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Training Programs and its Impact on Job Competencies in Ministry of Energy and Mineral Resources/ Case Study

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Abstract  
The study aimed to test the impact of training programs on job competencies in Jordanian Ministry of Energy and Mineral Resources. The study relied on four dimensions to measure training programs, namely: identifying needs, program design, program implementation and program evaluation, while three dimensions were adopted to measure job competencies: core competencies, general competencies and technical competencies. The study was conducted on a sample of (185) employees in the ministry. The researchers used the descriptive analytical method to reach the results.

The study concluded that there are high levels for identifying training needs and implementing training programs, while the levels were medium for designing training programs and evaluating training programs. As for the dimensions of job competencies, they were all at high levels. The researchers recommended increasing the level of interest in designing training programs, by designing training programs commensurate with the nature of the ministry’s work in general and the nature of the employees’ work in particular, and increasing the level of interest in designing training programs, by designing training programs commensurate with the nature of the ministry’s work in general and the nature of the employees’ work in general private.

Keywords: Training Programs, Job Competencies, Ministry of Energy and Mineral Resources.

Introduction  
Sufficiency is considered one of the pillars of civilized progress, and that the nation that is absent or neglected by those with competence is doomed to failure. Therefore, Islamic Sharia has given the issue of sufficiency clear attention in the Holy Book and the honorable Sunnah of the Prophet, and that it should be the centerpiece in all aspects of life in choosing the official and the leader or the administrator and in all the works are small or large, God said in his book. When God wanted to find a caliph on earth, the angels objected to the inadequacy of humans because they were not aware of his ability. Rather, they nominated themselves on
their tongue: “And we glorify your praises and we sanctify you”. So, God almighty made clear to them the most important element that they do not possess, which is knowledge, but rather the owner of it and investing it. The owner of knowledge in the field in which he works, and he said, “One of them said, ‘O my father, hire him.’ Indeed, the best of them is the one who hires the strong, the faithful” (Al-Qasas: 26). The efficient individual, for which the public function in the true Islamic religion was based on clear criteria that came in the Noble Qur’an and the honorable Sunnah, which emphasized the necessity of having them in the employee, namely: strength, honesty, conservation, and knowledge, which departments must provide their organizations with what they need of human energy in a manner he is keen on equal opportunities and fairness of choice.

To develop the competencies owned by organizations at all levels, they must constantly search for appropriate training methods, such as holding training programs that are commensurate with the requirements and needs of work and workers, which can positively affect their attitudes or correct their understanding of their work, as the objectives of the training program differ from one organization to another depending on its service or productivity goals, or societal changes, or training needs that emerge on the scientific and practical reality within the organizations, which ultimately aim to bring about changes positive in workers in terms of their attitudes, knowledge, and skills to qualify them to perform the work required of them, and to make their performance level better than it is.

**Study Problem and Questions**

The success of public and private organizations is based on the human element, where individuals are of great importance, so the interest in individuals came through working to improve and develop their competencies and performance, which has an impact on organizations in achieving their goals. Responsible for this, it became clear to the researchers through a telephone conversation with one of the former directors of manpower in the Jordanian Civil Service Commission, and by reviewing the reports issued by the Bureau - which is the body that exercises its oversight, legislative and policy-making functions in relation to the affairs of the public employee and the job of all ministries. Institutions subject to the Civil Service Bureau system, which aims to empower, develop and attract qualified human resources, motivate and preserve them, and focus on creativity, excellence, innovation and decentralization in human resource management. It was found that there have been efforts during the past few years by the Civil Service Bureau in coordination with the Ministry of Planning and International Cooperation and the administration support program and good governance (SIGMA) in accelerating the shift towards the concept of resource management human capital based on functional competencies in line with royal directives and in line with Jordan’s vision (2025). The strategic plans of the Bureau, and to strengthen access to the production state and to an efficient and effective public sector, through restructuring processes that aim to reduce the size of the government apparatus, and abolish duplication, overlap and repetition in the tasks implemented by the government, and controlling the expansion of the establishment of independent institutions and limiting their presence to cases that require the nature of their work to do so only. Accordingly, the process of systematic transformation in human resource management came so that all components of the human resource management process became based on functional competencies, including: the introduction of competencies in replacement and succession programs, training, performance appraisal, promotion.... etc.
To complement the efforts of the Civil Service Bureau in developing the job and the public employee represented in the transformation project towards human resource management based on functional competencies, it was necessary to go towards the training process that targets a certain level of knowledge, skills, abilities and attitudes necessary to perform the tasks of a specific job. To achieve the strategic objectives of the department therefore, the training process should be directed and implemented towards bridging the gaps between the required level of competencies needed to perform the job duties, and the actual level of knowledge, skills, abilities, and trends that the employee possesses at different levels of management.

Based on the foregoing, the focus of this study will be on the concept of functional competencies for the Jordanian ministries, relying on training programs, and determining the role that training programs can play in job competencies. Accordingly, the problem of the study can be determined by the following question:
What is the impact of training programs on job competencies in the Ministry of Energy and Mineral Resources?
What is the level of training programs in the Ministry of Energy and Mineral Resources?
What is the level of job competencies in the Ministry of Energy and Mineral Resources?

Study Importance

The importance of the study comes in two aspects
The scientific aspect: The importance of this study stems from the importance of the variables it included, as training programs are considered among the old and modern administrative topics in the field of work, which often attract researchers to study and research for its role in enhancing the efficiency and sustainability of the government sector. Highlighting it, because of its role in assisting the government sector in achieving its strategic objectives.

