) indicate that all the paragraphs are related to the total degree of the field in a statistically significant way, which means that there is a correlation between each paragraph and its domain, so the field has a degree of validity that reassures the researcher that it measures the strategy of the ministry of higher education and scientific research.

#### **4.6.3.2. Reliability of the Strategy of the Ministry of Higher Education and Scientific Research scale:**

For achieving reliability of the strategy of the ministry of higher education and scientific research scale, the researcher calculated the reliability by the method of internal consistency and the equation for Cronbach's alpha, as well as the reliability was calculated by the split-half method, as shown in Table (4.7):

**Table (4.7): Reliability of the Strategy of the Ministry of Higher Education and Scientific Research Scale**

Variables	No. of Items	Cronbach Alpha coefficient	Split-Half	
			R	Adjusted Spearman coefficient
<b>Total degree</b>	<b>6</b>	<b>.838</b>	<b>.675</b>	<b>.806</b>

The data in Table (4.7) indicate that the value of Cronbach's alpha coefficient for the total degree of the scale was high, where the coefficient of Cronbach's alpha for the total degree of the strategy of the ministry of higher education and scientific research scale was (0.838). The corrected Spearman-Brown coefficient was (0.806). This indicates that the scale has a high degree of reliability and is an indication that the scale can give the same results if it is re-applied to the same sample and in the same application conditions.

#### **4.7 The Interview**

The personal interview was used as a tool for the study, and the interview method is defined in scientific research as a dialogue, conversation or directed discussion, usually between the researcher on the one hand and a person or other people on the other hand, with the aim of arriving at information that reflects specific facts or situations, the researcher needs reaching and obtaining them, in light of the objectives of his research, the interview represents a set of questions, inquiries and clarifications, which he requests to answer or comment on (Kandalji, 2019).

In the study, semi-mentioned individual interviews were conducted with (10) experts in tertiary education, and universities employee, as represented by the ministry of higher education policymakers, academic researchers as well as independent researchers, to determine their assessment, insight, and perspectives. The interview form in the first part contained general information about the interviewee, and the second part consisted of two interview questions aimed to investigating the compatibility of higher educational programs with the requirements of the labour market in Palestine..

#### 4.8 Statistical Methods:

Data were collected, coded and processed using the Statistical Package for the Social Sciences (SPSS) program. The following statistical techniques were used:

1. Descriptive statistics: such as, percentage, arithmetic means, standard deviation, which is used to identify the categories of variable frequency according to researcher's view presented in the description of the study variables.
2. Pearson correlation coefficient: to identify the correlation among the items of the questionnaire.
3. Cronbach's Coefficient Alpha: to test the reliability of questionnaire paragraphs.
4. The multivariate analysis of variance (MANOVA) is used to examine if there is a statistically significant difference between several means among the respondents.
5. Path analysis is used to examine the role of mediator variable on the relationship between independent and dependent variables.
6. Objective analysis of interviews.

#### Correction key:

**Table (4.8): Key for Reading Means.**

<b>Intervals of mean</b>	<b>Degree of agreement</b>
<b>1.00-2.33</b>	<b>Low</b>
<b>2.34-3.67</b>	<b>Moderate</b>
<b>3.68-5.00</b>	<b>High</b>

#### Check the Normal Distribution of the Data:

The researcher used Kolmogorov-Smirnov test to check if the data distributed normally or not, as shown in table (4.9).

**Table (4.9): Kolmogorov-Smirnov Test**

Variable	Kolmogorov-Smirnov		
	Statistic	df	Sig.
Academic Counseling	0.072	200	.200*
Educational Content	0.089	200	.200*
Supporting graduates through continuing education	0.094	200	.200*
language and technical skills	0.122	200	.137
Creativity and innovation in scientific research	0.094	200	.200*
The compatibility with the needs of the labour market	0.059	200	.200*
Strategy of the Palestinian Minister of Higher Education and Scientific Research	0.109	200	.200*

It is clear from the data in Table (4.9) that the statistical significance of all variables was greater than (0.05), and this indicates that the data is distributed normally, and this allows the researcher to use parametric tests to answer the study's questions and examine its hypotheses.

## Chapter Five

### Results of the study

#### 5.1 Introduction:

The researcher in this study aimed to investigate the compatibility of higher educational programs with the requirements of the labour market in Palestine.

#### 5.2 The Results of the Quantitative Study

##### 5.2.1. What is the Reality of the Outputs of Higher Education Programs in Palestinian Universities?

To answer the first question, means, Standard Deviation, and relative weight were computed for each field and their total degree.

**Table (5.1): Means, Standard Deviation, and Relative Weight for the Reality of the Outputs of Higher Education Programs in Palestinian Universities, in Descending Order.**

No.	Items	Mean	Standard Deviation	Relative weight	Approval
30	The university works to discover and develop the talented students and encourages innovation and scientific research.	3.52	1.03	70.4	moderate
25	The university encourages students and graduates to conduct research and studies related to the demand of the labour market.	3.50	0.99	70.0	moderate
27	The university sufficiently provides printed and digital information resources to conduct scientific research.	3.48	1.11	69.6	moderate
28	The university develops students' skills, interests, and production in the field of	3.47	0.92	69.4	moderate

No.	Items	Mean	Standard Deviation	Relative weight	Approval
	scientific research.				
29	The university provides financial support, grants, scholarships, and cultural exchange programs for students and academic staff.	3.44	0.96	68.8	moderate
26	The university' publications cover the scientific, literary and professional production of the academic staff, students and graduates.	3.40	1.01	68.0	moderate
<b>Creativity and innovation programs in scientific research</b>		<b>3.47</b>	<b>0.66</b>	<b>69.4</b>	<b>moderate</b>
17	The university strengthens relations among graduates through various cultural, educational and social activities.	3.62	1.00	72.4	moderate
18	The university enhances a sense of professional, moral and patriotic responsibility among students and graduates.	3.60	0.98	72.0	moderate
16	The university assists in finding suitable scholarship, training, capacity-development, and employment opportunities for graduates.	3.37	1.05	67.4	moderate
15	The university works to enhance partnership and cooperation between the academic community and the private sector.	3.37	1.09	67.4	moderate
14	The university provides students and graduates with the required administrative, technical, linguistic, and personal skills.	3.25	0.96	65.0	moderate
13	The university strengthen relationship and maintain close communication with students and graduates and follows up on their conditions.	3.25	1.10	65.0	moderate

<b>Supporting graduates through continuing education</b>		<b>3.41</b>	<b>0.82</b>	<b>68.2</b>	<b>moderate</b>
10	The educational curricula equip students with values, concepts and skills related to the labour market.	3.43	1.02	68.6	moderate
11	The university provides a variety of educational resources, including books, literature, and scientific research for the students.	3.41	1.04	68.2	moderate
12	The university organizes seminars and scientific conferences and assists in implementing its recommendations to serve the community.	3.41	1.00	68.2	moderate
9	The university's curricula comprise of theoretical knowledge, educational research, and practice.	3.40	1.09	68.0	moderate
7	The academic programs and educational curriculum at the university are compatible with the new requirements of the labour market.	3.35	1.04	67.0	moderate
8	The academic programs achieve the student's educational goals and aspirations for the future.	3.21	0.98	64.2	moderate
<b>The Educational Content</b>		<b>3.37</b>	<b>0.78</b>	<b>67.4</b>	<b>moderate</b>
21	The university contributes to building the capabilities of students and graduates in communication and language skills.	3.57	0.96	71.4	moderate
24	Language and technical training programs enhance the chances of acceptance and integration of graduates into the labour market.	3.52	0.98	70.4	moderate
20	The university provides the necessary information and communication technology (ICT) Infrastructure and technical support.	3.49	0.93	69.8	moderate
23	The university designs and implements language and technical training programs for students and graduates according to	3.38	1.13	67.6	moderate

	the requirements of the labour market.				
22	The technical and linguistic programs at the university are compatible with the scientific and knowledge progress at the local and international levels.	3.22	1.17	64.4	moderate
19	The university provides students with modern computer skills and software applications and offers them focused training courses.	3.07	1.19	61.4	moderate
<b>Language and technical skills</b>		<b>3.37</b>	<b>0.83</b>	<b>67.4</b>	<b>moderate</b>
3	The university helps students discover their personal interests and preferences.	3.60	0.98	72.0	moderate
6	The university helps students plan their future careers.	3.52	1.03	70.4	moderate
5	The university provides students with psychological support, moral incentives, and a sound environment that qualifies graduates for the labour market.	3.40	1.01	68.0	moderate
2	The university helps students choose a specialization according to their preferences and assists them in setting and achieving their academic goals.	3.25	0.96	65.0	moderate
4	The university encourages students to achieve academic excellence and self-development, as well as scientific and community participation.	3.22	1.17	64.4	moderate
1	The university provides academic counselling to educate students about academic systems and regulations.	3.21	0.98	64.2	moderate
<b>Academic Counseling</b>		<b>3.36</b>	<b>0.72</b>	<b>67.2</b>	<b>moderate</b>
<b>Outputs of Higher Education Programs</b>		<b>3.39</b>	<b>0.66</b>	<b>67.8</b>	<b>moderate</b>

The data presented in Table (5.1) indicate that the reality of the outputs of higher education programs was moderate. The arithmetic mean of the reality of the outputs of higher education programs was (3.39), with a percentage of (67.8%).

It is clear from the table (5.1) that the dimension (**Creativity and innovation programs in scientific research**) came in the first place with an arithmetic mean (3.47) and a percentage (69.4%). The dimension (**Supporting graduates through continuing education**) came in second place with an arithmetic mean (3.41) and a percentage (68.2%).

Both of (**The Educational Content**) and (**Language and technical skills**) came in the third place, with an arithmetic mean (3.37), with a rate of (67.4%) for each of them.

Finally, the dimension (**Academic Counseling**) came in the fourth place with an arithmetic mean of (3.36) and a percentage of (67.2%).

### **5.2.2. What is the Degree of Compatibility of the Outputs of Higher Education Programs with the Needs of the Labour Market?**

To answer the second question, means, Standard Deviation, and relative weight were computed, as shown in table (5.2).

