Training and Development Needs and Its Impact on Productivity: A Case Study Maritime Shipping Companies

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ABSTRACT
The significance of the study lies in its exploration of the intricate relationship between training and development needs and productivity within the context of maritime shipping companies in Jordan. This investigation holds particular relevance due to the critical role played by the maritime sector in the country’s industrial landscape. This research uses a quantitative approach. The quantitative adopts the self-administered survey which uses simple random sampling. This study will focus on the maritime shipping sector, which is critical in Jordan, and will be conducted on 10 companies in the sector. The study proposes that in order to boost productivity, organisations hire highly experienced and competent people who create financial information and have adequate academic credentials. As a result, providers of training and development should follow the code of ethics and be able to meet the needs of the laws, rules, policies, and standards that govern the compilation and presentation of information connected to the productivity of these businesses.

KEYWORDS: Productivity, Training and Development needs.

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1. INTRODUCTION
Training and development programs are a set of structured activities that are planned to bring about changes in behavior (Sung & Choi, 2018). In large corporate organizations, training and development programs are crucial for new employees who may not be familiar with the required performance standards of their job. By participating in these programs, employees can acquire the knowledge and skills needed to enhance their job-related abilities and build their confidence, job performance, and overall job satisfaction (Kapur, 2018). As a result, corporate organizations can function more effectively, achieve their goals, and increase their profits, particularly when their trained employees exhibit high levels of job performance (Nassazi, 2013; Sandamali et al., 2018; Swaminathan et al., 2019) and job satisfaction (Tzafrir, 2016; Huang, 2020) on a consistent basis.

Peter Drucker, a reputable author of management, has defined the rapidly growing sector of training & development, by giving the value of training for increased workforce productivity in quality improvement, the cost of training staff was an organization’s investment (Shah, 2015). And are important consideration for modern companies that impact the productivity of employees directly (Al Ali et al., 2018). Since training and development services enhance employee talents and attitudes towards effective productivity within the company (Siddiqui & Sahar 2013), they can be regarded as management practices that can either be regulated or be managed to generate the desired unwritten, reciprocal attitudes and conduct, such as involvement, organizational culture and organizational commitment. Organizations must also ensure an attempt to maintain dedicated staff as their commitment tends to minimize the sales expenses related to hiring, training and development. However, the influence that organization commitment plays in defining organization productivity has remained debated, under-explored and needs to be further researched.

Training and development needs becomes important for reorienting personnel and ensuring a seamless transition within the company (Kapoor et al., 2015). Needs research enables human resource experts and line managers to pinpoint operational issues and underperformance in order to implement effective training to support the company achieve its goals and...
thereby reinforce productivity (Mozael, 2015). Guzzo et al. (1985) showed by meta-analysis that training and development, goal setting, and sociotechnical system architecture have had important and beneficial effects on productivity. Thus, identifying training requirements should be addressed in order to scrutinize the elements that are required prior to identifying training and development needs. Previous research indicates that conducting an accurate training and development needs report would assist a company in increasing its productivity and developing the effectiveness and morale of its workers (Kapoor et al., 2015).

Currently in Jordan, productivity is the most critical factor to stimulating economic growth in Jordan. A country’s economic success depends on the strength of its industrial sector both locally and internationally, which is why Jordan’s industrial sector is its most essential pillar (Matar & Unaizat, 2018). However, economists noted that Jordan employees’ productivity level is poor compared to other countries, especially developed countries. Also, industrial production in Jordan decreased 10.17 percent in January of 2021 over the same month in the previous year (Central Bank of Jordan, 2021), noting that the decrease in productivity is related to weak training and development process in general (Alrai, 2014). Thus, the Al-Tal study (Petro, 2023) pointed to the low participation rates of the Jordanian labor force (39% in 2020) and the low productivity of the Jordanian workers, which directly reflect the weak competitiveness of the Jordanian economy to work as a component of productivity. In order to enhance productivity and job satisfaction among employees, Shaban et al. (2017) recommended that management should focus on re-engineering systems and processes, as well as providing training and development programs.

Training and development needs also reflected the process of determining the needs of organisations and organisational members to identify the required training forms (Kadri et al., 2017). Furthermore, training & development needs should be based on organisational needs, work type, and the required skills for work completion (Kibibi, 2011). Notably, Kapenga (2008) indicated that organisations should start by monitoring the current organisational status and employees’ work capacity. Pynes (2008) defined need as the difference between what was currently being performed and what needed to be executed. The construction and execution of a training program without needs analysis would inevitably produce alternatives that were irrelevant to training deficiencies. For example, employees’ training needs could be determined through corporate systems, such as skills gap analysis, training need assessments, performance reviews, counselling sessions, and work evaluations. Therefore, effective training sessions must explicitly relate to core business activities. The most efficient means of determining employees’ talent gaps was to meticulously match job specifications to professional activities using employees’ profiles and an organisational-oriented HRM package for clear training requirements (Poulet, 2008).

