

Job Training and Employee Skills: Key to Employee Performance in Jordan

Eman Alkawasbeh, AP Dr. Khairul Anuar

School of Management, Universiti Sains Malaysia (USM), Penang, Malaysia

Email: alkawasbeh@student.usm.my, khairulms@usm.my

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Abstract

This paper explores how job training influences employee skills and job performance at the Port of Aqaba, Jordan's main seaport. It specifically examines the roles of both on-the-job and off-the-job training methods, assessing their impact on performance outcomes and the development of essential work-related skills. While both training types contribute to improving employee performance, their effectiveness varies depending on how well they build technical know-how, cognitive abilities, and interpersonal competencies. Employee skills are shown to play a key role in connecting training efforts to practical job results. By drawing from existing research and relevant theoretical frameworks, the study highlights the importance of skill-focused training programs and supportive organizational environments that promote continuous learning. The insights gained here have useful implications for enhancing workforce development in operational fields like maritime logistics.

Keywords: On-The-Job Training, Off-The-Job Training, Employee Skills, Job Performance, Port Of Aqaba

Introduction

Effective employee performance is fundamental to organizational success, particularly in complex and high-pressure environments such as seaports. At Jordan's sole commercial seaport, the Port of Aqaba employee performance has a direct influence on national trade, logistics operations, and overall economic resilience. As this port processes over 85% of the country's imports and exports, the competence, reliability, and efficiency of its workforce are crucial for sustaining economic development. In such a strategic setting, workforce training and skill enhancement are not optional; they are essential components of operational sustainability and competitiveness.

The maritime logistics sector is evolving rapidly due to technological innovations, stricter international regulations, and shifting global trade patterns. Port employees must now be capable of adapting quickly, working efficiently under pressure, and operating increasingly advanced systems and machinery. This transformation raises a critical question: to what extent are current training programs equipping employees with the skills needed to meet

these demands? Although training is widely implemented across Jordan's maritime sector, there is increasing concern that existing programs may be outdated, poorly structured, or misaligned with actual job requirements. High-profile incidents at the Port of Aqaba including oil spills, gas leaks, and safety violations have revealed significant gaps in employee readiness and risk mitigation. These cases underscore the urgent need to examine how training interventions contribute to skill acquisition and measurable improvements in job performance.

Despite the operational and economic importance of employee performance, most research on Jordan's shipping industry has focused on infrastructure, system-level logistics, or broad organizational indicators. There is limited attention given to how training impacts individual workers the very people whose actions determine daily port operations. This lack of focus is especially concerning considering that over half of maritime accidents are attributed to human error. Without targeted training and continuous skill development, employees may be unprepared to handle the increasing complexity and risk inherent in port environments. In light of Jordan's national logistics strategy and ongoing investments in port modernization, enhancing employee performance has become a critical area for both academic inquiry and policy action.

This study aims to address this gap by examining the effects of on-the-job and off-the-job training on employee performance at the Port of Aqaba. Special emphasis is placed on the role of employee skills technical, cognitive, and interpersonal as mediating variables that translate training into performance outcomes. Unlike previous research that often examines training at an organizational level, this study focuses on the individual, seeking to understand how skill development can support safer, more productive, and more resilient job performance.

The significance of this research lies in both its theoretical contribution and its practical application. From a theoretical perspective, the study fills a gap in the literature by investigating the mediating role of employee skills in the training-performance relationship within a maritime context. For practitioners such as port managers and human resource professionals, the study offers data-driven insights to improve the design and implementation of training programs tailored to real-world operational demands. Policymakers and regulators may also find value in the findings, as they provide evidence that can inform human resource policies, safety standards, and national workforce development strategies in critical infrastructure sectors.

The broader implications of this research extend to improved operational efficiency, reduced incident rates, and enhanced competitiveness for Jordan's shipping industry. Moreover, the study has the potential to inform training strategies in other ports across the region facing similar workforce development challenges.

The research is guided by three main objectives. First, it examines the impact of on-the-job and off-the-job training on employee performance. Second, it assesses how these training methods contribute to the development of essential job-related skills. Third, it analyzes whether employee skills serve as a mediating factor in the relationship between training and performance.

To achieve these objectives, the study employs a structured quantitative approach. Data were collected through a validated survey administered to employees at the Port of Aqaba. The responses were analyzed using structural equation modeling (SEM) via SmartPLS 3.0, which enabled the examination of both direct and indirect relationships between training, skill development, and performance.

In conclusion, this study seeks to move beyond the question of whether training improves performance. It aims to uncover how training works by focusing on the skills employees gain and apply in their daily roles. The insights generated will contribute not only to the academic field of workforce development but also to practical improvements in training effectiveness, port safety, and operational performance within Jordan's maritime sector.

