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**The Effect of Vocational Education and Training on the Economy In Jordan**

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# **Chapter one**

## **Introduction to the study**

## **1.1.Introduction:**

Human resource management is considered one of the most important functions of the administration due to its focus on the human factor, which is the most valuable resource for the administration and the most influential in productivity at all, and the management and development of human resources is a fundamental pillar in most organizations as it aims to strengthen organizational capabilities, and enable institutions to attract and qualify the necessary competencies And able to keep pace with current and future challenges, human resources can contribute strongly to achieving the goals of institutions, provided that there is an efficient human resource planning. Human resource management means, in short, the optimal use of the available and expected human element, and the efficiency, capabilities, experiences of this human element, and its enthusiasm for work depends on the efficiency of the institution and its success in reaching its objectives. Therefore, management scholars have been interested in setting principles and foundations that contribute to achieving the goals of institutions through resource management Humanity and these foundations start from planning through to polarization, selection, training, incentives, evaluation, and everything related to the human element. Vocational education and training are generally concerned with the quantitative and qualitative assessment of the future needs of all types and levels of the workforce during a certain period of time and drawing strategies to meet those needs on time by studying and analyzing sources of supply, on scientific grounds in light of the current situation, determining its dimensions, extrapolating the past and investigating Expected future variables and setting assumptions, alternatives and predictions, in other words, vocational education and training mean the scientific method for studying and analyzing the demand and supply of the workforce for a future period of time and the balance between them, based on the analysis of short and long-term goals, with an assessment of potential changes in environmental conditions, where education and training are considered The professional is part of the overall strategic planning of the organization and is closely related to it. The overall strategic planning of the organization involves identifying the organizational goals and the necessary means to achieve them and includes analyzing the capabilities necessary to achieve the goals of financial and human resources, and the proper planning of the workforce depends on understanding the strategic objectives of the organization, its philosophy and the scope of its work. Given the importance of vocational education and training as the most important tool of human resources, it is worthwhile to study its impact on the economy in Jordan in a government facility such as the Jordanian Vocational Training Corporation, which is primarily concerned with managing and developing human resources through the pivotal role played by this institution, which contributes to reducing unemployment rates by qualifying a trained workforce in various disciplines according to the requirements of the labor market. Hence the importance of this study in knowing the impact of vocational education and training on the economy in Jordan at the Vocational Training Corporation.

## **1.2 Study problem:**

In all organizations and institutions, whether in the public sector or the private sector, there is an administrative body responsible for managing human resources whose main task is to develop strategic plans that aim at the optimal use of the available and expected human element and to identify the extent of the competencies, capabilities, and experiences of this human element that leads the result to contribute to Raising the organization's efficiency and success in reaching the achievement of its goals and continuing as a stand-alone existence that performs the role required of it efficiently and competently. Through research and perusal of previous research and studies related to education and vocational training, it was revealed that there are no studies and research studies that have studied the importance of the impact of vocational education and training on the economy in Jordan in the public sector, especially in the vocational training institution.

Therefore, the main objective of this study is to demonstrate the impact of vocational education and training on the economy in Jordan, given its importance in contributing to the achievement of the institution's strategic goals, which in turn contribute to achieving national goals. In order to clarify the impact of education and vocational training on the economy in Jordan, the following questions must be answered:

The main question: What is the impact of education and vocational training on the economy in Jordan? It is divided into the following sub-questions

The first question: What is the impact of the estimated forecast on the economy in Jordan (efficiency, effectiveness)?

The second question: What is the effect of cascade substitution on the economy in Jordan (efficiency, effectiveness)?

The third question: What is the effect of polarization on the economy in Jordan (efficiency, effectiveness) in the vocational training institution?

## **1.3 Objectives of the study:**

the current study is a new addition of studies and research related to the impact of education and vocational training on the economy, since its measuring the education and vocational training and its impact on the performance of organizations, the study lies through its approach to a relatively recent topic of great importance, especially in the government sector because of its direct impact on the success and failure of any organization, whether in the private or public sector, like education and vocational training have a major role in strengthening the Jordanian economy by providing expertise and job competencies in the required numbers at the specified time, and this matter is extremely important in achieving the competitive advantage and achieving the optimal use of human resources, especially in the government sector. so the study aims at several objectives:

- 1- Learn about the concept of vocational education and training in the vocational training institution.
- 2- Identify the elements of vocational education and training (estimated prediction, job replacement, and recruitment).
- 3- Learn about the concept of the Jordanian economy (efficiency, effectiveness).
- 4- Knowing the vocational training institution.

#### **1.4 Study hypotheses:**

**The study consists of the main hypothesis and stems from it:**

- **The main hypothesis:**

Hypothesis: There is no statistically significant effect at the significance level ( $0.05 \geq \alpha$ ) for education and vocational training (estimated prediction, job replacement, polarization) on the economy in Jordan.

**It stems from the following sub-hypotheses:**

A. There is no statistically significant effect at ( $0.05 \geq \alpha$ ) for vocational education and training (estimated forecast) on the economy in Jordan

B. There is no statistically significant effect at ( $0.05 \geq \alpha$ ) for vocational education and training (job replacement) on the economy in Jordan.

C. There is no statistically significant effect at ( $0.05 \geq \alpha$ ) for vocational education and training (polarization) on the economy in Jordan.

#### **1.5 Study methodology:**

This study relied on the descriptive and analytical approach, whereby the data were analyzed through the (SPSS) program, where multiple and simple regression equations were used, and the deductive approach was also relied on in order to achieve the goals and reach the results.

#### **1.6 study Framework:**

Time limits: During the period from 2020

Spatial boundaries: The Vocational Training Corporation - Amman - Jordan.

Human limits: workers at the Jordan Vocational Training Corporation.

### 1.7 Data sources:

- **Primary data sources:** represented by the questionnaire, the questionnaire was used to obtain the necessary data for the study
- 
- **Secondary sources:** represented by books, references, periodicals, the Internet, and studies related to and related to the subject of study.

# **Chapter Two**

## **Literature Review**



## **2.1 Conceptual approach:**

Modern society is highly dependent on the establishment of its human resources and the continuous development of their quantity and quality. Thus, in most of the world, due to the urgent need for skilled labor to meet the needs of different fields, vocational education related to skilled workers and professionals preparing for basic work has taken a prominent place in formal and non-formal education system.

For students, considering the choice of an educational path is a crucial issue, particularly at the end of the basic education stage. This is a means of providing educational inputs in their academic and professional fields, and this is its main result. For an individual, choosing a career is a very special process, because it contributes to the success of their career, which is reflected in the stability of their home and returns. The student's choice of course will lead to their future career choice. Therefore, this is considered one of the most important decisions of their life, because it determines their lifestyle, social conditions and professional scale. Global job market is undergoing rapid changes due to the growth of scientific, professional and practical careers, as well as continuous changes in technology, economics, politics and development that affect career options. Occupations are becoming more and more extensive, and each occupation has begun to acquire its own characteristics of occupation and learning. As the world lives in a new industrial and technological revolution, our times are constantly changing. The future will also occupy an important position in the industry, which means that there will be many jobs that are different from today, and will have new requirements that force individuals to change occupations many times in their working lives (Jane, 2007; Al-Masry, 2003; MacAskill, 2014).

Al-Hassan study (2011), determine the obstacles that stand in the way of the tenth-grade students 'orientation towards vocational education through several topics. They have been transferred to vocational education, and they will feel shy and demonstrate that society's view towards professionals is inferior. The study recommended educating the individual community on the importance of vocational education and training.

Al-Farhan & Tarawneh (2007), in his analytical study measured the extent of the interest of public and private sector institutions in Jordan in technology, research and development, and training and the impact of this on interest in the productivity of these institutions. The results indicated the lack of interest of public and private sector institutions in any of the above-mentioned aspects, except for the interest of the private sector in technology. The study also showed a positive relationship between those aspects and productivity in public and private sector institutions, and that this relationship varies with the sector in the areas of technology, research, and development and does not differ in the field of training.