By reviewing previous studies related to the subject, the two researchers noticed the scarcity of research and studies that linked the two variables of the study (training programs and job competencies), especially in the Arab environment, as studies in this field are still insufficient. Therefore, the researchers hope that this study will be a qualitative addition that enriches knowledge in the field of its variables (training programs, job competencies), and contributes to filling some of the shortcomings in the Arabic library in this field.

The practical aspect: The practical importance of the study is the extent to which the Ministry of Energy and Mineral Resources will benefit from the results it will reach, with regard to the concept of training programs, and job competencies in the Ministry of Energy and Mineral Resources.

Study Objectives

This study mainly aims to identify the impact of training programs (identifying needs, designing programs, implementing programs, and evaluating programs) on job competencies (core competencies, general competencies, and technical competencies), as well as achieving a set of the following sub-objectives:

1. Identifying the level of training programs (identifying needs, designing programs, implementing programs, and evaluating programs) in the Ministry of Energy and Mineral Resources.
2. Identifying the level of functional competencies (core competencies, general competencies, and technical competencies) in the Ministry of Energy and Mineral Resources.
Theoretical Framework
Training Program

Training programs have become technical means and activities that help growth. One of the urgent duties of any administration is the development of work skills and experience, and this cannot be achieved unless a training program for employees is implemented that includes the latest experiences in the field of work. The success of the training process is measured by the extent to which the training is able to achieve its mission, and the training message cannot be achieved without a good organized planning of the training activity, so the first basic stages of organizing the training activity in any organization is to have a proper planning for this work (Hegazy, 2010, 42). It has become clear that there is an effective positive relationship between the advanced training programs and the increase in the efficiency of workers, and for the purpose of increasing the effectiveness and efficiency of workers, training programs must be built for them that develop their experiences and skills in their field of work, and perhaps training programs are the backbone of the organizational and practical training structure (Ben Aishi, 2017 68), because of its objectives, not only because it trains workers to perform their jobs in a satisfactory manner, but rather aims to improve the efficiency and effectiveness of workers by developing their knowledge and skills, providing them with experience, and improving their performance, which is thus reflected in the success of the organization and increasing its efficiency and effectiveness in general (Al-Khalifat, 2010, 35).

The training program was defined as linking each of the training curriculum topics with a trainer, date, timing, and arranging the topics for each other in a logical sequence, which is expressed in the program implementation schedule (Hegazy, 2010, 110), on the other hand it was referred to training programs are programs that are conducted on the premises of the organization mainly by the employees of the organization who are familiar with the organization and its functions and its employees and are experts in the design and implementation of training programs (Denisi & Griffin, 2005, 331) while the training program was defined as a set of organized and planned activities it is continuous and aimed at providing the trainees in the organization with the knowledge to improve and develop their skills and abilities and change their behavior in a positive and constructive manner (Ali & Hassan, 2018, 319). It helps to raise their efficiency in carrying out their work in a regular manner and with high productivity (Ben Aishi, 2017, 67).

A number of management researchers refer to the dimensions of training programs, and there was a discrepancy between them in terms of identifying these dimensions that were addressed in their studies. Abu Zaheer (2018) adopted the administrative dimension, and the technical dimension, while Al-Zubaidi and Mutlaq (2020) dealt with the dimensions of the programs training in terms of identifying training needs in the following form: the objectives of the training program, and feedback. On the other hand, many studies have adopted the following dimensions of training programs, namely: identifying needs, designing programs, implementing programs, and evaluating programs (Mamar, 2010; Radwan, 2014; Al-Sharaa & Sanjak, 2019; Manaseer & Shawabkeh, 2017; Jassem, 2012; Bu Yala, 2017; Mahmoud, 2018). Based on the previous studies, the researchers adopted the last classification of the dimensions of training programs in conducting this study.

1. Identifying Needs: The stage of identifying training needs is one of the important elements in the training process, because accurate identification of training needs helps to make the training activity a meaningful activity for the organization and the trainees, and makes it also a realistic activity, and saves a lot of efforts and expenses (Durra & Al-Sabbagh, 2010, 316).
Training programs must be linked to business needs, problems, or opportunities, and management must clearly understand these links. Furthermore, the employee outcomes that will be obtained from any training effort must be clarified before the program is implemented (Robunson & Robinson, 1989, 8). Training need means the existence of a current or future contradiction or difference between an existing situation and a desirable situation in the performance of the organization, a job or individuals in any of the knowledge, skills or trends (Dahman, 2010, 269). It can be defined as the sum of changes in quantity and quality that require their occurrence knowledge, attitudes and behavior of working individuals in order to reach the required levels of performance, and to achieve the appropriate climate for performance, so the training programs should cover the gap between what is achieved and what should be achieved in performance (Hammoud & Al-Kharkha, 2010, 129).

2. Program Design: Human resource development specialists succeeded in thinking about designing training programs that have a role in contributing to improving organizational effectiveness in times of intense competition in the nineties of the last century (Robinson & Robinson, 1989, 1). The step of designing programs is considered the second stage of the training process. This stage includes defining the objectives of the training program, defining the topics of the training program, and defining the training methods that are selected in light of the objectives of the training program (Al-Nadawi, 2009, 190). It means designing practical training programs according to which training needs are transformed into practical steps by designing a program that meets the needs identified by the lack of information, skills, or behavior (Ben Aishi, 2017, 45). While training needs defined as a process concerned with educational goals, and selecting vocabulary programs, their sequence, timing, training methods that will depend on them, conditions for participating in the training program, and setting criteria for evaluating and measuring the effectiveness of the program (Manaseer & Shawabkeh, 2017).