Literature Review and Hypotheses Development

Training and Development and Job Performance

Employee performance is a critical factor in determining organizational success, particularly in high-demand sectors like maritime logistics. In such settings, training and development are not just routine practices but strategic efforts aimed at building a skilled, capable workforce. Among the various available approaches, on-the-job and off-the-job training are two of the most commonly used and practical methods. These forms of training help employees acquire technical and job-specific skills, while also enhancing their ability to adapt, respond accurately under pressure, and work confidently in challenging conditions.

On-the-job training involves learning while carrying out actual work tasks under supervision. This approach gives employees hands-on experience and immediate feedback in real-world scenarios. In operational environments like the Port of Aqaba, this method is especially valuable for roles that involve handling machinery, managing cargo, ensuring safety compliance, or coordinating with teams. According to Liu (2020), practicing tasks in real work conditions helps employees retain knowledge more effectively and improves their technical abilities through experience.

By contrast, off-the-job training takes place outside of the employee's regular work setting. It typically includes structured learning formats such as workshops, seminars, or simulations. This type of training is particularly useful for developing broader skills like strategic thinking, decision-making, and problem-solving. It provides employees with the space to reflect on their roles, learn new concepts, and explore alternative approaches to workplace challenges. Studies by Ab Rashid et al. (2020) and Park (2024) indicate that when off-the-job training aligns with employees' actual responsibilities, it helps them handle complex tasks more effectively and adapt to change, leading to improved long-term performance.

The effectiveness of both training types, however, is shaped by various contextual factors. Baldwin and Ford's (1988) Transfer of Training Model highlights three key elements that determine whether training positively influences job performance: the characteristics of the learner, the quality of the training design, and the level of support available in the work environment. Factors such as employee motivation, clearly defined learning goals, relevant content, and opportunities for real-world application all play a role in ensuring that training leads to meaningful behavioral change on the job.

At the Port of Aqaba, where employees often face high-stakes responsibilities and tight operational timelines, well-designed training can make a substantial difference. When on-the-job and off-the-job training programs are thoughtfully planned and aligned with actual job needs, they can lead to better task performance, increased productivity, and stronger organizational outcomes.

Based on this understanding, the following hypotheses are proposed:

H1: On-the-job training has a significant positive relationship with job performance among employees working in the Jordanian shipping industry.

H2: Off-the-job training has a significant positive relationship with job performance among employees working in the Jordanian shipping industry.

Training and Development and Employee Skills

One of the main goals of employee training is to develop the skills necessary for effective performance, particularly in work settings that demand precision, adaptability, and strong collaboration. In port environments, where operations are highly technical, time-sensitive, and team-oriented, employees need more than basic job knowledge. They must possess a well-rounded mix of technical, interpersonal, and cognitive skills to meet daily operational challenges. On-the-job and off-the-job training are two commonly used approaches that contribute directly to developing these essential competencies and help prepare workers for the demands of complex workplaces.

On-the-job training strengthens technical skills through direct participation in real tasks within the work setting. Employees gain firsthand experience while being supervised, which helps them apply procedures correctly, operate machinery, and follow safety standards. This type of training allows for continuous learning through practice and immediate feedback, making it particularly effective in ports such as Aqaba. In this setting, employees often manage cargo, operate equipment, and coordinate logistics, all of which benefit from hands-on learning. Liu (2020) notes that this approach supports skill acquisition by linking theoretical knowledge to day-to-day responsibilities, enhancing both confidence and job competence.

Off-the-job training, by comparison, usually takes place outside the workplace and involves structured formats such as lectures, simulations, and workshops. Although it does not provide immediate opportunities for practice, it is especially useful for developing broader skill sets in areas like critical thinking, leadership, and teamwork. These learning environments offer employees the chance to concentrate, reflect, and engage with new ideas in a setting free from operational pressure. According to Ab Rashid et al. (2020) and Park (2024), this form of training encourages reflective thinking and better prepares employees to manage complex or unfamiliar challenges upon returning to their roles.

Skill development includes more than just technical proficiency. Interpersonal skills such as effective communication, collaboration, and conflict resolution are vital for ensuring smooth teamwork in coordinated operational environments. Cognitive abilities, including adaptability and problem-solving, help employees respond to disruptions, delays, and shifting demands. When training programs are built around clear learning goals and are aligned with job expectations, both on-the-job and off-the-job methods support the growth of these competencies.

