



The Effect of Training, Work Environment, Esprit de Corps, and Competence on Combat Readiness

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Abstract

Personnel combat readiness is the main focus of the Indonesian Air Force units in carrying out their main tasks. Air Squadron 15 (Iswahjudi Air Force Base) is one of the Indonesian Air Force units that is expected to have maximum personnel combat readiness, but in reality, the combat readiness of personnel in this unit is not yet optimal. Personnel combat readiness can be influenced by various factors. This study used a quantitative method with a sample size of 59 people, and data analysis was carried out using path analysis techniques. The results of the study showed that training has a direct positive effect on combat readiness, the work environment had a direct positive effect on combat readiness, and environmental factors had a direct positive effect on combat readiness. Esprit de corps had a direct positive effect on combat readiness, and competence had a direct positive effect on combat readiness. Furthermore, training had a direct positive effect on competence, the work environment had a direct positive effect on competence, esprit de corps had a direct positive effect on competence, and training had a direct positive effect on esprit de corps. It is recommended that Air Squadron 15 improve the combat readiness of personnel by increasing and improving the training process, work environment, esprit de corps, and personnel competence. In addition, further research is needed on the combat readiness of personnel by considering other relevant aspects. It is recommended that the Indonesian Air Force leaders in air units increase the combat readiness of their personnel by adding/improving the variables that influence it.

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INTRODUCTION

The Indonesian Air Force is a cornerstone of the nation's defense architecture, tasked with safeguarding national airspace, enforcing air law, and developing designated

air-defense regions. A recent legal study on the realignment of the Jakarta-Singapore Flight Information Region in 2022 underscores that these strategic responsibilities are channelled through a tiered command system that reaches down to individual air squadrons so that grand strategy decisions are translated into base-level action (Putro et al., 2024).

Air Squadron 15 (Iswahjudi Air Force Base), part of the Indonesian Air Force, must plan and conduct air-defense, strike, and support missions. Its success, therefore, hinges on modern matériel and highly trained, motivated personnel. Survey work on other Indonesian squadrons shows that leadership, systematic training, and motivation expressed through unit-level management practice significantly raise operational performance and readiness (Bintang et al., 2023). In the closing of the Rajawali Perkasa Exercise, it was stated that the exercise not only evaluated doctrine and tactics, but also tested the aspects of professionalism and synergy of the Indonesian Air Force soldiers. This emphasized the role of effective leadership and systematic training in building combat readiness (TNI AU, 2025b).

Meanwhile, contemporary military-health research defines combat readiness as the integrated capacity of a unit to accomplish assigned missions, combining physical conditioning, psychological resilience, and mission-specific skills (Tornero-Aguilera et al., 2024). Systems and operations research further emphasize that readiness is also critically dependent on logistics, equipment maintenance, sustainable command processes, and rapid feedback mechanisms. Elvemo (2025) highlights that logistics resilience, characterized by reliable supply, equipment upkeep, and adaptive command, is a foundational prerequisite for maintaining operational performance in dynamic environments. In line with this, Norrman & Jansson (2021) demonstrate that flexibility, real-time visibility of logistics data, and effective inter-unit communication are central to ensuring continuity and readiness in military operations. Stentoft & Mikkelsen (2025) further note that adaptive command systems and timely feedback significantly improve a unit's response to changing operational conditions, especially within integrated military logistics.

Beyond materiel and process, readiness is amplified when personnel believe in their collective capability, making cohesion and collective efficacy critical multipliers. Readiness is further boosted when personnel share a strong belief in their collective capability. A Portuguese Military-Academy study shows that team cohesion and collective efficacy (often labelled *esprit de corps*) are powerful predictors of leadership performance and decision-making under pressure (Rosinha, 2025). Such collective beliefs are strengthened by repeated joint training, shared goals, and credible leadership signals that align individual roles with mission outcomes. In practice, deliberately cultivating cohesion through scenario-based team drills, cross-flight debriefs, and peer coaching translates into faster coordination, fewer errors under stress, and more reliable mission execution.

