Exploring welfare, organizational commitment, and turnover intention: An empirical investigation of Indonesian Air Force pilot

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Abstract

Purpose: This study aims to investigate how organizational commitment and welfare affect the likelihood of pilots leaving the Indonesian Air Force. It examines whether organizational commitment acts as a bridge between welfare and turnover intention. The goal is to provide insights into improving pilot retention, ensuring operational readiness and national security.

Methodology: Research design employs a quantitative research approach using Structural Equation Modeling (SEM) PLS to analyze the relationships between welfare, organizational commitment, and turnover intention among Indonesian Air Force pilots. Data were collected through a survey questionnaire distributed to active-duty pilots.

Results: Findings indicate that welfare and organizational commitment both significantly reduce turnover intention. Affective commitment (emotional attachment to the organization) is the strongest factor in reducing turnover intention. Better welfare policies, such as job satisfaction programs, improve organizational commitment, further lowering turnover rates.

Conclusions: Enhancing welfare policies and organizational commitment can help retain skilled pilots. The Indonesian Air Force should focus on comprehensive welfare programs and engagement strategies to strengthen pilots' commitment and reduce turnover.

Limitations: This study only examines organizational commitment and welfare. Other factors, like leadership styles and career development opportunities, were not considered.

Contribution: This research helps military policymakers and organizational leaders understand how to improve pilot retention. It contributes to studies on employee retention in high-risk professions and provides practical recommendations for enhancing workforce stability.

Keywords: Indonesian Air Force, Organizational Commitment, Turnover Intention, Welfare

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1. Introduction

Retaining skilled and experienced personnel is a critical challenge for organizations, particularly in high-stakes sectors such as the military and aviation. For the Indonesian Air Force, pilot retention is vital not only for operational effectiveness but also for maintaining national security and defense capabilities. According to Giancola et al. (2021), pilots are strategic human resources that play crucial roles in military aviation operations. However, the growing turnover intention among military pilots poses significant risks, including the loss of trained expertise and increased recruitment and training

costs. According to estimates, job opportunities for pilots in the Indonesian civil aviation sector are projected to increase consistently over the next decade, with an annual average of over positions. According to a 2024 report, the Indonesian Ministry of Transportation indicated that the country requires up to 600 new pilots each year.

This phenomenon highlights that welfare and commitment are the primary drivers motivating pilots to transition from the military or public sector to the private sector (Arutyunova & Bocchese, 2024). Competitive welfare benefits, including salaries, allowances, bonuses, and additional perks such as housing and healthcare facilities, serve as the main incentives (Baranyeretse & Rulinda, 2025; Stubbs & Zrinščak, 2019). Furthermore, in certain situations, the private sector provides enhanced long-term career stability, particularly for pilots who may be at risk of being laid off from the military (Pugh, 2020), and offers access to advanced training, international certifications, and a more well-defined career trajectory (Pejchinovska, Ahmed, & Jehona, 2023).

Two key factors often associated with turnover intention are welfare and organizational commitment (Al-Suraihi, Samikon, Al-Suraihi, & Ibrahim, 2021). Welfare, encompassing financial (e.g., salary and benefits) and non-financial support (e.g.,job satisfaction and health), plays a crucial role in shaping employee satisfaction and loyalty. Organizational commitment, on the other hand, reflects the psychological attachment employees feel toward their organization, influencing their willingness to remain. The three dimensions of organizational commitment-affective, continuance, and normative-offer a comprehensive framework for understanding why employees choose to stay or leave their roles.

While extensive research has explored the relationship between welfare, organizational commitment, and turnover intention, few studies have focused on the unique context of military personnel, especially pilots in the Indonesian Air Force. This study aims to address this gap by investigating the effects of welfare and organizational commitment on turnover intention among Indonesian Air Force pilots. Furthermore, it examines the mediating role of organizational commitment in the relationship between welfare and turnover intention. By providing insights into the interplay of these factors, this study seeks to inform strategies for improving pilot retention in the Indonesian Air Force.

2. Literature Review

2.1 Turnover Intention

Turnover intention is a person's intention to leave the organization where they work, which can negatively impact the operational sustainability of an institution (Suleman, Amponsah-Tawiah, & Ametorwo, 2024). According to Khan (2020), the more strategic a company is with its human resources, the more turnover it can achieve, even if it has a similar number of human resources. The high rate of employee turnover, one of which is in health care institutions, stems from poor implementation of human resource management, including succession planning, commitment and welfare (Mabhanda & Masukume, 2025).

Turnover is often measured using Mobley's (1977) turnover intention scale. This scale captures the cognitive processes that lead to turnover, including dissatisfaction with the current role, evaluation of alternative opportunities, and intention to quit. High turnover intention is a critical issue for organizations, as it is strongly associated with productivity loss and increased recruitment costs. Based on Mobley's (1977) Model of Turnover, the dimensions of turnover intention are derived from a sequence of cognitive and affective processes that an individual undergoes before deciding to leave their job. These dimensions provide a comprehensive framework for understanding the factors influencing turnover intention.

- a. Thinking of Quitting. This dimension captures the initial cognitive process in which an employee contemplates leaving their current job. It often arises from dissatisfaction with job aspects such as work conditions, leadership, or lack of growth opportunities. This phase reflects employees' mental assessment of their dissatisfaction and begins the turnover intention process.
- b. Intention of Search. This dimension refers to the deliberate exploration of alternative job opportunities. Employees evaluate external options, such as pay, benefits, career growth, or workplace environment, and compare them with their current jobs. Search intentions signify a shift from passive dissatisfaction to active job-seeking behavior, increasing the likelihood of actual turnover.
- c. Intention of Quit. This final dimension involves employees making a concrete decision to quit their jobs. It is the culmination of dissatisfaction, evaluation of alternatives, and perceived feasibility of leaving. Intention to leave is the strongest predictor of actual turnover, making it critical for organizations to intervene before employees reach this stage of turnover.

