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PROGRAM PERFORMANCE TRAINING AT MALAYSIAN ARMY ENGINEERING INSTITUTE: THE COMPREHENSIVE STUDY OF ORGANIZATIONAL COMMITMENT AND LEADERSHIP AMONG THE OFFICERS

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ABSTRACT

Technological improvements, evolving worker demographics, and heightened demands for global competitiveness in higher education make program performance training in Malaysia increasingly responsive. Consequently, training in the Malaysian Army (MA), overseen by the Army Training and Doctrine Command Headquarters, is designed to develop military troops that are proficient and adept at executing missions with efficacy and efficiency. The MA Engineering Institute (IJED) provided instruction to military soldiers integrated into the Royal Electrical and Mechanical Corps. To detect trends in the performance training program, assess the degree of continuous improvement methods at the IJED, and evaluate the efficacy of implemented programs, performance must be evaluated appropriately. This study aims to assess the levels of organizational commitment and leadership roles among IJED course participants in relation to the training program's performance, to enhance the efficiency of the MA military personnel. The reliability test results indicate that the Cronbach's alpha values for all items related to training program performance, organizational commitment, and leadership role position exceed 0.6. The results demonstrate that IJED has preserved its human resource skills, knowledge, and capabilities, ensuring that students can perform proficiently following their course or training at IJED. Consequently, IJED must enhance human resource development and infrastructure to achieve a high level of competence.

KEYWORDS: Program Performance Training, Organizational Commitment, And Leadership Role.

1. INTRODUCTION

Technological advancements, changing workforce demographics, and increased demands for global competitiveness of higher education render the trend of program performance training in Malaysia increasingly more responsive (Karim & Said, 2024). Malaysia has a significant impact on developing excellent leadership qualities and general soft skills. An area of growing emphasis in Malaysia is the development of 'soft skills' (Kearney et al., 2024). Subsequently, these are generic attributes that are not only sought after by employers but are also almost universally desired, encompassing not only communication and teamwork capabilities but also the ability to manage change, rather than emotional intelligence. An increasing number of companies are focusing more on leadership development programs, which organizations commit to in order to augment their employees' ability to participate in training programs. Such soft skills are vital for fostering collaboration and efficiency, especially in a multi-generational workforce. However, with the globalization and cultural diversity of the Malaysian workforce, training programs in Malaysia are gradually shifting their focus to cross-cultural competence (Armada & Armada, 2024). The need for training is significant for companies expanding into foreign markets, and offering training in cultural awareness, cultural sensitivity, and global business practices would be beneficial for employees. It helps employees work across different teams.

Naem (2022) reports that the Randstad Workmonitor 2022 poll in Malaysia was conducted from February 21 to March 13 of this year, with respondents aged 18 to 67 years. Approximately 97% of respondents in Malaysia expressed a strong desire for learning and professional development. Nevertheless, just 36 percent of survey participants in this nation said that their employers provided training opportunities. A recent survey conducted by Randstad, a leading human resources solutions agency, as part of its 2022 Workmonitor survey, reveals that over 80% of respondents consider training and development to be a vital component of their career advancement, thereby affirming its significance in achieving job satisfaction. Randstad conducts the survey. According to Fahad Naem, Country Director of Randstad Malaysia, employees in this nation recognize the importance of consistently participating in upskilling training programs as part of their professional development. It is essential to emphasize that enhancing employee abilities is a shared responsibility between the firm

and the employee. Organizations aiming to retain their most productive and appealing employees should provide workers with opportunities to enhance skills that enable them to excel in roles that deliver maximum value to the organization. When enquired about their training preferences, 61 percent of respondents expressed a desire to enhance their technical abilities, 60 percent aimed to improve their soft skills, and 54 percent indicated a willingness to expand their existing responsibilities. Naem asserts that organizations in the digital transformation age must invest in and cultivate a next-generation informed workforce.

The changing dynamics of technology and the world have increased the demand for proper human resource management in Military systems worldwide (Gerschberger et al., 2023; Karmila et al., 2024). Nevertheless, this budgetary tightness and uneven training consistency complicate achieving diverse ability levels. You need a more sophisticated military training system to do so. Training institutions are the backbone of any military, and as such, Ščavničar (2023) explained, the military needs them to modernize, and their role is unparalleled in the success of the military in providing quality education. They employ quality management techniques and infuse innovation to remain effective. Enhancing the effectiveness of institutional training benefits stakeholders in other institutions.

Training at the Malaysian Army (MA) level is the responsibility of the Army Training and Doctrine Command Headquarters (PLDTD, 2023), which aims to produce military personnel who are trained and capable of executing tasks effectively and efficiently through 16 CCorps Training Centers. PLDTDs are institutions that provide training to permanent members whose primary job is to detect and develop the latent faculties of individuals. Individual MA training involves skill training around the provision of resources for skill members. PLDTD headquarters' annual reports, upon appraisal of the conditions and needs of human energy resources, reveal that the quality of training at the MA Training Center needs improvement. The researcher chose the MA Engineering Institute (IJED) to examine the performance of the training program based on historical annual records. A breakdown over the five years from 2019 to 2023 shows that specific courses delivered at IJED require enhancement. The data on the percentage of students who received the highest marks in the classification of the Engineering Mechanics course for the automotive class 1 and mechanical honor class 1 show the minimum percentage of success in Engineering Mechanics (Jab

Arah JLJ, 2023).