Taken together, peer-reviewed evidence from the past five years indicates that the Indonesian Air Force's air-sovereignty mission (reinforced by the 2022 FIR agreement) cascades down to squadron level; unit readiness is therefore pivotal for national-level objectives. Combat readiness blends training quality, physical and psychological fitness, equipment status, and a cohesive team culture. *Esprit de corps* amplifies the impact of training and resources, translating competence into dependable mission performance. Understanding these interlocking factors will allow Air Squadron 15 and the wider Indonesian Air Force to prioritise human resource and capability development strategies that maximise operational effectiveness.

According to Tornero-Aguilera et al. (2024), combat readiness is a state where a military unit is fully prepared, both in terms of personnel and logistics, to conduct operations swiftly and accomplish all assigned missions effectively. The effectiveness of enforcing air sovereignty and national defense missions is inseparable from continuous efforts to maintain and enhance personnel combat readiness across all levels of the Indonesian Air Force. Combat readiness has become a key parameter for modern military organizations in facing diverse threats. Military readiness is determined by a unit's ability to anticipate and overcome threats, requiring not only optimal equipment readiness but also the preparedness of its personnel. The readiness of both equipment and personnel must be carefully managed through recruitment, education, utilization, maintenance, and retirement processes at every level of service (Pace et al., 2025a).

Ideally, personnel combat readiness should meet the highest/optimal operational requirements. However, preliminary research indicates a significant gap, as the personnel combat readiness level of Air Squadron 15 has not yet reached an optimal standard. This condition has led to delays in mission execution, reduced operational effectiveness, and disruptions to air-sovereignty enforcement, potentially creating risks for national defense objectives. This is consistent with Aprianto's study, which found that the personnel combat readiness of Air Squadron 15 has not yet reached an optimal level. His results show that the competence and work environment have direct effects on combat readiness, with effects are 0.881 and 0.72, and contributions are 77.61% and 51.8% (Aprianto, 2018). Given the gap between desired and actual conditions, this issue is intriguing and warrants further research.

Therefore, the research problem addressed in this study is the suboptimal combat readiness of Air Squadron 15 (Iswahjudi Air Force Base) personnel, specifically examining the extent to which training, work environment, and esprit de corps influence combat readiness and the mediating role of competence. Several factors influence combat readiness. Recent studies identify competence and work environment as key determinants (Pace et al., 2025). Thus, this research aims to measure the direct and indirect effects of training, work environment, esprit de corps, and competence on the combat readiness of personnel from Air Squadron 15.

Training is widely recognized as a principal activity for enhancing military knowledge, skills, and abilities. Modern training covers not only technical-tactical aspects, but also soft skills like teamwork, resilience, and leadership (Smith et al. 2023). Training programs are systematically designed to change behavior, knowledge, and motivation, ensuring alignment between personnel attributes and operational needs. Well-structured training has a proven significant impact on improving job performance and overall unit readiness (Sekel et al., 2023). The 2025 Yudha Space Exercise was positioned as essential to maintain baseline proficiency, improve advanced skill sets, and test them under realistic conditions. Building on that logic, the exercise highlighted that coordinated leadership and a deliberately staged training plan are prerequisites for optimal readiness (TNI AU, 2025a)

The work environment is also a factor that can affect combat readiness. Work environment refers to the physical, psychological, and organizational conditions under which personnel operate. A supportive work environment, including adequate facilities, positive leadership, and good interpersonal relations, enhances satisfaction and productivity, thereby increasing combat readiness (Pace et al., 2025b). It also nurtures motivation, performance, and well-being, which are crucial for military effectiveness. Another factor that can influence combat readiness is esprit de corps. Esprit de corps, or collective morale, is a critical factor in military organizations, fostering unity, loyalty, and

mutual support. Recent literature shows that high esprit de corps strengthens cohesion, inspires commitment to shared goals, and improves operational performance (Brandebo et al., 2022). Esprit de corps develops through shared experience, trust, and commitment, sustaining motivation in challenging missions (Rosinha, 2025).