2.2 Welfare

Welfare, as described by Slijepčević, Popović Šević, Krstić, Rajić, and Ranković (2024), is a multidimensional concept encompassing the financial, job satisfaction, and health aspects of employees' well-being. Financial welfare includes competitive salaries, performance-based bonuses, retirement plans, and securing jobs. These elements directly affect employees' economic stability, reducing financial stress and improving motivation and loyalty. By ensuring that employees feel financially secure, organizations can foster a sense of stability and reduce turnover intention.

The second dimension, job satisfaction, focuses on intrinsic and extrinsic factors that influence employees' happiness and contentment at work (Nimtur, Kusa, & Olanrewaju, 2023). Key contributors include role clarity, opportunities for career growth, recognition of contributions, and a positive organizational culture. Employees who feel valued and have growth opportunities tend to exhibit higher levels of engagement and organizational commitment.

Finally, health welfare emphasizes the physical and mental well-being of employees. This dimension includes health insurance, wellness programs, workplace safety measures, and provisions such as paid sick leave. Supporting employees' health reduces absenteeism and enhances productivity while fostering long-term commitment to the organization. Together, these three dimensions-financial, job satisfaction, and health-form a comprehensive framework for improving employee welfare and building a resilient workforce. According to Camlian and Baron (2025), workplace health and safety practices, social support, and turnover intention play significant roles in faculty retention.

According to Triningsih and Darma (2024), workplace welfare, including financial and non-financial support, directly affects employees' turnover intention. A positive relationship exists between improved welfare and reduced turnover intention. (Yuliantini, Rahmat, Marlapa, & Malihah, 2024), analyzed the effects of employee relations, workplace well-being, and compensation on turnover intentions. According to Hwei and Anuar (2024), welfare initiatives, such as adequate compensation and supportive environments, decrease turnover intention by improving job satisfaction. A growing body of research provides strong evidence that comprehensive welfare negatively and significantly influences employees' turnover intention.

Financial welfare, including competitive salaries, performance-based incentives, and job security, plays a crucial role in reducing employees' financial stress, which directly impacts their intention to remain. For instance, Nanda, Silveri, Wang, and Zhao (2024) found that reducing financial strain through robust compensation policies decreases voluntary turnover. Similarly, Hwei and Anuar (2024) observed that in the Malaysian banking sector, supportive welfare systems significantly reduce employees' desires to leave. Choudhary (2022) emphasized the impact of non-financial welfare, such as housing and childcare benefits, noting a marked reduction in turnover among mid-career professionals. In contrast, welfare significantly and positively influenced organizational commitment. Welfare fosters loyalty by strengthening the psychological contract between employees and their organizations.

According to Meyer and Allen (1991) three-component model of organizational commitment, welfare directly supports affective commitment through job satisfaction, continuance commitment through financial security, and normative commitment through health support. Lee and Kim (2023) found in South Korean firms that flexible working conditions, health care programs, and mentoring- elements of a strong welfare system-greatly enhance employees' attachment to the organization. Hui (2021) similarly observed that generous welfare policies in Chinese tech companies led to stronger organizational identification and loyalty among employees.

Perić, Dramićanin, and Pavlović (2021) reinforced this by highlighting the role of equitable compensation and benefits in deepening employees' commitment. Papageorgiou et al. (2025) contributed to this perspective by identifying that tailored welfare, particularly in the form of retirement planning and flexible policies, enhances commitment, especially among older employees. The following hypotheses can be developed based on the studies:

H1: Welfare negatively significant influences turnover intention

H2: Welfare positively influences significant organizational commitment.

2.3 Organizational Commitment

Organizational commitment, as conceptualized by Meyer and Allen (1991), refers to the psychological attachment that employees feel toward their organization. It is divided into three dimensions: affective, continuance, and normative commitments. Each dimension represents a distinct reason why employees remain with an organization, providing a comprehensive framework for understanding employee loyalty and retention issues. Affective commitment refers to the emotional attachment that employees have to their organization. This reflects the extent to which employees identify with the organization's values and goals. Employees with strong affective commitment stay because they genuinely want to, as they feel a sense of belonging and loyalty (Yang & Mostafa, 2024). This dimension is significantly influenced by job satisfaction, organizational support, and the workplace culture.

Continuance commitment refers to employees' calculation of the costs of leaving an organization. It is driven by perceived losses associated with quitting, such as forfeiting financial benefits or disrupting career stability. Employees with strong continuance commitment remain because they feel they must, often due to a lack of better alternatives or substantial investments in their current roles (Galanaki, 2020). Normative commitment, on the other hand, is a sense of obligation that employees feel toward their organization. It is influenced by personal values, social norms, and experiences, such as receiving support during difficult times. Employees with strong normative commitment stay because they feel they should, believing that it is the morally correct action (Zehong & Hunsaker, 2025).

Numerous studies have affirmed that employees with strong emotional ties or a sense of loyalty toward their organization are significantly less likely to consider leaving. For instance, Munthe, Susan, and Sulungbudi (2024) further emphasized that among the three dimensions, affective commitment was the strongest predictor of turnover intention. Similarly, Muchtadin and Sundary (2023) found that in high-stress environments, affective and normative commitment effectively reduced employees' inclination to quit their jobs. Hasnah, Panjaitan, and Ekananta (2023) observed a significant decrease in turnover intention among healthcare professionals with high levels of organizational commitment, especially when job satisfaction was moderate to high. According to Ulabor and Bosede (2019), observed that employee commitment could be affected by some factors such as gender, nature of work, length of service, and management style, Although, length of service and management style affects staff turnover.