**Table (5.2): Means, Standard Deviation, and percentages for the Degree of Compatibility of the Outputs of Higher Education Programs with the Needs of the Labour Market, in Descending Order.**

No.	Item	Mean	Std. Deviation	Relative Weight%	Approval
3	The university develops and updates its academic programs and curricula based on the needs of the labour market.	3.98	0.95	79.6	High
2	The university maintain relations with the private sector and organizes events to create training and employment opportunities for graduates.	3.91	0.98	78.2	High
1	The university provides laboratories and technical infrastructure to develop	3.84	1.03	76.8	High

No.	Item	Mean	Std. Deviation	Relative Weight%	Approval
	competencies required for labour market.				
7	The university provides a space for the private sector to display and sponsor their business, products, and services.	3.83	0.92	76.6	High
4	The educational curricula focus on the practical aspects at the expense of the theoretical knowledge.	3.80	0.92	76.0	High
6	The university appoints faculty members with high and distinguished academic competences.	3.75	1.03	75.0	High
9	The university organizes events, exhibitions and conferences that contribute to creating new job opportunities for graduates internally and externally.	3.67	0.99	73.4	Moderate
8	The university applies quality standards to achieve the aspirations of the beneficiaries and to gain their trust and loyalty.	3.64	0.90	72.8	Moderate
5	The university employs experts from labour market to teach some courses and train students.	3.62	1.02	72.4	Moderate
<b>The compatibility of the outputs of higher education programs with the needs of the labour market</b>		<b>3.78</b>	<b>0.76</b>	<b>75.6</b>	<b>High</b>

Table (5.2) shows that the **compatibility of the outputs of higher education programs with the needs of the labour market**, was high, with mean (3.78) and percentage (75.6%).

From table (5.2) we obtained that paragraph (3) has the highest score with an average of (3.98) and percentage (79.6%).

While paragraph (5) received the lowest score with an average of (3.62) and percentage (72.4%).

### **5.2.3. What is the Strategy of the Ministry of Higher Education and Scientific Research to Harmonize the Outputs of Higher Education Programs with the Needs of the Labour Market?**

To answer the third question, means, Standard Deviation, and relative weight were computed, as shown in table (5.3).

**Table (5.3): Means, Standard Deviation, and Percentages for the Strategy of the Ministry of Higher Education and Scientific Research to Harmonize the Outputs of Higher Education Programs with the Needs of the Labour Market, in Descending Order.**

<b>No.</b>	<b>Item</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Relative Weight%</b>	<b>Approval</b>
1	The Ministry sets the necessary policies to harmonize the outputs of university education with the needs of the labour market.	3.67	1.05	73.4	Moderate
2	The Ministry directs universities to increase their absorptive capacity and diversify their academic programs according to the needs of the labour market.	3.64	0.95	72.8	Moderate
6	The Ministry supports studies and research on the labour market and implements the results in developing academic programs in universities.	3.62	0.96	72.4	Moderate
3	The Ministry develops the necessary procedures and mechanisms for cooperation between universities and business sector institutions.	3.51	0.97	70.2	Moderate

No.	Item	Mean	Std. Deviation	Relative Weight%	Approval
4	The Ministry assists in marketing the majors offered by Palestinian universities in the labour market, both internally and externally.	3.48	0.93	69.6	Moderate
5	The Ministry provides opportunities for applied training, scholarships, and external scholarships for students, graduates, and university academics.	3.40	1.02	68.0	Moderate
<b>The strategy of the Ministry of Higher Education and Scientific Research to harmonize the outputs of higher education programs with the needs of the labour market</b>		<b>3.55</b>	<b>0.73</b>	<b>71.0</b>	<b>Moderate</b>

Table (5.3) shows that the strategy of the Ministry of Higher Education and Scientific Research to harmonize the outputs of higher education programs with the needs of the labour market was moderate, with mean (3.55) and percentage (71.0%).

From table (5.3) we obtained that paragraph (1) has the highest score with an average of (3.67) and percentage (73.4%).

While paragraph (5) received the lowest score with an average of (3.40) and percentage (68.0%).

#### **5.2.4. What is the Nature of the Relationship between the Strategy of the Ministry of Higher Education and Scientific Research and Outputs of Higher Education Programmes and the Compatibility with the Needs of the Labour Market?**

To answer this question, the researcher formulated the following hypothesis:

**First hypothesis: There is statistically significant correlation relationship at the level of significance ( $\alpha \leq 0.05$ ) between strategy of the ministry of higher education**

**and scientific research and outputs of higher education programmes and the compatibility with the needs of the labour market.**

To answer the first hypothesis, use the Pearson correlation coefficient to identify the type and strength of the relationship between the variables, as shown in the table (5.4):

**Table (5.4): Pearson Correlation Coefficients for the Relationship between Strategy of the Ministry of Higher Education and Scientific Research and Outputs of Higher Education Programmes and the Compatibility with the Needs of the Labour Market**

<b>Correlations</b>	<b>Outputs of higher education programmes</b>	<b>Compatibility with the needs of the labour market</b>
Strategy of the ministry of higher education and scientific research	0.330**	0.250**
Outputs of higher education programmes	1	0.814**

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The results of table (5.4) showed that the correlation coefficients between the strategy of the Ministry of Higher Education and Scientific Research and the outputs of higher education programs were positive and statistically significant at (0.01). This indicates that there is a direct correlation between the strategy of the Ministry of Higher Education and Scientific Research and the outputs of higher education programs.

It was also found that the correlation coefficient between the strategy of the Ministry of Higher Education and Scientific Research and its suitability with the needs of the labour market was positive and statistically significant at (0.01). There is a positive correlation between the strategy of the Ministry of Higher Education and Scientific Research and the degree of compatibility with the needs of the labour market.

Finally, it was found that the correlation coefficient between the outputs of higher education programs and their compatibility with the needs of the labour market was positive and statistically significant at (0.01). The outputs of higher education programs and the degree of compatibility with the needs of the labour market. So, the first hypothesis was accepted.

#### **5.2.5. Mediation Analysis**

##### **Second Hypothesis: Strategy of The Ministry of Higher Education and Scientific Research Mediates the Relationship Between the Outputs of Higher Education Programs and the Degree of Compatibility with the Needs of the Labour Market.**

To test this hypothesis, which states that Strategy of the ministry of higher education and scientific research will mediate the relationship between the outputs of higher education programs and the degree of compatibility with the needs of the labour market, mediation analyses were conducted using path analysis in Amos program. The significance of the paths in the mediation model can be found in Figure (1). This mediation model shows the relationships among the Strategy of the ministry of higher education and scientific research, the outputs of higher education programs and the degree of compatibility with the needs of the labour market.

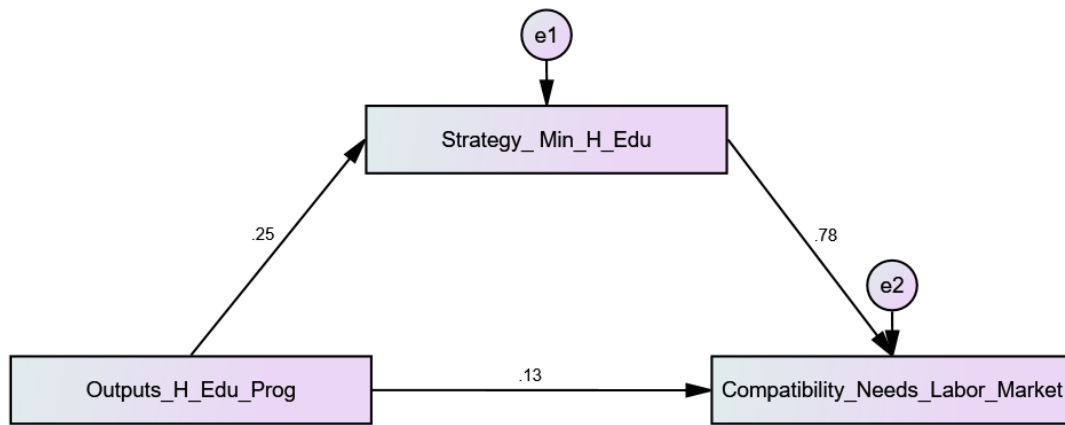


Figure 5.1: Mediation of the Outputs of Higher Education Programs and the Degree of Compatibility with the Needs of the Labour Market By Strategy of the Ministry of Higher Education and Scientific Research.

Indicators of goodness of fit of the proposed model with the data of the current study. The calculated value indicator is the criterion for acceptance GFI: Goodness of Fit Index 1  $GFI > 0.90$  CFI: Comparative Conformity Index 1  $AGFI > 0.90$ , RMSEA: Root Mean Square Error of Approximation (0.0),  $RMSEA < 0.05$ . It is clear that the Goodness of Fit indicators for the proposed model have the best values for all indicators, as the Goodness of Fit Index, whose value was (1), indicates complete quality of fit, and the value of the Comparative Fit Index was (1). The value indicates perfect matching, in addition to the Ramsey index (RMSEA), which is the most important indicator in the structural model, which reached a value of (0.00), which is a perfect matching value. After ensuring the suitability of the proposed model to the data of the current study, the researcher conducted a path analysis and the results were as shown in Table (5.5).

**Table (5.5): Path Estimates**

			Estimate	S.E.	C.R.	P
Compatibility_Needs_Labour_Market	<---	Outputs_H_Edu_Prog	.13	.076	3.649	***
Strategy_Min_H_Edu	<---	Compatibility_Needs_Labour_Market	.78	.043	18.846	***
Strategy_Min_H_Edu	<---	Outputs_H_Edu_Prog	.25	.048	3.257	.001

It is clear from the table () that Outputs of higher education programmes affect the compatibility with the needs of the labor market, as the value of p was (0.000), which is statistically significant. It also appears that the compatibility with the needs of the labor market affects the Strategy of the Ministry of Higher Education and Scientific Research, as the value of p (0.000), which is statistically significant, and that the Outputs of higher education programmes affect the Strategy of the Ministry of Higher Education and Scientific Research, as the value of b (0.001) was statistically significant.

**Table (5.6): Direct, Indirect, and Total Effect of Outputs of Higher Education Programs on Compatibility with the Needs of the Labour Market**

Type of effect	Variable	Strategy_Min_H_Edu	Compatibility_Needs_Labour_Market
Standardized direct effect	Strategy_Min_H_Edu	-----	0.780
	Outputs_H_Edu_Prog	0.250	0.130
Standardized indirect effect	Strategy_Min_H_Edu	-----	-----
	Outputs_H_Edu_Prog	-----	0.195
Standardized total effect	Strategy_Min_H_Edu	-----	0.780
	Outputs_H_Edu_Prog	0.250	0.975

**Strategy\_Min\_H\_Edu** = strategy of the ministry of higher education and scientific research.

**Outputs\_H\_Edu\_Prog**= outputs of higher education programs.

**Compatibility\_Needs\_Labour\_Market**= compatibility with the needs of the labour market

The results of the path analysis shows that there is a positive effect of strategy of the ministry of higher education and scientific research on compatibility with the needs of the labour market, where the coefficient of direct effect when mediating was positive

and reached (0.780), and the effect of outputs of higher education programs on the strategy of the ministry of higher education and scientific research was positive and reached (0.250), and the indirect effect of outputs of higher education programs on compatibility with the needs of the labour market when the strategy of the ministry of higher education and scientific research is included as a mediate variable, is  $(0.250) \times (0.780) = (0.195)$ , and this indicates that the strategy of the ministry of higher education and scientific research plays an important role as a mediating variable, as it was able to increase the effect of the indirect relationship of outputs of higher education programs on compatibility with the needs of the labour market by (0.195).