Thus, in addition to providing students with correct information to help them choose the correct form of education in the future, education should also provide them with a model of career choice. Students and parents must understand the job market and the career opportunities available (Liu et al., 2014). In recent decades, the relationship between general education and job transition has caused much controversy. The "professional debate" is an international controversy since the 1960s, mainly related to the provision of vocational education at the secondary level. This debate involves several issues. These issues include cultural issues related to the state of vocational education viewed by students, teachers, and the wider community, including the students' parents. Compared to the cost of the academic education, there are other economic and functional issues related to purely vocational schools and purely academic schools or the offer of different courses (Hayward, 2004). There is growing evidence that the vocational school curriculum is not feasible (Grubb, 2004). Since the mid-1970s, aid agencies like the World Bank have begun to show big changes in their sponsorship from vocational education to non-formal education and other programs (Hayward and James, 2004). The school curriculum seems to be based on economic themes.

Professional courses were found to be very expensive. An important contribution to the debate was the conclusion that policies, which emphasize the provision of vocational education in schools, are doomed to fail. It is believed that schools should focus on increasing general education opportunities and improving its quality. However, postponing vocational education after secondary education is recommended, which also means depriving most students of the possibility of acquiring basic professional skills (Hayward, 2004).

Therefore, education must provide them with a model of career choice, requiring students and parents to understand the available career market and career opportunities, and to provide the correct information to help them choose their future educational path (Liu et al., 2014). In recent years, the relationship between public education and migration in the workplace has caused controversy. The "career debate" is an international debate that started in the 1960s and focused primarily on vocational training at the secondary level. Several issues are related to this debate. These issues include cultural issues that students, teachers, and the entire community (including students and parents) believe are related to the state of vocational education.

In addition to planned expenditures for pure vocational education and academic education, other economic problems also involve some professional problems related to pure academic education or multiple courses (Hayward, 2004). There is increasing evidence that vocational training is not applicable (Grubb, 2004).

Therefore, the educational system prepares the individual by providing educational strategies that establish links between school and work. This is the so-called "professional training", which aims to provide

students with the attitudes and skills necessary to adapt to change. This includes: basic academic skills, job search, decision-making skills, job search and retention, good work habits, and a positive personal work value system (Galliot et al., 2020; Twarawneh, 2000). Many factors affect a person's career choice. It takes time to advance from one position or level on the career ladder to another. This is the so-called career ladder. Time depends on the individual's career, direction, motivation, and opportunity, and can be long or short. Sometimes, due to the difficult demands of a new job, people can take a step back. Due to their special activities or other circumstances, the same person may skip some tasks and speed up the pace (Liao and Ji, 2020). In the labor market, experience and qualifications play an important role in promoting working and production conditions in factories. Whenever production increases, this leads to an increase in demand for higher-level jobs on the professional scale, especially for those who work in factories. Therefore, it is necessary to understand the obviousness of the career ladder and the types of occupations available at each level, the requirements to enter these occupations, and the reasons for promotion, because they will affect personal career decisions (Amir and Canada), (Gatti, 2006; Atwan, 2001). If the course commits to making more positive personal career decisions during the learning year to make it more in line with their status, interests, and abilities, then they will achieve one of the life's most important learning goals (Mahasneh, 2011)

## **2.2 professional definitions:**

### **Vocational education:**

This is a form of formal education that includes educational preparation and the acquisition of manual skills and professional knowledge. It is carried out by formal educational institutions of secondary schools in order to provide skilled workers in various industries, agriculture, health, administration and education.. Other careers are usually within a period of time after the basic education stage (3) years. (Al-Salami 1985)

Graduates of professional education can perform the tasks assigned to them and contribute to the production of individuals or groups within their professional field. They also form the link between skilled and unskilled workers in the agency's workforce. Within this concept, professional training is carried out in specialized centers linked to productive institutions or any institutions that benefit from the results of these institutions.

### **Technical education:**

It is a modality of formal higher education, which includes educational preparation and the acquisition of technical skills and knowledge, which is carried out by formal educational institutions no less than two years after the secondary stage to prepare various technical frameworks. Specialties in industry, agriculture, health, administration, etc. It is in charge of the operation, maintenance and service. At their level, technicians

represent the connection between experts (college graduates) and skilled workers who graduated from high school.

The development of technology and science and the information revolution rooted in the means of production and service have made it necessary to improve the graduation level of technical personnel with greater efficiency (knowledge and skills) than graduates of middle schools. Therefore, so-called technical schools have been created. , study time is 4 to 5 years after high school. (Al-Hamdan, 2017).

### **Vocational Education & Training (VET):**

1. It is education and training to provide people with applicable skills (competency)
2. It is a system used to provide education and training, which allows providing people with the required competencies. (Attia and Al Hashemi, 2008).

### **2.3 Vocational Education in Jordan**

With the advent of Jordan's economic development plan in the 1990s, plans and procedures for general and technical secondary education have become increasingly abundant, including some new careers that meet the requirements of technological progress in working market. The most important update to the school curriculum is the use of courses with supplementary education and training modules or competency-based qualification modules. These modules are used for applied education in secondary schools. This includes theoretical and technical information and practical training to obtain a series of skills that meet the requirements of the labor market (ALECSO, 1998; Alsaydeh, 2002). The Ministry of Education is committed to expanding the secondary vocational education program through two main areas:

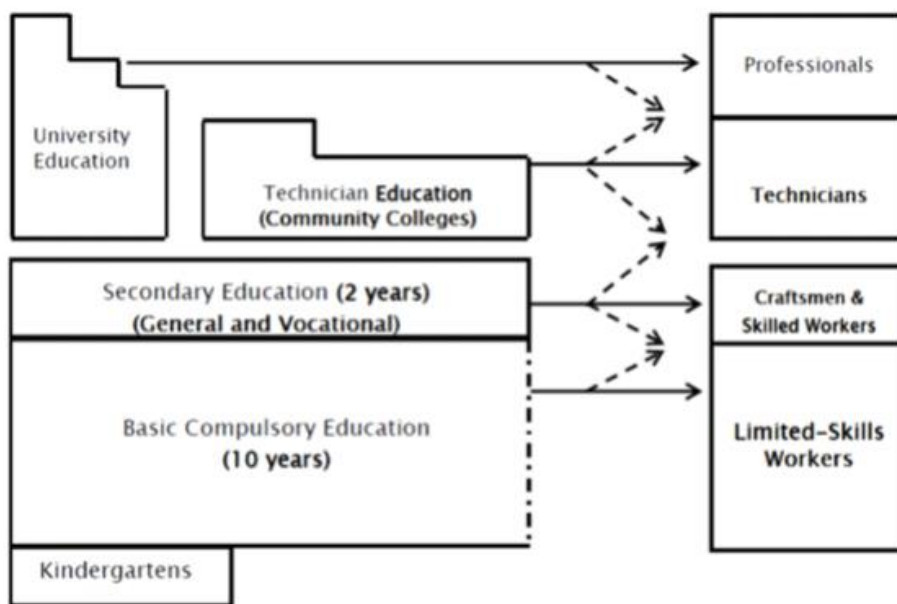
1. A full high school VE is a two-year course after passing the 10th grade core course. At the end of the course, students will pass the General Diploma of High School Examination (GCSE), which allows them to do professional work or attend to higher education in universities and technical colleges.
2. Middle school uses VE, which is a two-year course after passing the 10-year core course, but this course does not allow students to take the GCSE exam. Instead, they receive a school certificate from the training site. However, they can take the GCSE exam within a year after the completion of the training program (Al-Adwan, 2009; Yusuf, 2012)

Many organizations are dealing with VE in Jordan, such as:

1. Pre-VE (PVE) courses are taught in schools from grade one to grade 10 (basic level)

It consists of several departments (general health and safety, general life and family life, lighting engineering and maintenance, agriculture and environment, economy and technology, tourism and hospitality) (Al-saaideh, 2013)

2. The first and second vocational secondary schools, namely VE (second stage). The plan is expected to cover four areas (industry, agriculture, hospitality and family economy). According to the Jordan Occupational Scale, students will graduate as skilled workers (Yusuf, 2012)
3. Vocational training centers select qualified and technical workers with limited competencies according to different time courses (Al-Mahasneh and AlSaaideh, 2020)
4. Community college (technical education), graduate of various professional and technical staff (Al-Mahasneh and Al-Saaideh, 2020).
5. Other sectors of the private sector, such as electricity companies, communications companies and the Royal Forces, will hire technicians. People who meet their professional needs (Al-Mahasneh and Al-Saaideh, 2020). Figure 1 shows the relationship between education and professionalism in Jordan's VE clause. According to research carried out by UNESCO-UNEVOC (2012), al-Raggad (2005) and European Training Foundation (2006), the promotion of EV in Jordan involves many aspects.