3. Program Implementation: Following the design phase of the training program, another phase is the implementation of the program, whether this program is inside or outside the organization. The training manager and specialist must supervise the implementation, and ensure that the design that has been developed has been implemented, and includes setting the schedule for implementing the program, and arranging the place and training rooms, and daily follow-up to the progress of the program (Maher, 2008, 486). The issue of implementing the training program is very important and should receive a great deal of attention, especially when training is a means to bring about change in work or in systems (Pepper, 1984, 83). The stage of implementing training programs is defined as the process of providing trainees with the required information at a specific time and place, and the place of training may be changed according to the skills and knowledge required for trainees, taking into account the process of monitoring the mechanism of program implementation, avoiding existing errors, and using all the required supplies and devices that deliver information to the trainee better (Jassim, 2012). It was defined as the stage that covers the operational aspects that the training planner is interested in preparing for, the most important of which are: the timing of the program, coordinating the chronological sequence of various training topics, preparing publications, and communicating with both trainers and trainees (Radwan, 2014, 138).

4. Program Evaluation: Assessment includes gathering information about whether the trainees were satisfied with the program, learned the specific material in the training
program, were able to apply the skills back to the job, whether the trainees were able to demonstrate the appropriate level of skill, changed their behavior, and whether the change was due to training, whereby evaluation ensures that programs are accountable and meet the specific needs of employees in a cost-effective manner (Bernardin, 2006, 212). Program evaluation can be defined as measuring the effectiveness of training, in addition to measuring the size of the change that the training has brought about in the knowledge and behavior of trainees (Gouda, 2010, 197). Graham (1974, 179) referred to the definition of training program evaluation as a process of comparing the costs of training and the financial benefits achieved for the organization resulting from improved performance from these programs, this was helpful or inappropriate (Pepper, 1984, 95).

**Job Competencies**

Organizations seek to provide the best products to their customers to ensure the survival of their competition in the market, and therefore they are always looking for efficient workers with a set of capabilities and necessary skills that help them complete the tasks required of them to the fullest (Al-Azzam & Mahdi, 2018). The sufficiency is represented by a set of knowledge concepts, trends, and skills that confront the behavior of the individual and help him to perform his tasks with a certain level of mastery that he needs to do his work with the least amount of cost, effort and time, without which he cannot perform his duty in the required manner, and it can be measured through accurate criteria or indicators (Al-Sakarna & Al-Ajili, 2020).

Functional competencies are performance based on individual capabilities (Mitrani et al., 1992, 111), and can play an important role in managing changes through which organizations can be directed in the right direction, and the development of the appropriate strategy for the organization (Mufti et al., 2016). It represents the ability to achieve the set goals in a specific time, taking into account the quality of the outputs, and it is one of the success measures of organizations, that is, it is a comprehensive concept that includes the ability to use skills and knowledge in new situations within the organizational and planning field, in addition to technical and sensory skills (Al-Ashhab, 2015, 119). As it was defined as the knowledge, skills, abilities and attitudes (behavioral and personal) that must be available in the employee and that enable him to practice his work or perform his job duties (Civil Service Occupational Competencies Manual, 2016). It was defined as the traits and behaviors that include ethical principles, honesty, time management, flexibility, self-development, understanding customer needs, enhancing quality, managing stakeholders and other public issues, interpersonal skills and leadership skills (Mufti et al., 2016). With reference to from two perspectives, the first is the narrow perspective, which considers it the sum of knowledge, skills, and attitudes, while the second perspective is the broad perspective. In addition to the above-mentioned elements, capabilities, interests, talents, education, experience, internal motivation, behaviors, and work patterns have been added to it. Health status, physical and mental fitness, formal right to act on behalf of the organization, and adherence to ethical values and principles (Bombiak, 2018).

There were many dimensions of functional competencies, some of them mentioned individual and collective competencies, special or qualitative competencies, extended or transverse competencies, and organizational competencies (Al-Ashhab, 2015, 122). While the dimensions of functional competencies were referred to as: adequacy of complexity management, adequacy of competition management, and adequacy of strategic planning. The sufficiency of change management, the sufficiency of managing in work teams, the...
sufficiency of continuous learning, the sufficiency of dealing with modern technology easily, and the sufficiency of understanding and dealing with the civilization of society and other civilizations (Durra & Al-Sabbagh, 2008, 48). Other studies dealt with the following dimensions: time management, taking decision, job commitment, and information technology (Al-Sakarna & Al-Ajili, 2020). Al-Awartani and Alkshali (2021) have adopted knowledge, skills, and trends as dimensions of job competencies. From another point of view, the dimensions of functional competencies were identified with skills, possessing cognitive abilities, and diagnosing situations (Al-Azzam & Mahdi, 2018). Another study dealt with six main groups of job competencies: business, human resources tools, practices and processes, human resources information systems and analytics and architecture, change management, organization and culture, and personal aspects (Botter & Rosa, 2018). For the purposes of this study, the researchers have adopted the following dimensions of functional competencies: core competencies, general competencies, and technical competencies, which are approved by the Civil Service Bureau of the Jordanian Ministry of Labor (Manual of Job Competencies in the Civil Service, 2016).