**5.2.6. Are There Statistically Significant Differences Between The Averages Of The Respondents Regarding The Outputs Of Higher Education Programs And Their Compatibility With The Labour Market And The Strategy Of The Palestinian Minister Of Higher Education And Scientific Research From Their Point Of View Due To The Following Variables: (Gender, Age, Profession, Specialization, Educational Qualification, Workplace).**

The following null hypothesis were derived from it:

**Third Hypothesis: There Are No Statistically Significant Differences At The Significance Level ( $\alpha \leq 0.05$ ) In The Averages Of The Respondents Regarding The Outputs Of Higher Education Programs And Their Compatibility With The Labour Market And The Strategy Of The Palestinian Minister Of Higher Education And Scientific Research From Their Point Of View Due To The Following Variables: (Gender, Age, Profession, Specialization, Educational Qualification, Workplace).**

To answer the sixth question, the third hypothesis was tested using a multivariate analysis of variance (MANOVA) to examine the differences in the means of the study sample about the outputs of higher education programs and their compatibility with the labour market and the strategy of the Palestinian Minister of Higher Education and Scientific Research, as shown in Table (5.7).

**Table (5.7): the arithmetic means and standard error of the outputs of higher education programs and their compatibility with the labour market and the strategy of the Palestinian Minister of Higher Education and Scientific Research from their point of view due to the following variables: (gender, age, profession, specialization, educational qualification, workplace).**

Variables	variable classes	AC		EC		SGCE		LTSP		CIPSR		Total degree of OHEP		CNLM		SMHESR	
		Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error
<b>Gender</b>	Female	3.31	0.13	3.35	0.14	3.37	0.15	3.24	0.15	3.32	0.12	3.33	0.12	3.67	0.14	3.62	0.13
	Male	3.24	0.11	3.35	0.12	3.33	0.13	3.18	0.13	3.32	0.10	3.28	0.11	3.65	0.12	3.48	0.11
<b>Age</b>	Less than 30 years old	3.29	0.14	3.34	0.16	3.30	0.17	3.27	0.17	3.41	0.13	3.34	0.13	3.76	0.15	3.74	0.14
	30 - 39 years old	3.29	0.13	3.36	0.14	3.40	0.15	3.25	0.15	3.40	0.11	3.34	0.12	3.67	0.13	3.46	0.13
	40 - 49 years old	3.24	0.15	3.35	0.16	3.34	0.17	3.11	0.17	3.14	0.13	3.24	0.14	3.55	0.16	3.44	0.15
<b>Profession</b>	Employed graduate	3.27	0.15	3.32	0.17	3.30	0.17	3.31	0.17	3.34	0.14	3.31	0.14	3.80	0.16	3.68	0.15
	Partially employed graduate	3.22	0.19	3.34	0.21	3.29	0.22	2.94	0.22	3.29	0.17	3.23	0.17	3.59	0.20	3.52	0.19
	Unemployed graduate	3.33	0.12	3.38	0.13	3.46	0.14	3.37	0.14	3.32	0.11	3.38	0.11	3.59	0.13	3.44	0.12
<b>Specialization</b>	Human, social specialties	3.29	0.12	3.40	0.13	3.38	0.14	3.24	0.14	3.36	0.11	3.35	0.11	3.72	0.12	3.61	0.12
	Scientific specialties	3.29	0.16	3.35	0.17	3.30	0.18	3.22	0.18	3.41	0.14	3.32	0.15	3.77	0.17	3.64	0.16
	Health and medical specialties	3.24	0.16	3.31	0.18	3.37	0.18	3.17	0.18	3.18	0.15	3.25	0.15	3.49	0.17	3.40	0.16
<b>Educational</b>	Intermediate Diploma	3.43	0.12	3.39	0.13	3.44	0.14	3.40	0.14	3.52	0.11	3.43	0.11	3.88	0.13	3.58	0.12

Variables	variable classes	AC		EC		SGCE		LTSP		CIPSR		Total degree of OHEP		CNLM		SMHESR	
		Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error
Qualification	Bachelor's Degree	3.33	0.10	3.34	0.10	3.35	0.11	3.27	0.11	3.38	0.09	3.33	0.09	3.73	0.10	3.59	0.10
	Postgraduate	3.06	0.28	3.31	0.30	3.26	0.32	2.96	0.32	3.05	0.25	3.15	0.25	3.37	0.29	3.48	0.28
Workplace	NGOs	3.23	0.16	3.31	0.17	3.31	0.18	3.15	0.18	3.33	0.14	3.26	0.14	3.67	0.16	3.61	0.15
	Private Sector	3.16	0.13	3.24	0.14	3.21	0.15	3.01	0.15	3.25	0.11	3.19	0.12	3.60	0.13	3.46	0.13
	Public Sector	3.42	0.15	3.50	0.16	3.52	0.17	3.47	0.17	3.38	0.13	3.46	0.14	3.71	0.16	3.58	0.15

**AC:** Academic Counseling. **EC:** Educational content. **SGCE:** Supporting graduates through continuing education. **LTSP:** Language and technical skills programmes.

**CIPSR:** Creativity and innovation programs in scientific research. **Total degree of OHEP:** Total degree of outputs of higher education programmes. **CNLM:** The degree of compatibility with the needs of the labour market. **SMHESR:** Strategy of the Ministry of Higher Education and Scientific Research

It is evident from Table (5.6) that there is a difference in the arithmetic means of the study sample at the outputs of higher education programs and their compatibility with the labour market and the strategy of the Palestinian Minister of Higher Education and Scientific Research, due to the following variables: (gender, age, profession, specialization, educational qualification, workplace). To verify the significance of the differences, a multiple analysis of variance (MANOVA) test was used, as shown in Table (6.7):

**Table (5.8): Results of the multiple analysis of variance (MANOVA) for the difference in the arithmetic means of the study sample at the outputs of higher education programs and their compatibility with the labour market and the strategy of the Palestinian Minister of Higher Education and Scientific Research according to demographic variables**

Source	Dependent Variables	Type III Sum of Squares	df	Mean Square	F	Sig.
<b>Gender</b>	Academic Counseling	0.209	1	0.209	0.394	0.531
	Educational Content	1.830E-05	1	1.830E-05	0.000	0.996
	Supporting graduates through continuing education	0.050	1	0.050	0.072	0.789
	language and technical skills	0.120	1	0.120	0.175	0.676
	Creativity and innovation in scientific research	0.001	1	0.001	0.001	0.971
	Total degree of outputs	0.073	1	0.073	0.162	0.688
	The compatibility with the needs of the labour market	0.006	1	0.006	0.010	0.919
	strategy of the Palestinian Minister of Higher Education and Scientific Research	0.685	1	0.685	1.300	0.256

Source	Dependent Variables	Type III Sum of Squares	df	Mean Square	F	Sig.
<b>Age</b>	Academic Counseling	0.064	2	0.032	0.060	0.941
	Educational Content	0.022	2	0.011	0.017	0.983
	Supporting graduates through continuing education	0.307	2	0.154	0.222	0.801
	language and technical skills	0.522	2	0.261	0.378	0.686
	Creativity and innovation in scientific research	1.718	2	0.859	2.015	0.136
	Total degree of outputs	0.270	2	0.135	0.301	0.740
	The compatibility with the needs of the labour market	0.755	2	0.378	0.647	0.525
	strategy of the Palestinian Minister of Higher Education and Scientific Research	2.316	2	1.158	2.197	0.114
<b>Profession</b>	Academic Counseling	0.169	2	0.084	0.159	0.853
	Educational Content	0.079	2	0.039	0.063	0.939
	Supporting graduates through continuing education	0.650	2	0.325	0.469	0.627
	language and technical skills	2.513	2	1.257	1.822	0.165
	Creativity and innovation in scientific research	0.020	2	0.010	0.023	0.977
	Total degree of outputs	0.296	2	0.148	0.330	0.719
	The compatibility with the needs of the labour market	0.951	2	0.476	0.816	0.444
	strategy of the Palestinian Minister of Higher Education and Scientific Research	1.117	2	0.559	1.060	0.348
<b>Specialization</b>	Academic Counseling	0.054	2	0.027	0.051	0.951
	Educational Content	0.165	2	0.082	0.131	0.877
	Supporting graduates through continuing education	0.175	2	0.088	0.126	0.881
	language and technical skills	0.087	2	0.044	0.063	0.939

Source	Dependent Variables	Type III Sum of Squares	df	Mean Square	F	Sig.
	Creativity and innovation in scientific research	0.758	2	0.379	0.889	0.413
	Total degree of outputs	0.155	2	0.078	0.173	0.841
	The compatibility with the needs of the labour market	1.204	2	0.602	1.032	0.358
	strategy of the Palestinian Minister of Higher Education and Scientific Research	0.870	2	0.435	0.826	0.440
<b>Educational Qualification</b>	Academic Counseling	0.898	2	0.449	0.846	0.431
	Educational Content	0.090	2	0.045	0.071	0.931
	Supporting graduates through continuing education	0.311	2	0.155	0.224	0.800
	language and technical skills	1.341	2	0.670	0.972	0.380
	Creativity and innovation in scientific research	1.510	2	0.755	1.771	0.173
	Total degree of outputs	0.601	2	0.300	0.670	0.513
	The compatibility with the needs of the labour market	1.720	2	0.860	1.474	0.232
	strategy of the Palestinian Minister of Higher Education and Scientific Research	0.077	2	0.038	0.073	0.930
<b>Workplace</b>	Academic Counseling	1.476	2	0.738	1.390	0.252
	Educational Content	1.355	2	0.678	1.078	0.343
	Supporting graduates through continuing education	2.079	2	1.039	1.499	0.226
	language and technical skills	4.779	2	2.389	3.463	0.033
	Creativity and innovation in scientific research	0.489	2	0.244	0.573	0.565
	Total degree of outputs	1.524	2	0.762	1.700	0.185
	The compatibility with the needs of the labour market	0.308	2	0.154	0.264	0.768

Source	Dependent Variables	Type III Sum of Squares	df	Mean Square	F	Sig.
	strategy of the Palestinian Minister of Higher Education and Scientific Research	0.857	2	0.428	0.813	0.445
<b>Error</b>	Academic Counseling	99.788	188	0.531		
	Educational Content	118.205	188	0.629		
	Supporting graduates through continuing education	130.363	188	0.693		
	language and technical skills	129.693	188	0.690		
	Creativity and innovation in scientific research	80.130	188	0.426		
	Total degree of outputs	84.285	188	0.448		
	The compatibility with the needs of the labour market	109.662	188	0.583		
	strategy of the Palestinian Minister of Higher Education and Scientific Research	99.067	188	0.527		
<b>Total</b>	Academic Counseling	2365.833	200			
	Educational Content	2385.806	200			
	Supporting graduates through continuing education	2454.833	200			
	language and technical skills	2412.278	200			
	Creativity and innovation in scientific research	2486.889	200			
	Total degree of outputs	2390.687	200			
	The compatibility with the needs of the labour market	2972.568	200			
	strategy of the Palestinian Minister of Higher Education and Scientific Research	2629.806	200			

It is clear from the results presented in Table (5.7) that:

#### **5.2.6.1. Differences Due to Gender:**

It was found through the data in Table (6.7) that there were no statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) in the averages of the respondents with regard to the outputs of higher education programs and their compatibility with the labour market and the strategy of the Palestinian Minister of Higher Education and Scientific Research from their point of view due to gender, where the statistical significance calculated for the total degree of the outputs of higher education programs was (0.688), which is greater than (0.05) and not statistically significant. The statistical significance calculated for the compatibility of higher education programs with the labour market was (0.919), which is greater than (0.05) and not statistically significant. The statistical significance calculated for the strategy of the Palestinian Minister of Higher Education and Scientific Research was (0.256), which is greater than (0.05) and not statistically significant. With these results, the first null hypothesis was accepted.

