

The Impact of Occupational Safety Management on the Employee's Job Commitment in the Jordanian Company of Electricity

Mohammad Salameh Zaid Almahirah

Associate Professor, Business Faculty, Isra University, Amman, Jordan

Abstract

The study aimed to identify the impact of occupational safety management on the job commitment of employees in the Jordan Electricity Company. The study sample consisted of (65) employees of the company. The researcher used the questionnaire as an instrument for data collection, and the descriptive (survey) approach was used. The study reached a set of results, according to which the arithmetic mean of the items of occupational safety was (3.87), and the arithmetic means of the items of occupational safety and the commitment of employees ranged between (3.31 - 4.22), between the lowest and highest arithmetic mean. Moreover, the values of (T) were statistically significant, and this indicates that there is a clear impact of occupational safety on the commitment of workers in the Jordan Electricity Company.

Keywords: Occupational Safety, Work Injury Accidents, Jordan Electricity Company.

Introduction

The human element is the real wealth and the main focus of production in the various workplaces. The huge devices, tools and machines, no matter their degree of development and complexity, will remain useless and do not work if the human mind that moves them, employs and preserves them (Sembe & Ayuo, 2017) is not available. Since the human mind is of such great importance, it is fair and equitable to have safe working conditions that ensure an appropriate degree of safety while performing work (Laciok, Bernatik, & Lesnak, 2020).

It should be noted that occupational safety is the responsibility of each individual in his workplace, whether workers are individuals, heads, or the machines that individuals work on (Jilcha & Kitaw, 2017). Occupational safety has become regulations and laws that workers must know, and all departments must apply them and not tolerate workers by overcoming or underestimating their importance, and that this be under proper training and supervision of workers on these systems by safety experts so that many risks that occur to workers in the workplace can be avoided in the different work environments, which is positively reflected on the awareness and behavior of workers (Pinion, Brewer, Douphrate, Whitehead, DelliFraine, Taylor, & Klyza, 2020).

The physical safety of the worker is one of the priorities of the safety management within the organization to ensure the worker's continuity in work and avoiding absence due to injury, and then secure the material income of the facility and employees (Afolabi, Beer, & Haafkens, 2020). Accordingly, productivity becomes an important matter in the life of the worker through the efforts of occupational

safety in the facility, and both parties, the facility and the workers, benefit from the Occupational Safety Department, to reflect this in the company (Schulte, Delclos, Felknor, &Chosewood, 2019).

It is worth noting that the occupational safety of workers in the workplace is one of the vital issues in this era in which people deal with places and equipment to perform the required work (Yanar, Robson, Tonima, &Amick, 2020).Therefore, safety is based on the safe design of it, as well as on the means of training and its use in the best way to achieve the best performance of companies (da Costa, & Costa, 2020).

In the same context, occupational safety is based on a set of principles and rules according to which human resources of different types and nature of their work are protected from the dangers of the professions they practice, whether physical, physiological or psychological.And that is through the development, implementation and follow-up of an appropriate security and protection program that can reduce the number of accidents and injuries that workers are exposed to in the workplace or prevent their occurrence while performing their work (Misiurek&Misiurek, 2017). Where the protection program is developed by studying and analyzing each work to find out the risks or injuries to which workers are exposed, and to provide the means that enable them to protect them (Smith, 2018).

On the other hand, the Jordanian Electricity Company is required today to provide occupational safety for its employees by defining the nature of accidents that occur to workers in terms of their nature, causes and effects. In addition to identifying the various interlocking factors that contributed to the injuries of the company's employees, as the Jordan Electricity Company is considered one of the main sectors in the Jordanian national economy, and this economic sector receives great support from the Jordanian government, which has taken a number of measures to advance this sector towards achieving excellence and creativity, in addition to putting in place prevention and safety measures for employees of the company (Jordan Electricity Company, 2021).

Based on the foregoing, research into the impact of occupational safety management on the employee's job commitment in the Jordan Electricity Company is justified, because this research on determining the extent of injuries and knowing the causes and factors that led to it is necessary so that the Jordanian Electricity Company is distinguished among other sectors.

Problem of the Study

The absence of a clear and effective administrative system for companies to provide occupational safety for workers may lead to departments not working in accordance with the instructions and rules related to providing systems and means of occupational and technical safety and security in facilities and companies.