Beyond its direct influence, organizational commitment also acts as a powerful mediator between welfare and turnover intention. Welfare, through its financial, health, and job satisfaction dimensions, strengthens employees' emotional and moral bonds to the organization, which, in turn, decreases their likelihood of leaving. Ganji, Johnson, Sorkhan, and Banejad (2021) demonstrated that comprehensive welfare programs, including benefits and support services, enhanced commitment levels, which significantly mediated the reduction in turnover intention. Similarly, Sabella and Fazlurrahman (2023) highlighted that organizational commitment, especially its affective and normative components, mediates the impact of income and work-family conflict on employees' desire to quit. Rachman,

Handayani, and Sugijanto (2022) emphasized that the indirect effect of increased commitment was stronger than the direct impact of welfare.

The following hypotheses can be developed based on the studies:

H3: Organizational commitment negatively influences turnover intention

H4: Organizational commitment mediates the relationship between welfare and turnover intention.



Figure 1. Hypothesis Model

Source: Adapted from Mobley (1977), Meyer and Allen (1991), and Slijepčević et al. (2024)

3. Research Methodology

3.1 Population and Sample

This study utilized quantitative methods to collect data through surveys. The study's model incorporated a second-order construct approach, and data analysis was performed using SEM-PLS software. The independent variable was welfare, the mediating variable was organizational commitment, and the dependent variable was turnover intention. The population comprised 100 pilots stationed at airbases on Java Island. Stratified random sampling was applied, with a margin of error of 0.05, determined using the Slovin formula, as detailed below:

$$n=\frac{N}{1+Ne^2}$$
 ,
$$n= \text{sample} \qquad n=\frac{100}{1+100(0,05^2)} \qquad N= \text{population}$$
 e= error rate
$$n=80$$

The sampling method used was stratified random sampling, with a total of 80 respondents...

3.2 Operational Concept

- a. Turnover Intention: Assessed using a scale adapted from Mobley's (1977) measurement framework.
- b. Organizational Commitment: Evaluated using the Organizational Commitment Questionnaire (OCQ) developed by Meyer and Allen (1991).
- c. Welfare: Measured using an instrument encompassing aspects of financial well-being, health, and job satisfaction based on the work of Slijepčević et al. (2024)..

Table 1. Operational Concept

Variable	Dimention	Code
Turnover Intention	This 1-in a f Oi4i	TI11
Mobley's (1977)	Thinking of Quittig	TI12
	Intention of Security	TI21
-	Intention of Search	TI22
	Intention of Onit	TI31
	Intention of Quit	TI32
Organizational Commitment		KO11
(Meyer & Allen, 1991)		KO12
	Affective	KO13
		KO14
		KO15
	Continuance	KO21

Variable	Dimention	Code
		KO22
	Normative	KO31
		KO32
		KO33
		KO34
Welfare		K11
(Slijepčević et al., 2024)	Financial	K12
		K13
	11046	K21
	Job Satisfaction	K22
		K23
_	II14h	K31
	Health	K32
		K33

Source: Adapted from Mobley (1977), Meyer and Allen (1991), and Slijepčević et al. (2024).

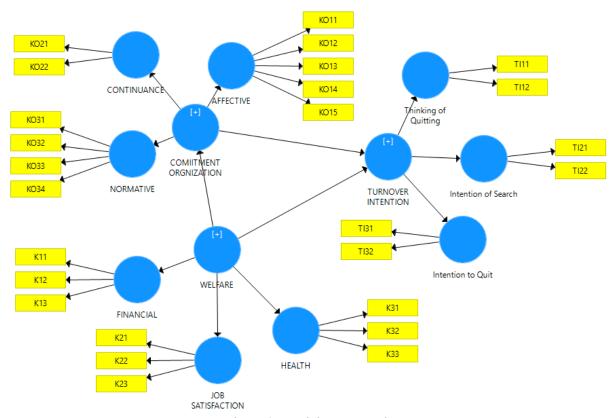


Figure 2. Model Framework

Source: Model modified from Mobley (1977), Meyer and Allen (1991), Slijepčević et al. (2024), and processed using SmartPLS (2025).

3.3 Data Collection Procedure

The following steps were used to analyze the data.

- a. Data Preparation. The sample size was evaluated to confirm its sufficiency for conducting the SEM analysis. Stratified random sampling was employed, with a margin of error set at 0.05, calculated using the Slovin formula Hair19
- b. Model Specification (Brown, 2015).
 - 1) Measurement Model: Constructs such as welfare, organizational commitment, and turnover intention were defined using theoretical frameworks and assessed through multiple indicators or observable variables.

- 2) Structural Model: The relationships between the constructs were hypothesized, considering both direct and indirect effects.
- c. Assessment of Measurement Model (Hair, Black, Babin, & Anderson, 2019)
 - 1) Reliability:
 - a) Internal Consistency: Cronbach's Alpha and Composite Reliability (CR) were used to assess the reliability of constructs, with CR values greater than 0.7 deemed acceptable. Indicator Reliability: Indicator outer loadings were examined, retaining items with loadings above 0.7.
 - 2) Validity:
 - a) Convergent Validity: Average Variance Extracted (AVE) was calculated, with values exceeding 0.5 indicating adequate convergence.
 - b) Discriminant validity: The Fornell-Larcker criterion ensured that the constructs were distinct from one another.
- d. Assessment of Structural Model (Hair et al., 2019)
 - 1) Path Coefficients: Bootstrapping techniques (e.g., using 5,000 subsamples) were applied to determine the significance of the relationships between constructs, yielding p-values for hypothesis testing.
 - 2) Model Explanatory Power: The coefficient of determination (R²) was analyzed to assess the variance explained by the model for endogenous constructs. Values greater than 0.25, 0.5, and 0.75 were categorized as weak, moderate, and substantial explanatory power, respectively.
- e. Model Fit Assessment. While PLS-SEM focuses on variance-based modeling and does not heavily depend on traditional model fit indices, measures like the Standardized Root Mean Square Residual (SRMR) were reviewed, with values below 0.08 indicating an acceptable fit.
- f. Hypothesis Testing Using Bootstrapping in SEM-PLS.
 - 1) Bootstrapping, a non-parametric resampling method, was used to test the statistical significance of path coefficients and model parameters within PLS-SEM.
 - 2) Results Interpretation. The results were analyzed considering theoretical frameworks, with particular attention to the magnitude and direction of the path coefficients to provide meaningful insights.