#### **5.2.6.2. Differences Due to Age:**

It was found through the data in Table (6.7) that there were no statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) in the averages of the respondents with regard to the outputs of higher education programs and their compatibility with the labour market and the strategy of the Palestinian Minister of Higher Education and Scientific Research from their point of view due to age, where the statistical significance calculated for the total degree of the outputs of higher education programs was (0.740), which is greater than (0.05) and not statistically significant. The statistical significance calculated for the compatibility of higher education programs with the labour market was (0.525), which is greater than (0.05) and not statistically significant.

The statistical significance calculated for the strategy of the Palestinian Minister of Higher Education and Scientific Research was (0.114), which is greater than (0.05) and not statistically significant. With these results, the second null hypothesis was accepted.

#### **5.2.6.3. Differences Due to Profession:**

It was found through the data in Table (6.7) that there were no statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) in the averages of the respondents with regard to the outputs of higher education programs and their compatibility with the labour market and the strategy of the Palestinian Minister of Higher Education and Scientific Research from their point of view due to profession, where the statistical significance calculated for the total degree of the outputs of higher education programs was (0.719), which is greater than (0.05) and not statistically significant. The statistical significance calculated for the compatibility of higher education programs with the labour market was (0.444), which is greater than (0.05) and not statistically significant. The statistical significance calculated for the strategy of the Palestinian Minister of Higher Education and Scientific Research was (0.348), which is greater than (0.05) and not statistically significant. With these results, the third null hypothesis was accepted.

#### **5.2.6.4. Differences Due to Specialization:**

It was found through the data in Table (6.7) that there were no statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) in the averages of the respondents with regard to the outputs of higher education programs and their compatibility with the labour market and the strategy of the Palestinian Minister of Higher Education and Scientific Research from their point of view due to specialization, where the statistical

significance calculated for the total degree of the outputs of higher education programs was (0.841), which is greater than (0.05) and not statistically significant. The statistical significance calculated for the compatibility of higher education programs with the labour market was (0.358), which is greater than (0.05) and not statistically significant. The statistical significance calculated for the strategy of the Palestinian Minister of Higher Education and Scientific Research was (0.440), which is greater than (0.05) and not statistically significant. With these results, the fourth null hypothesis was accepted.

#### **5.2.6.5. Differences Due to Educational Qualification:**

It was found through the data in Table (6.7) that there were no statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) in the averages of the respondents with regard to the outputs of higher education programs and their compatibility with the labour market and the strategy of the Palestinian Minister of Higher Education and Scientific Research from their point of view due to educational qualification, where the statistical significance calculated for the total degree of the outputs of higher education programs was (0.513), which is greater than (0.05) and not statistically significant. The statistical significance calculated for the compatibility of higher education programs with the labour market was (0.232), which is greater than (0.05) and not statistically significant. The statistical significance calculated for the strategy of the Palestinian Minister of Higher Education and Scientific Research was (0.930), which is greater than (0.05) and not statistically significant. With these results, the fifth null hypothesis was accepted.

#### **5.2.6.6. Differences Due to Workplace:**

It was found through the data in Table (6.7) that there were no statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) in the averages of the respondents with regard to the outputs of higher education programs and their compatibility with the labour market and the strategy of the Palestinian Minister of Higher Education and Scientific Research from their point of view due to workplace, where the statistical significance calculated for the total degree of the outputs of higher education programs was (0.185), which is greater than (0.05) and not statistically significant. The statistical significance calculated for the compatibility of higher education programs with the labour market was (0.768), which is greater than (0.05) and not statistically significant. The statistical significance calculated for the strategy of the Palestinian Minister of Higher Education and Scientific Research was (0.445), which is greater than (0.05) and not statistically significant. With these results, the sixth null hypothesis was accepted.

### **5.3 The Results of the Qualitative Study**

#### **5.3.1. Interviews were Conducted with (5) Experts in Tertiary Education.**

##### **5.3.1.1 What is your Role in Enhancing the Compatibility of Educational Outputs with the Needs of the Labour Market?**

Those interviewed from experts answered that the Ministry of Higher Education and Scientific Research adapts the educational outputs with the needs of the labour market through its authority under the Higher Education Law No. (6) of 2018, where the Accreditation, Quality and Quality Commission for Higher Education Institutions licenses and accredits higher education programs for all institutions after the institution submits a file It includes the extent to which the market needs the educational program,

the knowledge and skills required by the labour market, in addition to an economic feasibility study. The program is evaluated by qualified and experienced external residents. The Ministry also develops study plans for technical education programs using the national standard method for developing vocational education curricula. And technical, which includes a workshop for experts from the labour market to determine the skills required for the labour market, and the Council of Higher Education and the Council of University Presidents issue relevant instructions to suit the educational outcomes of the study programs and the needs of the labour market, as well as partnerships between the Ministry of Higher Education, trade unions and chambers of commerce And industry and the Palestinian Federation of Industries and other representatives of the labour market, which flow in the same direction.

The Ministry is also working to align the outputs of higher education programs with the needs of the labour market through:

1. The Ministry, through the Council of Higher Education and the Council of University Rectors, sets policies, instructions, and regulations so that the programs are compatible with the requirements of the labour market.
2. The Licensing, Accreditation, Quality and Quality Authority, and before accepting the license of any program, requires a feasibility study for the program, on the basis of its approval for the labour market.
3. There is a graduate follow-up system called (GTS), through which surveys and studies are conducted to determine the quality of education institutions' programs and their conformity with the needs of the labour market.

### **5.3.1.2. Is your Strategic Planning Process Applied? How Effective is it in Matching the Educational Outputs with the Needs of the Labour Market?**

The interviewed experts answered that the strategic planning process is applied, as the Ministry's strategic plan was prepared through strategic planning, where the (SWOT) tool was used to identify strengths, weaknesses, opportunities, and challenges, and to set strategic goals, interventions and necessary budgets, in addition to the existence of an evaluation system and follow-up to monitor the extent to which goals are achieved. As for effectiveness, strategic planning is effective. However, the ministry is currently facing, like all ministries and government agencies, some challenges because of the financial crisis, and they are overcome by finding alternative funding sources through donors or by reusing available budgets according to The Ministry also aligns its strategic objectives with the goals of sustainable development (2030).

They also indicated that the Ministry seeks to implement its strategic plans through:

1. The policies it sets in licensing and approving programs.
2. Holding workshops and training.
3. Encouraging technical education, supporting its programs, and bringing in external support for it.
4. The Quality Fund is called QUIF.

### **5.3.2. Interviews were Conducted with (5) Universities Employees.**

#### **5.3.2.1 What is your Role in Enhancing the Compatibility of Educational Outputs with the Needs of the Labour Market?**

Five workers in Palestinian universities were interviewed, and they answered that Palestinian universities play an important role in matching educational outcomes with

the needs of the labor market through developing study programs and educational plans that respond to changes in the needs of the labor market. Universities also contribute to qualifying graduates with the skills and knowledge they need to successfully integrate into the labor market. the job. Palestinian universities follow many methods to achieve this, including:

1. Analyzing the needs of the labour market: Universities conduct a thorough analysis of the needs of the labour market in their local and regional areas. This includes understanding the types of jobs required and the skills and knowledge required of graduates.
2. Developing appropriate educational programs: Based on an analysis of the needs of the labour market, universities can develop programs of study that reflect these needs. These programs can include practical studies, workshops, and practical training to provide students with the required practical skills.
3. Promote Career Guidance: Universities offer career guidance services to students to help them choose fields that match their skills and interests, and that also meet the needs of the labour market.
4. Cooperation with employers: Universities enhance their cooperation with private sector companies and institutions to ensure a balance between theory and practice in education. This is done by organizing training programs and workshops in cooperation with these companies.
5. Follow up the performance of graduates: Universities follow up the performance of graduates in the market, evaluate the university's role in meeting the needs of the labour market and ensure continuous improvement of educational programs.

6. Encouraging entrepreneurship: Universities encourage a culture of entrepreneurship and offer courses and workshops that teach students how to launch their own projects and develop new job opportunities.

#### **5.3.2.2. Is your Strategic Planning Process Applied? How Effective is it in Matching the Educational Outputs with the Needs of the Labour Market?**

The five workers who works in the Palestinian universities answered that the strategic planning process is an important tool for aligning educational programs with the needs of the labour market in universities around the world, including Palestinian universities.

By analyzing the needs of the labour market and developing appropriate programs of study, universities can strike a balance between academic knowledge and practical skills required for graduates. However, universities in Palestine may face challenges in applying the process due to the difficult political, economic, and social conditions that affect the education environment in the region. However, Palestinian universities seek to achieve a balance between academic and professional dimensions in their educational programs through:

1. Analysis of labour market needs: Before developing study programs, universities conduct a thorough analysis of labour market needs, including the skills and knowledge required by employers.
2. Developing appropriate programs: Based on an analysis of the needs of the labour market, universities can develop study programs that reflect these needs, and include the skills and knowledge that students need to succeed in the labour market.

3. Knowledge Integration: Universities include components of the development process in educational programs such as practical training, workshops, and field training to enhance students' practical and applied skills.
4. Communication with employers: Cooperation with private sector companies and institutions can contribute to directing educational programs and ensuring that they meet the needs of the industry and the labour market.
5. Evaluation and Continuous Improvement: An effective evaluation of the impact of educational programs on qualifying graduates and their integration into the labour market helps in continuous improvement and adaptation to changes in market needs.