At the Port of Aqaba, overall performance depends greatly on the collective abilities of the workforce. Skill development is therefore a key component of both individual and organizational success. When training is supported by strong objectives and a workplace culture that values continuous learning, it significantly enhances employees' ability to work safely, efficiently, and reliably in demanding environments.

Based on these observations, the following hypotheses are proposed:

H3: On-the-job training has a significant positive relationship with Employee Skill among employees working in the Jordanian shipping industry.

H4: Off-the-job training has a significant positive relationship with Employee Skill among employees working in the Jordanian shipping industry.

Relationship between Employee Skill and Job Performance

Employee skills play a crucial role in explaining variations in job performance, especially in demanding and fast-paced work environments. In port operations, where efficiency depends on speed, accuracy, and coordination, employees are expected to go beyond routine knowledge. Their ability to apply technical, interpersonal, and cognitive skills directly affects how they carry out tasks, work with others, and respond to challenges. Previous studies have consistently shown that these skill sets are associated with stronger individual performance and improved organizational outcomes (Boyatzis et al., 2000).

Technical skills are particularly vital in port operations due to the hands-on nature of many tasks. Employees must be capable of managing cargo, operating machinery, following strict safety procedures, and complying with regulations. At the Port of Aqaba, these skills are not only important for completing tasks efficiently but are also essential for preventing operational mistakes. Workers with strong technical abilities generally perform their duties more quickly, require less supervision, and contribute to safer and more streamlined workflows. As a result, technical competence has a direct influence on both productivity and service quality in the maritime sector.

Interpersonal skills are also key in this environment. Port operations often involve coordination between different teams, communication across departments, and collaboration under tight deadlines. Employees who can communicate effectively, resolve conflicts constructively, and support team efforts are more likely to help maintain smooth operations. When interpersonal relationships are strong, teams tend to function more cohesively, reducing disruptions and improving overall performance.

Cognitive skills such as critical thinking, problem-solving, and adaptability are equally important for handling uncertainty and managing complex tasks. These abilities allow employees to assess situations, make quick but informed decisions, and adapt their actions as needed. In unpredictable scenarios, cognitive strength helps workers manage unexpected issues, prioritize their tasks effectively, and limit operational delays. Nyaupane et al. (2020) suggest that such skills are especially valuable in roles that involve independent judgment and risk management.

Together, technical, interpersonal, and cognitive skills support performance in three key areas: task performance, contextual performance, and adaptive performance. Task

performance involves completing primary job responsibilities with accuracy and efficiency. Contextual performance includes behaviors that contribute to the overall workplace environment, such as cooperation and willingness to help others. Adaptive performance refers to an employee's ability to adjust to change, including the adoption of new tools, updated procedures, or evolving job roles. Employees who possess strong skill sets often excel in all three dimensions, making them essential contributors to team success and organizational resilience.

The application of these skills is also influenced by the broader work environment. Factors such as leadership style and organizational culture can greatly impact how employees use their capabilities. Environments that promote learning, provide regular feedback, and support professional development are more likely to see positive outcomes from skill use. Transformational leadership, in particular, has been shown to encourage skill application by recognizing employee strengths, promoting innovation, and fostering trust and autonomy (Bass & Avolio, 1994). When employees feel supported and empowered, they are more inclined to apply their skills effectively and consistently.

At the Port of Aqaba, the importance of employee skills extends beyond individual performance. Skilled workers help maintain safety standards, reduce operational errors, and ensure the smooth flow of cargo. As global maritime trade continues to grow in both scale and complexity, the ability of the workforce to apply a well-developed set of skills will remain a vital element in the port's continued success.

Based on this evidence, the following hypothesis is proposed:

H5: Employee Skill has a significant positive relationship with Job Performance among employees working in the Jordanian shipping industry.

Employee Skill as a Mediator in the Relationship between Training and Job Performance

Training has long been recognized as an important strategy for improving employee performance. However, the impact of training depends not just on how it is delivered but on whether it actually leads to the development and use of job-relevant skills. Without this crucial link, even the most well-designed training efforts may have little real effect on workplace behavior. In this light, employee skills can be seen as the bridge that connects training initiatives with improved performance on the job.

The framework developed by Baldwin and Ford (1988), known as the Transfer of Training Model, offers insight into how training effectiveness is shaped. It highlights three key areas: the characteristics of the employee being trained, the quality and relevance of the training content, and the environment in which learning is expected to be applied. For training to bring about positive change, it must first result in skill acquisition. Just as importantly, the workplace must encourage employees to use those new skills.