A factor that can directly influence combat readiness and also act as a moderating factor is competence. Competence encompasses the knowledge, skills, attitudes, and behaviors needed for effective duty performance. It is a key driver of individual and collective military effectiveness. According to Smith et al. (2023), competence includes technical proficiency, adaptability, critical thinking, and decision-making, all of which directly affect combat readiness. Qurotalain & Fitriyah (2022) define competence as a person's ability based on knowledge, skills, and supported by work attitudes and their implementation in carrying out work or tasks in the workplace that are guided by work requirements set. Competence is shaped by ongoing training and a supportive work environment (Sekel et al., 2023). Military competence includes knowledge, physical and cognitive skills, attitudes, and behaviors that allow for successful mission completion, and is shaped by ongoing training and adaptation (Tornero-Aguilera et al., 2024).

Empirical studies from Pace et al. (2025) and Brandebo et al. (2022) show that both competence and work environment significantly impact combat readiness, either as direct predictors or mediating variables. Notably, competence mediates the influence of training, work environment, and esprit de corps on overall personnel combat readiness. Therefore, this study specifically aims to assess the extent to which training, work environment, and esprit de corps contribute to the combat readiness of personnel, as well as to explore the mediating role of competence in these relationships. Understanding these factors is crucial for optimizing human resource management strategies and improving the operational effectiveness of Air Squadron 15 (Iswahjudi Air Force Base). The urgency of this inquiry lies in the squadron's continuous demand to generate qualified sorties under tight resource and safety constraints at one of the Indonesian Air Force (TNI AU)'s principal operating bases on Java, making this locus strategically decisive for near-term readiness gains. Recent empirical research has demonstrated that targeted training, a supportive work environment, and strong esprit de corps significantly enhance combat readiness, especially when competence acts as a mediating factor between these variables and overall unit performance (Pace et al., 2025; Brandebo et al., 2022; Smith et al., 2023).

This study addresses the existing knowledge gap by clearly assessing how training, work environment, and esprit de corps contribute to combat readiness of personnel, with special emphasis on the mediating role of competence, thereby offering concrete insights for improving operational effectiveness.

METHODS

This study used quantitative methods and a survey design. Quantitative research methods can be interpreted as research methods based on the philosophy of positivism, used for research on certain populations or samples, data collection techniques using research instruments, and data analysis is quantitative/statistical, with the aim of testing predetermined hypotheses (Sugiyono, 2018). Researchers used quantitative methods to measure the effect of training, work environment, esprit de corps, and competence variables on combat readiness variables. The survey design was carried out by distributing questionnaires to the respondents. The population in this study was 144 personnel of the Air Squadron 15 (Iswahjudi Air Force Base). The respondent profile, consisting of military rank and age, is shown in Table 1.

Table 1. List of Respondent Profiles (Air Squadron 15 Iswahjudi Air Force Base, 2024)

No.	Military Rank	Age	Number of Personnel
1.	Officer	25 – 45 year	33
2.	Non-Commissioned Officer	24 – 49 year	77
3.	Private	22 – 35 year	34
			144

The research sample was determined by proportionate stratified random sampling using the Slovin formula:

$$n = \frac{N}{Ne^2 + 1}$$

Where:

n = Desired sample size

N = Total population by the study area

e = estimation sample error (1%).

Sample size:

$$n = \frac{N}{Ne^2 + 1} = \frac{144}{144 \times 0,1^2 + 1} = \frac{144}{2,44} = 59 \text{ people}$$

The sample for each military rank stratum was taken proportionally, which was calculated in the following way:

$$\begin{array}{lcl} \text{Officer} & = & 33/144 \times 59 = 13 \\ \text{Non-Commissioned Officer} & = & 77/144 \times 59 = 32 \\ \text{Private} & = & 34/144 \times 59 = 14 \\ \hline \text{Totally} & = & 59 \text{ people} \end{array}$$

Data was collected using a research instrument in the form of a questionnaire. The research instrument for each variable (Y, X1, X2, X3, and X4) was created and developed with the following steps: (1) formulating a conceptual definition, (2) formulating an operational definition, (3) creating a grid instrument, (4) conducting a trial instrument, (5) test the validity and the reliability of the instrument.