It should be noted that the clarity of the main objectives of companies and establishments in relation to occupational safety and their interest in the human element is a main goal that is achieved through training in all fields, especially occupational safety (Alawneh&Hawamdeh, 2021).In this regard, companies and establishments should look for innovative ways to reduce accidents and encourage work to implement safety systems. Any error or omission on the part of companies will be a direct or indirect

factor in the occurrence of accidents and injuries to employees (SwusteGulijk, Groeneweg, Guldenmund, Zwaard, & Lemkowitz, 2020).

In this context, it has become imperative for the Jordanian Electricity Company to adopt high quality and effective occupational safety and preventive measures so that workers are safe from accidents and injuries resulting from machines and the rules of work design and workplace. Accordingly, the current study sought to answer the following main question:

What is the impact of occupational safety management on the employee's job commitment in the Jordan Electricity Company?

Objectives of the Study

- Identifying the impact of occupational safety management on the employee's job commitment in the Jordan Electricity Company.
- Identifying the level of commitment of the employees of the Jordanian Electricity Company to the levels of occupational and preventive safety.
- Identifying the means and methods used by the Jordan Electricity Company to provide occupational safety standards.

Significance of the Study

- Shedding light on the occupational safety standards in the Jordan Electricity Company.
- Disclose the procedural methods used by the company to impose job commitment on the employees.
- The study may contribute to providing a perception about the mechanisms of employing occupational safety in order to reduce accidents of injuries in the company.
- The study may contribute to presenting a visualization of the technical and procedural methods to reduce the injuries of workers in the company.

Terms of the Study

Occupational Safety:

Occupational safety is defined as the practice of a number of activities with the aim of protecting production factors, foremost of which is the human element in companies and facilities from exposure to accidents during work, by creating appropriate physical and psychological conditions for workers to perform their work with high productivity ().

Occupational safety is also defined as a set of principles and rules according to which human resources of all kinds and nature of their work are protected from the dangers of the professions they practice through the development, implementation and follow-up of an appropriate security and protection program through which the number of accidents and injuries that workers are exposed to in the workplace or prevent their occurrence in the course of their work (Skład, 2019).

Accident: An unplanned event that occurs because of improper work methods causing work injuries or loss of property and in this sense, the accident occurs during the course of work, which leads

to physical or mental damage, and includes severe injury cases. It is the one that can be recognized medically, and that it is an improper health condition resulting from professional work (Tomakov, Tomakov, Pahomova, Semicheva, &Bredihina, 2018).

Jordan Electricity Company: It is a public shareholding electricity company that is reliable in providing electricity distribution services in Jordan.It is a pioneering company in using the latest safe technology and knowledge transfer in service performance in Jordan and the Arab world and providing the best sustainable services to achieve the satisfaction of all subscribers (Jordan Electricity Company, 2021).

Field Study

Methodology of the Study

The researcher adopted the descriptive analytical approach by investigating the opinions of the employees of the Jordanian Electricity Company to know their opinions about the company's role in securing occupational safety, in addition to knowing the extent of the commitment of the employees of the company.

Sample of the Study

The study sample consisted of (65) workers in the Jordan Electricity Company, and the sample size was determined based on the law of minimum selection of samples.

Instrument of the Study

To achieve the objectives of the study, the researcher developed a questionnaire that included items about occupational safety provided by the Jordan Electricity Company.

Validity of the Questionnaire

The validity of the questionnaire was calculated using the internal consistency method by calculating the correlation coefficients between the total score for each dimension and the total score for the questionnaire; The following table shows the procedures for calculating the internal consistency validity.

Table (1) shows the Pearson Correlation Coefficients for the Degrees of each Cimension

Dimension	Correlation Coefficients	Value of Significance
Occupational Safety	0.753**	0.000

It is clear from the previous table that the correlation coefficient of occupational safety was (0.753), which is a high correlation coefficient, and it is statistically significant at the level of significance (0.05).

Reliability of the Questionnaire

To check the reliability of the questionnaire, the researcher followed Cronbach's Alpha method. Table (2) shows the reliability coefficient of the questionnaire.

Table (2) shows Cronbach's Alpha .Reliability Coefficients

Dimension	Cronbach's Alpha
Occupational Safety	0.852
Total Reliability	0.744

It is clear from the previous table that the total reliability coefficient of the questionnaire was (0.744), which is a high reliability coefficient that indicates that the questionnaire has a high degree of reliability and can be relied upon in the field application of the study.