To be eligible for engineering and related courses in Massachusetts, a student must achieve a score of 70 percent on a specific set of training score criteria (MD 7.0A TD Training, 2010). The first-year Automotive Engineering Mechanics course and the Mechanics Returning class 1 consistently achieve results below the minimal threshold of 70 percent, as mandated by MA, annually. Figure 1 illustrates the course accomplishments at IJED during the past five years as follows:

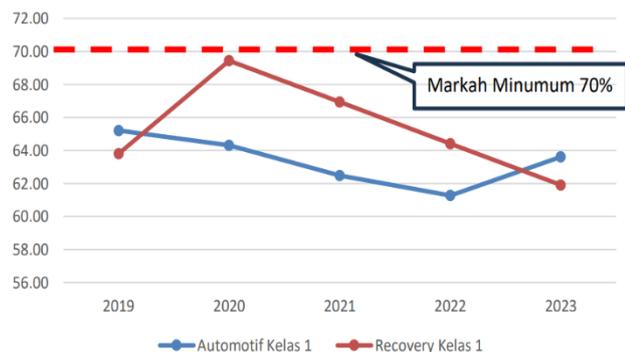


Figure 1: Graph of Course Participant Achievement Percentage for Marks 69 and .

Source: IJED Training Yearly Report from 2019-2023

In accordance with the capabilities mandated by MA, IJED's primary objective was to deliver training to military personnel incorporated into the Royal Electrical and Mechanical Corps (KJLJD), specialized in their respective fields. The KJLJD is responsible for maintaining all vehicles and equipment owned by MA to facilitate mobility and power in operations. This training is crucial as MA will ascertain the necessary vehicles and equipment to achieve 80% operational readiness (MA Preparedness Report, 2023).

However, to identify trends in the performance training program, the extent of continuous improvement practices at the IJED, and the performance of implemented programs, performance must be monitored accordingly. Coaching reinforcement after training is crucial for reinforcing learning and promoting the application of skills in the workplace. Employees are more likely to apply their new skills when supervisors promote and acknowledge the use of new capabilities. Factors ranging from what happens before and after a training regimen to the individual's motivation play a role in the effectiveness of training regimens. By focusing on employee readiness, material retention, effective facilitators, and strong buy-in and support from management and peers, organizations can significantly enhance the efficacy of their training. Understanding these factors enables companies to

develop more effective training programs, ultimately leading to improved employee performance and sustained long-term organizational success.

This study aims to examine the perceptions of military personnel, both current and former participants in IJED courses, regarding the performance of the training program. The objective of this study is to measure the levels of organizational commitment and leadership role among IJED course participants in relation to the training program's performance, to increase the efficiency of the MA military personnel.

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2. LITERATURE REVIEW

2.1 Program Performance Training

A comprehensive training program becomes a prerequisite to ensure better employee productivity and the accomplishment of the organization's overall objectives. According to their journal, Emon and Chowdhury (2023), personnel who are trained will develop their skills. Through training programs, the focus is on enhancing the technical and interpersonal skills of employees, thereby impacting their productivity and the overall quality of work. Refining these skills will enable individuals to perform operations more effectively, with greater efficiency and effectiveness, resulting in fewer mistakes and reduced rework (Agustian et al., 2023). Enhance your ability to adapt to change. Training programs help staff adapt to changing market trends, technological advancements, and industry standards. Regular training enables individuals to adapt more easily to changes within the organization, such as new regulations or technological advancements. It expedites and simplifies the adaptation process. Additionally, the development of the training program had a positive impact on both the morale and motivation of the workforce (Singh, 2023). A company should convey its commitment to both personal and professional development by offering a well-structured training program for its employees. That could boost morale, as it helps employees feel valued and motivates them to excel in their jobs. Moreover, Urme (2023) claims that the training strategy increased the employee retention rates. Employees who perceive growth opportunities in their job and the development of new skills tend to stay with the organization longer. They aid in professional development and contribute to the retention of workers, as they help key individuals stay in their roles. This training program has clearly demonstrated higher output and performance levels. Custom job-oriented training

enhances the productivity and efficiency of resources, enabling organizations to improve their output. Additionally, the effectiveness of the training program will be assessed excellently.

The existence of proficient and contemporary human capital gives a superior competitive edge to an organization (Nawaz *et al.*, 2024). Hiring skilled personnel will foster innovation and originality, distinguishing the organization from its competitors. Likewise, the transition to integrated training, particularly for specialised or hazardous roles, reduces the probability of workplace accidents and errors (Samarasinghe & Heenatigala, 2024). In summary, a comprehensive training program is crucial for developing a more skilled staff, enhancing job satisfaction, and promoting organizational values to ensure long-term success. A corporation can demonstrate its commitment to training by providing evidence of such dedication through prudent resource allocation, ongoing support, and alignment with broader organizational objectives. If you feel your organization is inclined to pursue this, the likelihood of employees participating in the programs, applying the newly acquired abilities, and contributing to the organization's success is at an all-time high. This is due to the organization's evident commitment, as observed by its employees. Comprehensive leadership engagement is essential for the effective development of a training program that encompasses initiation, production, sales, and management (Haber & Carmeli, 2023). The leaders of a company are accountable for fostering a growth culture by active engagement, effective communication, and prioritizing training. Consequently, it becomes easier to guarantee that the training programs are both effective and connected with the corporate goal.

2.2 Organization Commitment

A successful training program is unlikely to be achieved in just one or two days; thus, the duration must reflect the organization's commitment. Alkadash *et al.* (2023) elucidate that an organization's devotion imparts distinct concepts and objectives. A clear vision for training programs conveys to employees that the company is committed to their professional growth. Establishing precise training objectives that align with the organization's goals demonstrates to employees that their development and career progression are valued. Agustian *et al.* (2023) mention that one of the primary functions of an organization is to obtain the necessary funds and resources to ensure the quality of the services it provides. It encompasses investment in specialized

trainers, cutting-edge tools, contextually relevant material within a blended training framework, and infrastructure for both in-person and online training environments. Single-instance training is inadequate for a sustained and long-term strategy. For organizations that genuinely invest in their people, training transcends a singular event; it encompasses opportunities for continuous development and regular updates to maintain consistently sharp and relevant competence (Matshetshe, 2023). This strategy may also reflect a dedication to adjusting to changes in technology and business trends.