**Figure 1: Relationship between the educational levels and occupational levels (Source: World TVET Database - Country Profiles- Jordan)**

Which are:

1. Starting in the lower grades, relevant courses in school education called vocational education have been offered. However, there are many problems in the design and implementation of this course.
2. Establishing a committee for school career management to guide students in making appropriate educational and career decisions in the future.
3. From time to time, various initiatives will be launched to provide individuals with employment opportunities, including opportunities related to skills and qualifications. These initiatives are generally implemented in cooperation between government agencies, formal and private training institutions and departments. Since Jordan VE graduates do not have sufficient professional job skills, these programs have been slow to reach their goals.
4. Reform legislation related to professional education to train graduates. While this has increased the number of students enrolled in EV courses, only a few have earned enough GPA to enroll in college, and they do not want to participate in professional jobs.
5. An attempt is made to spread awareness of the importance of manual and professional work through public media, but current plans are not sufficient to achieve this goal. Although they promote all of these aspects of VE, students still avoid participating in their programs. Furthermore, most of the people who take the EV course use it as a bridge to university education, rather than entering professional work (Al-Tweissi, 2013). The "Technical and Vocational Education and Training Strategy" (E-TVET) (2005) follows the technical education and training objectives for 2006-2020 (UNESCO-UNEVOC, 2012):

When planning employment and vocational and technical education and training, two methods are used. These methods consider:

1. The characteristics and needs of the labor market and the skills and needs of the learners;
2. Developing the capacities of educational, professional and technical training institutions based on their role in planning, formulating policies, and developing resources and activities related to follow-up, monitoring, evaluation and networking actions;
3. Varying the number and types of vocational and technical education and training providers, and ensuring their coordination and cooperation;
4. Promoting the participation of women in vocational and technical education and training and encourage women to participate in first-level planning and implementation.
5. Encouraging the media to promote vocational and technical education and training to enhance positive attitudes towards professional and technical occupations, and to involve women in vocational and technical education and training;

6. Initiating, institutionalizing, and improving channels between supply and demand for vocational and technical education and training, including legislation, information systems and resource development, occupational classification and standards, occupational consulting and training services. job.
7. Cooperating with universities and other TVET stakeholders to promote TVET research.
8. Considering and applying international best practices in vocational education and training to develop national planning skills.
9. Formulating legal documents to establish an appropriate legal framework for vocational and technical education and training.
10. Establishing an organizational structure that links general education with vocational and technical education and training, so that the vocational and technical education and training system has greater flexibility.
11. Highlighting and promoting the role of women in education and professional and technical training.

The Higher Committee for Human Resources Development was established to be responsible for the human resources development plan at the national level, formulating policies related to professional technical training, coordination and planning, decision-making, and educational activities and coordination. To meet the needs of the country, King of Abdullah has formulated the 2011-2020 National Employment Strategy and its 2012 implementation plan, focusing on helping young people find suitable jobs.

The strategy goal is to support programs aimed at funding graduates to launch pilot projects and start-ups. Furthermore, the National Employment Strategy has also developed practical solutions and mechanisms to solve the problem of unemployment by providing and expanding vocational training programs, thus enabling paid training in cooperation with the private sector (UNESCO, 2012). The question of preventing students from joining VE in Jordan piqued the interest of researchers. The purpose of Mdanat and Naser (1982) is to explore the socioeconomic reasons, the level of education of the father and the impact of the student's performance on the VE attitude of the third preparatory child. The results showed that differences in family income level, parental education level, and student performance level would not significantly affect students' attitudes towards electric vehicles.

Al-Shawaqfah (1991) conducted a study to explore the attitude of the Jordanian community towards individual education and its relationship with variables (individual education level, gender and different occupations). The results showed that Jordanians have very different attitudes towards manual education, which can be attributed to differences in individual college education. As for the gender differences, there is no obvious difference.

A study by Al-Ja'nini (1992) explored the attitudes of tenth grade students. It concluded that it has a positive effect on VE regardless of the gender, residence and level of education of the parents, and the nature of their work or the child's attitude towards this type of Education. In recent decades, many academics in Jordan have spoken about the general attitude of students towards EV.

A study by Al-Sabaibah (1998) showed that students have a positive attitude towards VE, and there is no difference in gender or performance level. However, it is due to the educational level of their parents. AlBanawi and Al-Ghazwi (1999) also conducted a study to explore students' attitudes towards VE, including social status, economic aspects of education, and the possibility of providing employment opportunities to graduates. The research results showed that in the sample of this study, the social status of VE was negative, and there was no significant difference in the social status of VE between men and women. Student attitudes toward EV's ability to provide economic benefits are positive, while students' attitudes toward EV's economic benefits vary widely according to gender variables and household income levels. Most research samples indicate that family conditions will affect students' attitudes toward electric vehicles, which will vary based on family income level.

Al-Alwan (2001) also conducted a study to explore the attitudes of high school students towards VE in rural and urban areas. Attitudes are considered positive, while students from urban areas were more positive. There was no significant difference in the attitudes of the students, which can be attributed to the type of work of the parents, the educational level and the monthly family income. There were significant differences in students' attitudes towards VE, which is mainly due to the different ways in which students choose VE. In Palestine, Abu-Asbah (2005) studied the main problems of vocational education in vocational secondary schools from the perspective of teachers. The results showed that significant differences in VA cannot be attributed to gender or class variables. Migdadi (2007) conducted a study to explore the reality of VE in Jordan, its most important problems and ways to improve it. Although this study showed a moderately positive attitude, it showed that Jordan still has a positive attitude towards the development of VE. Al-Fahrah and Abu-Samaha (2010) conducted a study to determine the attitude of high school students towards VE. The title comes from the GCSE exam results in 2010, because the success rate in 2010 has decreased compared to previous years. The results showed that the educational level of the parents of students who have participated in academic training was higher than that of VE students. This means that the parents of students who have received academic education would guide them to accept a college education, and the grades of students in ninth grade were better than those of vocational centers and vocational secondary education. The study also showed that the majority of the subjects in the research sample expressed a desire to continue academic research. This means that VE, which goal is to provide technical staff suitable for the job market, did not achieve its goal of



persuading students to enter the field. Student motivations for joining VE vary, including personal preferences, average grades, desire for job opportunities, and desire for a good income, parental preferences, and teacher advice. VE students also showed a greater tendency to work.

Vocational high school students showed greater confidence in respecting professional work in the community. Through this research, the status of vocational training in all disciplines is unclear, as 50% of them only know the type of occupation. On a closely related topic, Al-Tuwaisi (2013) studied the proposed solution that uses expert opinions to improve society's negative impression of technical and vocational education. The nature of the solution is divided into six areas: curriculum, teaching methods, infrastructure and learning environment, policy and legislation, media and communication, education and career-oriented programs, and partnerships between institutions related to VE. Curriculum solutions include suggestions that teaching materials should be kept up to date, in addition to enriching their courses by strengthening respect for manual work and the people involved in this work. Moreover, income should be beyond choice of occupation, and teachers should play the role of parents and conduct field visits to real workplaces, especially seniors, as well as benefiting from partnerships with the private sector and international institutions to implement awareness initiatives. Last but not least, continuous professional campaigns should be carried out through radio and television. Finally, it is recommended to reduce tuition and provide special allowances for VE graduates.