1. Core Competencies: The core competencies were referred to as the trends, assumptions, behavioral tendencies, and humanity of the trainee, and the reinforcement of the directions required in order to increase the desire and degree of psychological maturity of the individual (Ali & Hassan, 2018, 18). On the other hand, they were referred to as the extended or transverse competencies that extend their application and employment new contexts, as the more broad and different the fields, situations, and contexts in which the same competency is employed and different from the original field and situation, the greater the degree of extension of this competency (Al-Ashhab, 2015, 122).

2. General Competencies: It includes several competencies according to the hierarchical level in the organization, and according to the multiplicity of functions in it, they are represented in technical efficiency, human relations efficiency, administrative technical efficiency on the one hand, planning and management efficiency, implementation efficiency, and control or evaluation efficiency on the other hand, whose concept varies according to the organization. The type of its work, and the extent of its understanding of the relationships that exist between it and the surrounding environment (Al-Ashhab, 2015, 123). It was defined as a set of skills, knowledge, trends, and practices enjoyed by the employees of the organization, which aims to achieve a competitive advantage for the organization and gain customer satisfaction, and possibility of achieving future goals (Al-Asadi & Talib, 2017). It can also be defined as a set of personal, scientific and practical characteristics and qualifications that enable employees to achieve distinct and standard performance rates that exceed normal rates (Al-Awartani & Alkshali, 2021).

3. Technical Competencies: Technical competencies were defined as specialized knowledge in a branch of science and efficiency in using this knowledge, such as planning skills, organization skills (records + tests), follow-up skills, evaluation skills, time management skills, decision-making skills, and change management skills (Al-Shara’ah & Sanjak, 2019, 172). It has been referred to as specific or qualitative competencies, which is the competency associated with a specific cognitive, skill or emotional field, and it is special because it is linked to a specific type of tasks that fall within the framework of the internal departments of the organization, as the competence of each department in a particular field is imposed on
employees possess special competencies related to the type of work entrusted to them (Al-Ashhab, 2015, 122). It was also defined as the information, concepts, principles, rules, procedures, hypotheses and theories provided by the training program, and helps the trainee to learn, understand and remember specific facts, information and principles (Ali & Hassan, 2018, 17). On the other hand it was referred to as the ability to act in the ways that achievement of success in performing the job, task or work (Tawfik, 2012, 249). Tawfiq (2012, 331) adds that the technical competencies represent the trainee’s performance in the job and in the field in which he was trained, in other words, did the trainee use the knowledge, skills, experience, and trends he received In practical application? Have the training results been transferred into practice?

The Relationship between Training Programs and Job Competencies

According to the researchers’ knowledge and knowledge of previous studies and research, there is a scarcity or lack of observation of any study that combined the three dimensions. Some studies have dealt with training in general and its role in developing human resource competencies, such as the study of Bin Khaira and Bin Al-Natheer (2019), which indicated that there is a strong positive relationship between training and human resource competencies, and the results concluded that training helps to improve human resource competencies, and that organizations give great importance training is an effective way to improve the skills and competencies of human resources, and since training programs are part of the whole, which is training, and that human resources competencies are part of all functional competencies - according to what the researchers see – this leads to thinking that there is a role for training programs towards functional competencies, and if they are this relationship has been proven through a hypothesis as the previous study. It can also be observed by reading the title of the study of Al-Azzam and Mahdi (2018) “The Impact of Competency-Based Training in improving the performance of employees. It can also be observed by the study of Al-Azzam and Mahdi (2018), which refers to the complementary relationship between training and job competencies on the one hand and the performance of workers on the other hand, and this is nothing but a guide. It illuminates the relationship or the impact between the training programs and the job competencies, which the researcher will seek through her research to show this relationship.

Literature Review

In Al-Mutlaq study (2021), which aimed to identify the role of functional competencies for workers in human resources departments in the application of human resources practices, by identifying the reality of the competencies necessary for employees of human resources departments, the extent to which human resources practices are applied, and the role of human resources staff competencies in applying HR practices. The results of the study indicated that there is a statistically significant relationship between the application of human resources practices and the dimensions of job competencies for human resources employees, and this means that job competencies have a significant impact on human resources practices. In another study conducted by Al-Azzouni (2020), which focused on knowing the impact of training programs on the sustainability of the human element with the aim of achieving the sustainability of government institutions, identifying the concept of training programs and their importance and their relationship to some other concepts, and identifying the concept and objectives of sustainability of government institutions. The results of the study indicated the impact of training programs on the sustainability of the human element,
and that the impact of the sustainability of the human element on achieving the sustainability of government institutions was significant, and that the effect of the dimensions of training programs in achieving the sustainability of government institutions was significant, and this indicates a significant effect of training programs on the sustainability of government institutions. The human element, as there is a significant impact of the sustainability of the human element on the sustainability of government institutions, and the presence of a significant effect of training programs on the sustainability of government institutions. As for the study of Bin Khaira and Bin Al-Natheer (2019), it was concerned with defining a conceptual framework for each of the training and human resource competencies, and to reveal the level of training and its role in improving and developing human resource competencies, and if there are moral differences in training and competencies according to the variable of experience, and to highlight the relationship between training and human resource competencies. The study concluded that there are high levels of training from the workers' point of view, and high levels of human resource competencies, and that there is a statistically significant relationship between training and human resource competencies.