This particular organizational commitment initiative aims to ensure that workers foster a sense of engagement. Training is strongly encouraged, employees have time off for training, and they apply their learning in the workplace; yet, these businesses also endorse educational opportunities (Carranza & McKenzie, 2024; Koopmans *et al.*, 2012). When a business implements regulations permitting training during work hours or provides incentives for completion, it signifies a prioritization of learning. Consequently, the organization needs to demonstrate how it evaluates and monitors the impact of its activities. Furthermore, Alzoraiki *et al.* (2023) indicate that training programs are not only implemented by dedicated organizations but are also evaluated for their efficacy. They have a commendable results-oriented commitment towards training, systematically assessing its impact on staff performance, customer satisfaction, and organizational efficiency. This allows them to pinpoint areas for improvement during the training process. A company demonstrates its commitment to the development of its professionals by offering growth opportunities through training as a means of career advancement. Therefore,

H1: *There is a significant relationship between Organization Commitment toward program performance training*

2.3 Leadership Role

The efficacy of the training performance program depends on the quality of leadership provided (Putri & Hartono, 2023). These leaders are not only managing these initiatives but are also accountable for advancing them, therefore establishing the success criteria and determining their effectiveness in fulfilling their intended objectives. According to Riwayadi (2024), all individuals in leadership roles are accountable for establishing explicit objectives for the training program. Subsequently, implement the program and its developer in alignment with the organization's objectives, while clearly

communicating to all employees the necessity for their own self-improvement. Employees are motivated to comprehend how their personal development aligns with the overarching business mission when provided with this clarity through guidance.

Furthermore, Hernandez (2023) asserted that leadership plays a crucial role in allocating management resources and budget to ensure the production of effective training by adequately managing both financial and material resources. This entails investing in seasoned educators, high-quality material, and cutting-edge training systems. By allocating resources for training, executives convey the significance of this initiative throughout the organization.

Mamaqi (2023) demonstrates that companies often associate training with professional advancement by linking it to promotions, additional responsibilities, or leadership development opportunities. Moreover, the dedication of organizational members to nurturing an authentically dedicated learning culture further promotes such a culture. This encompasses not just structured programs but also experiential learning opportunities, information exchange, and support for employees who pursue more learning independently. Moreover, Javaid et al. (2023) emphasise the importance of employee participation and feedback for the company in 2023. When an organization solicits input from workers about their training requirements and the effectiveness of existing programs, it demonstrates the firm's commitment to tailoring training to meet the genuine needs of its workforce. This strategy will yield significant and relevant training sessions. A further indication of an organization's dedication is its investment in mentoring programs and peer learning opportunities. These projects will enhance training, enable knowledge transmission, and encourage collaborative learning.

Turyadi et al. (2023) assert that leadership is a critical factor to consider in maintaining an effective learning-oriented culture. Leaders with a strong commitment to learning and self-directed development create an environment where employees are eager to grow and receptive to training as a means of advancing their careers. The leader must establish a communication strategy that guarantees training is conducted and conveys a clear message to employees on the significance and advantages of training (Gafni et al., 2024). When workers get clear and consistent information, they recognize that training is not only a singular event

but an ongoing commitment to their growth (Javad, 2024). This thus signifies that both individual and organizational growth are enhanced. When leaders participate in training programs, they demonstrate effective communication skills that others can learn from and emulate. Employees are motivated to engage with training, which also demonstrates that training is esteemed at all organizational levels. Bakker et al. (2023) found that leaders who demonstrate a commitment to their personal growth instill this mindset in their subordinates. The leader is now assessing the training requirements and identifying existing skills deficiencies. Leaders possess distinct perspectives on talent deficiencies and the expectations they have for their teams. By evaluating these requirements, they can guide the creation of relevant and significant training materials. This addresses pertinent topics that are more relevant to them, so they possess greater significance and are more tailored to the individual.

Ultimately, leaders play a crucial role in establishing an environment that encourages employees to engage in proactive training (Khairy et al., 2023). According to Magige (2023), leaders can foster involvement by emphasizing training, providing flexibility, and addressing employees' concerns about participating in training. Training is not a singular event; leaders must provide ongoing feedback and coaching to staff to facilitate the application of new knowledge and reinforce the effective acquisition of skills. This type of pragmatic assistance is crucial for ensuring the applicability of training in everyday operations. The leader can evaluate the monitoring and impact assessment of training to identify deficiencies and implement adjustments to address staff requirements. Leaders must implement metrics to assess the efficacy of training initiatives. Through voucher-based presentations, lead workers can evaluate the ROI – the potential output – and analyze the findings, which include the growth in development or learning (Geerts, 2024).

Leadership entails creating new opportunities that facilitate personal and professional development. Leaders can facilitate the application of workers' learning by offering opportunities within their domain of responsibility. It offers genuine experience by encouraging individuals to step beyond their designated roles—through project assignments, cross-functional responsibilities, or heightened accountability—to utilize their newly acquired skills, thereby ensuring practical retention of knowledge while simultaneously contributing to the organization's growth. Leaders must

acknowledge and incentivize progress. A commendable method to foster a culture that prioritizes education is to acknowledge and reward employees who finish training programs. Leaders can do this by providing official acknowledgement, career advancement chances, or other incentives that encourage people to pursue continuous learning. Therefore,