# **Chapter Three**

## **Methodology**

## **The First Topic: Field Study Procedures**

This chapter deals with a detailed description of the methodology and procedures followed by the researcher in implementing the study as well as a description of the study community, a description of the study tool used, the study variables (independent and dependent), and the procedures followed in the implementation of the study and the statistical treatment of data analysis, and treatment of the study results.

This study adopted the descriptive and analytical approach, by reviewing and reviewing the theoretical literature and previous studies on vocational education and training and the economy in Jordan and preparing a study tool to collect data and submit it to statistical analysis, through which the impact of vocational education and training on the economy in Jordan is measured.

### **First: Study population and sample:**

The study population consists of all employees in the supervisory and leadership positions in the Vocational Training Corporation, whose number is about (167) employees during the year 2014, all of whom were taken within the study sample. The number of completed and analyzable questionnaires reached (164), where (3) questionnaires were excluded due to the lack of response (1) to the respondent and the incomplete answers of (2) others. Thus, the percentage of the questionnaires subject to analysis out of the total questionnaires is (98%).

### **Second: The study tool:**

The study included a tool that measures the impact of vocational education and training on the economy in Jordan, based on theoretical literature, research, and previous relevant studies. The study tool (questionnaire) consisted of three parts as follows:

- 1- The first part: the personal and functional variables of the vocabulary of the study sample and include (gender, age, academic qualification, job level, work experience).
- 2- The second part: It consists of (21) statements that measure the vocational education and training variable (the independent variable), which includes three sub-dimensions which are (prediction of human resource needs, sequential job replacement, and recruitment).
- 3- The third part: It consists of (13) statements that measure the economy variable in Jordan (the dependent variable), which includes two dimensions, namely (efficiency, effectiveness).

The two variables of education and vocational training and the economy in Jordan, according to their respective statements and sub-dimensions, the five-point Likert scale was used as follows: (Strongly disagree, disagree, neutral, agree, strongly agree) weights are assigned to it (1, 2, 3, 4, and 5) respectively, for each

statement of the questionnaire, and according to the sub-dimensions based on the principle of correcting the study tool and according to the relative weights, the following grades were adopted:

- 1- A low degree of practice: it is represented by the statements whose arithmetic average is less than (2.34)
- 2- Average degree of practice: It is represented by the statements whose arithmetic mean between (2.34 - 3.67)
- 3- A high degree of practice: It is represented by the statements whose arithmetic average is greater than (3.67)

**Table (4/2) study variables and number of statements**

<b>Variable</b>	<b>Sub-dimension</b>	<b>Number of statements</b>
Education and vocational training	Forecasting of human resources	9
	Sequential Job replacement	6
	Polarization	6
Economy in Jordan	Efficiency	6
	Effectiveness	7

**Source:** Abu Asbeh, 2005

Prepared by the researcher from the questionnaire data, 2020

**Third: Validation of the study instrument:**

To verify the validity of the study tool, the researcher presented the study tool to a group of specialized faculty members (at the Jordanian Islamic Sciences University / College of Finance and Business) to verify the indications of the validity of the content of the tool to suit the purposes of the study, and the arbitration was conducted according to the following criteria:

1. Fit statements to scale.
2. The belonging of the statements to the domain that they fall under.
3. The integrity of the wording of the statements and the clarity of the meaning from the linguistic point of view.
4. Add new statements

The comments of the referees were taken into account in terms of reformulating, deleting some statements, adding new statements, and amending some statements in terms of their belonging to the field and

their linguistic validity until the scale became ready in its final form for field application and consisting of (34) statements in its final form.

To verify the stability of the study tool, the researcher used the Cronbach Alpha coefficient for the internal consistency of each dimension of the study as follows:

**Table (4/3) the values of the stability coefficient of internal consistency for each dimension of the study**

<b>Variable</b>	<b>Dimension</b>	<b>Coefficient value</b>
Education and vocational training	Forecasting of human resources	0.94
	Sequential Job replacement	0.86
	Polarization	0.87
	The total dimension of Education and vocational training	0.95
Economy in Jordan	Efficiency	0.85
	Effectiveness	0.88
	The total dimension of Economy in Jordan	0.92

**Source: Prepared by the researcher from the questionnaire data, 2020**

The Cronbach's alpha test is usually applied to test the consistency and stability of the questionnaires which measure latent variables. From the above table, it is clear that the stability coefficients calculated with the Cronbach Alpha equation ranged between (0.85-0.95). These coefficients are high and a function of stability and meet the purposes of the present study.

In addition, based on the statistical program (SPSS), the study data were analyzed using the following statistical methods:

Descriptive statistics: to present the characteristics of the sample members and describe their answers through:

- 1- Frequencies and percentages
- 2- Arithmetic means and standard deviations.

\* Inferential statistics: to investigate the significance, strength, direction, and form of the relationship between the study variables through simple linear regression.

\* Cronbach alpha coefficient: to measure the stability of the study instrument.

**Fifth: Sources of data collection:**

The researcher relied on two sources to collect data as follows:

First: Primary sources: The researcher relied on the questionnaire as a tool to collect data from the study sample on the impact of vocational education and training on the economy in Jordan.

Second: Secondary sources: For the purposes of collecting this data, reliance has been made mainly on all the books, periodicals, magazines, research papers, publications, official reports, and search engines over the Internet that have been accessed regarding the subject of the study.

# **Chapter Four**

## **Data Analysis**

## First: Analysis of Personal Data

**Table (4/4): Frequencies and percentages of the study sample**

Variable	Category	Frequency	Percentage %
Gender	Male	142	86.6
	Female	22	13.4
	Total	164	100
Age	Less than 30	0	0
	30 –less than 40	16	9.8
	40 – less than 50	88	53.7
	50-less than 65	60	36.6
	Total	164	100
Education	Diploma	31	18.9
	Bachelor degree	104	63.4
	High diploma	10	6.1
	Master degree	13	7.9
	Doctorate	6	3.7
	Total	164	100
Experience	Less than 5 years	1	0.6
	5 – less than 10 years	7	4.3
	10 – less than 15 years	43	26.2
	15 – less than 35 years	113	68.9
	Total	164	100
Job position	General manager assistant	4	2.4
	Consultant	4	2.4
	Director of the department	12	7.3
	Unit chief	3	1.8
	Section head	39	23.8
	Coordinator	40	24.4
	Institute head	40	24.4
	Bureau head	22	13.4
	Total	164	100

Source: Researcher prepared from the questionnaire data, 2020

It is noted from the above table that the percentage of males reached (86.6%), which is a high percentage due to the high number of male employees in the vocational training institution, especially in senior management compared to the number of females, while the age group (40 - less than 50) years constituted the highest percentage of (53.7) % Due to the concentration of senior management employees' ages within this category, as for scientific qualification, holders of a bachelor's degree formed the highest percentage, amounting to (63.4%), while the highest percentage of practical experience for the category was (15-35) years,



reaching (68.9%). Finally, the two categories (coordinator, institute director) formed the highest percentage compared to other job levels, which amounted to (24.4%) for each.

1- Measuring the degree of total practice of vocational education and training and its component sub-dimensions:

**Table (4/5): Arithmetic averages, standard deviations, and the Total degree of the practice of VET and its sub-dimensions according to the responses of the study sample**

No.	Dimension	Arithmetic mean	Standard deviation	Practice degree
1	Forecasting of human resources	3.78	0.64	High
2	Sequential job replacement	3.45	0.64	Moderate
3	Polarization	3.47	0.69	Moderate
Total		3.60	0.59	Moderate

Source: Researcher prepared from the questionnaire data, 2020

The above table shows that the total arithmetic means of the degree of human resource planning practice in the vocational training institution reached (3.60) with a standard deviation (0.59) with a moderate practice score. After forecasting the needs of human resources, he achieved the highest arithmetic average of (3.78) reflecting the degree of practice (high), while after sequential job replacement he achieved the lowest arithmetic average of (3.45) and with a degree of (medium) practice. It is also noted that the arithmetic averages for the degree of practice Vocational education and training in its various dimensions were high and medium, indicating that the responses of the study sample were somewhat conservative towards practicing strategic vocational education and training in the vocational training institution.