The data analysis technique used descriptive and inferential statistics, and used path analysis. Path analysis is an extension of linear regression that allows researchers to analyze causal relationships involving more than one independent variable and intermediary variable (mediator), so that the direct and indirect influence of each variable can be determined (Santoso, 2021). Path analysis aims to measure how much direct and indirect influence one or more independent variables have on the dependent variable, either through the intervening variable or without going through the variable (Riduwan & Sunarto, 2020). Size analysis to obtain an overview of the distribution of scores on each variable studied, including data presentation, central measure, and distribution. Meanwhile, inferential/causal analysis is used for hypothesis testing. Hypothesis testing was conducted to determine the direct and indirect effects between variables. The proposed hypothesis will be carried out through the calculation of the coefficient value and the significance of the relationship and influence between the variables studied.

Based on the study and development of the theory, the hypothesis can be formulated as follows:

- H1: Training has a positive direct effect on combat readiness.
 H2: Work environment has a positive direct effect on combat readiness.
 H3: Esprit de corps has a positive direct effect on combat readiness.
 H4: Competence has a positive direct effect on combat readiness.
 H5: Training has a positive direct effect on competence.
 H6: Work environment has a positive direct effect on competence.
 H7: Esprit de corps has a positive direct effect on competence.
 H8: Training has a positive direct effect on esprit de corps.

RESULTS AND DISCUSSION

Based on the study and development of the theory, the research framework can be formulated as follows:

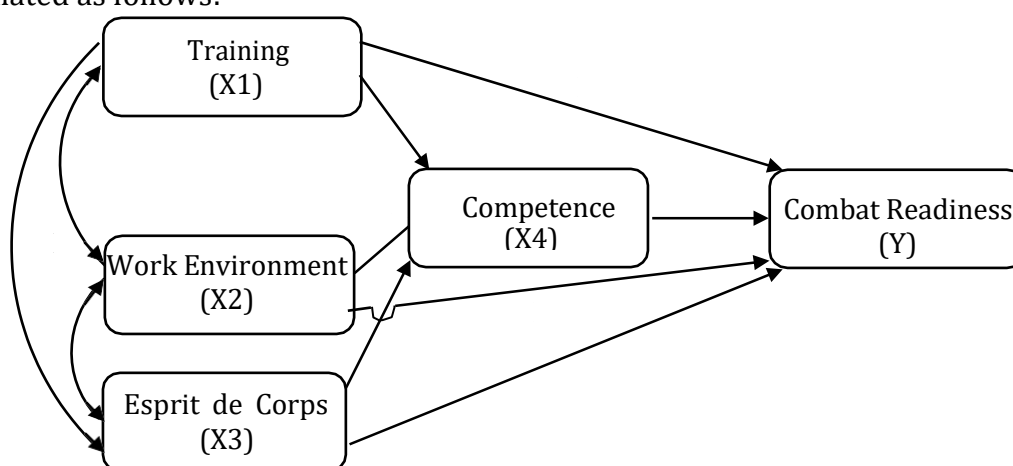


Figure 1. Research Framework (Akmalet et al., 2023)

The research results described include: data description of combat readiness (Y), training (X1), work environment (X2), esprit de corps (X3), and competence (X4) variables. A summary of descriptive statistics of the research data was obtained for all the variables listed in Table 2.

Table 2. Summary of Descriptive Statistics of Research Data
(Processed by the Author with IBM SPSS 25)

		Statistics				
		Combat Readiness	Training	Work Environment	Esprit de Corps	Competence
N	Valid	59	59	59	59	59
	Missing	0	0	0	0	0
Mean		104.63	83.85	85.34	84.54	91.62
Std. Error of Mean		.739	.702	.757	.669	.822
Median		104.00	85.00	86.00	83.00	92.00
Mode		112	85	78	80	84
Std. Deviation		5.678	5.394	5.818	5.227	6.419
Variance		32.238	29.097	33.849	27.319	41.205
Range		24	23	23	21	24
Minimum		94	74	75	76	81
Maximum		118	97	98	97	105
Sum		6173	4947	5035	5157	5589

a. Multiple modes exist. The smallest value is shown

The distribution of data or scores combat readiness (Y) variable is shown in Table 3.