H2: *There is a significant relationship between leadership*

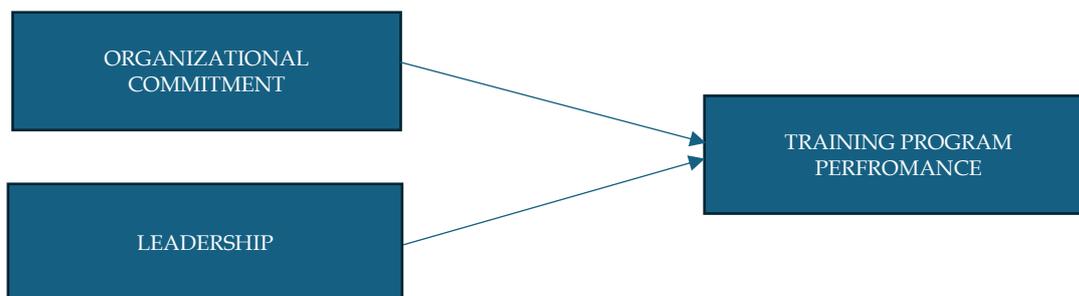


Figure 1: Research Framework.

towards program performance training

3. RESEARCH FRAMEWORK

This study aims to examine organizational commitment and leadership position as independent variables influencing training program performance, the dependent variable, among military personnel now undergoing or having completed training at IJED. Figure 1 illustrates the study framework.

4. METHODOLOGY

This study employs a quantitative method in analyzing the data from the questionnaire. The primary data used in this research are a questionnaire with three topics: demographic variables, organizational commitment, leadership, and training program performance. The sample consists of military personnel attending the military course at IJED. A random questionnaire was conducted using Google Forms for 4 months (from July 15, 2024, to October 31, 2024), with 70 respondents from IJED who completed the questionnaire. From the entire sampled population, only 59 individuals shared their insights, as they agreed to participate in the study and met the criteria for data analysis.

5. RESULTS

5.1 Descriptive Analysis

The questionnaire results indicated that the primary age demographic of respondents was 30-35 years, comprising 43.3% (26 respondents). The sample was taken from the IJED officers who have finished their studies. The population consists of approximately 70 military officers, with the majority of respondents, comprising 60.0% (36 people), aged 15-21 years, according to their duration of service. The majority of respondents hold a Secondary education, accounting for 71.6% (43 respondents), and make a monthly income ranging from RM1,201.00 to RM2,500.00. The data reveal that the respondents have a noteworthy and reliable level of maturity in their questionnaire replies.

Table 1: Descriptive Statistics.

Item	Mean	Std. Deviation	Skewness	Kurtosis
TTP1	3.69	.951	-.337	.392
TTP2	4.03	.909	-1.209	2.398
TTP3	3.72	.951	-.424	.499
TTP4	3.81	.880	-.876	1.824
TTP5	3.49	1.089	-.600	.012
TTP6	3.44	1.103	-.323	-.157
TTP7	3.78	.892	-1.053	1.871
TTP8	3.61	.891	-.345	.916
ORC1	3.44	.749	-.937	2.351
ORC2	3.20	.738	-.878	1.110
ORC3	3.47	.504	.108	-2.062
ORC4	4.22	.911	-1.592	3.509
ORC5	3.97	.850	-1.328	3.405
ORC6	3.81	.776	-1.491	4.448
ORC7	3.47	.847	-.554	1.246
ORC8	3.49	.796	-.927	1.878
ORC9	3.71	.671	-2.425	7.630
ORC10	3.66	.921	-1.453	2.759
ORC11	3.90	.904	-.954	1.793
ORC12	3.85	.887	-.918	1.865
ORC13	3.75	.939	-.495	.656
ORC14	4.00	.891	-1.213	2.614
ORC15	3.95	.955	-.881	1.156
LEA1	3.54	.916	-.617	.662
LEA2	3.59	.873	-1.019	1.393
LEA3	3.39	.831	-.290	-.687
LEA4	3.49	.679	-.310	-.150
LEA5	3.71	.720	-.648	.527
LEA6	3.58	.814	-.255	-.341
LEA7	3.47	.858	-.088	-.581
LEA8	3.19	1.090	-.385	-.166
LEA9	3.19	1.025	-.190	-.066
LEA10	3.17	.894	-.346	-.241
LEA11	3.47	.863	-.739	.976
LEA12	3.32	.937	-.437	-.115
LEA13	3.47	.953	-.481	.174

Table 1 presents descriptive statistics for three scales: Training Program Performance (TTP), Organization Commitment (ORC), and Leadership Role (LEA), derived from a Likert-scale survey with sample sizes ranging from 57 to 59. Mean values range from 3.17 to 4.22, with standard deviations between 0.504 and 1.103, indicating variability. The distributions show leptokurtic profiles with left skewness, suggesting generally favorable judgments but identifiable ceiling effects. For TTP, the range is from 3.69 to 4.03, exhibiting negative skewness. In contrast, ORC shows a range from 3.20 to 4.22, characterized by significant negative skewness and high kurtosis. LEA means are between 3.17 and 3.71, displaying similar trends. Overall, negative skewness indicates a tendency toward higher scores, and positive kurtosis suggests peaked distributions, necessitating non-parametric tests for analysis in wellbeing studies within higher education.

5.2 Reliability and Validity Analysis

The reliability test in Table 2 indicates that all items possess a Cronbach alpha (α) value greater than 0.6 (Creswell, 2021). According to Table 2, the Cronbach alpha values for each variable are all greater than 0.6. The highest Cronbach alpha

value is for Leadership Role, at 0.960, followed by Training Program Performance at 0.956, and lastly, Organization Commitment at 0.912.

Table 2: The Cronbach alpha value for each variable.

Variables	Cronbach Alpha (α)	Items
Training Program Performance	0.956	8
Organization Commitment	0.912	14
Leadership Role	0.960	13

i. Program Performance Training

As shown in Table 3, the Cronbach's Alpha value for Training Program Performance is greater than 0.6. There is a maximum score that is associated with the question. TPP6 - *I came up with creative solutions to new problems*, with a Cronbach Alpha value of 0.959; followed by TPP5 - *I recovered fast, after difficult situations or setbacks at work after attending the training program at IJED*, with a Cronbach Alpha value of 0.953; and TPP7 - *I was able to cope well with uncertain and unpredictable situations at work after attending the training program at IJED*, with a Cronbach Alpha value of 0.951. This suggests that military troops engaged in training at IJED may be able to function independently with minimal assistance from their superiors.