Effectively achieving the compatibility of Palestinian educational outputs with the needs of the labour market depends on several factors, including the correct implementation of the strategic planning process and directing efforts towards achieving tangible goals. This task is a challenge in light of the complex political and economic conditions affecting the education environment in Palestine, although Therefore, the effectiveness of these efforts can be evaluated through several elements: achieving a balance between academic and practical skills, integrating educational programs with the needs of the labour market, evaluating and monitoring performance, and cooperation with the private sector.

In general, the effectiveness of matching educational outputs with the needs of the labour market requires the integration of efforts between universities, employers, government agencies, and the local community. Achieving this fit take time and effort, and a balance must be achieved between academic education requirements and market needs to achieve long-term success.

#### **5.4.2. Correlation and Difference between Interview Results:**

1. The role of the Ministry of Higher Education and Scientific Research in matching educational outputs with the needs of the labour market is based on the decision of the Accreditation, Quality and Quality Commission for Higher Education Institutions regarding granting licenses and accreditation of higher education programs for all universities.
2. The role of Palestinian universities in aligning education outputs with the needs of the labour market depends on developing study programs and educational plans that respond to changes in the needs of the labour market.
3. The Palestinian Ministry of Higher Education applies the strategic planning process, as the Ministry's strategic plan was prepared through strategic planning. As for effectiveness, the strategic planning is effective, but the ministry is currently facing some challenges as a result of the financial crisis.
4. Employees in Palestinian universities saw that the process of strategic planning to harmonize educational programs with the needs of the labour market in Palestinian universities is applied by analyzing the needs of the labour market and developing appropriate programs of study, and achieving a balance between academic knowledge and practical skills required for graduates.
5. Achieving the effective alignment of Palestinian educational outputs with the needs of the labour market depends on several factors, including the correct implementation of the strategic planning process and directing efforts towards achieving tangible goals through several elements: achieving a balance between academic and practical skills, and integrating educational programs with education.

Labour market needs, performance evaluation and monitoring, and cooperation with the private sector.

## Chapter Six

### Discussion and Recommendations

#### 6.1 Discussion

##### 6.1.1. What is the Reality of the Outputs of Higher Education Programs in Palestinian Universities?

The results showed that the reality of the outputs of higher education programs was average. The arithmetic mean of the reality of the outputs of higher education programs was (3.39), with a percentage of (67.8%).

The dimension (creativity and innovation programs in scientific research) ranked first with an arithmetic mean of (3.47) and a rate of (69.4%). The dimension (Supporting graduates through continuing education) came in second place with an arithmetic mean (3.41) and a percentage (68.2%).

Both of (The Educational Content) and (Language and technical skills) came in the third place, with an arithmetic mean (3.37), with a rate of (67.4%) for each of them. Finally, the dimension (Academic Counseling) came in the fourth place with an arithmetic mean of (3.36) and a percentage of (67.2%).

This finding differs with the study of Abu Snaineh (2017) that revealed a low level of practicing the human resources management these functions in an effective and efficient manner.

**The Researcher** believes that evaluating the reality of the outcomes of higher education programs in any region, including Palestine, is a complex task that involves various factors. Possible reasons why the reality of the outcomes of higher education programs in Palestine are average include the following: Resource constraints: Higher education

institutions in Palestine may face challenges related to limited financial resources, outdated infrastructure, and insufficient funding for research and development. These limitations can affect the overall quality of education and research outcomes.

**Political instability:** The political situation in the region, especially the Israeli-Palestinian conflict, has led to challenges in infrastructure development, academic freedom, and student mobility. Political instability can disrupt the normal functioning of educational institutions, affecting the quality of education.

**Access to Technology:** Limited access to modern technology and research facilities can hinder the ability of higher education institutions in Palestine to keep pace with advances in various fields. This lack of access may affect the quality of research and practical skills students gain.

**Relevance of the curriculum:** The curriculum of higher education programs may not always align with labor market needs or global trends. Outdated or inappropriate curricula can lead to graduates who lack the skills and knowledge required by employers.

**Employability skills:** The focus of higher education programs may not adequately address the development of practical skills and real-world applications. Graduates may find themselves unprepared for the job market, affecting their overall employability.

**Limited collaboration between industry and academia:** Strong relationships between academic institutions and industries can enhance the practical relevance of education. In some cases, there may be a lack of collaboration between higher education institutions and industries, resulting in a gap between academic learning and workplace requirements.

**Brain drains:** Skilled professionals, including those with advanced degrees, may seek opportunities abroad due to limited job opportunities or better conditions. This brain drain can impact talent retention within the region.

**Quality assurance mechanisms:** The absence or inadequacy of quality assurance mechanisms in higher education institutions

can lead to differences in the level of education provided. Accreditation processes and regular evaluations are crucial to maintaining and enhancing the quality of education.

### **6.1.2. What is the Degree of Compatibility of the Outputs of Higher Education Programs with the Needs of the Labour Market?**

The results showed that the compatibility of the outputs of higher education programs with the needs of the labour market was high, with an average of (3.78) and a rate of (75.6%).

This result differs with the European Union report issued in 2012, which indicated that the main challenges facing the higher education sector in Palestine are not limited to “weak linkage of programs or their connection to the needs of the labour market; rather, the lack of national and external funding has a serious negative impact on the quality and relevance of higher education programs.

**The Researcher** attributes the high degree of compatibility of the outputs of higher education programs with the requirements of the labour market in Palestine to several factors, including that those who apply to complete postgraduate studies are often employees and at the top of their work, and the dependence of universities on the continuous updating of curricula and educational content, and postgraduate programs offered by universities are according to the needs of the labour market. And approved by the Palestinian Ministry of Higher Education.

### **6.1.3. What Is The Strategy of the Ministry of Higher Education and Scientific Research to Harmonize the Outputs of Higher Education Programs with the Needs of the Labour Market?**

The results showed that the strategy of the Ministry of Higher Education and Scientific Research to align the outputs of higher education programs with the needs of the labour market was moderate with an average of (3.55) and a rate of (71.0%).

This is consistent with the study of Qumsiyeh & Isaac (2012), which concluded that the Palestinian education system is characterized by poor management and planning, the lack of an appropriate financial structure, rapid and unjustified expansion of study programs at the same time, and indications of a deterioration in the quality of education, as indicated by the Ministry of Higher Education in its report. year (1997).

**The Researcher** attributes the role of the strategy of the Palestinian Ministry of Education in aligning the outcomes of higher education programs and the requirements of the labor market to a moderate degree due to several factors and challenges that affect this role. This affects its ability to achieve significant improvements and developments in the education system, and the Ministry faces challenges in implementing effective strategies to match the outcomes of higher education with the needs of the labor market due to the administrative and organizational challenges that may exist in the educational system. All of these factors have led to it being the strategic role of the Ministry. Palestinian education in harmonizing the outcomes of intermediate higher education programs.

#### **6.1.4. What is the Nature of the Relationship Between the Strategy of the Ministry of Higher Education and Scientific Research and Outputs of Higher Education Programmes and The Compatibility with the Needs of the Labour Market?**

The study concluded that the correlation coefficients between the strategy of the Ministry of Higher Education and Scientific Research and the outputs of higher education programs were positive and statistically significant at (0.01). This indicates a direct relationship between the strategy of the Ministry of Higher Education and Scientific Research and the outputs of higher education programs. It was also found that the correlation coefficient between the strategy of the Ministry of Higher Education and Scientific Research and its suitability with the needs of the labour market was positive and statistically significant at (0.01). There is a positive correlation between the strategy of the Ministry of Higher Education and Scientific Research and the degree of compatibility with the needs of the labour market.

Finally, it was found that the correlation coefficient between the outputs of higher education programs and their compatibility with the needs of the labour market was positive and statistically significant at (0.01). The outputs of higher education programs and the degree of compatibility with the needs of the labour market.

**The Researcher** attributes the existence of a positive relationship between the strategy of the Ministry of Higher Education and Scientific Research and the outputs of higher education programs and matching the requirements of the labour market stemming from several factors related to the development and improvement of the education and scientific research system. Among these factors: Modernization of curricula and educational content, as the strategy of the Ministry of Higher Education can encourage the modernization and development of curricula and educational content to be more

compatible with the needs of the labour market. This could include the introduction of practical and applied components into educational programmes. Directing scientific research, as the Ministry of Higher Education can direct scientific research towards areas of economic and social importance in the country, and scientific research can contribute to solving problems and meeting the needs of the labour market. It also promotes applied research and innovation, as the ministry's strategies can encourage universities and research institutions to implement applied research and innovation that achieves applicable results in the labour market.

**6.1.6. The Strategy of The Ministry of Higher Education and Scientific Research Mediates The Relationship Between The Outputs of Higher Education Programs and The Degree of Compatibility with The Needs of The Labour Market.**

The results showed that the strategy of the Ministry of Higher Education and Scientific Research plays a mediating role in the relationship between the outputs of higher education programs and compatibility with the needs of the labour market. Where it worked to increase the effect of the causal relationship of the outputs of higher education programs on compatibility with the needs of the labour market by (0.195).

**The researcher** attributes this result to the fact that the strategy of the Ministry of Higher Education and Scientific Research can act as a mediating variable between the outputs of higher education programs and matching the requirements of the labour market in the Palestinian reality, due to directing policies and strategies through directing universities and educational institutions towards developing educational programs commensurate with the needs of the labour market. By developing strategies and policies that encourage the development of practical skills and professional

requirements. The Ministry is also working to encourage and support universities to modernize and develop their curricula and educational content to ensure their compatibility with current and future labour market requirements. It is also promoting communication and cooperation with employers and the private sector to understand the needs and requirements of the labour market, and this can contribute to directing the development of educational programs.

**6.1.7. Are There Statistically Significant Differences Between The Averages of The Respondents Regarding The Outputs Of Higher Education Programs And Their Compatibility with The Labour Market and The Strategy of The Palestinian Minister Of Higher Education And Scientific Research From Their Point Of View Due to The Following Variables: (Gender, Age, Profession, Specialization, Educational Qualification, Workplace).**

**6.1.7.1. Differences Due to Gender:**

The study found that there were no statistically significant differences at the significance level ( $\alpha \leq 0.05$ ) in the averages of the respondents about the outputs of higher education programs and their compatibility with the labour market. And the strategy of the Palestinian Minister of Higher Education and Scientific Research from their point of view due to gender.

**The researcher** attributes the lack of differences in the respondents' viewpoints about the outputs of higher education programs and the compatibility of labour market requirements and the strategy of the Ministry of Higher Education in Palestine between males and females, to the similarity of opinions and perceptions between the two sexes in this context. The similarity in the cultural background, education, and the culture of

the society, where common values and beliefs in society can influence perceptions and opinions similarly between males and females.