2- Measuring the degree of practicing vocational education and training through the prediction of human resource needs:

**Table (4/6): Arithmetic averages, standard deviations, and the degree of practice for vocational education and training through the prediction of human resource needs according to the responses of the study sample.**

No.	Statement	Arithmetic mean	Standard deviation	Practice degree
1	The institution has a database on human resources (comprehensive information for each employee).	3.96	0.61	High
2	The Foundation uses the forms of vocational education and training approved by the Civil Service Bureau	3.93	0.72	High
3	In the organization, there is a strategic plan for human resource management	3.89	0.74	High
4	When preparing the human resources management plan, the organization takes into account the processes of career mobility (promotion, assignment, permanent and temporary separation)	3.79	0.76	High
5	The organization has a plan to forecast the human resource needs	3.78	0.82	High
6	There are a clear methodology and mechanism for working in the institution for vocational education and training	3.74	0.77	High
7	The vocational education and training process takes place in the preparatory stage with the participation of all the administrative units in the institution	3.71	0.85	High
8	Those in charge of vocational education and training in the institution possess the appropriate qualifications and experience	3.63	0.87	Moderate
9	The Foundation holds introductory courses and workshops for the incumbents of supervisory and leadership positions on how to determine the needs of human resources	3.61	0.91	Moderate
Total		3.78	0.64	High

**Source: Prepared by the researcher from the questionnaire data, 2020**

The above table shows that the total arithmetic means of the degree of practicing vocational education and training through the prediction of the human resource needs in the vocational training institution has reached (3.78) with a standard deviation (0.64), and it expresses a high degree of practice. Statement No. (8) and its content "The institution has a database on human resources (comprehensive information for each employee) has achieved the highest arithmetic average of (3.96) with a degree of practice (high), while Statement No. (6) has achieved its content," the institution holds courses and workshops. An introduction to the

supervisory and leadership positions on how to determine the human resource needs. The lowest arithmetic average is (3.61) and expresses the degree of practice (medium). It is also noticed that the arithmetic averages of the degree of the practice of vocational education and training through after forecasting the needs of human resources were high Total, indicating that the responses of the study sample were positive towards a practice after forecasting the human resource needs in the vocational training institution.

- Measuring the degree of practicing vocational education and training through the sequential job replacement dimension:

**Table (4/7): Arithmetic averages, standard deviations, and the degree of practice for vocational education and training through the sequential job replacement dimension according to the responses of the study sample individuals.(Nasrallah, 2012)**

No.	Statement	Arithmetic mean	Standard deviation	Practice degree
1	The organization analyzes the organizational tasks of the administrative units to determine the job titles required to perform those tasks	3.69	0.68	High
2	The organization designs jobs on the basis of workload to determine the needs required for them	3.60	0.77	Moderate
3	The organization reviews the results of the job analysis to determine the required human resource qualifications	3.57	0.77	Moderate
4	The organization guides employees about the career path of each job	3.53	0.82	Moderate
5	The corporation identifies important jobs for replacement purposes	3.30	0.90	Moderate
6	The corporation identifies important jobs for replacement purposes	3.30	0.90	Moderate
Total		3.45	0.64	Moderate

**Source: Researcher prepared from the questionnaire data, 2020**

The total arithmetic mean of the degree of practicing vocational education and training through the sequential job replacement in the vocational training institution was (3.45) with a standard deviation (0.64), and expressing a moderate degree of practice. Statement No. (3) and its content, “The institution analyzes the organizational tasks of the administrative units to determine the job titles required to perform these tasks” has achieved the highest arithmetic average of (3.69) with a (high) degree of practice, while Statement No. (1) and its content have achieved “there is a methodology in the institution For sequential job replacement, "the lowest arithmetic mean of (2.97), expressing a degree of practice (medium). It is also noticed that the arithmetic averages of the degree of vocational education and training practice through the sequential job replacement

were average Total, indicating that the responses of the study sample were conservative towards practice after sequential job replacement in the vocational training institution.

4- Measuring the degree of practicing vocational education and training through the recruitment dimension:

**Table (4/8): Arithmetic averages, standard deviations, and degree of practice for vocational education and training through the polarization dimension according to the responses of the study sample**

No.	Statement	Arithmetic mean	Standard deviation	Practice degree
1	The human resources plan in the organization clarifies the appropriate dates for recruitment	3.64	0.83	Moderate
2	The institution has a methodology for internal and external recruitment	3.62	0.80	Moderate
3	The institution has a program to follow up the implementation of the recruitment plan	3.61	0.83	Moderate
4	The organization's senior management supports the process of following up on the implementation of the recruitment plan	3.61	0.81	Moderate
5	The organization builds the recruitment plan based on its career forecast plan	3.56	0.82	Moderate
6	The organization resists favoritism and favoritism when implementing the HR plan	2.80	1.14	Moderate
Total		3.47	0.69	Moderate

Source: Prepared by the researcher from the questionnaire data, 2020

The above table shows that the total arithmetic means of the degree of practicing vocational education and training through the polarization dimension in the vocational training institution was (3.47) with a standard deviation (0.69), and it is expressed as a mean degree of practice. Statement No. (4) and its content, "The human resources plan in the institution clarifies the appropriate dates for recruitment," achieved the highest arithmetic average of (3.64) with a degree of practice (medium), while it achieved statement No. (3) and its content "The institution resists favoritism and favoritism when implementing the human resources plan. The lowest arithmetic mean (2.80), which expresses a degree of practice (medium). It is also noted that the arithmetic averages of the degree of practicing vocational education and training through after polarization were all average, indicating that the responses of the study sample were conservative towards the practice of post-polarization in the vocational training institution.

## Results of the Descriptive Statistics of the Dependent Variable (Economy in Jordan):

1- Measuring the Total level of the economy in Jordan and its component sub-dimensions:

**Table (9/4): Arithmetic averages, standard deviations, and the Total level of the economy in Jordan and its sub-dimensions according to the responses of the study sample:**

No.	Dimension	Arithmetic mean	Standard deviation	Practice degree
1	Efficiency	3.74	0.60	High
2	Effectiveness	3.68	0.61	High
Total		3.60	0.59	High

Source: Researcher prepared from the questionnaire data, 2020

The above table shows that the proficiency dimension has achieved an arithmetic mean of (3.74) with a (high) level, which is higher than the arithmetic average of the effectiveness dimension, which expresses a high level also of (3.68). The table also shows that the Total arithmetic average of the economy in Jordan reached (3.71) with a standard deviation (0.57), expressing a high level, which indicates that the responses of the study sample were positive towards the economy in Jordan.

2- Measuring the level of the economy in Jordan through the competency dimension:

**Table (4/10): Arithmetic averages, standard deviations, and the level of the economy in Jordan through the competency dimension according to the responses of the study sample individuals.**

No.	Statement	Arithmetic mean	Standard deviation	Practice degree
1	The institution has a methodology for training its employees in a way that raises their efficiency	3.82	0.72	High
2	The Corporation sends its employees on internal and external courses to provide them with the necessary skills	3.91	0.72	High
3	The institution has a mechanism to measure the impact of targeted training to improve employee skills	3.64	0.76	Moderate
4	The organization is characterized by the simplification of work procedures	3.85	0.69	High
5	The organization motivates efficient employees	3.77	0.74	High
6	The organization works to put everyone on the right job for them	3.44	1.06	Moderate
Total		3.74	0.60	High

Source: Al-ukosh, 2020

Researcher prepared from the questionnaire data, 2020

The above table shows that the arithmetic average of the level of the economy in Jordan through the dimension of proficiency in the vocational training institution has reached (3.74) with a standard deviation (0.60), expressing a high level, and it has achieved statement No. (2) and its content: "The institution sends its employees in internal and external courses. In order to provide them with the necessary skills, "the highest arithmetic average of (3.91) expressing a level (high), while the statement number (6) has achieved and its content," the institution is working to place each person in the appropriate job for him "the lowest arithmetic average of (3.44) and expressing the level of (average It is also noted that the arithmetic averages of the level of the economy in Jordan through the competency dimension were mostly high, indicating that the responses of the study sample were positive towards the level of the proficiency dimension in the vocational training institution.