In Hussein’s study (2018), which dealt with determining the nature of the organization’s mission and its impact on the success of training programs for human resources in business organizations, and in deepening the awareness of senior management and working human resources, and the importance of the success of training programs in them. It was found through the results of the analysis that the mission of the organization has a significant effect on the success of the organization’s training programs, and that the mission of the organization plays a vital and important role in helping organizations build the right start for their work, as its important role is in helping management in the organization to determine the training programs necessary to develop the capabilities of its human resources and thus help it to Survival, growth and continuity. As for the study of Al-Azzam and Mahdi (2018), it aimed to identify the effect of competency-based training in improving the performance of employees. The study concluded that there is a statistically significant effect of competency-based training in improving the performance of employees, and that the dimensions of the independent variable (skills, diagnosis of attitudes, attitudes) have a statistically significant effect on improving the performance of employees, and that the results of the study helped identify weaknesses in the services provided to patients. To address them and find methods and plans that will improve the performance of employees in order to raise the level of services provided. In the study of Al-Ghashimi (2017), which focused on clarifying the elements of competence in Islamic jurisprudence, its concept in the civil service system, and the extent to which the concept of competence in jurisprudence agrees with the concept of merit in occupying a public position in the civil service system. In his study, the researcher touched on three elements of competence in public office in jurisprudence and the civil service system: physical ability in jurisprudence and order, scientific-professional ability in jurisprudence and order, and moral ability in jurisprudence and order. The study concluded that the jurists made the validity of guardianship in general guardianship dependent on the individual’s sufficiency, and that the individual has three capabilities: physical ability, scientific and professional ability, and moral ability, according to what each job needs.

As for the study Xu et al (2021), which evaluated the effects of training for a number of newly graduated nurses, as it was found that there is a great challenge for newly graduated nurses during their transition from university to work. The study sample was divided into two groups, one group underwent traditional training, and the second group underwent a new training program for four weeks before work, which included training models (in-class
training, case analysis, group discussion, process presentation, and scenario simulation). The group spends one hour to conduct group discussions, and a question and answer session on the theoretical and/or clinical issues encountered during the practices. As for the traditional group, its training program included theoretical knowledge and training in operational skills, and after the completion of the training of the two teams at each stage there are common nursing practices. Both teams in the training center. The results of the study indicated that the second group, which underwent a new training program, had a higher level of knowledge than the other group. The new program was adopted, which has an impact on improving the scientific and practical knowledge of nurses, and in their ability to solve problems, which is reflected in the cost of health care for nurses. Hospitals through nursing ability to work quickly and adapt to daily working conditions. In a study of Berestova et al (2021), which aimed at examining the leadership level of school and university teachers, and what is the positive impact of the leadership position on professional competence, identifying the problems they face, and proposing possible solutions to them. The results of the study showed that most of the professional activities practiced by the participants in the study are joint educational planning, professional development of colleagues, and participation in data collection groups, and therefore it can be concluded that almost all teachers who were interviewed show leadership, and the results indicated that contemporary teachers do not realize and do not accept completely the idea of teacher leadership, which constitutes a hindrance in the development of leadership and the development of professional competence, and these problems can be solved through special training courses.

In another study conducted by Lee and Porumbescu (2019), which focused on evaluating whether citizen participation in government training programs is associated with increased use of e-government among participants, it also aimed to assess whether the strength of this relationship varies according to the fact that the citizen is an older person. Whether or not, disabled or not, the researchers relied on the main variables to achieve the goals: the elderly, people with special needs, participation in a government training program for information technology, and the dependent variable: the use of the Internet for the electronic government for public information. The results of the study indicated that the participation of citizens in government training programs on information technology is positively related to the use of e-government, and that this relationship is stronger for elderly citizens and people with special needs. As for the study Karabulut and Dogan (2018), it aimed to determine the general competencies and levels of entrepreneurship for university students. The results of the study concluded that there is no relationship between gender variables, and levels of general competence and entrepreneurship, with a positive relationship between the general level of student competence and levels of entrepreneurship, and that students have a general belief in competence and this matches literary studies that university education contributes positively to the general level. The study showed that the gender variable does not affect their beliefs about competence and levels of entrepreneurship according to the university variable. Universities located in cities near the sea, port works, and areas of trade and business achieved higher degrees in competency beliefs than in other regions.

Study Hypotheses
Based on the main question of the study and the sub-questions, the study hypotheses can be identified as follows:
H1: There is a significant impact of training programs on job competencies in the Ministry of Energy and Mineral Resources.
Ho2: There is a significant impact of training programs on core competencies in the Ministry of Energy and Mineral Resources.

Ho3: There is a significant impact of training programs on general competencies in the Ministry of Energy and Mineral Resources.

Ho4: There is a significant impact of training programs on technical competencies in the Ministry of Energy and Mineral Resources.

Methodology
Study Sample
The population of this study consisted of employees of the Ministry of Energy and Mineral Resources of different levels of management (specialist/executive, supervisory, leader/effective manager), and their number is (386) employees. The statistical tables were relied upon to determine the acceptable sample size, based on the total size of the population, and the permissible margin of error (5%), which amounted to (194) employees (Al Najar et al., 2018, 109). The proportional random stratified sampling method was used to determine the size of the target sample from the administrative levels, Table 1.