On-the-job training contributes to skill development by immersing workers in their actual work environment, where they can learn through direct experience and supervised practice. This hands-on approach helps improve technical abilities and allows employees to apply what they have learned right away. In contrast, off-the-job training often focuses on broader skill areas such as critical thinking, collaboration, and communication. Although it occurs outside

the immediate work setting, it offers a different kind of value by encouraging reflection and structured learning. Together, both training methods provide a more complete approach to employee development.

Recent studies reinforce the view that training only leads to real improvement when it builds usable skills. For example, Fauziyah and Kuswinarno (2024) found that performance gains were closely tied to the skills employees picked up during training. Similarly, Sabekti and Setiawan (2023) emphasized that skill development was a major factor behind the effectiveness of training programs. These findings suggest that developing skills should not be seen as a secondary outcome. It is central to achieving the broader goal of better performance.

In port operations, where work conditions demand precision, speed, and adaptability, the link between skills and performance is especially strong. At the Port of Aqaba, for instance, employees handle both routine and unexpected tasks. Unless training equips them with skills they can regularly apply, its effect will remain limited. What matters most is whether those skills are carried over into the day-to-day responsibilities of the job.

Social Learning Theory, introduced by Bandura and Walters (1977), offers another perspective on how training translates into workplace behavior. According to this theory, people often learn by observing others, mimicking effective behaviors, and receiving reinforcement. When employees see their colleagues putting new skills into practice and getting recognized for it, they are more likely to do the same. This kind of modeling helps embed skills into everyday routines and reinforces the value of training.

Ultimately, training alone does not ensure improved performance. What truly makes a difference is whether employees gain and apply relevant skills. These skills are not just outcomes of training. They are the essential link that allows learning to transform into better performance on the job.

Based on this understanding, the following hypotheses are proposed:

H6: Employee Skill mediates the positive relationship between On-the-Job Training and Job Performance among employees working in the Jordanian shipping industry.

H7: Employee Skill mediates the positive relationship between off-the-job training and Job Performance among employees working in the Jordanian shipping industry.

Discussion

This review has underscored the important role that job training plays in shaping employee performance, particularly by strengthening the skills that employees need to succeed in demanding work environments. At the Port of Aqaba, where operational efficiency, safety, and accuracy are critical, training is not simply a helpful resource but a core requirement. However, the real value of training lies not only in offering learning opportunities but also in building job-relevant skills that employees actively use in their roles.

Among the different methods explored, on-the-job training proved especially valuable for developing technical skills. By learning in the flow of work, employees can directly connect what they learn with what they do. This method allows workers to gain hands-on experience,

build confidence through practice, and apply new knowledge in context. In roles that involve fast decision-making or precise execution, which are common in port operations, this form of training supports immediate skill application and performance improvement.

Off-the-job training also contributes meaningfully, particularly in areas like communication, problem-solving, and reflective thinking. Because it takes place away from routine job pressures, this approach creates space for employees to think critically about their work and develop broader skill sets. When well-designed and tied to actual job tasks, off-the-job learning can enhance strategic thinking and adaptability. These skills are becoming increasingly important as port operations grow more complex.

A central takeaway from this review is the importance of employee skills as the link between training and performance. Simply providing training does not lead to improvement unless employees also gain the ability and confidence to apply what they learn. The evidence reviewed suggests that it is the development and consistent use of specific skills such as technical, interpersonal, and cognitive abilities that enable employees to perform more effectively, solve operational problems, and work better with others.

This relationship is supported by both research findings and theoretical models such as the Transfer of Training Model and Social Learning Theory. These frameworks emphasize that for training to be successful, it must be absorbed and reinforced through ongoing practice and observation. Learning continues beyond formal sessions and depends on how well employees are able to integrate new behaviors into their daily routines. In environments where collaboration and timing are critical, as in the case of port operations, translating knowledge into action becomes especially important.

The broader organizational environment also plays a key role in whether training leads to real outcomes. Leadership support, regular feedback, and a workplace culture that encourages development can make a significant difference. When employees feel supported in applying new skills, they are more likely to take initiative and pursue ongoing improvement, which in turn enhances team and organizational performance.

Even so, some challenges persist. Training programs that are outdated, irrelevant, or disconnected from daily responsibilities may fall short, regardless of how well they are delivered. To avoid this, organizations need to ensure that training content stays aligned with real-world demands and is adapted to changing roles and technologies. Training should not be treated as a one-time event but as part of a broader and continuous effort to build workforce capability.

In conclusion, the findings in this review point to the value of combining on-the-job and off-the-job training with a strong focus on skill development. When training is designed with clear objectives and supported by a learning-oriented culture, it becomes a powerful tool for improving employee performance. For high-demand sectors such as maritime logistics, this approach offers a practical path to stronger and more resilient operations.