3- Measuring the level of the economy in Jordan by following the event:

**Table (11/4): Arithmetic averages, standard deviations, and the level of an economy in Jordan by the event dimension according to the responses of the study sample.**

Number	Statement	Arithmetic Mean	Standard Deviation	Practice Degree
1	The goals of the institution are integrated	3.84	0.68	High
2	The goals of the enterprise are interrelated	3.88	0.63	High
3	The organization has the ability to invest its human resources in the best way	3.63	0.85	moderate
4	The organization has the ability to achieve goals and exploit opportunities	3.68	0.80	High
5	The organization is characterized by clarity of roles and responsibilities of its employees	3.77	0.73	High
6	Education and vocational training in the institution contributed to increasing the productivity of workers	3.65	0.80	moderate
7	The organization works so that the majority of people occupy the right job for him	3.32	1.06	moderate
Total		3.68	0.61	High

Source: Prepared by the researcher from the questionnaire data, 2020

The above table shows that the arithmetic average of the economy level in Jordan through the effectiveness dimension in the vocational training institution reached (3.68) with a standard deviation (0.61), and expresses a high level. Expression No. (2) and its content, “The objectives of the institution are interrelated,” have achieved the highest average arithmetic It reached (3.88) and expresses the level of (high), while it has achieved the statement No. (7) and its content, “The institution shall work so that the majority of people occupy the appropriate position for him.” The lowest arithmetic mean of (3.32) and expresses the level of (medium). It is also noticed that the arithmetic averages of the economy level in Jordan through the effectiveness dimension ranged between medium and high, indicating that the responses of the study sample were somewhat positive towards the level of competence dimension in the vocational training institution.

**Testing the hypotheses of the study:**

The simple linear regression analysis method was used to test the main hypothesis and the sub-hypotheses emerging from it, in order to verify the extent of the existence of a statistically significant effect of vocational education and training on the economy in Jordan at a level of statistical significance (= 0.05  $\alpha$ ).

**1- Main study hypothesis:**

**Table No. (12/4) Results of simple regression analysis of the impact of education and vocational training on the economy in Jordan**

1- The value of the linear Pearson correlation coefficient (R) amounted to (0.73), which is statistically significant at the level of significance (0.05 $\alpha$ ), and indicates a fairly strong relationship between the independent variable (education and vocational training) and the dependent variable (economy in Jordan)

<b>Model Summaries</b>	<b>R</b>	<b>R<sup>2</sup></b>	<b>Calculated Test value F</b>	<b>Significance</b>
Value	0.73	0.53	180.077	*0.000

<b>Model coefficient</b>	<b>Coefficient symbol</b>	<b>Coefficient value</b>	<b>Calculated T-test value</b>	<b>Significance</b>
Constant coefficient	$\alpha$	1.18	6.17	*0.000
Simple linear regression coefficient	$\beta$	0.70	13.45	*0.000

**Source: Prepared by the researcher from the questionnaire data, 2020**

The following are noted from the results of the simple linear regression analysis shown in the table above:

- 2- (R) Positive indicates that the relationship between both variables is positive, that is, the better education and vocational training, the better the economy in Jordan.
- 3- The value of the simple linear regression coefficient ( $\beta$ ) reached (0.70) and it is statistically significant as the value of the statistical test  $t$  reached (13.45) at the level of significance ( $\leq 0.05\alpha$ ), and it indicates the existence of an effective and explanatory relationship between education and vocational training and the economy in Jordan, and the value of the regression coefficient ( $\beta$ ) and its positive sign mean that increasing the independent variable (education and vocational training) by one unit leads to an increase in the dependent variable (economy in Jordan) by (0.70) units, and the value of the stability coefficient of the simple linear regression model ( $\alpha$ ) has reached ((1.18) and it is statistically significant as the value of the statistical test  $t$  reached (6.17) at the level of significance ( $\leq 0.05\alpha$ ), and it represents the value of the dependent variable (the economy in Jordan) when the value of the independent variable (education and vocational training) Equal to zero.
- 4- The value of the coefficient of determination ( $R^2$ ), which represents the explanatory power of the simple linear regression model, reached (0.53), which is statistically significant as the value of the statistical test  $F$  reached (180.77) at the level of significance ( $0.05\alpha$ ), and this value means that the model Simple linear regression and through the independent variable (vocational education and training) can explain a percentage (0.53) of the difference and variation in the dependent variable (the economy in Jordan) in the vocational training institution, which is a rather high percentage and indicates the existence of an influential relationship of statistical significance at The level of significance ( $\leq 0.05\alpha$ ) between the state of vocational education and training and the economy in Jordan.
- 5- A simple linear regression model representing the influential relationship between education and vocational training and the economy in Jordan can be constructed as follows:

$$Y = \alpha + \beta X$$

When representing the values in the above form, it is as follows:

$$\text{Economy in Jordan} = .181 + 0.70 (\text{vocational education and training})$$

Source: Prepared by the researcher from the questionnaire data, 2020

Based on the above results, the null hypothesis was rejected and the alternative hypothesis accepted, that is, there is a statistically significant effect at the significance level ( $\leq 0.05\alpha$ ) between education and vocational training and the economy in the study subject of Jordan.

To confirm the results that were reached in testing the main hypothesis of the study, the sub-hypotheses emanating from it were tested as follows:

- The first sub-hypothesis:



Hypothesis (Ho): There is no statistically significant effect at the level of significance ( $0.05 \geq \alpha$ ) for vocational education and training (forecasting human resource needs) on the economy in Jordan (efficiency, effectiveness).

The alternative hypothesis (Ha): There is a statistically significant effect at the level of significance ( $0.05 \geq \alpha$ ) for vocational education and training (forecasting human resource needs) on the economy in Jordan (efficiency, effectiveness).

Table (4/14): Results of simple regression analysis of the impact of education and vocational training through the dimension of (forecasting human resource needs) on the economy in Jordan:

Model Summaries	R	R <sup>2</sup>	Calculated Test value F	Significance Sig
value	0.64	0.41	110.76	*0.000

Model coefficient	Coefficient symbol	Coefficient value	Calculated test value F	Significance Sig
Constant coefficient	$\alpha$	1.56	7.50	*0.000
The simple linear regression coefficient	$\beta$	0.57	10.52	*0.000

**Source: Prepared by the researcher from the questionnaire data, 2020**

The following are noted from the results of the simple linear regression analysis shown in the table above:

1- The value of the Linear Pearson Correlation Coefficient (R) reached (0.64), which is statistically significant at the level of significance ( $\leq 0.05\alpha$ ), and indicates that there is a fairly strong relationship between the independent variable (forecasting human resource needs) and the dependent variable (the economy in Jordan ), And the positive sign of the correlation coefficient (R) indicates that the relationship between both variables is a positive direct relationship, i.e. the better the forecast of human resource needs, the better the economy in Jordan.

2- The value of the simple linear regression coefficient ( $\beta$ ) reached (0.57) and it is statistically significant as the value of the statistical test t reached (10.52) at the level of significance ( $0.05\alpha$ ), and it indicates the existence of an effective and explanatory relationship between forecasting the needs of human resources.

And the economy in Jordan, and the value of the regression coefficient ( $\beta$ ) and its positive sign means that increasing the independent variable (forecasting human resource needs) by one unit leads to an increase in the dependent variable (the economy in Jordan) by (0.57) units, and the value of the stability factor of the model The simple linear regression ( $\alpha$ ) reached ((1.56) which is statistically significant as the value of the statistical test t reached (7.50) at the level of significance ( $\leq 0.05\alpha$ ), and it represents the value of the dependent variable (the economy in Jordan) when the value of the independent variable is ( Forecasting human resource needs) equal to zero.