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Myles (2000) mentioned that organisations sought to effectively train and develop employees by rewarding positive work performance. Consequently, employees...
became more motivated and engaged professionally and improved organisational performance and loyalty. Training and development demonstrated a planned process established to elevate the current and potential capacities through human resources in the organisation (Millmore & Lewis, 2007). Adams (2002) argued that training and development can help create a skilled workforce that is less prone to errors and mistakes. Additionally, training and development were both processes that induced employee enhancement skills. Development was generally utilised in skills-enhancing processes for staff at the managerial level, whereas training was normally utilised for skills-enhancement processes regarding lower-level jobs in organisations (Salas et al., 2012). Following Law et al. (2015), Training & development was the most important aspect of company growth and success through work efficiency and effectiveness. Furthermore, training and development programmes increased employee work performance through improved skills and abilities. Corporate need to establish training & development programmes was evident as training influenced return on investments following the explicit relationship between organisational performance and employee productivity.

2.2 Improve Productivity by Training and Development

Enhancing productivity within organizations can be achieved through effective training and development initiatives, as highlighted by Suganya (2011) and Neyestani (2014). Suganya identifies key factors contributing to productivity improvement, including fostering employee awareness of productivity assessment strategies, implementing incentives and appraisals for high-performing individuals, enhancing workplace discipline, identifying and developing employee skills, providing constructive feedback, offering professional encouragement, and ensuring consistent training on multidimensional job performance. Neyestani (2014) emphasizes that organizations can significantly enhance employee productivity and performance through systematic training and development programs. By addressing these aspects comprehensively, organizations create an environment that not only cultivates individual skills but also instills a culture of continuous improvement, ultimately leading to heightened productivity and overall success. According to Oguntimehin (2001), training and development may boost productivity by improving trainees’ work quality, skills, knowledge, understanding, and attitude. By pushing workers to question accepted ideas and produce original ones, training and development also promotes creativity and inventive thinking. This can then help the organization expand and become more productive, so insuring its existence. After Tiwari (2014), training and development turned shown to be crucial for organizational productivity in order to improve employees’ overall and professional growth. Employee and organizational productivity increased in this aspect. Training has a favorable impact on organizational goals and objectives as a tool. Numerous studies have shown that improving one’s abilities via training increases productivity. According to the Diamantidis and Chatzoglou (2018), the top five factors affecting organizational productivity include both ineffective managers and personnel. Insufficient experience and training were also among the top three causes of low production, according to Naoum and Hackman (1996). Additionally, it was confirmed that improved training and development programs enabled increased labor efficiency in the construction industry (Rojas and Aramvareekul, 2003). Training promoted skill development, job performance, and output quantity and quality given that competent individuals often displayed greater productivity and work output quality than untrained counterparts (Jayum et al., 2018). Training results that strategically linked the work scope to organizational goals were referred to as performance enhancement involving productivity, quality, and services (Kamau et al., 2020). It became clear that investments in staff training and development (problem-solving, decision-making, collaboration, and interpersonal skills) produced positive organizational outcomes. The majority of businesses have properly understood the need of training and development for increased production.

2.3 Theory linking the Training & development and productivity

2.3.1 Human Capital Theory (HCT)

In 1964, Becker introduced and popularized Human Capital Theory, which illustrated the economic benefits of investing in education and training to improve an individual’s human capital. Human capital encompasses a range of professional efforts that enhance an employee’s knowledge, skills, values, abilities, and social connections. It is a crucial aspect for organizations, and constant improvement of employees’ abilities can aid in its development. Figure 2 depicts the principles of Human Capital Theory and its fundamental beliefs.
Relationship 1 pertains to the application of production functions to education and training, which assumes that investing in education and training leads to a rise in learning. Relationship 2 pertains to the relationship between human capital, which is learning, and increased productivity. The fundamental assumption behind this relationship is that increased learning leads to a tangible improvement in productivity. Relationship 3 depicts how human capital contributes to organizational advantages and profits through increased productivity leading to higher wages and earnings. The underlying assumption is that as productivity increases, wages for individuals and earnings for businesses also increase. The vast majority of training efforts can concentrate on tough skills thanks to Becker’s influence; that is, basic, learning expertise directly relevant to work success.