Table 3: Cronbach Alpha (α) For Training Program Performance.

Serial No	Item	Cronbach Alpha (α)
TPP1	I continued to update my job knowledge after attending the training program at IJED.	0.946
TPP2	I worked at keeping my job skills up to date after attending the training program at IJED.	0.949
TPP3	I have demonstrated flexibility after attending the training program at IJED.	0.948
TPP4	I was able to cope well with difficult situations and setbacks at work after attending the training program at IJED.	0.950
TPP5	I recovered quickly after difficult situations or setbacks at work, following the training program at IJED.	0.953
TPP6	I developed creative solutions to new problems.	0.959
TPP7	I was able to cope well with uncertain and unpredictable situations at work after attending the training program at IJED.	0.951
TPP8	I easily adjusted to changes in my work after attending the training program at IJED.	0.947

Adopted from: Koopmans et al. (2012)

ii. Organization Commitment

According to Table 4 shows the Cronbach Alpha (α) value for Organization Commitment more than 0.6 which the higher value is ORC2- *I feel significantly higher loyalty to KJLJD* with Cronbach Alpha (α) value is 0.915; followed by ORC1- *I am willing to put in a great deal of effort beyond that normally expected in order to help KJLJD be successful* and ORC8- *It would take a tremendous change in my present circumstances to cause me to leave KJLJD* with Cronbach Alpha (α) value is 0.912 respectively;

and ORC3- *I would accept almost any type of job assignment in order to keep working for KJLJD* with Cronbach Alpha (α) value is 0.911. This demonstrates that the military personnel who are presently doing training or courses at IJED, as well as those who have previously attended these institutions, have a high level of devotion to the leaders in the KJLJD and are consequently prepared to give their lives in order to ensure that the integrity of the Corps is maintained at the most significant possible level.

Table 4: Cronbach Alpha (α) For Organization Commitment.

Serial No	Item	Cronbach Alpha (α)
ORC1	I am willing to put in a great deal of effort beyond that normally expected in order to help KJLJD be successful	0.912
ORC2	I feel a great deal of loyalty to KJLJD.	0.915
ORC3	I would accept almost any type of job assignment to continue working for KJLJD.	0.911
ORC4	I find that my values and the KJLJD's values are very similar.	0.903
ORC5	I am proud to tell others that I am part of KJLJD.	0.905
ORC6	I could just as well be working for a different company as long as the type of work was similar.	0.908
ORC7	KJLJD really inspires the very best in me in the way of job performance.	0.907
ORC8	It would take a huge change in my present circumstances to cause me to leave KJLJD.	0.912
ORC9	I am extremely glad that I chose KJLJD to work for over others I was considering at the time I joined.	0.908
ORC10	There is too much to be gained by sticking with this organization indefinitely.	0.907
ORC11	Often, I find it easy to agree with this company's policies on important matters relating to its employees.	0.906
ORC12	I really care about the KJLJD.	0.899
ORC13	For me, this is the best of all possible Corps for which to work.	0.899
ORC14	Deciding to work for KJLJD was the right decision on my part.	0.899

Adopted from: Kanning and Hill (2013)

iii. Leadership Role

According to Table 5 shows the Cronbach Alpha (α) value for Leadership Role more than 0.6 which the higher value is LDR6- *My leader supports me in the work process when I have difficulties after attending the training program at IJED* with Cronbach Alpha (α) value is 0.962; followed by LDR3- *My leader hands over most of the planning, execution and checking of my work to me after attending the training program at IJED* and LDR9- *My leader searches for solutions to conflicts after attending the training program at IJED* with Cronbach Alpha (α) value is 0.959 respectively; and LDR12- *My*

leader is open and honest with me after attending the training program at IJED with Cronbach Alpha (α) value is 0.957. This demonstrates that military personnel currently undergoing training or courses at IJED, as well as those who have previously attended IJED for training or courses, believe that their commanders are highly supportive of efforts to develop job skills. Additionally, their executives work closely together to resolve any issues that arise, benefiting the organization. This is part of their commitment to the organization.

Table 5: Cronbach Alpha (α) For Leadership Role.

Serial No	Item	Cronbach Alpha (α)
LDR1	My leader assigns me too much responsibility.	0.955
LDR2	My leader assigns me tasks that require me to use various skills and capabilities after attending the training program at IJED.	0.955
LDR3	My leader hands over most of the planning, execution, and checking of my work to me after I attend the training program at IJED.	0.959
LDR4	My leader incorporates my ideas and suggestions after I attend the training program at IJED.	0.955
LDR5	My leader demonstrates trust in my abilities and actions after I attended the training program at IJED.	0.955
LDR6	My leader supports me in the work process when I have difficulties after attending the training program at IJED.	0.962
LDR7	My leader clarifies who is responsible for what after attending the training program at IJED.	0.955
LDR8	My leader lets me know how well I do my job after attending the training program at IJED.	0.954
LDR9	My leader searches for solutions to conflicts after attending the training program at IJED.	0.959
LDR10	My leader encourages employees to support one another after attending the training program at IJED.	0.956
LDR11	My leader supports my career advancement after I attend the training program at IJED.	0.955
LDR12	My leader is open and honest with me after attending the training program at IJED.	0.957
LDR13	My leader inquired about my wellbeing after I attended the training program at IJED.	0.954

Source: Adopted from: Vincent-Höper and Stein (2019)

5.3 To Assess the Program Performance Training Levels of IJED

This study examines the perception of program performance training factors that influence training

program performance, specifically organizational commitment and leadership role, as independent variables among IJED military personnel attending the course, as shown in Table 6.