Table 3. List of Frequency Distribution of Combat Readiness Variable Scores
(Processed by the Author with IBM SPSS 25)

No.	Class Interval	Absolute Frequency (%)	Relative Frequency (%)	Cumulative Frequency (%)
1.	94 – 97	6	10,17	0
2.	98 – 101	14	24	6
3.	102 – 105	13	22	20
4.	106 – 109	12	20	33
5.	110 – 113	12	20	57
6.	114 – 117	1	1,69	58
7.	118 – 121	1	2	59
		59	100	

The distribution of data or scores training (X1) variable is shown in Table 4.

Table 4. List of Frequency Distribution of Training Variable Scores
(Processed by the Author with IBM SPSS 25)

No.	Class Interval	Absolute Frequency (%)	Relative Frequency (%)	Cumulative Frequency (%)
1.	72 – 75	2	3,39	0
2.	76 – 79	12	20,34	2
3.	80 – 83	13	22,03	14
4.	84 – 87	16	27,12	27
5.	88 – 91	13	22,03	56
6.	92 – 95	2	3,39	58
7.	96 – 99	1	1,69	59
		59	100	

The distribution of data or scores work environment (X2) variable is shown in Table 5.

Table 5. List of Frequency Distribution of Work Environment Variable Scores
(Processed by the Author with IBM SPSS 25)

No.	Class Interval	Absolute Frequency (%)	Relative Frequency (%)	Cumulative Frequency (%)
1.	73 – 76	2	3	0
2.	77 – 80	13	22	2
3.	81 – 84	11	19	15
4.	85 – 88	12	20	26
5.	89 – 92	16	27,12	54
6.	93 – 96	4	6,78	58
7.	97 – 100	1	1,69	59
		59	100	

The distribution of data or scores esprit de corps (X3) variable is shown in Table 6.

Table 6. List of Frequency Distribution of Esprit de Corps Variable Scores
(Processed by the Author with IBM SPSS 25)

No.	Class Interval	Absolute Frequency (%)	Relative Frequency (%)	Cumulative Frequency (%)
1.	73 – 76	5	8	0
2.	77 – 80	14	23,73	5
3.	81 – 84	9	15	19
4.	85 – 88	13	22,03	28
5.	89 – 92	14	23,73	55
6.	93 – 96	2	3,39	57
7.	97 – 100	2	3,39	59
		59	100	

The distribution of data or scores competence (X4) variable is shown in Table 7.

Table 7. List of Frequency Distribution of Competence Variable Scores
(Processed by the Author with IBM SPSS 25)

No.	Class Interval	Absolute Frequency (%)	Relative Frequency (%)	Cumulative Frequency (%)
1.	81 - 84	14	24,59	0
2.	85 - 88	7	13,11	14
3.	89 - 92	13	21,31	21
4.	93 - 96	10	16,39	34
5.	97 - 100	9	14,75	44
6.	101 - 104	5	8,19	53
7.	105 - 108	1	1,63	59
		59	100	

The results of hypothesis testing are summarized in Table 8.

Table 8. Recapitulation of the Results of Hypothesis Testing
(Processed by the Author with IBM SPSS 25)

No.	Hypothesis	Statistic Test	Result of t Test	H ₀ Decision	Conclusion
1.	Training has a positive direct effect on combat readiness.	$H_0 : \beta_{yx1} \leq 0$ $H_1 : \beta_{yx1} > 0$	$t_{count} = 3,292 >$ $t_{tab} = 1,672$	rejected H ₀	a positive direct effect
2.	The work environment has a positive direct effect on combat readiness.	$H_0 : \beta_{yx2} \leq 0$ $H_1 : \beta_{yx2} > 0$	$t_{count} = 2,578 >$ $t_{tab} = 1,672$	rejected H ₀	a positive direct effect
3.	Esprit de corps has a positive direct effect on combat readiness.	$H_0 : \beta_{yx3} \leq 0$ $H_1 : \beta_{yx3} > 0$	$t_{count} = 2,022 >$ $t_{tab} = 1,672$	rejected H ₀	a positive direct effect
4.	Competence has a positive direct effect on combat readiness.	$H_0 : \beta_{yx4} \leq 0$ $H_1 : \beta_{yx4} > 0$	$t_{count} = 3,035 >$ $t_{tab} = 1,672$	rejected H ₀	a positive direct effect
5.	Training has a positive direct effect on competence.	$H_0 : \beta_{x4x1} \leq 0$ $H_1 : \beta_{x4x1} > 0$	$t_{count} = 3,866 >$ $t_{tab} = 1,672$	rejected H ₀	a positive direct effect