However, an evolving study stream also focuses on soft competences, which is in line with the need for more attention on the improvement of the soft skills of workers (Robles, 2012). The study discussed in this special issue highlights the importance of two types of preparation in soft skills. Human capital results are shown by the productivity of employees (Ployhart et al., 2014). Human capital has the experience, strengths, abilities and other capabilities (Kim & Ployhart, 2014). In terms of planning, Becker distinguished generic from corporate human capital; the organization was not alone with generic human capital (i.e., leadership growth, college degree) (e.g., how to use proprietary software). For the company-specific human resources, the economic benefits of the enterprise may be higher when workers will prefer to pick a new employer after a standardized acquisition and possibly deny the benefit of preparation. Becker (1964) established the theory of human capital that highlights the benefits of investing in employee training and development for both individuals and organizations. According to this theory, human capital is a crucial resource that generates organizational productivity, and investments in employee skills are justifiable in terms of future productivity and performance. This theory serves as a suitable framework for this study, which aims to identify factors that influence productivity. The study focuses on enhancing training and development programs to increase employee commitment and create a more skilled workforce, which can positively impact organizational productivity. Human Capital Theory is employed to emphasize the critical role of human capital in enhancing productivity, and effective training and development programs must consider various aspects, including training and development needs, program design, implementation, and evaluation.

3. CONCEPTUAL FRAMEWORK

Figure 3 depicts the research model, incorporating the independent variable (training and development needs) and the dependent variable (productivity). The primary focus of this study is to explore the correlation between training and development needs and productivity. The development of this framework draws upon a diverse array of sources, encompassing both published and unpublished data from reputable journals, varied definitions, and practical experiences. Its intent is to effectively address the research question and achieve the specific objectives outlined in the study.

4. METHODOLOGY

This study employs a quantitative methodology, specifically utilizing a self-administered survey with a simple random sampling technique. The Social Security Corporation reported a total of 230 employees in maritime shipping companies in Jordan. Consequently, the research sample comprised 152 employees, with 5 excluded, leading to the analysis being conducted on 147 questionnaires. The research was conducted in Jordan, and questionnaire responses were collected to gather data for the study. The data is analysed using Partial Least Squares-Structural Equation Modeling (PLS-SEM) to identify the relationship among training and development needs towards the increase of productivity.

5. RESULTS AND DISCUSSION

The findings of the descriptive analysis of this variable training and development needs (TDN) using both mean and standard deviation SD are shown in Table 1. The results revealed that the mean score for the measuring items for TDN variable ranged from (3.73) to (4.08), which indicate greater implementation of these statements. The majority of responses showed that the item coded TDN2 “The company makes efforts to determine training and development needs” had the highest mean score of (4.08) with a standard deviation of (0.861). While the least mean value was (3.73) for the item coded TDN1 “The human resource department determine training and development needs analysis before organizing training and development program”. The overall average of TDN items was (3.90) which indicate a high implementing.

6. DESCRIPTIVE ANALYSIS OF PRODUCTIVITY

A Five-Likert Scale ranging from 1 strongly disagree to 5 strongly agree was used to quantify the productivity variable as one key first-order construct. The findings of a descriptive analysis of this variable using both mean
The findings showed that this variable’s measuring items had a mean score that varied from (3.29) to (3.95), indicating medium to high implementation with these claims.

Most responses indicated that item P9, “The company is keen to gain maximum advantage from the production elements,” received the highest mean score (3.95) and standard deviation (0.871). While the item with the item code P1 had the lowest mean score (3.29) with a standard deviation (1.165) and low agreement level, training and development minimize consumption of time and expense and boost performance and productivity. The average of productivity was (3.60), and the level of implementation was medium. It shows that maritime shipping companies have adopted productivity at a medium level.

7. CONCLUSION

To fulfill the aim of this research, which is to explore the impact of training and development needs on the productivity of maritime shipping companies, the researcher developed the hypothesis of the study. Hypothesis states that “There is a positive relationship of training and development needs in productivity in maritime shipping companies”. The relationship between training and development need and productivity was found to be significant and positive. Additionally, the reference to Human Capital Theory implies that the study will likely analyze how investments in training and development contribute to the accumulation of human capital within the workforce. Human Capital Theory posits that individuals’ skills, knowledge, and experiences are valuable assets that contribute to overall productivity and economic success. This perspective underscores the importance of viewing employees as valuable assets and understanding how investments in their development can yield positive outcomes for the organization.