4 Result and Discussion

4.1 Descriptive Statistics

A descriptive analysis was conducted to summarize the demographic characteristics of the 100 military pilots stationed at air bases on the island of Java. The analysis provides an overview of key attributes, such as age, rank, years of service, type of aircraft operated, education level, and flight hours.

Table 2. Demographic Characteristics of Respondents

Demographic Category	Subcategory	Percentage (%)	
	25–30 years old	25%	
A Distanting 41	31–35 years old	35%	
Age Distribution	36–40 years old	20%	
	41+ years old	20%	
	Lieutenant (Junior Pilots)	40%	
Rank of Pilots	Captain (Mid-Level Pilots)	35%	
	Major & Above (Senior Pilots)	25%	
	Less than 5 years	30%	
Years of Service	5–10 years	40%	
	More than 10 years	30%	
	Fighter Jets (TNI-AU –	450/	
T 64' 60 4 1	Indonesian Air Force)	45%	
Type of Aircraft Operated	Transport Aircraft	30%	
	Helicopters	25%	

Education Level	Bachelor's Degree (Military Academy or Aviation-related field)	70%
	Master's Degree	30%
	Less than 1,000 hours	30%
Flight Hours	1,000–3,000 hours	50%
_	More than 3,000 hours	20%

The descriptive analysis revealed a well-balanced sample of military pilots in terms of age, rank, experience, and aircraft specialization. The presence of both junior and senior pilots ensured a comprehensive perspective on organizational commitment, welfare, and turnover intention. These findings contribute to a deeper understanding of factors influencing pilot retention in the Indonesian military aviation sector

4.2 Convergent validity test with Outer Loading

Convergent validity assesses whether multiple indicators measuring the same construct are highly correlated and contribute significantly to the measurement's model. In Structural Equation Modeling (SEM), it is typically evaluated using outer loadings (indicator loadings) and Average Variance Extracted (AVE). Discriminant validity was assessed through factor loadings analyzed using PLS software, as presented in Table 3.

Table 3. Outer Loading

Variable	Dimention	Code	Outer 1	Loading	Summary
		K11	0.960		Valid
	Financial	K12	0.970	0.919	Valid
		K13	0.957	0.919	Valid
Welfare		K21	0.974		Valid
(Slijepčević et al.,	Job Satisfaction	K22	0.979	0.977	Valid
2024)		K23	0.959		Valid
	_	K31	0.986		Valid
	Health	K32	0.987	0.954	Valid
		K33	0.983		Valid
		KO11	0.975		Valid
	Affective	KO12	0.974	0.959	Valid
		KO13	0.980		Valid
		KO14	0.972		Valid
Organisation Commitment		KO15	0.957		Valid
(Meyer & Allen,	Continuance -	KO21	0.968	0.954	Valid
1991)	Continuance	KO22	0.967	0.934	Valid
1771)	_	KO31	0.975		Valid
	Normative –	KO32	0.986	0.952	Valid
	Normanive =	KO33	0.983	0.934	Valid
		KO34	0.974		Valid
	Thinking of _	TI11	0.958	0.942	Valid
Turnover	Quitting	TI12	0.952	U.9 4 4	Valid
I urnover Intention	Intention of Search -	TI21	0.936	0.913	Valid
	intention of Search	TI22	0.918	0.913	Valid
(Mobley, 1977)	Intention of Quit -	TI31	0.767	0.931	Valid
	intention of Quit =	TI32	0.910	0.931	Valid

Source: Processed data by PLS (2025)

The validity of the instrument was evaluated using Outer Loading. The overall validity coefficient for the scale was ≥ 0.7 , indicating that the instrument items were highly effective in measuring the

underlying constructs, supporting its suitability for the study (Hair et al., 2019) and serving as a reference point for scholars, researchers, and academicians.

4.3 Convergent validity with Average Variance Extracted (AVE)

The Average Variance Extracted (AVE) value is another way to assess discriminant validity; a good AVE value is greater than 0.5. Table 3 shows the AVE values found in this study.

Table 4. Average Variance Extracted (AVE)

Variable	Dimention	AV	AVE	
variable	Dimention	Dimention	Variable	Summary
Walfana	Financial	0.926		Valid
Welfare	Job Satisfaction	0.942	0.855	Valid
(Slijepčević et al., 2024)	Health	0.971		Valid
Commitment	Affective	0.945		Valid
Organisation	Continuance	0.936	0.866	Valid
(Meyer & Allen, 1991)	Normative	0.960		Valid
Turnover Intention (Mobley, 1977)	Thinking of Quittig	0.913		Valid
	Intention of Search	0.859	0.710	Valid
	Intention of Quit	0.709		Valid

Source: Processed data by PLS (2025)

An AVE value greater than 0.5, as shown in Table 4, indicates that the indicators within the construct explain more than 50% of the variance of the measured construct, thereby confirming convergent validity (Hair et al., 2019).

4.4 Discriminant Validity Test with Fornell-Larcker Criteria

The Fornell-Larcker criterion can also be used to evaluate discriminant validity. This technique states that discriminant validity is valid if the square root of the AVE for each construct is greater than the correlation values between that construct and the others. Table 5 displays the discriminant validity results for this study model according to the Fornell-Larcker criterion.

Table 5. Fornell-Larcker Criteria

	Comitment Organization	Turnover Intention	Welfare
Comitment Organization	0.930		
Turnover Intention	-0.702	0.842	
Welfare	0.688	-0.685	0.925

Source: Processed data by PLS (2025)

According to Table 5, discriminant validity is attained when the square root of the AVE of each construct is higher than its association with other constructs (Hair et al., 2019).