6. The work environment has a positive direct effect on competence.	$H_0 : \beta_{x4x2} \leq 0$ $H_1 : \beta_{x4x2} > 0$	$t_{count} = 1,858 > t_{tab} = 1,672$	rejected H_0	a positive direct effect
7. Esprit de corps has a positive direct effect on competence.	$H_0 : \beta_{yx3} \leq 0$ $H_1 : \beta_{yx3} > 0$	$t_{count} = 1,732 > t_{tab} = 1,672$	rejected H_0	a positive direct effect
8. Training has a positive direct effect on esprit decorps.	$H_0 : \beta_{x3x2} \leq 0$ $H_1 : \beta_{x3x2} > 0$	$t_{count} = 2,953 > t_{tab} = 1,672$	rejected H_0	a positive direct effect

The Effect of Training on Combat Readiness

Based on empirical evidence, it shows that training is a fairly important variable and has a positive direct effect on the combat readiness of the 15th Air Squadron personnel, so H_1 is accepted. This effect can be proven by the value of $t_{count} = 3,292 > t_{table (0,05;57)} = 1,672$. Supporting these findings, Smith et al. (2023) found that well-structured and targeted training programs significantly improve not only physical performance but also overall readiness and operational effectiveness among military personnel. Similarly, Tornero-Aguilera et al. (2024) highlight that systematic and continuous training leads to improvements in both psychological and physiological preparedness, which are crucial for successful mission accomplishment. This indicates that combat readiness achieved by personnel is a reflection of the effectiveness of the training programs implemented within the organization. Therefore, the level of operational performance is strongly influenced by the quality and success of training execution.

The Effect of Work Environment on Combat Readiness

Based on empirical evidence shows that the work environment has a fairly important role and has a positive direct effect on the combat readiness of the 15th Air Squadron personnel, so H_2 is accepted. This effect can be proven by the value of $t_{count}=2,578 > t_{table (0,05;57)}=1,672$. The work environment encompassing both physical conditions (facilities, equipment) and psychosocial factors (work atmosphere, interpersonal relations) is inseparable and has been shown to enhance job satisfaction, productivity, and readiness (Pace et al., 2025b). Anselmi and colleagues found that military personnel in environments with higher job resources and supportive leadership report better well-being and operational readiness.

The Effect of Esprit de Corps on Combat Readiness

Based on empirical evidence, it shows that esprit de corps has a fairly important role and has a positive direct effect on the combat readiness of the Air Squadron 15 personnel, so H_3 is accepted. This effect can be proven by the value of $t_{count} = 2,578 > t_{table (0,05;57)} = 1,672$. Esprit de corps is needed to move members of a team, group, or organization in carrying out a job or task. Esprit de corps fosters unity, commitment, and mutual support among team members, which in turn strengthens operational performance and readiness. Brandebo et al. (2022) confirmed that high levels of cohesion and esprit de corps are directly correlated with unit effectiveness and mission success in military contexts. Therefore, esprit de corps must be fostered because harmony and unity among members of the organization a great strengths in the organization and can increase organizational readiness in dealing with dynamic situations. In a soldier's life, esprit de corps needs to be nurtured and developed to foster a sense of responsibility and love for its unit, and foster good solidity among members oriented towards maximum implementation readiness