#### **6.1.7.2. Differences due to Age:**

The study found that there were no statistically significant differences at the significance level ( $\alpha \leq 0.05$ ) in the averages of the respondents regarding the outputs of higher education programs and their compatibility with the labour market. And the strategy of the Palestinian Minister of Higher Education and Scientific Research from their point of view due to age.

**The Researcher** attributes this result to joint education and awareness so that different age groups have common education and awareness, which leads to a convergence of views on these issues. The cultural and value similarity of different age groups leads to a similarity of opinions. Also, the impact of social and economic transformations may affect the views of all age groups.

#### **6.1.7.3. Differences Due to Profession:**

The study found that there were no statistically significant differences at the significance level ( $\alpha \leq 0.05$ ) in the averages of the respondents regarding the outputs of higher education programs and their compatibility with the labour market. And the strategy of the Palestinian Minister of Higher Education and Scientific Research from their point of view due to profession.

**The Researcher** attributes this to the basic aspects of higher education such as the quality of curricula and teaching and the development of basic skills. This leads to a convergence of viewpoints among the respondents despite the difference in profession.

various professions. And the general challenges facing higher education, and the interest in developing comprehensive skills, as there is a focus on developing comprehensive skills that enhance the capabilities of graduates in various fields, this may contribute to a consensus. The effect of government policies and directions If there are clear government directions towards improving higher education and matching it with the needs of the labour market, this may lead to a consensus of views.

#### **6.1.7.4. Differences Due to Specialization:**

The study found that there were no statistically significant differences at the significance level ( $\alpha \leq 0.05$ ) in the averages of the respondents regarding the outputs of higher education programs and their compatibility with the labour market. And the strategy of the Palestinian Minister of Higher Education and Scientific Research from their point of view due to specialization.

**The Researcher** attributes the lack of differences in the respondents' viewpoints about the outputs of higher education programs and the compatibility of the requirements of the labour market and the strategy of the Ministry of Higher Education in Palestine in different disciplines to the existence of a consensus in the visions and perceptions between the various disciplines. This consensus may be the result of common educational and vocational trends that concern various disciplines and contribute to a consensus on the outputs of higher education and harmonization with the requirements of the labour market. In addition, the impact of government policies and directions towards improving higher education and matching it with the needs of the labour market may lead to consensus in viewpoints between different disciplines.

#### **6.1.7.5. Differences Due to Educational Qualification:**

The study found that there were no statistically significant differences at the significance level ( $\alpha \leq 0.05$ ) in the averages of the respondents regarding the outputs of higher education programs and their compatibility with the labour market. And the strategy of the Palestinian Minister of Higher Education and Scientific Research from their point of view due to educational qualification.

**The researcher** attributes the lack of differences in the respondents' viewpoints about the outputs of higher education programs and the compatibility of the requirements of the labour market and the strategy of the Palestinian Ministry of Higher Education, according to the educational qualification, to the existence of a general agreement in the visions and perceptions between the various educational qualifications. This consensus may be the result of the basic challenges facing Palestinian higher education, such as improving the quality of education and flexibility in meeting the needs of the labour market, as well as interest in developing practical skills, critical thinking, and innovation.

#### **6.1.7.6. Differences Due to Workplace:**

The study found that there were no statistically significant differences at the significance level ( $\alpha \leq 0.05$ ) in the averages of the respondents regarding the outputs of higher education programs and their compatibility with the labour market. And the strategy of the Palestinian Minister of Higher Education and Scientific Research from their point of view due to workplace.

**The researcher** attributes the absence of a difference in the respondents' viewpoints about the outputs of higher education programs and the compatibility of the

requirements of the labour market and the strategy of the Palestinian Ministry of Higher Education according to the workplace, to a consensus of visions and perceptions between different geographical regions, and this compatibility may be a result of the general national and cultural needs with regard to the development of education. higher education and its compatibility with the needs of the labour market, and the common national challenges faced by all geographical regions similarly, such as improving educational quality or providing suitable job opportunities, and responding to the needs of the national economy, if there is a focus on developing specific skills and specializations that support the national economy in general, it leads This is due to a consensus of viewpoints between the different regions, as well as government orientations and unified national policies towards the development of higher education and its alignment with the needs of the labour market.

### **6.3 Recommendations:**

Achieving the compatibility of the outputs of higher education programs with the requirements of the labour market requires a joint effort on the part of universities and policy makers. Therefore, the researcher recommended a set of recommendations that can help Palestinian universities and policy makers achieve this goal, namely:

1. Modernizing the curricula: Universities should provide modern and updated curricula that reflect the needs of the labour market by including educational materials that cover technical skills and soft skills such as critical thinking, communication, and problem-solving.
2. Promote practical training and practical experiences: Universities can offer educational opportunities that include practical training and practical experiences in

industry and various sectors, which helps students acquire the necessary skills and experience.

3. Partnership with the private sector: Enhancing cooperation between universities, companies and industrial institutions can contribute to directing curricula and providing training and employment opportunities for graduates.
4. Offering training programs and workshops: Universities should hold workshops and training programs for students and faculty members that can help develop practical skills and raise awareness of the requirements of the labour market.
5. Monitoring and evaluating performance and career orientations: Universities should track the performance of graduates and their career paths to understand how education outputs are in line with the requirements of the labour market, by conducting periodic studies and questionnaires.
6. Enhancing Career Guidance and Career Counseling: Providing career guidance and counseling services to students can help guide them towards majors and fields that are compatible with their interests and abilities.
7. Promote scientific research and innovation: It can help develop new solutions and innovations that meet the needs of the business market.
8. Follow-up and evaluation of matching strategies: Policymakers and universities must follow-up and evaluate the plans and strategies used to match education outcomes with the requirements of the labour market and make the necessary adjustments on a periodic basis.
9. Strengthening communication and cooperation between universities and the public sector: Strengthening communication and cooperation between universities, the

public sector, and government ministries can contribute to directing higher education programs towards the needs of the country.

10. Developing graduate employment follow-up mechanisms: Establishing mechanisms and systems to track and evaluate employment paths for graduates can help in understanding and improving the effectiveness of education outcomes based on the actual needs of the labour market.

**Potential Obstacles:**

1. Lack of literature materials, resource constraints and dearth of statistics on labour market's real needs and projections in Palestine.
2. the difficulty to reach and include the graduates from all Palestinian higher education institutions in the Palestinian territory, particularly from Gaza Strip.

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## Appendices

### Appendix A: Questionnaire



الجامعة العربية الأمريكية - رام الله  
عمادة الدراسات العليا  
كلية الاقتصاد والعلوم الإدارية  
برنامج التخطيط الاستراتيجي وتجديد الاموال

حفظه/ا الله

السيدة/ة

السلام عليكم ورحمة الله وبركاته

#### الموضوع/ تعبئة استبانة لدراسة ماجستير

تعمل الباحثة (سماح خالد مسعود إشتيوي) على إعداد دراسة بعنوان: "ملائمة استراتيجيات برامج التعليم العالي مع احتياجات سوق العمل في فلسطين: جامعات الضفة نموذجاً" وذلك استكمالاً لمتطلبات الحصول على درجة الماجستير في إدارة الأعمال من الجامعة العربية الأمريكية.

وإيماناً من الباحثة بأهمية موضوع الدراسة وثقتها العالية بدوركم الرائد في دعم البحث العلمي والباحثين في المجالات العلمية المختلفة، فيحذوها الأمل بتكرم حضرتكم في المساعدة بتعبئة الاستبانة المرفقة، كما أرجو من سيادتكم توشي الدقة والموضوعية في اختيار الدرجة المناسبة لكل إجابة، والتي تتوافق مع رأيكم الكريم لما له من أثر كبير في الحصول على نتائج دقيقة تُعزز من تحقيق أهداف البحث الذي تعكف الباحثة على إنجازه.

ونحيطكم علماً بأن كل ما تدلون به من آراء أو بيانات سوف يتم التعامل معه بسرية تامة، ولن تُستخدم إلا لأغراض البحث العلمي لذلك فإن ذكر الاسم غير مطلوب.

نشكر لكم مقدماً حسن تعاونكم ومشاركتم الفاعلة

وبارك الله فيكم ،،،

الباحثة: سماح خالد مسعود

إشتيوي

جوال/0598996605

أولاً: البيانات الشخصية والوظيفية: يرجى وضع إشارة (✓) في المكان المناسب.

<b>1. الجنس</b>		
<input type="checkbox"/> ذكر	<input type="checkbox"/> أنثى	
<b>2. العمر</b>		
<input type="checkbox"/> أقل من 30 سنة	<input type="checkbox"/> 30 سنة إلى أقل من 40 سنة	
<input type="checkbox"/> 40 سنة إلى أقل من 50 سنة		
<b>3. طبيعة العمل:</b>		
<input type="checkbox"/> خريج لا يعمل	<input type="checkbox"/> خريج يعمل بعقد عمل جزئي	<input type="checkbox"/> خريج يعمل بعقد عمل كامل
<b>4. التخصص</b>		
<b>4. المؤهل العلمي</b>		
<input type="checkbox"/> دراسات عليا	<input type="checkbox"/> بكالوريوس	<input type="checkbox"/> دبلوم متوسط
<b>5. مكان العمل</b>		
<input type="checkbox"/> القطاع العام	<input type="checkbox"/> القطاع الخاص	<input type="checkbox"/> القطاع الأهلي

ثانياً: مخرجات برامج التعليم العالي:

هذه مجموعة من العبارات تخص برامج (جامعات الضفة الغربية)، لذا يُرجى التكرم بالإجابة بدرجة الموافقة التي تراها مناسبة أمام كل من العبارات الآتية:

م	الفقرة	(5) أوافق بشدة	(4) أوافق	(3) محايد	(2) لا أوافق	(1) لا أوافق بشدة
<b>البعد الأول: الإرشاد الأكاديمي</b>						
1	تحرص الجامعة على توفر الإرشاد الأكاديمي لتوعية الطلاب بالقوانين والانظمة الدراسية.					
2	تساعد الجامعة الطلاب في اختيار التخصص وفقاً لرغبتهم وتحديد أهدافهم الأكاديمية وتحقيقها.					
3	تساعد الجامعة الطلاب في اكتشاف ميولهم واهتماماتهم الشخصية.					
4	تشجع الجامعة الطلبة على التميز الأكاديمي وتطوير الذات والمشاركة العلمية والمجتمعية.					
5	تقدم الجامعة للطلاب دعم نفسي وحوافز معنوية وبيئة سليمة تؤهل الخريجين لسوق العمل.					