Table 6: Pearson Correlation.

	TPP	ORC	LEA
Training Program Performance (TPP)	1.000	.794**	.749**
Organization Commitment (ORC)	.794**	1.000	.693**
Leadership Role (LEA)	.749**	.693**	1.000

Note: **. Correlation is significant at the 0.01 level (2-tailed).

The correlation matrix reveals strong positive relationships among Training Program Performance (TPP), Organizational Commitment (ORC), and Leadership Role (LEA) among IJED military personnel, with significant coefficients at $p < 0.01$. TPP exhibits a high correlation with ORC ($r = 0.794$) and with LEA ($r = 0.749$), suggesting that increased commitment and leadership involvement can significantly enhance program outcomes. Additionally, a robust correlation of 0.693 between ORC and LEA indicates these factors mutually reinforce one another. The notable r values (0.693-0.794) correspond to large effect sizes, implying that leadership and commitment account for 56-63% of the variance in TPP (equivalent r^2 values). In military training contexts, such as IJED, enhancing ORC through focused interventions could lead to improved performance outcomes. Recommendations include prioritizing leadership training to strengthen the ORC, given the identified bidirectional influences. Future research should consider exploring mediation effects (e.g., LEA •

ORC → TPP) through regression analysis to gain a deeper understanding of the causal relationships.

5.4 To Assess the Significance of Program Performance Training in IJED

Tables 7 and 8 show that the regression model accounts for 77.9% of the variability in Training Program Performance ($R^2 = 0.779$), identifying Organizational Commitment and Leadership as significant predictors among IJED military personnel. An adjusted R^2 of 0.771 suggests a robust model fit after considering the predictors, while a standard error of 3.249 indicates moderate prediction accuracy. A significant F-change of 98.880 ($df = 2, 56, p < 0.001$) demonstrates the model's superiority over a constant-only baseline. The high multiple correlation coefficient ($R = 0.883$) indicates a strong relationship between the predictors and the outcome. Additionally, a Durbin-Watson statistic of 2.052 indicates that there is no autocorrelation in the residuals, thereby validating the model assumptions. The findings emphasize that Leadership and Organizational Commitment collectively enhance training outcomes, corroborating previous studies with correlation coefficients ranging from 0.749 to 0.794. Recommendations include focusing on these factors in military education interventions to improve performance, while also cautioning against potential issues of multicollinearity due to the interconnections between the predictors.

Table 7: Model Summary.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.883 ^a	.779	.771	3.24902	.779	98.880	2	56	.000	2.052

Note: a. Predictors: (Constant), Leadership, Organizational Commitment

b. Dependent Variable: Training Program Performance

Table 8: Coefficients.

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1	(Constant)	-4.132	2.431		-1.700	.095
	ORC	.379	.052	.586	7.335	.000
	LEA	.282	.058	.391	4.888	.000

Note: a. Dependent Variable: Training Program

Organizational Commitment (ORC) and Leadership (LEA) are both significant predictors of Training Program performance among IJED military officers, with ORC proving to have a stronger relative influence. Specifically, the unstandardized coefficient for ORC is 0.379 ($SE = 0.052$), indicating that a 1-unit increase in ORC results in a 0.379-unit increase in Training Program Performance (TPP), with a significant t-value of 7.335 ($p < 0.001$). In contrast, LEA has an unstandardized coefficient of 0.282 ($SE = 0.058$), resulting in a similar but smaller

directional effect, as supported by a t-value of 4.888 ($p < 0.001$).

The standardized betas reinforce this finding, showing a beta of 0.586 for ORC compared to 0.391 for LEA, suggesting that a 1 standard deviation increase in ORC results in a 0.586 standard deviation increase in TPP, thereby highlighting the stronger impact of ORC. Furthermore, the constant is -4.132 ($p = 0.095$), indicating a marginal baseline without predictors. Overall, both variables play substantial roles in influencing training outcomes, aligning with a prior R^2

of 0.779, which underscores the importance of prioritizing commitment-building in military training for improved performance outcomes. Therefore

H1: *There is a significant relationship between Organization Commitment toward program performance training (ACCEPTED)*

H2: *There is a significant relationship between leadership towards program performance training (ACCEPTED)*

6. DISCUSSION OF FINDINGS

6.1 Holistic View in Comparison With Past Studies

This study on IJED military training performance correlates significantly with literature on organizational commitment (ORC) and leadership role (LEA) as essential factors for training efficacy, particularly in the military and higher education sectors in Malaysia. However, it notes a lack of a foundational theory, such as Social Exchange Theory (SET), for comprehensive synthesis. Correlations and regression analyses demonstrate high alignment with previous research, evidencing a correlation (TPP-ORC: 0.794; TPP-LR: 0.749) and a regression $(R^2 = 0.779)$ with betas of 0.586 and 0.391. These findings align with studies by Karmila *et al.* (2024) and Ščavničar (2023), which focus on HR demands and modernization in Malaysian Army training institutions. Furthermore, Naeem (2022) indicates that 97% of the Malaysian workforce seeks upskilling, with a particular emphasis on soft skills, which aligns with the study's focus on ORC. The research reinforces the conclusions of others that training enhances adaptability and productivity, supporting hypotheses H1 and H2.

Nevertheless, discrepancies arise, particularly in the emphasis on LEA's resource allocation in dynamic environments as presented by Putri and Hartono (2023) and Riwayadi (2024). This study highlights ORC's greater impact, evidenced by a stronger beta (0.586 vs. 0.391), which may stem from IJED's specific focus on engineering despite low pass rates during 2019-2023. Global comparisons, such as those by Haber and Carmeli (2023), report similar (R^2) values (~0.70-0.80) for LEA-ORC training relationships within civilian firms; however, military budget constraints complicate these dynamics. Finally, the absence of mediation tests in this study, such as LEA→ORC→TPP, limits the depth of causal analysis compared to more comprehensive models presented in studies like Alkadash *et al.* (2023).