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**Table 1: Descriptive analysis of TDN**

<table>
<thead>
<tr>
<th>Item code</th>
<th>Statement</th>
<th>Mean</th>
<th>SD</th>
<th>Rank</th>
<th>Implement level</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDN1</td>
<td>The human resource department determine training and development needs analysis before organizing training and development program</td>
<td>3.73</td>
<td>1.021</td>
<td>5</td>
<td>High</td>
</tr>
<tr>
<td>TDN2</td>
<td>Training and development provided align with company objectives</td>
<td>4.08</td>
<td>.861</td>
<td>1</td>
<td>High</td>
</tr>
<tr>
<td>TDN3</td>
<td>The company makes efforts to determine training and development needs</td>
<td>3.85</td>
<td>.928</td>
<td>3</td>
<td>High</td>
</tr>
<tr>
<td>TDN4</td>
<td>The training and development programme helps to know the requirements of the company work and the working process well enough to assist me in providing high quality performance</td>
<td>4.03</td>
<td>.911</td>
<td>2</td>
<td>High</td>
</tr>
<tr>
<td>TDN5</td>
<td>Training and development needs are identified periodically</td>
<td>3.83</td>
<td>.950</td>
<td>4</td>
<td>High</td>
</tr>
<tr>
<td>Total Average</td>
<td></td>
<td>3.90</td>
<td>.714</td>
<td></td>
<td>High</td>
</tr>
</tbody>
</table>

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**Table 2: Descriptive Statistics of Productivity**

<table>
<thead>
<tr>
<th>Item code</th>
<th>Statement</th>
<th>Mean</th>
<th>SD</th>
<th>Rank</th>
<th>Implement level</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Training and development reduce consumption of time and cost and increase performance and productivity</td>
<td>3.29</td>
<td>1.165</td>
<td>12</td>
<td>Medium</td>
</tr>
<tr>
<td>P2</td>
<td>Skilled employees’ performance and productivity is more than the unskilled employees</td>
<td>3.31</td>
<td>1.038</td>
<td>11</td>
<td>Medium</td>
</tr>
<tr>
<td>P3</td>
<td>HR Practices on employee training and development enhances productivity</td>
<td>3.59</td>
<td>1.019</td>
<td>7</td>
<td>Medium</td>
</tr>
<tr>
<td>P4</td>
<td>Training and development programs in your organization have positive impact on the productivity of our people</td>
<td>3.65</td>
<td>1.071</td>
<td>6</td>
<td>Medium</td>
</tr>
<tr>
<td>P5</td>
<td>Training and development programs in organization helped in delivering quality services to our customer</td>
<td>3.84</td>
<td>1.102</td>
<td>3</td>
<td>High</td>
</tr>
<tr>
<td>P6</td>
<td>Does in workplace have everything need (raw material, machinery, instruments) to produce the products that are offered to the consumer</td>
<td>3.59</td>
<td>1.169</td>
<td>8</td>
<td>Medium</td>
</tr>
<tr>
<td>P7</td>
<td>Training and development within the organization now gives me the necessary skills to work in tasks from start to the end</td>
<td>3.44</td>
<td>1.111</td>
<td>9</td>
<td>Medium</td>
</tr>
<tr>
<td>P8</td>
<td>There are ongoing development opportunities created for employees to improve and maintain high levels of performance</td>
<td>3.68</td>
<td>1.027</td>
<td>5</td>
<td>High</td>
</tr>
<tr>
<td>P9</td>
<td>The company is keen to achieve maximum benefit from the production elements</td>
<td>3.95</td>
<td>.871</td>
<td>1</td>
<td>High</td>
</tr>
<tr>
<td>P10</td>
<td>The company considers the productive efficiency of workers as one of the most important elements of promotion the company provides an environment that stimulates performance</td>
<td>3.72</td>
<td>1.005</td>
<td>4</td>
<td>High</td>
</tr>
<tr>
<td>P11</td>
<td>The company provides an environment that stimulates performance</td>
<td>3.37</td>
<td>1.028</td>
<td>10</td>
<td>Medium</td>
</tr>
<tr>
<td>P12</td>
<td>This company should continue giving its employees training and development programme in order to make the employees increase their efficiency</td>
<td>3.87</td>
<td>.981</td>
<td>2</td>
<td>High</td>
</tr>
<tr>
<td>Total Average</td>
<td></td>
<td>3.60</td>
<td>.897</td>
<td></td>
<td>Medium</td>
</tr>
</tbody>
</table>
REFERENCES