Answering the Main Question of the Study

What is the impact of occupational safety management on the employee’s job commitment in the Jordan Electricity Company?

To answer this question, arithmetic means, and standard deviations were calculated, and the (T) value was extracted for each of the items of the impact of occupational safety management on the employee's job commitment. The following table illustrates this.

Table (3) Arithmetic averages, standard deviations and (T) value of the impact of occupational safety management

Items	Mean	Standard Deviation	T Value	Significance
The Jordan Electricity Company provides advertisements to help workers avoid dangers.	3.92	0.942	121.267	0.000
There is a department concerned with occupational safety at the Jordanian Electricity Company	3.82	0.919	118.863	0.000
There are measures adopted by the Jordanian Electricity Company to reduce work accidents	4.01	0.945	104.328	0.000
There is a job obligation for the employees at the Jordan Electric Power Company	3.31	0.783	128.913	0.000
There are deterrent penalties for non-compliance with prevention at work	3.51	0.850	128.144	0.000

Items	Mean	Standard Deviation	T Value	Significance
The most common cause of work-related injuries is due to workers	4.22	0.901	120.408	0.000
Occupational prevention and safety training opportunities are available in the company	3.71	0.811	141.074	0.000
The company's equipment and machinery are not developed	3.85	0.834	102.167	0.000
The technical staff experience is weak	4.19	0.855	112.510	0.000
There are accidents of injuries, fractures, etc. during work	4.17	0.870	113.397	0.000
Total Mean	3.87	0.629	Significant	

From a review of Table (3), it is clear that the arithmetic mean of the items of occupational safety was (3.87), and the arithmetic means of the items of occupational safety and the commitment of employees ranged between (3.31 - 4.22), between the lowest and highest arithmetic mean. It was also shown from the previous table that the (T) values are statistically significant, and this result can be explained by the fact that the Jordanian Electricity Company uses the means and methods of occupational and preventive safety from accidents during work, and that the commitment of workers to safety procedures limits the impact of work accidents.

Hypothesis of the Study

The first hypothesis: There is no statistically significant effect of the role of the impact of occupational safety management on the employee's job commitment in the Jordan Electricity Company.

To verify the hypothesis validity test, the role of safety (the independent variable) was identified through the following degrees: high, medium, low, on achieving the commitment of the workers (the dependent variable) to agree, neutral, disagree, and the two phenomena can be studied together according to this division as it is shown in Table (4).

Table (4) The Role of Occupational Safety on the Commitment of Employees

Sum of Rows		Eommitment of Employees						Occupational Safety
		Disagree		Neutral		Agree		
Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	
% 3.3	4	%0.0	0	%0.0	0	%3.3	4	High

%30.9	37	%3.3	4	%25.0	30	%2.5	3	Medium
%65.8	79	%45.0	54	%20.8	25	%0.0	0	Low
%100	120	%48.4	58	%45.8	55	%5.8	7	Sum of columns

Chi - square = 100.337

Degree of freedom= 4

Significance = 0.000

Table (4) shows that the value of Chi - square = 100.337 at Degree of freedom = 4 and Significance = 0.000. The tabular value of Chi - square (critical value) at 4 degrees of freedom and the level of significance = 0.000 and the value of the square, and the tabular value of Chi - square (critical value) at 4 degrees of freedom and the level of significance 5% = 9.488 compared to 0% it becomes clear that the calculated value of Chi - square = 100.337 is greater than the tabular value of the Chi - square = 9.488. Therefore, zero hypotheses are rejected and thus we accept the alternative hypothesis of the research. Thus, there is a role for occupational safety on the commitment of workers in the Jordanian Electricity Company, and this means that the role of occupational safety and its achievement in the company is reflected in the commitment of workers, which means that there is a real and statistical indication of the impact of the role of occupational safety on the commitment of workers.

Results

- The study showed that the fewer injuries inside the company, the higher the productivity, and this is related to the degree of commitment of the employees in the company.
- Distinguished human and technical factors within the company lead to the reduction of injuries to workers during work.
- The company's devices and equipment, as well as the physical environment lead to the reduction of accidents, and thus increase the company's productivity.
- There is a strong and statistically significant correlation between the role of occupational safety and the commitment of employees in the Jordanian Electricity Company
- There is an inverse relationship between the number of work accidents and work productivity.