Conclusion

This review explored how job training relates to employee skills and performance at the Port of Aqaba. The analysis demonstrated that both on-the-job and off-the-job training make unique but complementary contributions to employee development. On-the-job training focuses on building practical skills through direct interaction with daily tasks, while off-the-job training is more suited for developing cognitive and interpersonal abilities in structured, distraction-free environments. When combined, these approaches offer a balanced and effective foundation for workforce development in complex operational settings.

One of the key takeaways from this review is that employee skills play a central role in linking training to performance outcomes. Offering training alone is not enough. What matters most is whether employees are able to develop and apply the skills that their roles demand. Competencies in technical tasks, communication, and problem-solving directly influence how effectively employees carry out their responsibilities, adapt to challenges, and collaborate with others.

The review also points to the importance of organizational support in strengthening the impact of training. Leadership behavior, timely feedback, and a workplace culture that values learning all contribute to an environment where skills are more likely to be used and improved. When employees feel supported and encouraged to apply what they have learned, training becomes more impactful and leads to better performance.

At the same time, the review recognizes ongoing challenges. Some training programs are not well aligned with real job demands, or they lack practical follow-up in the workplace. To overcome these gaps, organizations need to update training content regularly, adapt it to specific roles, and ensure that learning continues beyond formal sessions. Training should be seen as a continuous process that supports long-term growth, rather than a one-time requirement.

In summary, the evidence reviewed highlights the benefits of investing in both on-the-job and off-the-job training, especially when the focus is on skill development. In high-pressure environments like the Port of Aqaba, maintaining operational effectiveness depends on a workforce that is not only trained but also confident and capable. Organizations that commit to developing employee skills and fostering a culture of learning are more likely to improve performance and sustain long-term success.

References

- Ab Rashid, R., Nor, M. N. M., & Yusoff, R. M. (2020). Off-the-job training and its effect on employee performance. *International Journal of Business and Society*, 21(2), 607–619.
- Al-Daboubi, A., & Al-Ma'aitha, S. (2023). Jordanian port system: Infrastructure and logistics. *International Journal of Maritime Studies*, 11(2), 114–126.
- AL-ghad. (2022). Aqaba port developments and trade contributions. *AL-ghad News*. <https://alghad.com/>
- Al-Khawaldah, H., Al-Momani, A., & Al-Khamaiseh, A. (2023). Environmental concerns in port operations: A case of Aqaba. *Journal of Environmental Management*, 165(3), 355–367.
- Baldwin, T. T., & Ford, J. K. (1988). Transfer of training: A review and directions for future research. *Personnel Psychology*, 41(1), 63–105.
- Bandura, A., & Walters, R. H. (1977). *Social learning theory*. Prentice Hall.
- Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Sage Publications.
- Baştuğ, S., Yıldırım, E., & Öztürk, B. (2022). Global trends in port performance evaluation. *Transport Policy*, 108, 34–42. <https://doi.org/10.1016/j.tranpol.2021.12.006>
- Bhattacharya, M., Gibson, D. E., & Doty, D. H. (2005). The effects of flexibility in employee skills, employee behaviors, and human resource practices on firm performance. *Journal of Management*, 31(4), 622–640.
- Boyatzis, R. E., Goleman, D., & Rhee, K. (2000). Clustering competence in emotional intelligence: Insights from the Emotional Competence Inventory. In R. Bar-On & J. D. A. Parker (Eds.), *Handbook of emotional intelligence* (pp. 343–362). Jossey-Bass.
- Fauziyah, U. R., & Kuswinarno, R. (2024). The mediating role of employee skills in the training–performance relationship: A manufacturing sector study. *International Journal of Human Resource Studies*, 14(2), 88–103.
- Garavan, T. N., Watson, S., Carbery, R., & O'Brien, F. (2021). Strategic human resource development: Organizational development, effectiveness, and performance. *Human Resource Development Quarterly*, 32(1), 25–43.
- Liu, Y. (2020). The role of on-the-job training in enhancing job readiness among entry-level employees. *Journal of Workplace Learning*, 32(5), 309–321.
- Nyaupane, D., Morais, D. B., & Graefe, A. R. (2020). Examining the role of competencies in career advancement. *Journal of Human Resource and Sustainability Development*, 8(2), 75–85.
- Park, H. (2024). Human capital development through training and its impact on innovation. *Journal of Management Development*, 43(1), 15–30.
- Sabekti, R., & Setiawan, M. (2023). Bridging training and performance through skill enhancement: The mediating role of competency. *Human Resource Development International*, 26(4), 512–528.