Table 1 study population and sample according to administrative levels

<table>
<thead>
<tr>
<th>Management level</th>
<th>Population</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional level</td>
<td>305</td>
<td>153</td>
</tr>
<tr>
<td>Supervisory level</td>
<td>63</td>
<td>32</td>
</tr>
<tr>
<td>Leadership level</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>Senior management level</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>386</strong></td>
<td><strong>194</strong></td>
</tr>
</tbody>
</table>

Study Procedure
The study used the survey method in collecting data from the members of the study population, through the questionnaire that was designed and distributed to the study sample members, where (194) questionnaires were distributed, and (198) questionnaires were retrieved. Because the answers to all the items are not complete, there will be (185) valid questionnaires for statistical analysis, i.e. (94.4%) of the total distributed questionnaires.

To measure the attitudes and estimates of the sample members towards agreeing to the items of the questionnaire, the cognitive measurement method based on the five-way Likert Scale was used, which consists of (5) answers, each corresponding to a numerical representation for the purposes of the analysis, as in Table 2.

Table 2 Approval direction and weight

<table>
<thead>
<tr>
<th>Approval direction</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

To determine the level of importance for the axes and items of the questionnaire, the mean value of the degrees of approval was relied upon, and by applying the following formula:

Significance level = (upper end of the scale – lower end of the scale)/ number of levels = (5 – 1)/3 = 1.33

the number of levels is 3, the importance was categorized into three levels, which are in Table 3.
Table 3 Importance levels and corresponding men averages

<table>
<thead>
<tr>
<th>Importance level</th>
<th>Mean</th>
<th>1 – less than 2.33</th>
<th>2.33 – less than 3.66</th>
<th>3.66 – 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Results

The reliability of the study tool was ensured according to its variables, and according to the answers of the respondents with regard to those variables, which are training programs and job competencies, by calculating the value of Cronbach’s Alpha Coefficient, which measures the internal consistency of the study items, and shows its quality, which means the strength of cohesion between items the scale. Table 4 shows the reliability coefficient for the study dimensions. Alpha values ranged between (0.764) as the lowest value for identifying training needs as one of the dimensions of the training programs, and (0.880) as the highest value for designing training program as one of the dimensions of the training programs. It is noted that all alpha values have exceeded the minimum acceptable percentage for the purposes of statistical analysis, as the value of alpha is greater or equal to (0.70) is considered acceptable in research related to administrative and human sciences (Al-Najar et al., 2018, 151).

Table (4) also shows a summary of the mean and the importance of the training programs and their dimensions. It came with medium importance for both designing training program and evaluating training program, and it came with a high importance for both identifying training needs and implementing training program, and the highest mean for identifying training needs was (4.043). This shows the importance of identifying training needs, as the main element in determining the necessary training methods and tools, the type of training required, and the target groups of training. It also enhances the effectiveness of training programs by focusing on improving competencies and achieving the goals and objectives of the training program. While the lowest mean for evaluating training programs was (3.438) at an average level, and the reason for this may be due to the holding of some distance courses, which hinders the evaluation process during the implementation of the training program. The lack of seriousness in evaluating the trainees after training, and the ineffectiveness of the evaluation mechanisms used.

Table 4 shows a summary of the mean and the level of importance for the job competencies and their dimensions. All of which were of high importance, and the highest mean for general competencies was (4.411). While the lowest mean for core competencies was (4.319) and at a high level as well. This indicates availability of job competencies (core, general, and technical) among the employees of the Ministry, which contribute to improving the level of performance and help in achieving its goals and objectives.

Table 4 Descriptive analysis

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Items</th>
<th>Alpha</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying needs</td>
<td>5</td>
<td>0.764</td>
<td>4.043</td>
</tr>
<tr>
<td>Program design</td>
<td>5</td>
<td>0.880</td>
<td>3.611</td>
</tr>
<tr>
<td>Program Implementation</td>
<td>5</td>
<td>0.848</td>
<td>3.773</td>
</tr>
<tr>
<td>Program evaluation</td>
<td>5</td>
<td>0.868</td>
<td>3.438</td>
</tr>
<tr>
<td>Core competences</td>
<td>5</td>
<td>0.794</td>
<td>4.319</td>
</tr>
<tr>
<td>General competences</td>
<td>5</td>
<td>0.836</td>
<td>4.411</td>
</tr>
<tr>
<td>Technical competences</td>
<td>5</td>
<td>0.838</td>
<td>4.324</td>
</tr>
</tbody>
</table>
Table 5 indicates the results of the multiple regression analysis of the impact of training programs with their dimensions (identifying needs, program design, program implementation, and program evaluation) on job competencies in the Jordanian Ministry of Energy and Mineral Resources. The value of correlation coefficient (R=0.470). This indicates a relationship between training programs and job competencies. While the value of the coefficient of determination was \( R^2 = 0.221 \), which means that the training programs explained a percentage of (22.1%) of the variance on job competencies, and the value of F was (12.774) at the level of significance (Sig.=0.000). This confirms the significance of the regression at level \( \alpha \leq 0.05 \), which indicates the existence of a statistically significant impact of training programs on job competencies.