4.5 Reliability Test with Cronbach's Alpha & Composite Reliability

The reliability test assesses the internal consistency of the measurement constructs to ensure that the indicators used in a model consistently measure the same concept. Two key metrics for evaluating reliability are Cronbach's alpha (α) and Composite Reliability (CR). Cronbach's alpha is a traditional measure of reliability that assumes that all indicators contribute equally to a construct. A Cronbach's alpha value of 0.7 or higher is generally considered acceptable, with values above 0.8 indicating good reliability and those above 0.9 indicating excellent reliability (Hair et al., 2019). However, Cronbach's alpha can be conservative and may underestimate reliability, especially if indicator loadings vary significantly.

Table 6. Cronbach's Alpha & Composite Reliability

Variable	Dimention	Cronbach	Cronbach's Alpha		Composite Reliability	
	Dimention	Dimention	Variable	Dimention	Variable	
Welfare	Financial	0.960		0.974		
(Briguglio &	Job Satisfaction	0.969	0.979	0.980	0.981	
Fenech, 2024)	Health	0.985	-	0.990		
Commitment	Affective	0.985		0.988		
Organisation	Continuance	0.932	0.984 -	0.967	0.986	
(Meyer & Allen, 1991)	Normative	0.986	0.704	0.990	0.700	
Turnover	Thinking of Quittig	0.904		0.954		
Intention	Intention of Search	0.837	0.914 -	0.924	0.935	
(Mobley, 1977)	Intention of Quit	0.705	0.714	0.829	0.933	

Source: Processed data by PLS (2025)

As shown in Table 6, the Cronbach's Alpha and Composite Reliability values exceeded 0.70, indicating that the construct demonstrated internal consistency and was considered reliable (Hair et al., 2019).

4.6 Effect Size (f²)

Effect size (f²) measures the impact of an independent variable on a dependent variable in a structural model. It quantifies the extent to which the variance in the dependent variable is explained by the independent variable beyond what is already accounted for by other predictors. According to Hair et al. (2019), in *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, the effect size (f²) is evaluated as follows: 0.02 (small effect), 0.15 (medium effect), and 0.35 (large effect).

Table 7. The effect size (f^2)

	Comitment Orgnization	Turnover Intention
Comitment Orgnization		0.298
Welfare	0.787	0.214

Source: Processed data by PLS (2025)

The results indicate that welfare has a strong influence on organizational commitment, with R^2 value of 0.787, meaning that 78.7% of the variance in organizational commitment is explained by welfare. In contrast, organizational commitment and welfare together explain 29.8% of the variance in turnover intention. This implies that while welfare and commitment contribute to reducing turnover intention, other external factors also play a role in pilots' decisions to leave.

4.7 R Square

The coefficient of determination (R-squared) measures the extent to which endogenous variables are influenced by other factors. According to Hair et al. (2019), changes in the R-squared value can be used to determine the significance of specific independent latent variables on dependent latent variables. The R-squared criteria classify values into three categories: 0.67 indicates a substantial effect, 0.33 indicates a moderate effect, and 0.19 indicates a weak effect. Table 8 presents the R-squared values obtained in this study.

Table 8. R Square

	R Square	R Square Adjusted
Comitment Orgnization	0.441	0.433
Turnover Intention	0.602	0.592

Source: Processed data by PLS (2025)

The model explains 59.2% of the variance in the dependent variable, as indicated by the Adjusted R² value of 0.592 (Hair et al., 2019). The remaining 40.8% of the variation was attributed to factors not included in this study.

4.8 Standardized Root Mean Square Residual (SRMR)

The standardized root mean square residual (SRMR) measures the discrepancy between the model-implied correlation matrix and the observed correlation matrix. It provides a standardized metric to assess how well the model replicates the observed data, serving as a tool for evaluating the model fit in PLS-SEM. A value below 0.08 is typically considered indicative of an acceptable model fit (Hair et al., 2019). Table 8 presents the SRMR values calculated in this study.

Table 9. Standardized Root Mean Square Residual (SRMR)

	Saturated Model	Estimated Model
SRMR	0.077	0.081

The SRMR value of 0.081 indicates that the model has a good fit.

4.9. Hypothesis Test

Partial Least Squares (PLS) was used in this study to perform relationship analysis by determining the path coefficients for each pathway. This analysis was performed after bootstrapping the samples. The results obtained after bootstrapping are as follows.

Table 10. Hypothesis Test

	Original Sample (O)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Summ ary
Direct Effect					
Comiitment Orgnization -> Turnover Intention	-0.460	0.089	5.197	0.000	Support ed
Welfare -> Comiitment Orgnization	0.664	0.083	8.044	0.000	Support ed
Welfare -> Turnover Intention	-0.390	0.086	4.532	0.000	Support ed
Indirect Effect					
Welfare -> Comiitment					Support
Orgnization -> Turnover Intention	-0.305	0.066	4.640	0.000	Support ed

Source: Processed data by PLS (2025)

4.10 Discussion

The table presents the path coefficients along with their statistical significance, focusing on the relationships between welfare, organizational commitment, and turnover intention. The following provides an interpretation of these findings. The analysis indicates significant relationships between welfare, organizational commitment and turnover intention. Organizational commitment demonstrated a strong negative effect on turnover intention, with a path coefficient of -0.460 and a highly significant p-value (0.000). This finding suggests that pilots who are more committed to their organization are less likely to consider leaving, emphasizing the critical role of commitment in reducing turnover rates. This is in line with Berber and Gašić's (2024) research, which Berber and Gašić (2024)showed that high levels of organizational commitment significantly reduce turnover intentions, supporting the finding

that organizational commitment is a key tool in reducing exit intentions in the aviation sector in South Africa.