3- The value of the coefficient of determination ( $R^2$ ), which represents the explanatory power of the simple linear regression model, reached (0.41) and it is statistically significant as the value of the statistical test F reached (110.76) at the level of significance ( $0.05\alpha$ ), and this value means that the model Simple linear regression, and through the independent variable (forecasting the needs of human resources), can explain a percentage (0.41) of the variation and variation in the dependent variable (the economy in Jordan) while the other factors remain constant, which is a rather high percentage and indicates the existence of an influential relationship. Statistical significance at the significance level ( $\leq 0.05\alpha$ ) between the state of forecasting human resource needs and the economy in Jordan.

4- A simple linear regression model that represents the influential relationship between forecasting human resource needs and the economy in Jordan can be constructed as follows:

$$Y = \alpha + \beta X$$

When representing the values in the above form, it is as follows:

The economy in Jordan = 1.56 + 0.57 (forecast of human resource needs) (**Al-ukosh , 2020**)

Based on the above results, the null hypothesis was rejected and the alternative hypothesis accepted, meaning that there is a statistically significant effect at the significance level ( $\leq 0.05\alpha$ ) between education and vocational training through the prediction of the needs of human resources and the economy in the Jordan subject of the study.

- The second sub-hypothesis:

Hypothesis ( $H_0$ ): There is no statistically significant effect at the level of significance ( $0.05 \alpha$ ) for education and vocational training (cascade job replacement) on the economy in Jordan (efficiency, efficiency)

The alternative hypothesis ( $H_a$ ): There is a statistically significant effect at the level of significance ( $0.05 \alpha$ ) for education and vocational training (cascade job replacement) on the economy in Jordan (efficiency, efficiency)

Table (4/13): Results of simple regression analysis of the impact of education and vocational training through the (sequential job replacement) dimension on the economy in Jordan

- 1- The value of the linear Pearson correlation coefficient (R) was (0.64), which is statistically significant at the significance level ( $\leq 0.05\alpha$ ), and it indicates that there is a fairly strong relationship between the independent variable (sequential job replacement) and the dependent variable (the economy in Jordan), Also, a positive correlation coefficient (R) sign indicates that the relationship between both variables is positive

Model Summaries	R	R <sup>2</sup>	Calculated Test value F	Significance Sig
value	.64	.40	09.43	0.000

Model coefficient	Coefficient symbol	Coefficient value	Calculated test value F	Significance Sig
Constant coefficient	$\alpha$	1.74	9.05	*0.000
The simple linear regression coefficient	$\beta$	0.57	10.46	*0.000

- 2- The value of the simple linear regression coefficient ( $\beta$ ) amounted to (0.57) which is statistically significant as the value of the statistical test t reached (10.46) at the level of significance ( $0.05\alpha$ ), and it indicates the existence of an influential and explanatory relationship between sequential job replacement and economics in Jordan, and the value of the regression coefficient ( $\beta$ ) and its positive sign means that increasing the independent variable (cascade job replacement) by one unit leads to an increase in the dependent variable (Economy in Jordan) by (0.57) units, and the value of the stability coefficient of the simple linear regression model ( $\alpha$ ) has reached ((1.74), which is statistically significant as the value of the statistical test t reached (9.05) at the level of significance ( $\leq 0.05\alpha$ ), and it represents the value of the dependent variable (the economy in Jordan) when the value of the independent variable (cascade functional replacement) Equal to zero.
- 3- The value of the coefficient of determination ((R<sup>2</sup>), which represents the explanatory power of the simple linear regression model, reached (0.40) and is statistically significant as the value of the statistical test F has reached (109.43) at the level of significance ( $0.05\alpha$ ), and this value means that the model Simple linear regression, and through the independent variable (sequential job replacement), can explain a percentage (0.40) of the difference and variation in the dependent variable (the economy in Jordan) while the other factors remain constant, which is a rather high percentage and indicates the

existence of an influential relationship of statistical significance At the level of significance ( $\leq 0.05\alpha$ ) between sequential employment status and the economy in Jordan.

- 4- A simple linear regression model that represents the influential relationship between cascade job replacement and the economy in Jordan can be constructed as follows:

$$Y = \alpha + BX$$

When representing the values in the above form, it is as follows:

Economy in Jordan = 1.74 + 0.57 (sequential job replacement)
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Source: Prepared by the researcher from the questionnaire data, 2020

Based on the above results, the null hypothesis was rejected and the alternative hypothesis accepted, meaning that there is a statistically significant effect at the significance level ( $\leq 0.05\alpha$ ) between education and vocational training through the sequential job replacement and the economy in the Jordan subject of the study.

\* The third sub-hypothesis:

**Table (4/15): Results of a simple regression analysis of the impact of education and vocational training through the dimension of (polarization) on the economy in Jordan**

Model summaries	R	R2	Calculated Test value F	Significance level Sig
Value	0.71	0.51	167.21	*0.000

Model coefficients	Coefficient symbol	Coefficient value	Calculated Test value F	Significance level Sig
Constant coefficient	$\alpha$	1.63	9.98	*0.000
The simple linear regression coefficient		0.60	12.93	0.000*

Source: Researcher prepared from the questionnaire data, 2020

The following are noted from the results of the simple linear regression analysis shown in the table above:

- 1- The value of the Linear Pearson Correlation Coefficient (R) amounted to (0.71), which is statistically significant at the level of significance ( $\leq 0.05\alpha$ ), and indicates that there is a rather strong relationship between the independent variable (polarization) and the dependent variable (the economy in Jordan). The positive sign of the correlation coefficient (R) indicates that the relationship between both variables is positive, that is, the better the polarization, the better the economy in Jordan.

- 2- The value of the simple linear regression coefficient amounted to (0.60), which is statistically significant, as the value of the statistical test t reached (12.93) at the level of significance (0.05 $\alpha$ ), and it indicates an effective and explanatory relationship between polarization and the economy in Jordan, The value of the regression coefficient and its positive sign mean that increasing the independent variable (polarization) by one unit leads to an increase in the dependent variable (the economy in Jordan) by (0.60) units, and the value of the stability coefficient of the simple linear regression model ( $\alpha$ ) has reached ((1.63), which is statistically significant, as the value of the statistical test t reached (9.98) at the level of significance ( $\leq 0.05\alpha$ ), and it represents the value of the dependent variable (the economy in Jordan) when the value of the independent variable (polarization) is equal to zero.
- 3- The value of the determination coefficient (R<sup>2</sup>), which represents the explanatory power of the simple linear regression model, reached (0.51) and it is statistically significant as the value of the statistical test F reached (167.21) at the level of significance (0.05 $\alpha$ ), and this value means that the model Simple linear regression, and through the independent variable (polarization), can explain a percentage (0.51) of the difference and variation in the dependent variable (the economy in Jordan) while the other factors remain constant, which is a rather high percentage and indicates the existence of an influential relationship of statistical significance at the level of The significance ( $\leq 0.05\alpha$ ) between the state of polarization and the economy in Jordan.
- 4- A simple linear regression model representing the influential relationship between polarization and the economy in Jordan can be constructed as follows:

$$Y = \alpha + BX$$

When representing the values in the above form, it is as follows:

$$\text{Economy in Jordan} = 1.63 + 0.60 (\text{Polarization})$$

Source: Prepared by the researcher from the questionnaire data, 2020

Based on the above results, the null hypothesis was rejected and the alternative hypothesis accepted, meaning that there is a statistically significant effect at the significance level ( $\alpha \leq 0.05$ ) between vocational education and training through the polarization dimension and the economy in the Jordan subject of the study.