The Effect of Competence on Combat Readiness

Based on empirical evidence, it shows that competence is one of the variables that is quite important and has a positive direct effect on the combat readiness of the Air Squadron 15 personnel, so H4 is accepted. This effect can be proven by the value of $t_{\text{count}}=3,035 > t_{\text{table}} (0,05;57)=1,672$. The underlying characteristics of a person that produce effective or superior performance can be able to in the form of traits, motives, skills, aspects of self-image, social roles, or a knowledge collection. This competence will produce an individual who will be able to work effectively and of superior quality from all aspects of both traits, motives, skills, and knowledge. Competence is one of the important components that must be owned by an employee to carry out a good job. Tornero-Aguilera et al. (2024) explain that military competence consists of a combination of technical skills, cognitive abilities, adaptability, and decision-making, all contributing to higher operational effectiveness and readiness. Competence can be continuously measured and enhanced through targeted training and development. Competence is one of the important components that must be owned by an employee to carry out a good job (Ardiansyah & Sulistyowati, 2018).

The Effect of Training on Competence

Based on empirical evidence, it shows that the training is a fairly important variable and has a positive direct effect on the competence of 15th Air Squadron personnel, so H5 is accepted. This effect can be proven by the value of $t_{\text{count}}=3,866 > t_{\text{table}} (0,05;57)=1,672$. Implementation of training for participants can increase the competency of the trainees. Therefore, the implementation of appropriate training programs and methods will affect the improvement of a person's competence, including a soldier. Smith et al. (2023) demonstrated that personalized and structured training programs significantly increase both physical and cognitive competence among military personnel. Such programs are essential in preparing soldiers to meet the demands of modern operations. Similarly, Tornero-Aguilera et al. (2024) emphasized that ongoing, scenario-based training directly enhances not only psychophysiological readiness but also critical decision-making and resilience in expeditionary military environments.

The Effect of Work Environment on Competence

Based on empirical evidence, it shows that the work environment is a variable that is quite important and has a positive direct effect on the competence of the Air Squadron 15 personnel, so H6 is accepted. This effect can be proven by the value of $t_{\text{count}}=1,858 > t_{\text{table}} (0,05;57)=1,672$. Competence is supported and influenced by several components, namely personnel readiness, material readiness, unit readiness, and a good work environment. The physical work environment is related to material and unit readiness. The work environment is a place where there are groups in which there are several supporting facilities and infrastructure, and relationships between personnel that are conducive to achieving the goals set by the organization. According to Pace et al. (2025), a supportive and resource-rich environment helps develop skills, attitudes, and behaviors that are important for competence in a military environment. Supportive leadership and adequate resources have been associated with greater motivation and more effective performance.

The effect of Esprit de Corps on Competence

Based on empirical evidence, it shows that the esprit de corps has a fairly important role and has a positive direct effect on the competence of the Air Squadron

15 personnel, so H7 is accepted. This effect can be proven by the value of $t_{\text{count}}=2,578 > t_{\text{table (0,05;57)}}=1,672$. Esprit de corps or collective motivation cannot be separated from everyday human life; people who are not motivated to work will naturally be unable to compete with those who are highly motivated to work. Brandebo et al. (2022) found that collective motivation and team cohesion directly improve learning, skill development, and individual competence within military units. Motivation includes collective motivation, even though it has been owned, it is not a guarantee that it will be able to compete; they must cleverly utilize motivation to get better at it achieve the quality or competence of human resources, work quality, and work results.

The Effect of Training on Esprit de Corps

Based on empirical evidence, it shows that the training has a fairly important role and has a positive direct effect on the esprit de corps of the Air Squadron 15 personnel, so H8 is accepted. This effect can be proven by the value of $t_{\text{count}} = 2,578 > t_{\text{table (0,05;57)}} = 1,672$, which means that the training has a positive direct effect on esprit de corps. Smith et al. (2023) and Brandebo et al. (2022) both note that group-based and cooperative training not only build technical skills but also reinforce loyalty, cooperation, and team spirit, core aspects of esprit de corps. Loyalty and cooperation are part of the esprit de corps that can be created or fostered through training programs. Participants are trained to respect each other and are willing to work together in group work. For this reason, it is necessary to explain the importance of patience and understanding among the members in working together. They are trained to be patient, not blame each other, and not be selfish. Through this kind of training, it is expected that a sense of togetherness will grow and become stronger.