6.2 Policy Implications

Malaysian military policymakers are urged to enhance organizational commitment (ORC) and

leadership effectiveness (LEA) in training reforms at institutions such as IJED to improve engineering program performance, aiming for an 80% operational readiness rate amid pass rates below 70% for the period 2019-2023. Budget policies should allocate 10-15% of training funds for LEA development, supporting frameworks that have previously demonstrated increased commitment in the Territorial Army. Additionally, training programs should incorporate soft skills and cross-cultural training, overseen by PLDTD, while utilizing metrics such as ROI tracking and regression analysis to identify effective interventions.

6.3 Limitations of the Study

This study is limited to Officers who have completed their Young Officers Career Course at IJED between 2020 and 2024. However, the results of this study may apply to all levels of management in the IJED, enhancing their training capabilities, including staff and instructor policies.

6.4 Suggestions for Future Research

Expand this study to explore innovative culture among instructors. The innovation culture may derive from IJED to become more competitive and gain prestige as an institute that produces mechanical and electrical engineers for the Malaysian Army.

7. CONCLUDING REMARKS

The development of an organization's human resources has become a crucial aspect, and an organization must prioritize its human resource development to continue demonstrating success. There is a correlation between the ability to develop human resources effectively and the capacity to enhance the organization's resilience and market competitiveness more sustainably. Additionally, the MA via the KJLJD program is not left behind in order to improve the effectiveness of human resources through training. The degree to which the training program achieves the intended level of performance is, nonetheless, a crucial consideration. As a result, research was conducted at IJED, a branch of the KJLJD training institution, to produce mechanical and electrical engineers to fulfill the MA requirements.

The study measured the performance of the training program by analysing how training program participants perceived their commitment to the organization and their position as leaders. After conducting a reliability investigation, it was found that the Cronbach alpha value for each of the items examined was greater than 0.6. The study also

examines the predictors of Training Program Performance (TPP) among IJED military personnel, revealing that Organizational Commitment (ORC) and Leadership (LEA) significantly enhance TPP, evidenced by a regression model that explains 77.9% of variability. ORC demonstrates a more substantial influence ($\beta = 0.586$; $p < 0.001$) compared to LEA ($\beta = 0.391$; $p < 0.001$). The findings align with existing literature, supporting hypotheses H1 and H2, which suggest the importance of these factors. Recommendations emphasize the importance of prioritizing commitment-building in military training to enhance performance.

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REFERENCES

- Agustian, K., Pohan, A., Zen, A., Wiwin, W., & Malik, A. J. (2023). Human resource management strategies in achieving competitive advantage in business administration. *Journal of Contemporary Administration and Management (ADMAN)*, 1(2), 108-117. <https://doi.org/10.61100/adman.v1i2.53>
- Alkadash, T. M., Nagi, M., Ateeq, A. A., Alzoraiki, M., Alkadash, R. M., Nadam, C., Allaymoun, M., & Dawwas, M. (2023). The effects of leadership style on employee sustainable behaviour: a theoretical perspective. In *Artificial Intelligence and Transforming Digital Marketing* (pp. 205-213). Springer. https://doi.org/10.1007/978-3-031-35828-9_19
- Alzoraiki, M., Ahmad, A. R., Ateeq, A. A., Naji, G. M. A., Almaamari, Q., & Beshr, B. A. H. (2023). Impact of teachers' commitment to the relationship between transformational leadership and sustainable teaching performance. *Sustainability*, 15(5), 4620. <https://doi.org/10.3390/su15054620>
- Armada, A. R., & Armada, M. S. (2024). Skill Development Journey through Hospitality: An In-Depth Study of Trainee Experiences in Malaysia. *International Tourism and Hospitality Journal*, 7(1), 1-18. <https://doi.org/10.37227/ITHJ-2024-4-3161>
- Bakker, A. B., Hetland, J., Olsen, O. K., & Espevik, R. (2023). Daily transformational leadership: a source of inspiration for follower performance? *European Management Journal*, 41(5), 700-708. <https://doi.org/10.1016/j.emj.2022.04.004>
- Carranza, E., & McKenzie, D. (2024). Job training and job search assistance policies in developing countries. *Journal of Economic Perspectives*, 38(1), 221-244. <https://doi.org/10.1257/jep.38.1.221>
- Creswell, J. W. (2021). *A concise introduction to mixed methods research*. SAGE publications.
- Emon, M. M. H., & Chowdhury, M. (2023). Assessing the influence of training and skill development initiatives on employee performance: A case study of private banks in Dhaka, Bangladesh. *Malaysian Business Management Journal*, 2(2), 10.26480. <https://doi.org/10.26480/mbmj.02.2023.74.79>
- Gafni, R., Aviv, I., Kantsepolsky, B., Sherman, S., Rika, H., Itzkovich, Y., & Barger, A. (2024). Objectivity by design: The impact of AI-driven approach on employees' soft skills evaluation. *Information and software technology*, 170, 107430. <https://doi.org/10.1016/j.infsof.2024.107430>
- Geerts, J. M. (2024). Maximizing the impact and ROI of leadership development: A theory-and evidence-informed framework. *Behavioral Sciences*, 14(10), 955. <https://doi.org/10.3390/bs14100955>
- Gerschberger, M., Ellis, S. C., & Gerschberger, M. (2023). Linking employee attributes and organizational resilience: An empirically driven model. *Journal of Business Logistics*, 44(3), 407-437. <https://doi.org/10.1111/jbl.12337>
- Haber, L., & Carmeli, A. (2023). Leading the challenges of implementing new technologies in organizations. *Technology in Society*, 74, 102300. <https://doi.org/10.1016/j.techsoc.2023.102300>
- Hernandez, C. B. (2023). *Funding the Mission: The Role of Leadership in Mission-Centered Budget Management* [Doctoral dissertation, California Lutheran University].
- Javaid, M., Haleem, A., & Singh, R. P. (2023). A study on ChatGPT for Industry 4.0: Background, potentials,

Consequently, this demonstrates that the three components, namely the performance of the training program, the dedication of the organization, and the role of the leadership, have a significant influence on IJED in terms of increasing the performance of military personnel. In light of this, IJED can enhance the pre-start training program by enhancing both the curriculum and the training facilities. It is also essential to train highly talented and committed teachers to ensure that the quality of education is of the highest possible standard, thereby generating competent mechanical and electronic engineers with a master's degree.