The coefficient also shows that there is an impact of program implementation on job competencies. The value of B for program implementation was (0.216) and with a standard error of (0.076), value of Beta was (β=0.291) and value of T was (2.834) at the level of significance (Sig.=0.005). The coefficients also show that there is no impact of identification needs on job competencies, where B value was (0.127), standard error (0.066), Beta value was (β=0.151), T value was (1.915) at the level of significance (Sig.=0.057). The program design and program evaluation also had no impact on job competencies The B value for program design was (0.029) with a standard error (0.066), Beta value was (β=0.040), T value was (0.445) at the level of significance (Sig.=0.657). The B value for program evaluation was (0.100) with a standard error of (0.065), Beta value was (β=0.143), T value was (1.535) at the level of significance (Sig.=0.127).

Table 5 The impact of training program on job competencies

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. error</td>
</tr>
<tr>
<td>Identifying needs</td>
<td>0.127</td>
<td>0.066</td>
</tr>
<tr>
<td>Program design</td>
<td>0.029</td>
<td>0.066</td>
</tr>
<tr>
<td>Program Implementation</td>
<td>0.216</td>
<td>0.076</td>
</tr>
<tr>
<td>Program evaluation</td>
<td>0.100</td>
<td>0.065</td>
</tr>
<tr>
<td>R</td>
<td>0.470</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.221</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>12.774</td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

Table 6 shows the results of multiple regression analysis of the impact of training programs with their dimensions (identifying needs, designing programs, implementing programs, and evaluating programs) on core competencies in the Jordanian Ministry of Energy and Mineral Resources. The value of the correlation coefficient reached (R=0.493), this indicates the presence of a relationship between training programs and core competencies. The value of the coefficient of determination was \( R^2 = 0.243 \), which means that the training programs explained a percentage of (24.3%) of the variance in the core competencies, and the value of F was (14.443) at the level of significance (Sig.=0.000). This confirms the significance of the regression at the level of significance \( \alpha \leq 0.05 \), which indicates the existence of a statistically significant impact of the training programs on core competencies.

The coefficient also shows that there is an impact of evaluating the program on core competencies. The value of B was (0.174) with a standard error of (0.069), the value of Beta was (β=0.234), value of T was (2.537) at the level of significance (Sig.=0.012). Needs identification, program design and program implementation had no impact on core competencies, where the B value for needs identification was (0.105) with a standard error...
(0.070), Beta value was (β=0.117), T value was (1.512) at the level of significance (Sig.=0.132). The B value for program design was (0.052) with a standard error of (0.070), Beta value was (β=0.066), T-value was (0.745) at the level of significance (Sig.=0.457). The value of B for implementing program was (0.140) with a standard error of (0.081), value of Beta was (β=0.176), value of T was (1.735) at the level of significance (Sig.=0.084).

Table 6 The impact of training program on core competencies

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. error</td>
</tr>
<tr>
<td>Identifying needs</td>
<td>0.105</td>
<td>0.070</td>
</tr>
<tr>
<td>Program design</td>
<td>0.052</td>
<td>0.070</td>
</tr>
<tr>
<td>Program Implementation</td>
<td>0.140</td>
<td>0.081</td>
</tr>
<tr>
<td>Program evaluation</td>
<td>0.174</td>
<td>0.069</td>
</tr>
</tbody>
</table>

Table 7 shows the results of the multiple regression analysis of the impact of training programs with their dimensions (identifying needs, designing programs, implementing programs, and evaluating programs) on general competencies in the Jordanian Ministry of Energy and Mineral Resources. The value of the correlation coefficient reached (R=0.468), this indicates the presence of relationship between training programs and general competencies. While the value of the coefficient of determination was (R²=0.219), which means that the training programs explained a percentage of (21.9%) of the variance in the general competencies, the value of F was (12.637) at the level of significance (Sig.=0.000). This confirms the significance of the regression at the level of significance (α≤0.05), which indicates the existence of a statistically significant impact of the training programs on the general competencies.

The coefficients also show that there is an impact of identifying needs and implementing program on general competencies. The B value for identifying needs was (0.277), with a standard error (0.068), Beta value was (β=0.321), T value was (4.074) at the level of significance (Sig.=0.000). The B value for program implementation was (0.215), standard error (0.078), Beta value (β=0.282), T value (2.750) at the level of significance (Sig.=0.007). The program design and program evaluation had no impact on general competencies. The value of B for program design was (0.109) and with a standard error of (0.068), the value of Beta was (β=0.145), value of T was (1.609) at the level of significance (Sig.=0.109). The value of B for program evaluation was (0.031), with a standard error of (0.067), Beta value was (β=0.044), T-value was (0.472) at the level of significance (Sig.=0.638).
Table 7 The impact of training program on general competencies

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. error</td>
</tr>
<tr>
<td>Identifying needs</td>
<td>0.277</td>
<td>0.068</td>
</tr>
<tr>
<td>Program design</td>
<td>0.109</td>
<td>0.068</td>
</tr>
<tr>
<td>Program Implementation</td>
<td>0.215</td>
<td>0.078</td>
</tr>
<tr>
<td>Program evaluation</td>
<td>0.031</td>
<td>0.067</td>
</tr>
</tbody>
</table>

R = 0.468, R^2 = 0.219, F = 12.637, Sig. = 0.000

Table 8 shows the results of the multiple regression analysis of the impact of training programs with their dimensions (identifying needs, designing programs, implementing programs, and evaluating programs) on technical competencies in the Jordanian Ministry of Energy and Mineral Resources. The value of the correlation coefficient reached (R=0.403) and this indicates the presence of relationship between training programs and technical competencies. The value of the coefficient of determination was (R^2=0.163), which means that the training programs explained (16.3%) of the variance in technical competencies, and the value of F was (8.747) at the level of significance (Sig.=0.000). This confirms the significance of the regression at the level of significance (α≤0.05), which indicates the existence of a statistically significant impact of training programs on technical competencies.