Recommendations

- The necessity of increasing concern for occupational safety within the company.
- The necessity of paying attention to the treatment of infected cases to prevent work stoppage within the company.
- The need to increase awareness and culture of occupational safety for employees within the company.
- Excessive attention to equipment and devices and ensuring their safety so that the safety of the company's employees is achieved.
- Training workers on occupational safety standards.
- Training workers on safety and security procedures while working.

References

- Afolabi, F. J., de Beer, P., &Haafkens, J. A. (2021). Can occupational safety and health problems be prevented or not? Exploring the perception of informal automobile artisans in Nigeria. *Safety Science, 135*, 105097.
- Alawneh, R. H., & Hawamdeh, N. S. (2021). Strategic Information Systems and their effects on the Developing of Intellectual Capital in the Electricity Distribution Company in the Hashemite Kingdom of Jordan. *Journal of Economics And Administrative Sciences, 27*(126).
- da Costa, S. P., & Costa, N. (2020). Industrial Occupational Safety: Industry 4.0 Upcoming Challenges. In *Safety and Security Issues in Technical Infrastructures* (pp. 152-172). IGI Global.
- Jilcha, K., &Kitaw, D. (2017). Industrial occupational safety and health innovation for sustainable development. *Engineering science and technology, an international journal, 20*(1), 372-380.
- Jordan Electricity Company.(2021). Occupational safety management, Jordan.
- Laciok, V., Bernatik, A., &Lesnak, M. (2020). Experimental implementation of new technology into the area of teaching occupational safety for Industry 4.0. *International Journal of Safety and Security Engineering, 10*(3), 403-407.
- Misiurek, K., & Misiurek, B. (2017). Methodology of improving occupational safety in the construction industry on the basis of the TWI program. *Safety science, 92*, 225-231.
- Pinion, C., Brewer, S., Douphrate, D., Whitehead, L., DelliFraine, J., Taylor, W. C., &Klyza, J. (2017). The impact of job control on employee perception of management commitment to safety. *Safety science, 93*, 70-75.
- Schulte, P. A., Delclos, G., Felknor, S. A., &Chosewood, L. C. (2019). Toward an expanded focus for occupational safety and health: a commentary. *International journal of environmental research and public health, 16*(24), 4946.
- Sembe, F., &Ayuo, A. (2017). Effect of selected occupational health and safety management practices on job satisfaction of employees in university campuses in Nakuru Town, Kenya. *Journal of Human Resource Management, 5*(5), 70-77.
- Skład, A. (2019). Assessing the impact of processes on the Occupational Safety and Health Management System's effectiveness using the fuzzy cognitive maps approach. *Safety science, 117*, 71-80.
- Smith, T. D. (2018). An assessment of safety climate, job satisfaction and turnover intention relationships using a national sample of workers from the USA. *International journal of occupational safety and ergonomics, 24*(1), 27-34.
- Swuste, P., van Gulijk, C., Groeneweg, J., Guldenmund, F., Zwaard, W., &Lemkowitz, S. (2020). Occupational safety and safety management between 1988 and 2010: Review of safety literature in English and Dutch language scientific literature. *Safety science, 121*, 303-318.
- Tomakov, V. I., Tomakov, M. V., Pahomova, E. G., Semicheva, N. E., &Bredihina, N. V. (2018). A study on the causes and consequences of accidents with cranes for lifting and moving loads in industrial plants and construction sites of the Russian Federation. *Journal of Applied Engineering Science, 16*(1).
- Yanar, B., Robson, L. S., Tonima, S. K., &Amick III, B. C. (2020). Understanding the organizational performance metric, an occupational health and safety management tool, through workplace

case studies. *International Journal of Workplace Health Management*.

Khan, Mohammad Zakir Hossain. "A case study on Occupational health and safety of footwear manufacturing industry." *Journal of Business and General Management* 2 (2017): 1-6.

Gaganpreetkaur, Nandita Mishra, and Puja Singhal. "Concern of construction industry towards occupational safety and health issues." *International Journal of Mechanical and Production, Engineering Research and Development (IJMPERD)*, ISSN (P): 2249-6890; ISSN (E) 2249.8001 (2018): 615-622.

Mrunalini, A., and S. Logeswari. "Musculoskeletal problems of artisans in informal sector—a review study." *Int J Environ, Ecology, Family and Urban Studies* 6.1 (2016): 163-170.

Alrwashdeh, SAAD S. "An Energy Production Evaluation from PV Arrays with Different Inter-Row Distances." *International Journal of Mechanical and Production Engineering Research and Development* (2019): 9-5.