In a military pilot aviation context, pilots who are highly committed to their organization are less likely to consider leaving because of severe contractual obligations, mission-driven loyalty, and operational challenges of transitioning to civilian aviation. Military pilots often sign long-term service contracts, and leaving before fulfilling these obligations can result in legal consequences, financial penalties, and the loss of rank or benefits. Furthermore, military pilots develop a strong sense of duty, camaraderie, and mission allegiance, which strengthens their commitment. Unlike civilian aviation, military pilots operate in high-stakes environments where teamwork, trust in command structures, and operational experience are critical. This deep integration into military culture makes transitioning to a civilian airline psychologically challenging, as the sense of purpose, structured hierarchy, and adrenaline-driven missions may not be replicated in commercial flights.

Additionally, military pilots undergo specialized training in combat, tactical maneuvers, and classified operations, making their skills highly specific to the defense aviation. While some transition to commercial airlines, many face requalification requirements, lower initial salaries, and an entirely different operational culture, which can deter them from leaving the military. The security, benefits, and structured career progression in the military further incentivize pilots to remain committed to military service rather than seeking uncertain civilian opportunities. Welfare has both direct and indirect impacts on turnover intention. Directly, welfare negatively affects turnover intention (coefficient: -0.390, p-value: 0.000), indicating that improved welfare conditions lead to a reduced likelihood of turnover. This is consistent with the study of Slijepčević et al. (2024) and Triningsih and Darma (2024), which emphasize that welfare measures, such as financial benefits, work-life balance initiatives, and supportive HR practices, significantly reduce turnover intention.

One of the primary reasons for this is the comprehensive benefits package that military pilots receive, including housing allowances, healthcare, retirement pensions, educational support, and family assistance programs. These benefits often surpass those available in civilian aviation, making the decision to leave the military less attractive. Guaranteed job security, structured promotions, and performance-based incentives further reinforce retention, as pilots see clear and stable career progression. Moreover, military pilots often have access to state-of-the-art training, cutting-edge aircraft, and specialized skill development at no personal cost to them. Leaving the military means losing access to these privileges and facing significant financial and professional challenges in transitioning to civilian aviation, which often requires additional certifications, reduced initial pay, and adaptation to commercial flight operations.

Additionally, welfare in the military extends beyond financial incentives to include mental health support, strong camaraderie, and institutional loyalty. Military organizations emphasize unit cohesion, purpose-driven missions, and recognition programs, fostering a sense of belonging that makes pilots less likely to leave their posts. The risk of losing this support system, along with the uncertainties of a civilian career, contributes to lower turnover intention when welfare conditions are favorable. Additionally, welfare positively influences organizational commitment (coefficient: 0.664, p-value: 0.000), indicating its role in fostering stronger employee allegiance to the organization. This is consistent with Djordjevic, Ivanović-Đukić, Lepojević, and Milanović's (2021) study, Djordjevic, Ivanović-Đukić, Lepojević, and Milanović (2021) which emphasizes that improving employee welfare in terms of financial stability, health, and job satisfaction significantly increases organizational commitment, especially in a dynamic and multigenerational work environment.

The findings support the claim that welfare is a key factor in building employee loyalty to the organization, one major reason being the extensive benefits system provided to military personnel, including free or subsidized housing, comprehensive healthcare for service members and their families, retirement pensions, and educational opportunities (such as tuition assistance programs). These welfare provisions offer security and stability, making military pilots more committed to staying in service rather than seeking civilian aviation jobs that may lack similar long-term guarantees. Additionally, the

military fosters a culture of belonging and purpose, wherein pilots are part of an elite group trained for national defense, humanitarian missions, and strategic operations.

Welfare programs, such as mental health support, deployment compensation, family assistance, and morale-boosting initiatives (such as recreation facilities and leadership training opportunities), contribute to a strong emotional attachment to the organization. When pilots feel that their well-being and that of their families is prioritized, their commitment to the organization deepens. Moreover, military pilots receive continuous career progression opportunities, specialized training, and leadership development, which enhance their professional growth and strengthen their loyalty to the service. Unlike civilian jobs, where career paths may be uncertain, the military offers structured promotions, mission-based incentives, and lifelong benefits that reinforce commitment.

Indirectly, welfare reduces turnover intention through its effect on organizational commitment, with a mediated effect of -0.305, highlighting the importance of organizational commitment as a bridge between welfare and retention. This suggests that although welfare has a direct impact, when it fosters a greater sense of commitment to the organization, its full potential in lowering turnover intention is maximized. This is in line with Gašić et al. (2024), who highlighted that welfare indirectly affects turnover intention through organizational commitment.

One of the primary reasons for this mediated effect is that military welfare programs go beyond financial incentives; they create a structured, stable, and supportive environment that makes personnel feel valued and invested in their careers. Military pilots receive exceptional healthcare, housing, pensions, educational support, and family assistance programs, which ensure not only their well-being but also that of their dependents. These benefits reduce financial stress and increase job satisfaction, fostering a sense of commitment that makes leaving the military less attractive. Furthermore, the military builds a strong culture of loyalty, unit cohesion, and mission-driven purpose, which further strengthens its organizational commitment. Welfare programs, such as mental health support, post-deployment reintegration, leadership development, and recognition programs, create a sense of belonging and professional fulfillment. Pilots who feel personally and professionally supported develop a strong attachment to their organization, making them less likely to consider external career opportunities.

Additionally, military pilots invest significant time and effort in specialized training, often gaining skills that are highly tailored to military operations and missions. Structured rank-based promotions, career progression incentives, and lifelong retirement benefits serve as additional motivators for commitment. If pilots consider leaving, they risk losing these long-term benefits and career stability, reinforcing the impact of welfare on retention through its effect on commitment. These results demonstrate that welfare is a key determinant of both commitment and turnover intention. Organizations aiming to minimize turnover should focus on enhancing welfare measures to directly reduce turnover and strengthen organizational commitment, which serves as an indirect mechanism for improving employee retention. These findings underscore the importance of comprehensive welfare programs in creating stable and loyal workforces.