The coefficients also show that there is an impact of program implementation on technical competencies, where B value was (0.198), the standard error was (0.086), Beta value was (β=0.244), T value was (2.292) at the level of significance (Sig.=0.023). While no identifying needs, designing program, and evaluating program had an impact on technical competencies. The B value for identifying needs was (0.026), with a standard error (0.075), Beta value was (β=0.028), T value was (0.345) at the level of significance (Sig.=0.731). The value of B for program design was (0.056), with a standard error of (0.074), value of Beta was (β=0.070), value of T was (0.751) at the level of significance (Sig.=0.454). The value of B for program evaluation was (0.091) with a standard error of (0.073), Beta value (β=0.120), T value (1.237) at significance level (Sig.=0.218).

Table 8 The impact of training program on technical competencies

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. error</td>
</tr>
<tr>
<td>Identifying needs</td>
<td>0.026</td>
<td>0.075</td>
</tr>
<tr>
<td>Program design</td>
<td>0.056</td>
<td>0.074</td>
</tr>
<tr>
<td>Program Implementation</td>
<td>0.198</td>
<td>0.086</td>
</tr>
<tr>
<td>Program evaluation</td>
<td>0.091</td>
<td>0.073</td>
</tr>
</tbody>
</table>

R = 0.403, R^2 = 0.163, F = 8.747, Sig. = 0.000

Discussion

It is noted that the Jordanian Ministry of Energy and Mineral Resources pays clear attention to the training programs for its employees. The directors in the ministry have a level of ability to determine the needs of their subordinates for the skills necessary to complete their work. The Ministry is working on organizing training programs for employees, whether
new or old, but at the same time, there are some shortcomings in its ability to design training programs appropriate to provide employees with these skills, as sometimes these programs are not related to the tasks of employees. On the other hand, there are good levels of implementation of training programs in terms of equipping training rooms and preparing the schedule for the training program. The most difficult thing that the training programs in the Ministry suffer from is the evaluation of these programs, as the employees do not get the appropriate feedback after the end of the training program, and sometimes the performance of the employees is evaluated during their work after they return from the training program.

There are high levels of job competencies for the employees in the ministry, they work in a team spirit, and they are working on self-development in order to provide the best services to the ministry’s customers, they clearly contribute to submitting proposals to improve their work, the prevailing relations between them are at good levels, they have knowledge of the instructions that they relate to how their work is accomplished, they have the necessary skills to accomplish it, and the ability to deal with technology related to the completion of their jobs.

The importance of training is not limited to enabling employees to perform their jobs in a satisfactory manner, but rather aims to improve their efficiency and effectiveness by developing their knowledge and skills and providing them with new experiences to improve their performance. The ability of the Ministry to accurately determine the skills needs of its employees helps to provide them with these skills that they lack, which makes training a realistic activity that saves a lot of efforts and expenses. For all this, the training program must be linked to the work needs, and the training program must be linked to the performance of the employees after the implementation of the training program to ensure that the training program has been designed in a way that gives the employees the required skills.

The Ministry’s design of a training program aimed at building new skills for employees takes place by transforming the training needs into practical steps by designing a program that meets the training needs identified by the lack of information or skills, whether technical or behavioral, which will be reflected in the behavioral trends and assumptions of the trainees, which helps in strengthening the required trends in order to increase the desire and degree of behavioral maturity of employees.

Determining training needs and designing an appropriate training program and implementing it in a timely manner leads to an increase in the job competencies of employees in the technical field, and leads to improving the efficiency of human and administrative relations, and an understanding of the ministry’s relationship with the surrounding environment, which leads to the achievement of its objectives and distinction. Training programs provide employees with a set of practical and scientific personal characteristics that enable them to improve distinct performance rates beyond the usual rates.

Training programs provide employees with specialized knowledge related to a specific field of knowledge or skill. The training program is designed to meet specialized needs in which employees acquire skills that increase their efficiency to accomplish their assigned tasks, as each employee is specialized in specific tasks, which requires him to possess special competencies related to the type of work assigned to him.

**Recommendations**

Based on the findings, the study recommends the following:

1. Increasing the level of interest in designing training program, by designing training program commensurate with the nature of the work of the Ministry in general and the nature of the
work of employees in particular, and covering all actual needs, and determining their content in line with the goals of the Ministry and the goals of the employees on the personal and practical levels.

2. Increasing the level of interest in evaluating training programs, by following effective and diversified evaluation mechanism to evaluate participant before, during and after completing the training program.

3. Providing a stimulating and encouraging environment to participate in the training programs, and giving all employees the opportunity to participate in them.

4. Continuing to motivate employees to possess the functional competencies that help them in carrying out the tasks assigned to them, improving their performance and achieving the Ministry's objectives.

5. Enhancing the level of interest in the training programs held by the Ministry because of their effective role in improving and developing the level of employee's job competencies.

6. Enhancing the provision of all requirements for implementing training program, including means, places, and tools, and adhering to the time period specified for the training program.

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