- challenges, and eventualities. *Journal of Economy and Technology*, 1, 127-143. <https://doi.org/10.1016/j.ject.2023.08.001>
- Kanning, U. P., & Hill, A. (2013). Validation of the Organizational Commitment Questionnaire (OCQ) in six languages. *Journal of business and media psychology*, 4(2), 11-20.
- Karim, A., & Said, F. (2024). Discussion on Malaysia's globalization journey from resource-based economy to global player. *Journal of Business and Economic Options*, 7(1), 29-38. <https://resdojournals.com/index.php/jbeo/article/view/252>
- Karmila, T., Romauli, R., Rahmawati, R., & Hakim, A. (2024). The Influence of Organizational Culture on the Performance Efforts of Pusdatin Employees to Support the Main Tasks of Pusdatin Kemhan. *Dinasti International Journal of Management Science (DIJMS)*, 5(3). <https://doi.org/10.31933/dijms.v5i3.2203>
- Kearney, J., Bond-Barnard, T., & Chugh, R. (2024). Soft skills and learning methods for 21st-century project management: a review. *International Journal of Information Systems and Project Management*, 12(4), 2. <https://aisel.aisnet.org/ijispm/vol12/iss4/2>
- Khairy, H. A., Liu, S., Sheikhsouk, S., El-Sherbeeney, A. M., Alsetoohy, O., & Al-Romeedy, B. S. (2023). The effect of benevolent leadership on job engagement through psychological safety and workplace friendship prevalence in the tourism and hospitality industry. *Sustainability*, 15(17), 13245. <https://doi.org/10.3390/su151713245>
- Koopmans, L., Benaards, C., Hildebrandt, V., Van Buuren, S., Van der Beek, A. J., & De Vet, H. C. (2012). Development of an individual work performance questionnaire. *International journal of productivity and performance management*, 62(1), 6-28. <https://doi.org/10.1108/17410401311285273>
- Magige, T. (2023). *Assessment of the Factors Affecting Training Programs on Employees' Performance in an Organization* Institute of Accountancy Arusha (IAA)]. <http://dSPACE.iaa.ac.tz:8080/xmlui/handle/123456789/2261>
- Mamaqi, E. (2023). The role of trainings in the development and enhancement of work performance in the public and private sector. *Interdisciplinary Journal of Research and Development*, 10(1 S1), 107-107. <https://doi.org/10.56345/ijrdv10n1s115>
- Matshetshe, M. G. (2023). *The assessment of employees' training and development programmes in a selected South African municipality* North-West University (South Africa)].
- Naeem, F. (2022). Ramai Responden Pilih Pembangunan Kerjaya, [MyMetro]. <https://www.hmetro.com.my/bisnes/2022/09/877560/ramai-responden-pilih-pembangunan-kerjaya>
- Nawaz, R., Hina, M., Sharma, V., Srivastava, S., & Farina Briamonte, M. (2024). Unleashing knowledge arbitrage potential: empowering startups through knowledge management. *Journal of Knowledge Management*, 28(11), 221-254. <https://doi.org/10.1108/JKM-06-2023-0503>
- Putri, D. K. A., & Hartono, A. (2023). Training, leadership style, and work environment on employee performance: The role of work motivation. *Jurnal Fokus Manajemen Bisnis*, 13(2), 197-214.
- Riwayadi, E. (2024). The leadership importance in international organization for standardization (ISO) implementation: a literature review. *Leadership*, 3(1).
- Samarasinghe, H., & Heenatigala, S. (2024). Insights from the field: A comprehensive analysis of industrial accidents in plants and strategies for enhanced workplace safety. *arXiv preprint arXiv:2403.05539*. <https://doi.org/10.48550/arXiv.2403.05539>
- Ščavničar, D. (2023). Streamlining the delivery of military education through the distance learning method. *Strategos: Znanstveni časopis Sveučilišta obrane i sigurnosti „Dr. Franjo Tuđman“ i Hrvatskog vojnog učilišta „Dr. Franjo Tuđman“*, 7(1), 33-69. <https://hrcak.srce.hr/305561>
- Singh, A. (2023). Impact of training and development as a vital instrument for boosting morale and productivity among young employees. *International Journal of Management, Public Policy and Research*, 2(4), 11-17. <https://doi.org/10.55829/ijmpr.v2i4.182>
- Turyadi, I., Zulkifli, Z., Tawil, M. R., Ali, H., & Sadikin, A. (2023). The role of digital leadership in organizations to improve employee performance and business success. *Jurnal Ekonomi*, 12(02), 1671-1677. <https://www.ejournal.seaninstitute.or.id/index.php/Ekonomi/article/view/2001>
- Urme, U. N. (2023). The impact of talent management strategies on employee retention. *International Journal of Science and Business*, 28(1), 127-146. <https://doi.org/10.58970/IJSB.2209>
- Vincent-Höper, S., & Stein, M. (2019). The role of leaders in designing employees' work characteristics: validation of the health-and development-promoting leadership behavior questionnaire. *Frontiers in psychology*, 10, 1049. <https://doi.org/10.3389/fpsyg.2019.01049>