# **Chapter Five**

## **Conclusions and Recommendations**

## **Conclusions & Recommendations:**

1. The Vocational Training Corporation supports the Jordanian economy by planning its human resources, through its elements of forecasting needs, recruitment, and job replacement.
2. The Vocational Training Corporation supports the Jordanian economy by raising the efficiency of its employees and providing them with skills, which reflects positively on the efficiency and effectiveness of their performance.
3. There is a statistically significant effect of human resources planning on the performance of employees in the vocational training institution, which contributes to supporting the Jordanian economy.
4. There is a statistically significant effect of human resource planning through the prediction of human resource needs on the performance of the employees of the vocational training institution, which contributes to supporting the Jordanian economy.
5. There is a statistically significant effect of human resources planning through the successive job replacement dimension on the performance of the employees of the Vocational Training Corporation, which contributes to supporting the Jordanian economy.
6. There is a statistically significant effect of human resources planning through the polarization dimension on the performance of the employees of the vocational training institution, which contributes to supporting the Jordanian economy.
7. The results of the study showed that the relationship between the variables is positive, that is, the better the human resources planning, the better the performance of the workers in the vocational training institution.

Based on the results of this study, the researcher recommends the following<sup>6</sup>: -

- 1- The vocational training institution should continue planning for its human resources by providing the body responsible for managing human resources with specialized professional competencies.
- 2- Holding courses and workshops for the occupants of leadership and supervisory positions on how to determine the actual needs of human resources for their departments.
- 3- More attention to the successive job replacement side for all jobs in general and focus on jobs that have an impact on achieving the institution's strategic goals.

4- The institution shall work on improving the methodologies of internal and external polarization so that these methodologies are characterized by their ability to resist the obstacles of polarization.

5- Finding a more effective work mechanism to measure the impact of the return on targeted training to raise the efficiency of workers at all job levels.



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# Appendices

## Appendix 1

### Glossary

A-Human Resources Management: Human resources are defined as the size of the workforce, that is, the group of individuals and groups that make up the organization at a specific time. These individuals differ in terms of their composition, experience, behavior, attitudes, and aspirations, and they also differ in their jobs, administrative levels, and career paths.

B- Human resource planning: Vocational education and training is defined as a means to secure access to human resources, and a vigorous effort facing institutions that deals with predicting the future of work needs, and the environment facing the work and activity of the human resources apparatus at the lowest possible cost, and by relying on various methods of monitoring and evaluation available.

C- Forecasting: it is the estimation of human resource needs between two variables, one related to the number of employees and the other related to the volume of production or sales.

D- Job replacement: it is the estimation of the number of individuals who will leave the job temporarily or permanently during the period that is being planned, and the estimation is done through studying temporary leave related to absence, vacations, permanent leave by dismissal, resignation, promotion, transfer, disability, death and retirement.

E- Recruitment: is the process by which job seekers can be attracted to the organization to fill vacant positions, and this may be done using expanded advertising as an entry point to inform job seekers that there are job opportunities in the organization so that the organization has a wider scope to select the best-advanced elements, so it is an attempt to attract the most efficient people. To work for the organization or is in the process of exploring potential candidates for current or potential vacancies.

F- Performance: The word “Jordanian economy” is used in several Statements, including those indicating the employee’s commitment to his job duties and the performance of the tasks assigned to him through his performance of his job tasks and his bearing of job burdens and responsibilities, commitment to good morals and ethics within the organization in which he works and adherence to official work dates in attendance and departure.

G- Efficiency: is the ability to do things correctly, and from there it depends on the concept of inputs and outputs. An efficient system is one that can achieve outputs that exceed the input used.

H- Effectiveness: is to obtain the largest output from the lowest input and the definition of relative managerial effectiveness varies according to its evaluator.

I-The Vocational Training Corporation: A Jordanian governmental institution established under Temporary Law No. (35) of 1976 (repealed), and currently operating under Law No. (11) of 1985 for the Vocational Training Corporation as amended by Law No. (50) of 2001 and Law No. 27 of 1999. The corporation provides its services to all citizens regardless of their level of education from the principle of lifelong continuous education, whether in professional preparation programs at all professional levels or programs to raise efficiency to raise the efficiency of practicing workers in the labor market, and the Foundation also provides training and consulting services in the field of occupational safety and health to reduce Of accidents at work sites, training of trainers and supervisors in behavioral and administrative aspects, developing the work of small and medium enterprises, and organizing the Jordanian professional labor market.

## Appendix 2

### Questionnaire

**Dear Sir, Madam:**

I am putting in your hands this questionnaire to carry out a study entitled ( )

We ask you to answer all the statements of this questionnaire accurately and objectively, assuring you that all data received are for scientific research purposes only.

Thank you for your cooperation

**Researcher: Ahmad Zboun**

**Part 1: Demographic Variables**

Please tick (✓) in the box that applies to you

1-Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female			
2-Age	<input type="checkbox"/> less than 30 years	<input type="checkbox"/> 30 years – less than 40 years	<input type="checkbox"/> 40 –less than 50 years	<input type="checkbox"/> 50 – less than 65 years
3-Education	<input type="checkbox"/> Diploma	<input type="checkbox"/> Bachelor Degree	<input type="checkbox"/> High Diploma	<input type="checkbox"/> Master Degree <input type="checkbox"/> Doctorate
4-years of experience	<input type="checkbox"/> less than 5 years	<input type="checkbox"/> 5- less than 10 years	<input type="checkbox"/> 10 – less than 15 years	<input type="checkbox"/> 15 years – less than 35 years

**Part two: Independent and Dependent Variables**

**First: Education and Vocational Training:**

**A- Forecasting human resource needs:**

	<b>Statements</b>	<b>Strongly agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly disagree</b>
<b>1</b>	In the organization, there is a strategic plan for human resource management					
<b>2</b>	The organization has a plan to forecast the human resource needs					
<b>3</b>	There are a clear methodology and mechanism of action in the VET					
<b>4</b>	Those in charge of vocational education and training in the institution possess the appropriate qualifications and experience					
<b>5</b>	The education and vocational training process takes place in the preparatory stage with the participation of all administrative units in the institution					
<b>6</b>	The Foundation holds introductory courses and workshops for the incumbents of supervisory and leadership positions on how to determine the needs of human resources					
<b>7</b>	When preparing the human resources management plan, the organization takes into account the processes of employment mobility (promotion of permanent and temporary separation assignment)					
<b>8</b>	The institution has a					



	database on human resources (comprehensive information for each employee).					
<b>9</b>	The Foundation uses the forms of vocational education and training approved by the Civil Service Bureau					

### **B- Sequential Job Replacement**

	<b>Statements</b>	<b>Strongly agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly disagree</b>
<b>1</b>	The organization has a succession methodology					
<b>2</b>	The organization works to guide employees about the career path of each job					
<b>3</b>	The organization analyzes the organizational tasks of the administrative units to determine the job titles required to perform these tasks					
<b>4</b>	The organization designs jobs on the basis of workload to determine the required needs					
<b>5</b>	The organization reviews the results of the job analysis to determine the required human resource qualifications					
<b>6</b>	The corporation identifies important jobs for the purpose of replacement					

### C- Polarization

	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	The Foundation has a methodology for internal and external recruitment					
2	The organization builds the recruitment plan based on its career forecast plan					
3	The organization resists favoritism and favoritism when implementing the HR plan					
4	The human resources plan in the organization clarifies the appropriate dates for recruitment					
5	The institution has a program to follow up on the implementation of the recruitment plan					
6	The organization's senior management supports the process of following up on the implementation of the recruitment plan					

### Second: Economy in Jordan

	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	The institution has a methodology for training its employees in a way that raises their efficiency					
2	The Foundation sends its employees on internal and external courses to provide them with the necessary skills					
3	In the institution, there is a mechanism to measure the impact of training aimed at improving employee skills					
4	The institution is characterized by the simplification of work					

	procedures					
5	The organization motivates efficient employees					
6	The organization works to put everyone on the right job					

**A- Effectiveness**

	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	The goals of the institution are integrated					
2	The Foundation's goals are interrelated					
3	The organization has the ability to invest its human resources in the best way					
4	The institution can achieve goals and exploit opportunities					
5	The organization is distinguished by clarity of roles and responsibilities of its employees					
6	Education and vocational training in the institution contributed to increasing the productivity of workers					
7	The Foundation works to ensure that the majority of people occupy the appropriate position					