5. Conclusion

5.1 Conclusion

This study highlights the critical roles of organizational commitment and welfare in shaping Air Force pilots' turnover intentions. Welfare, encompassing aspects such as financial security, health, and job satisfaction, plays a pivotal role in directly lowering turnover intention and indirectly through its influence on organizational commitment. The affective component of organizational commitment emerged as a powerful mediator, enhancing the impact of welfare in reducing employees' inclination to leave. These results underscore the necessity of cultivating a supportive workplace that prioritizes employee welfare and bolsters commitment to the organization.

5.2 Limitations

This study has certain limitations that should be considered in future studies. This study focused on a specific set of welfare and commitment dimensions. Future research should assess welfare in other

aspects, such as work-life balance, career advancement, and emotional well-being, which were not explicitly considered in this study, and could provide additional insights.

5.3 Suggestions

Based on the findings of this study, the Air Force should focus on implementing welfare programs that effectively address pilots financial, healthcare, and job satisfaction needs. Enhancing welfare through initiatives, such as improved compensation packages, comprehensive health benefits, and opportunities for professional growth, can significantly strengthen both welfare and organizational commitment. Tailored strategies designed to meet pilots'specific requirements are essential for ensuring their long-term retention.

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References

- Al-Suraihi, W. A., Samikon, S. A., Al-Suraihi, A.-H. A., & Ibrahim, I. (2021). Employee turnover: Causes, importance and retention strategies. *European Journal of Business and Management Research*, 6(3), 1-10. doi:https://doi.org/10.24018/ejbmr.2021.6.3.893
- Arutyunova, N., & Bocchese, M. (2024). From across the globe: understanding the motivations of pro-Ukraine foreign fighters. *European Security*, 1-24. doi:https://doi.org/10.1080/09662839.2024.2434701
- Baranyeretse, N., & Rulinda, E. (2025). Examining Compensation Management's Impact on Employee Performance: A Case Study of UNICOOPAGI, Rwanda (2019-2022). *East African Journal of Business and Economics*, 8(1), 1-17. doi:https://doi.org/10.37284/eajbe.8.1.2571
- Berber, N., & Gašić, D. (2024). The mediating role of employee commitment in the relationship between compensation system and turnover intentions. *Employee Relations: The International Journal*, 46(4), 721-755. doi:https://doi.org/10.1108/ER-05-2023-0270
- Brown, T. A. (2015). Confirmatory factor analysis for applied research: Guilford publications.
- Camlian, M. M., & Baron, J. V. (2025). Workplace health and safety, social support, and turnover intention in Private Higher Education Institutions in the Philippines. *Annals of Human Resource Management Research*, 5(1), 1-14. doi:https://doi.org/10.35912/ahrmr.v5i1.2661
- Choudhary, A. (2022). Is childcare cost a barrier to women managers' retention and progress at large firms? *Equality, Diversity and Inclusion: An International Journal*, 41(2), 241-253. doi:https://doi.org/10.1108/EDI-12-2020-0371
- Djordjevic, B., Ivanović-Đukić, M., Lepojević, V., & Milanović, S. (2021). Job satisfaction and organizational citizenship behaviour of employees in companies in the Republic of Serbia. Strategic Management-International Journal of Strategic Management and Decision Support Systems in Strategic Management, 26(3).
- Galanaki, E. (2020). Effects of employee benefits on affective and continuance commitment during times of crisis. *International Journal of Manpower*, 41(2), 220-238. doi:https://doi.org/10.1108/IJM-08-2018-0270
- Ganji, S. F. G., Johnson, L. W., Sorkhan, V. B., & Banejad, B. (2021). The effect of employee empowerment, organizational support, and ethical climate on turnover intention: The mediating role of job satisfaction. *Interdisciplinary Journal of Management Studies (Formerly known as Iranian Journal of Management Studies)*, 14(2), 311-329. doi:https://doi.org/10.22059/ijms.2020.302333.674066
- Gašić, D., Berber, N., Slavić, A., Strugar Jelača, M., Marić, S., Bjekić, R., & Aleksić, M. (2024). The Key Role of Employee Commitment in the Relationship Between Flexible Work Arrangements and Employee Behavior. *Sustainability*, 16(22), 10067. doi:https://doi.org/10.3390/su162210067
- Giancola, M., Verde, P., Cacciapuoti, L., Angelino, G., Piccardi, L., Bocchi, A., . . . Nori, R. (2021). Do advanced spatial strategies depend on the number of flight hours? the case of military pilots. *Brain sciences*, 11(7), 851. doi: https://doi.org/10.3390/brainsci11070851

- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate Data Analysis*: Cengage. Hasnah, C. M., Panjaitan, N. K., & Ekananta, A. (2023). The Influence of Job Satisfaction and Organizational Commitment on Turnover Intentions Hospital Nurses. *Jurnal Aplikasi Bisnis dan Manajemen (JABM)*, 9(2), 422-422. doi:https://doi.org/10.17358/jabm.9.2.422
- Hui, Z. (2021). Corporate social responsibilities, psychological contracts and employee turnover intention of SMEs in China. *Frontiers in Psychology*, 12. doi:https://doi.org/10.3389/fpsyg.2021.754183
- Hwei, R. B. B., & Anuar, A. (2024). The Determinants of Job Satisfaction Towards Turnover Intention Among Employees in Banking Industry. *Malaysian Journal of Social Sciences and Humanities* (MJSSH), 9(3), e002733-e002733. doi:https://doi.org/10.47405/mjssh.v9i3.2733
- Khan, M. M. R. (2020). Strategic human resource management in facilitating the organizational performance: Birds-eye view from Bangladesh. *Annals of Management and Organization Research*, 2(1), 13-24. doi:https://doi.org/10.35912/amor.v2i1.575
- Lee, M., & Kim, B. (2023). Effect of employee experience on organizational commitment: Case of South Korea. *Behavioral Sciences*, 13(7), 521. doi:https://doi.org/10.3390/bs13070521
- Mabhanda, W., & Masukume, H. (2025). Impact of succession planning practices on employee relations among health professionals in one government hospital in Zimbabwe. *Annals of Management and Organization Research*, 6(3), 221-236. doi:https://doi.org/10.35912/amor.v6i3.2413
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, *I*(1), 61-89. doi:https://doi.org/10.1016/1053-4822(91)90011-Z
- Mobley, W. H. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. *Journal of Applied psychology*, 62(2), 237. doi: https://doi.org/10.1037/0021-9010.62.2.237
- Muchtadin, M., & Sundary, Z. E. (2023). Pengaruh Komitmen Afektif, Stres Kerja, Work Engagement Terhadap Turnover Intention Perawat. *Journal of Health Management Research*, 2(2), 35-42. doi:https://doi.org/10.37036/jhmr.v2i2.420
- Munthe, R. G., Susan, M., & Sulungbudi, B. M. (2024). The role of internal marketing in building organizational commitment and reducing turnover intention affecting the improved performance of life insurance agents in indonesia. *Aptisi Transactions on Technopreneurship* (ATT), 6(1), 56-71. doi:https://doi.org/10.34306/att.v6i1.387
- Nanda, V., Silveri, S., Wang, K., & Zhao, L. (2024). Executive compensation limits and executive turnover. *Management Science*, 70(4), 2382-2405. doi:https://doi.org/10.1287/mnsc.2023.4812
- Nimtur, B. M., Kusa, N. D., & Olanrewaju, D. S. (2023). Job satisfaction on talent management and turnover intention among private secondary schools. *Annals of Human Resource Management Research*, 3(2), 129-140. doi:https://doi.org/10.35912/ahrmr.v3i2.1878
- Papageorgiou, G., Athanasiadou, P., Tsappi, E., Xergia, S. A., Maimaris, A., & Efstathiades, A. (2025). Organizational Work, Well-Being, and Quality of Life at an Elderly Age: The Case of Cyprus. *Journal of Aging Research*, 2025(1), 7194723. doi:https://doi.org/10.1155/jare/7194723
- Pejchinovska, M., Ahmed, Q., & Jehona, M. (2023). Steps Toward the Quality and Quality Assurance in Higher Education in Western Balkans and the Republic of North Macedonia. *Horizons International scientific journal Series A Social Sciences and Humanities*, 1(1), 236-251.
- Perić, G., Dramićanin, S., & Pavlović, N. (2021). The influence of internal service quality and employee satisfaction on organizational commitment in travel agencies: The case of Serbia. *Менацмент у хотелијерству и туризму, 9*(1), 43-60.
- Pugh, M. (2020). Precarity in post-conflict Yugoslavia: What about the workers? *Economies of Peace* (pp. 13-32): Routledge.
- Rachman, M. M., Handayani, C. M. S., & Sugijanto, S. (2022). The mediating role of job satisfaction: the impact of organizational commitment on employee intention to quit. *APMBA (Asia Pacific Management and Business Application)*, 11(2), 201-220. doi:https://doi.org/10.21776/ub.apmba.2022.011.02.5
- Sabella, S. A., & Fazlurrahman, H. (2023). The Effect of Work-Family Conflict on Turnover Intention Through Organizational Commitment as an Intervening Variable (Study on Employees of PT. Titipan Kilat Surabaya). *International Journal of Economics, Management, Business and Social Science (IJEMBIS)*, 3(3), 471-481. doi:https://doi.org/10.59889/ijembis.v3i3.160

- Slijepčević, M., Popović Šević, N., Krstić, J., Rajić, T., & Ranković, M. (2024). Exploring the Nexus of Perceived Organizational CSR Engagement, Job Satisfaction, Organizational Pride, and Involvement in CSR Activities: Evidence from an Emerging Economy. *Sustainability*, 16(8), 3403. doi:https://doi.org/10.3390/su16083403
- Stubbs, P., & Zrinščak, S. (2019). Reforming welfare assemblages in semi-peripheral spaces: understanding 'Drivers of Inertia'in Bosnia-Herzegovina, Croatia and Serbia Social Policy, Poverty, and Inequality in Central and Eastern Europe and the Former Soviet Union Agency and Institutions in Flux, ed. Sofiya An, Tatiana Chubarova, Bob Deacon, and Paul Stubbs (pp. 285-306).
- Suleman, A.-R., Amponsah-Tawiah, K., & Ametorwo, A. M. (2024). The role of employee environmental commitment in the green HRM practices, turnover intentions and environmental sustainability nexus. *Benchmarking: An International Journal*, 31(9), 3055-3078. doi:https://doi.org/10.1108/BIJ-06-2022-0393
- Triningsih, N. N., & Darma, G. S. (2024). Compensation, worklife balance, employee engagement, and turnover intention. *Quantitative Economics and Management Studies*, 5(1), 10-21. doi:https://doi.org/10.35877/454RI.qems2158
- Ulabor, E. A., & Bosede, A. I. (2019). Employee commitment and organizational performance in selected fast food outlets in Osun State. *International Journal of Financial, Accounting, and Management*, *I*(1), 23-37. doi:https://doi.org/10.35912/ijfam.v1i1.55
- Yang, Y., & Mostafa, A. M. S. (2024). High-performance human resource practices, organizational identification and employee commitment: the moderating role of organizational culture. *Frontiers in Psychology*, *15*, 1494186. doi:https://doi.org/10.3389/fpsyg.2024.1494186
- Yuliantini, T., Rahmat, A., Marlapa, E., & Malihah, F. D. (2024). The Effects of Employee Relations, Workplace Well-Being, and Compensation on Turnover Intentions: The Mediation Role of Work Stress. *Jurnal Aplikasi Bisnis dan Manajemen (JABM)*, 10(3), 931-931. doi:https://doi.org/10.17358/jabm.10.3.931
- Zehong, Y., & Hunsaker, W. (2025). The impact of spiritual leadership on unethical organizational behavior: the moderating effect of perceived organizational support. 경영경제연구, 47(1), 227-254. doi:https://doi.org/10.22828/meri.2025.47.1.010