م	الفقرة	(5) أوافق بشدة	(4) أوافق	محايد (3)	لا أوافق (2)	لا أوافق بشدة (1)
6	تساعد الجامعة الطلاب على التخطيط لمهنتهم المستقبلية.					
<b>البعد الثاني: المحتوى التعليمي</b>						
7	تتلاءم البرامج الأكاديمية والمنهاج التعليمي في الجامعة مع احتياجات سوق العمل الجديدة.					
8	تحقق البرامج الأكاديمية في الجامعة أهداف الطالب الأكاديمية وتطلعاته المستقبلية.					
9	تجمع الجامعة في مناهج التعليم بين الجوانب النظرية والتطبيق العملي والبحث العلمي.					
10	تزود المناهج التعليمية الطلاب بالقيم والمفاهيم والمهارات المتصلة بسوق العمل.					
11	توفر الجامعة مصادر تعليمية متنوعة تشمل الكتب والمؤلفات والابحاث العلمية للطلاب.					
12	تنظم الجامعة الندوات والمؤتمرات والبرامج العلمية وتسهم في تطبيق توصياتها لخدمة المجتمع.					
<b>البعد الثالث: دعم الخريجين من خلال التعليم المستمر</b>						
13	تحرص الجامعة على تعزيز العلاقة وتوثيق التواصل مع الطلبة والخريجين، وتتابع أوضاعهم.					
14	تزود الجامعة الطلبة والخريجين بالمهارات الإدارية والتقنية واللغوية والشخصية المطلوبة.					
15	تعمل الجامعة على تعزيز الشراكة والتعاون بين المجتمع الأكاديمي ومؤسسات قطاع الأعمال.					
16	تساعد الجامعة في إيجاد فرص منح وتدريب وتأهيل وتوظيف مناسبة للخريجين.					
17	توثق الجامعة العلاقات بين الخريجين من خلال النشاطات الثقافية والتعليمية والاجتماعية المختلفة.					
18	تعزز الجامعة لدى الطلبة والخريجين الشعور بالمسؤولية المهنية والاخلاقية والوطنية.					
<b>البعد الرابع: برامج المهارات اللغوية والتقنية</b>						
19	تتيح الجامعة للطلبة برامج وتطبيقات حديثة في الحاسب الآلي وتعمل على تدريب الطلبة عليها.					
20	توفر الجامعة البنية التحتية والدعم الفني اللازم في تقنيات المعلومات والاتصالات.					
21	تساهم الجامعة في بناء قدرات الطلاب والخريجين في مهارات الاتصال والمهارات اللغوية.					
22	تتوافق البرامج التقنية واللغوية في الجامعة مع التقدم					

م	الفقرة	(5) أوافق بشدة	(4) أوافق	محايد (3)	لا أوافق (2)	لا أوافق بشدة (1)
	العلمي والمعرفي محليا ودوليا.					
23	تصمم وتنفذ الجامعة برامج التدريب اللغوية والتقنية للطلبة والخريجين وفقا لاحتياجات سوق العمل.					
24	تعزز برامج التدريب اللغوية والتقنية فرص قبول واندماج الخريجين في سوق العمل.					
<b>البعد الخامس: برامج الإبداع والابتكار في البحث العلمي</b>						
25	تشجع الجامعة الطلاب والخريجين على اجراء بحوث ودراسات متصلة بحاجات سوق العمل.					
26	تصدر الجامعة مطبوعات تغطي الإنتاج العلمي والأدبي والمهني المتميز للطلبة والخريجين والأكاديميين.					
27	توفر الجامعة مصادر المعلومات المطبوعة والرقمية الكافية لإجراء الابحاث العلمية..					
28	تحرص الجامعة على تنمية مهارات الطلاب وإهتماماتهم ونتاجهم في مجال الابحاث.					
29	توفر الجامعة الدعم المالي والمنح الدراسية والإبتعاث والتبادل الثقافي للطلبة والاكاديميين					
30	تعمل الجامعة على اكتشاف المواهب العلمية وتطويرها وتشجعها على الإبداع والبحث العلمي.					

### ثالثاً: درجة الملائمة مع احتياجات سوق العمل:

هذه مجموعة من العبارات المتعلقة باحتياجات سوق العمل، لذا يرجى التكرم بالإجابة بدرجة الموافقة التي تراها مناسبة أمام كل من العبارات الآتية:

م	العبارات	(5) موافق بشدة	(4) موافق	محايد (3)	غير موافق (2)	غير موافق بشدة (1)
31	توفر الجامعة المختبرات والمعامل الفنية المطلوبة لتحقيق الكفايات اللازمة لمؤسسات سوق العمل.					
32	تقيم الجامعة علاقات مع قطاع الأعمال وتنظم فعاليات لخلق فرص تدريب وتوظيف الخريجين.					
33	تربط الجامعة برامجها الأكاديمية وتطور مناهجها بناء على احتياجات سوق العمل المتجددة.					
34	تركز الجامعة في المناهج التعليمية على الجانب العملي على حساب الجانب النظري.					
35	تستعين الجامعة بخبراء من مؤسسات سوق العمل لتدريس بعض المساقات وتدريب الطلاب.					
36	تحرص الجامعة على تعيين اعضاء هيئة تدريس من					

					ذوي الكفاءة الاكاديمية العالية والتميزة.
					توفر الجامعة مساحة لمؤسسات سوق العمل لعرض ورعاية أعمالها ومنتجاتها وخدماتها.
					تسعى الجامعة لتطبيق معايير الجودة لتحقيق تطلعات المستفيدين وتكسب ثقتهم وولاءهم.
					تنظم الجامعة فعاليات ومعارض ومؤتمرات تسهم في خلق فرص وظيفية جديدة للخريجين داخليا وخارجيا.

#### رابعاً: استراتيجية وزارة التعليم العالي والبحث العلمي:

هذه مجموعة من العبارات الخاصة باستراتيجية وزارة التعليم العالي والبحث العلمي تجاه الجامعات، برضاء وضع علامة ( ) أمام درجة موافقتكم على كل فقرة.

م	العبارات	موافق بشدة (5)	موافق (4)	محايد (3)	غير موافق (2)	غير موافق بشدة (1)
40	تضع الوزارة السياسات اللازمة لمواءمة مخرجات التعليم الجامعي مع احتياجات سوق العمل.					
41	توجه الوزارة الجامعات نحو زيادة قدرتها الاستيعابية وتنويع برامجها الأكاديمية وفقاً لاحتياجات سوق العمل.					
42	تطور الوزارة الإجراءات والآليات اللازمة للتعاون بين الجامعات ومؤسسات قطاعات الأعمال.					
43	تساعد الوزارة في تسويق التخصصات التي تقدمها الجامعات الفلسطينية في سوق العمل داخليا وخارجيا.					
44	توفر الوزارة فرص التدريب التطبيقي والابتعاث والمنح الخارجية للطلبة والخريجين والأكاديميين الجامعيين.					
45	تدعم الوزارة الدراسات والبحوث حول سوق العمل وتطبق النتائج في تطوير البرامج الأكاديمية في الجامعات.					

## Appendix B: Interview

### أسئلة المقابلة

ما هو دوركم في تعزيز ملاءمة المخرجات التعليمية مع احتياجات سوق العمل؟

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هل يتم تطبيق عملية التخطيط الاستراتيجي لديكم؟ وما مدى فعاليته في ملاءمة المخرجات

التعليمية مع احتياجات سوق العمل؟

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**Appendix C:  
Research Interview Target List**

	Name	Title and Institution	Contact Details
1	Dr. Moamar Ishtaiwi	Accreditation and Quality Assurance Commission	<a href="mailto:aqac.dip@mohe.pna.ps">aqac.dip@mohe.pna.ps</a>
2	Dr. Abdulsalam Alkaiyat	Vice President for Academic Affairs- Ana-Najah National University	<a href="mailto:vp.academic@najah.edu">vp.academic@najah.edu</a>
3	Rana Khatib	V.P. For Planning & Development - Birzeit University	<a href="mailto:rkhatib@birzeit.edu">rkhatib@birzeit.edu</a>
4	Dr. Abdulltif abu Odeh	Assistant President For Planning, Development and Quality- Al-Istiqlal University	<a href="mailto:abuoda@pass.ps">abuoda@pass.ps</a>
5	Dr. Hanna Abdel Nour	Vice President for Development and Planning – Al-Quds University	<a href="mailto:habdeen@staff.alquds.edu">habdeen@staff.alquds.edu</a>
6	Dr. Salman Talahmeh	Dean of Planning for Development- Hebron University	+972 2 2220995 Ext. 225
7	Head of Planning Department	Planning Department of al-Quds Open University	<a href="mailto:plan_quality@qou.edu">plan_quality@qou.edu</a>
8	Dr. Adli Saleh	Advisor to the Board of Directors for planning and Development the Arab American University -Jenin	<a href="mailto:pnd@aaup.edu">pnd@aaup.edu</a>
10	Dr. Ahmed Abdou	President Assistant For Planning and development at Palestine Ahliya University	<a href="mailto:a.abdou@paluniv.edu.ps">a.abdou@paluniv.edu.ps</a>
11	Dr. Murad Abdullah	Head of Planning & quality development at Palestine Technical University	<a href="mailto:murad.awadallah@ptuk.edu.ps">murad.awadallah@ptuk.edu.ps</a>
12	Dr. Ayman Sultan	Vice President for Planning & Development at Palestine Polytechnic University	<a href="mailto:vp-community@ppu.edu">vp-community@ppu.edu</a>
13	Rana Khoury	Vice President for Planning & Development at Dar al-Kalima University	<a href="mailto:rkhoury@daralkalima.edu.ps">rkhoury@daralkalima.edu.ps</a>
14	Nablus University for Vocational and Technical Education	Nablus University for Vocational and Technical	<a href="mailto:info@nu-vte.edu.ps">info@nu-vte.edu.ps</a>

		Education	
15	Dr. Majdi al-Khalili	Director of strategic Planning at the Arab American University -Jenin	<a href="mailto:Majdi.khalili@aaup.edu">Majdi.khalili@aaup.edu</a>
16	Dr. ahmad Sadaqa	Instructor of strategic Planning at the Arab American University -Jenin	<a href="mailto:Ahmad.sadaqa@aaup.edu">Ahmad.sadaqa@aaup.edu</a>
17.	Mr. Munjid Sulaiman	Director of Planning at the Ministry of Higher Education	<a href="mailto:Munjid.suleiman@mohe.pna.ps">Munjid.suleiman@mohe.pna.ps</a>
18.	Mrs. Abeer Shehabi	Director of Department of Public Affairs at the Ministry of Higher Education	<a href="mailto:abeer.shihabi@mohe.pna.ps">abeer.shihabi@mohe.pna.ps</a>
19.	Mr. Ezzeddin Ibrahim	Director of Information technology Department at the Ministry of Higher Education	<a href="mailto:Ezdeen.Ibrahim@mohe.pna.ps">Ezdeen.Ibrahim@mohe.pna.ps</a>
20.	Mr. Samer Hussein	Director of Technical Educations at the Ministry of Higher Education	<a href="mailto:Samer.hussein@mohe.pna.ps">Samer.hussein@mohe.pna.ps</a>

The researcher engaged in a series of insightful telephone interviews with businessmen and experts, delving into their perspectives on the correlation between research findings and their own beliefs regarding the competence of graduates. The burning question was: to what extent do graduates possess remarkable skills? And why?