Synthesis of Findings

The research findings indicate that all four predictors exert significant positive effects on combat readiness. In direct terms, training shows the largest impact on readiness ($t = 3.292$), followed by competence ($t = 3.035$), while work environment ($t = 2.578$) and esprit de corps ($t = 2.578$) also contribute meaningfully. Beyond these direct paths, training has the largest total effect because it additionally raises competence ($t = 3.866$) and builds esprit de corps ($t = 2.578$), both of which further elevate readiness. Competence emerges as the most proximal determinant of readiness, capturing how individual capabilities translate upstream drivers into operational performance.

In AMO (Ability–Motivation–Opportunity) framework states that training primarily enhances ability (skills/knowledge), esprit de corps elevates motivation (commitment/cohesion), and a supportive work environment supplies opportunity (resources, procedures, leadership) to perform (Bos-Nehles et al., 2023). Readiness rises when all three levers are jointly strengthened. Meanwhile, consistent with Smith et al. (2023) and Tornero-Aguilera et al. (2024), training accumulates human capital and, when well-designed (structured, scenario-based, continuous), transfers into on-the-job competence, explaining the strong training to competence path and the competence to readiness linkage.

In Job Demands–Resources (JD-R) model states that the work environment functions as a job-resources bundle (equipment availability, clear SOPs, predictable schedules, supportive leadership). These resources buffer demands and sustain engagement, thereby improving competence development and readiness (Pace et al., 2025). Meanwhile, aligning with Brandebo et al. (2022), that esprit de corps strengthens shared identity and trust, improving coordination, learning, and mission execution. Its

positive effects on both readiness and competence reflect that cohesive units learn faster and employ skills more effectively.

CONCLUSIONS, RECOMMENDATIONS, AND LIMITATIONS

Based on the results and discussion of this research, this study found the effect of training, work environment, and esprit de corps on the Air Squadron 15's personnel, as follows:

- a. The work environment has a positive direct effect on combat readiness, with the positive contribution being 10,4%. This means that conditions and situations that are conducive and good will be able to increase combat readiness.
- b. Esprit de corps has a positive direct effect on combat readiness, with the positive contribution being 11,3%. This means that a strong and good esprit de corps will be able to increase combat readiness.
- c. Competence has a positive direct effect on combat readiness, with the positive contribution being 13,9%. This means that the presence of high personnel competence will be able to increase combat readiness.
- d. Training has a positive direct effect on competence, with the positive contribution being 23,6%. This means that programmed training activities will be able to increase the competence of personnel.
- e. The work environment has a positive direct effect on competence, with the positive contribution being 8,1%. This means that conditions and situations that are conducive and good will be able to increase competency even though it is not significant.
- f. Esprit de corps has a positive direct effect on competence, with the positive contribution being 10,6%. This means that a strong and good esprit de corps will be able to increase competence.
- g. Esprit de corps has a positive direct effect on competence, with the positive contribution being 14,7%. This means that a strong and good esprit de corps will be able to increase competence.

The findings collectively show that combat readiness is maximized when training, work environment, and esprit de corps are treated as mutually reinforcing investments that ultimately express themselves as higher competence at the point of execution. Among these, training exerts the strongest total influence (direct+mediated), while competence is the immediate bridge to readiness.

This study recommends that further research needs to be conducted using a combination of quantitative and qualitative methods in order to be able to describe the results of the study in more depth, and it is recommended to include additional variables, especially those related to combat readiness. Also, relevant stakeholders (Indonesian Air Force Leaders in air units) need to improve/enhance the variables that affect the combat readiness of their personnel. This study also has some limitations, such as the study was conducted limited in the Air Squadron 15; the respondents might not answer objectively; the quantitative method in this study shows the use of statistical analysis in answering the test results in accordance with the procedures and requirements of statistical analysis so that the results of this study are relevant to the results of research that has been conducted by previous researchers; and this study has not include the dependent and intervening variables.

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