During these interviews, both employers and experts unanimously acknowledged that graduates showcase exceptional crisis management skills in the competitive labor market. This acknowledgment stems from various factors, such as universities implementing practical training or community service programs that cultivate personal skills.

Moreover, universities have been proactive in equipping graduates with both theoretical knowledge and practical expertise, thereby bolstering their readiness to thrive in the post-graduate job market. In recent years, a notable focus has been placed on enhancing

students' technological skills, further augmenting their aptitude compared to graduates from previous decades.

Interviews with the head of the Palestinian Accreditation and Quality Assurance Commission on 28 November 2022 has revealed that that the commission strives to bridge the gap between the new specializations offered by higher education institutions and the demands of the job market. Their aim is to create a comprehensive roadmap that not only considers the nature of the specializations but also emphasizes the necessary skills. This forward-thinking strategy is built upon a careful evaluation of licenses and credits offered by higher education institutions.

To kick-start the process, the Palestinian Accreditation and Quality Assurance Commission requires each higher education institution to submit a request for accreditation of the specialization. In collaboration with industry experts, the Commission organizes workshops to identify the competencies and knowledge needed in the labor market. These findings are used to automate training programs across all higher education institutions, ensuring that students are well-prepared and equipped with the right expertise.

Interview with S. H. as Director General of Technical Education on May 9, 2023 revealed that the Ministry of Higher Education and Scientific Research is suiting educational outputs to the needs of the labour market through its validity under the Higher Education Law No. (6) For the year 2018, the Authority for Accreditation, Quality and Quality Palestinian Accreditation and Quality Assurance Commission licenses and approves higher education programs for all institutions after the institution submits a file containing the market need for the educational program and the knowledge and skills required by the labour market as well as an economic feasibility

study. The program is evaluated through external evaluators with competence and experience. The Minister of Higher Education and Scientific Research develops study plans for technical education programmes using the national modality for the development of vocational and technical education curricula, which includes a workshop for experts from the labour market to identify the skills required for the labour market. The Council of Higher Education and the Council of University Presidents also issue relevant instructions to fit the educational outputs of the study programmes and the needs of the labour market as well as partnerships between the Ministry of Higher Education, professional unions, chambers of commerce, industry, the Federation of Palestinian Industries, and other representatives of the labour market.

In addition, the strategic planning process was implemented as the Ministry's strategic plan was prepared through strategic planning where a tool was used (SWOT) to identify the strengths, weaknesses, opportunities, challenges, strategic objectives, interventions and budgets required, as well as the existence of an assessment and follow-up system to monitor the achievement of the goals. In terms of effectiveness, strategic planning is effective, but the Ministry, like all ministries and government bodies, is currently facing some challenges because of the financial crisis and is overcome by finding alternative sources of financing through donors or by reusing available budgets in accordance with sustainable priorities. the Ministry of the 2030.

The interview revealed that the Higher Education Ministry is currently working on strategic planning to prepare its five-year plan for the coming years (2024-2029), with the participation of all stakeholders from higher education institutions, ministries, and other institutions.

Interview with I. S. at the Commission emphasized that the methodology is complemented by the Ministry of Higher Education's involvement in the development of accreditation procedures and program enhancement. By placing a strong emphasis on competencies, the Ministry highlights the significance of aligning skills with every course taken by students throughout their university journey. With this integrated approach, Palestinian Accreditation and Quality Assurance Commission is revolutionizing the way education and the labor market intersect.

Interview with experts from the Minister of Higher Education and Scientific Research on May 7, 2023, revealed that the Ministry is committed to ensuring that higher education programs meet the demands of the ever-evolving labor market. Working in collaboration with the Council of Higher Education and the Council of University Presidents, they actively formulate policies, instructions, and regulations that are tailored to align with the needs of industries.

To maintain high standards, the Ministry follows a meticulous process. The Accreditation and Quality Assurance Commission play a crucial role in this regard. Before granting licenses for any program, they carefully assess its feasibility and suitability for the labor market. This ensures that only programs of utmost relevance and quality are approved.

To further ensure the quality of educational institutions' programs, the Higher Education Ministry has established a robust Graduate Follow-up System (GTS). This system conducts comprehensive surveys and studies to evaluate the effectiveness and relevance of various programs. By understanding the needs of the labor market, they can make informed decisions to enhance the quality of education and bridge any gaps that may

exist. In pursuit of its strategic plans, the Palestinian Ministry of Higher Education has outlined key initiatives:

1. Policies for licensing and approving programs: These policies serve as a cornerstone to maintaining the highest standards in higher education. The Ministry continuously evaluates and updates these policies to adapt to the ever-changing demands of the labor market.

2. Workshops and training: The Ministry understands the importance of continuous professional development. Through workshops and training programs, they empower educators and administrators with the latest knowledge and skills. This ensures that they can effectively deliver relevant and up-to-date education to students.

3. Promoting technical education: The Ministry actively promotes technical education and supports its programs. Recognizing the significance of technical skills in today's job market, they strive to attract external support and resources. This enables them to offer cutting-edge technical programs that align with industry requirements.

4. Quality Fund called QUIF: In their commitment to excellence, the Ministry has established the Quality Fund (QUIF). This fund aims to provide financial support for initiatives that enhance the quality of higher education.

By investing in innovative projects and programs, students receive the highest standard of education. Through these efforts, the Minister of Higher Education and Scientific Research provides students with education that equips them with the skills and knowledge needed to thrive in the labor market.

Interview with N. D. from the Quality and Follow-up Unit of Birzeit University, responsible for the meticulous monitoring of academic standards, in June 2020 unveiled the comprehensive quality assurance procedures that Birzeit University implements

across its diverse educational programs and at every level. The university's unwavering dedication to evaluating the effectiveness of each program in achieving its intended learning outcomes was truly impressive. There is use of specific performance indicators that are regularly assessed and analyzed to ensure continuous improvement. Seeking feedback from all stakeholders is a critical aspect of Birzeit University's approach to enhancing the educational experience. Students, graduates, esteemed faculty members, industry professionals, and specialized bodies all contribute their valuable insights to shape and refine the university's programs. This collaborative effort is instrumental in driving program development and optimizing performance. The evaluation process in place have led to distinct outputs associated with each academic program. These outputs encompass a range of dimensions, including knowledge and understanding, cognitive skills, subject-specific expertise, general proficiencies, and adaptability. Carefully aligned with the courses offered, these outputs serve as benchmarks to assess students' progress and achievement. But evaluation doesn't stop there. Birzeit University employs an indirect evaluation method, gauging the effectiveness of academic programs and their relevance to the ever-evolving job market. This dynamic process involves engaging with industry professionals through a comprehensive form, ensuring the ongoing alignment of academic offerings with the demands of the labor market. Birzeit University's commitment to excellence and their unwavering pursuit of continuous improvement is evidently verified through the role of Quality and Follow-up Unit which play a pivotal role in upholding the university's lofty standards, leaving a lasting impact on the entire academic community.

Questionnaire was sent to the relevant experts at the palestinian universities whereas the questions were included in the emails indicating that it is part of the interview to

conduct educational research entitled Investigating the Compatibility of Higher Educational Programs with the Requirements of the Labour Market in Palestine.

The researcher also reached out to over 30 educational experts through various communication tools, including WhatsApp. Alas, despite our anticipation, the silence was deafening as the majority chose not to grace us with their replies and only few experts participated as indicated above.

## ملخص

تواجه مؤسسات التعليم العالي الفلسطينية تحديات عديدة في التكيف مع متطلبات سوق العمل المتجددة. هدفت الدراسة الحالية إلى التعرف على مدى ملائمة برامج التعليم العالي مع احتياجات سوق العمل في فلسطين، لمعالجة مشكلة تحديات مؤسسات التعليم العالي الفلسطينية في التكيف مع متطلبات سوق العمل المتغيرة، مما يؤدي إلى زيادة نسبة البطالة وكذلك الفجوة في العرض والطلب.

استخدمت الباحثة منهجية البحث المختلطة الكمية والكيفية في إجراء هذه الدراسة على عينة متاحة تكونت من (200) من خريجي الجامعات باستخدام الاستبانة كأداة لجمع البيانات منهم. كما تم استخدام استبانة شخصية لإجراء مقابلات مع عشرة خبراء من وزارة التعليم العالي الفلسطينية، وكذلك العاملين في الجامعات الفلسطينية في الضفة الغربية.

وبعد إجراء المعالجة الإحصائية الملائمة، توصلت الدراسة إلى أن واقع مخرجات برامج التعليم العالي كان متوسطاً، وأن ملائمة متطلبات سوق العمل جاءت كبيرة، وجاءت استراتيجية وزارة التعليم العالي والبحث العلمي متوسطة.

كما أظهرت النتائج وجود علاقة إيجابية طردية بين مخرجات برامج التعليم العالي وكل من ملائمة متطلبات سوق العمل واستراتيجية وزارة التعليم العالي والبحث العلمي. كما تبين إن استراتيجية وزارة التعليم العالي والبحث العلمي تؤدي دوراً وسيطاً في العلاقة بين مخرجات برامج التعليم العالي وملائمة متطلبات سوق العمل.

وتوصلت الدراسة إلى عدم وجود فروق ذات دلالة إحصائية عند مستوى الدلالة (0.05) بين متوسطات وجهات نظر المبحوثين حول مخرجات برامج التعليم العالي وموائمة متطلبات سوق العمل واستراتيجية وزارة التعليم العالي في فلسطين تعزى لمتغيرات: (الجنس، العمر، المهنة، المؤهل العلمي، التخصص، مكان العمل).

وفي ضوء نتائج الدراسة، قدمت الباحثة عدة توصيات تشمل تحديث المناهج لتشمل المهارات الفنية والتقنية، وتوفير التدريب العملي، وتعزيز الشراكة مع القطاع الخاص، وتقديم البرامج وورش العمل التدريبية، وتوفير التوجيه والارشاد المهني، وتعزيز الابتكار والبحث العلمي، وتقييم استراتيجيات الموائمة بين مخرجات التعليم وسوق العمل، وتعزيز التواصل مع القطاع العام، وتطوير آليات متابعة لتوظيف الخريجين.

**الكلمات المفتاحية:** مخرجات برامج التعليم العالي، متطلبات سوق العمل، استراتيجية وزارة التعليم العالي، الجامعات الفلسطينية.