

The Influence of Self-Efficacy, Knowledge, Attitude, and Skills on the Organizational Performance of the Ministry of Transportation, Mediated by Personnel Competence, Graduates of Indonesian Aviation Higher Vocational Education

Tri Agung Widayat^{1*}, Willy Arafah², Sarfilianty Anggiani³

Universitas Trisakti, West Jakarta, DKI Jakarta, Indonesia^{1,2,3}

Email: chila3838@gmail.com^{1*}, willy.arafah@trisakti.ac.id², sarfilianty@trisakti.ac.id³

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Self-Efficacy, Knowledge, Attitude, Organizational Performance, Personnel Competence, Higher Vocational Education.

ABSTRACT

This research delves into the impact of various factors on Organizational Performance, with a specific focus on graduates of Vocational Higher Education in Aviation in Indonesia employed as Civil Servants (ASN) within the Ministry of Transportation. The factors under scrutiny include Self-efficacy, Knowledge, Attitude, and Skill, with an exploration of their positive influence on Organizational Performance. Furthermore, the study examines how these factors contribute to Personnel Competence among these graduates and assesses the resultant effect on Organizational Performance within the Ministry of Transportation. Additionally, it investigates the mediating role of Personnel Competence in the relationship between Self Efficacy, Knowledge, Attitude, Skill, and Organizational Performance. Employing a quantitative survey method with a positivistic approach, this study utilizes Structural Equation Modeling (SEM) for data analysis. Through this methodology, the research aims to elucidate the correlation between graduate competencies and organizational tasks. The ultimate goal is to provide valuable insights into bolstering organizational performance through effective human resource development strategies within the aviation sector, thereby catering to readers unfamiliar with the topic or research methods and ensuring clarity and coherence in the language to enhance understanding.

INTRODUCTION

The State Civil Apparatus is a government employee and civil servant who carries out their duties following the Law with a binding work agreement, appointed, and dismissed by the official of the Civil Service Supervisor. The State Civil Apparatus (ASN) is the driving force in the government bureaucracy, so the quality of employees and their performance greatly affect the sustainability of government work programs (Azzahra, 2023; Destiana & Putra, 2022; Nasution et al., 2024). The performance of the State Civil Apparatus (ASN) at the Sidoarjo Regency Transportation Office is closely related to aspects of the quality of work of civil servants following the rules and duties given (Pujo & Mursyidah, 2020).

According to Law Number 12 of 2012 concerning Higher Education in Article 16, paragraph 1 states, vocational education is a higher education diploma program that prepares students for jobs with certain applied skills to applied undergraduate programs. The description above shows that vocational education implements educational programs closely related to employment (Rahdiyanta et al., 2019; Salas-Velasco, 2023; Tran, 2021; Winangun, 2017).

Gibson in Kasmir (2015) states that individual performance is the basis of organisational performance influenced by individual characteristics, individual motivation, expectations, and management assessments towards achieving individual work results (Tantuka, 2024). Organizational performance is also a work result produced by individuals through the organization's process that can be measured concretely and compared through standards that the organization has determined.

Organizational performance refers to the extent to which the achievements positioned by the organization, with several informational, financial, and human resources, can be effective in the business market (Knill et al., 2019; Olan et al., 2019; Ramdani et al., 2023). Individual performance can affect the organization's overall performance in the short, medium, or long term in a positive or negative direction. The achievement of organizational goals cannot be separated from the resources owned by the organization.

Self-efficacy concerns a person's perception that all forms of effort made can lead to success, thus leading to increased personnel competence in striving to achieve goals. Individuals with high self-efficacy are more likely to show persistence and intensity in their approach to their job role and seek more challenging goals (Carter et al., 2018; da Motta Veiga & Turban, 2018; Hadi, 2023; Ma et al., 2021). Tian et al. (2019) revealed that self-efficacy positively influences organizational performance.

Individuals' high self-perception makes them feel more confident and try to develop strategies for completing challenging tasks (Ingusci et al., 2019). Based on this statement, high self-efficacy tends to make someone do job crafting and vice versa. Job crafting is defined as changing the work done to adjust the resources and demands of the job to personal needs (Petrou et al., 2018; Tims et al., 2014; Zhang & Parker, 2019). Thus, personnel competence will increase, positively affecting organisational performance.

Efforts to encourage the improvement of the quality of human resources through education are carried out by various parties. One of the Law No. 1 of 2009 concerning Aviation in chapter XIX article 381 paragraph 2 mandates that "The provision and development of human resources in the aviation sector aims to realize professional, competent, disciplined, responsible, and integrity human resources".

Likewise, based on PP No. 51 of 2012 concerning Human Resources in the field of Transportation in Chapter IV Article 11, paragraph 1, it is stated that "Human Resources in the field of transportation must have the ability in the field of transportation in accordance with the type of ability determined for the position or job in the field of transportation carried out".

In this study, as an object, are graduates of Indonesian Aviation Vocational Higher Education who work as ASNs of the Ministry of Transportation and carry out duties as education personnel, educators, management, flight analysts, flight supervisors, flight technicians, and evaluators of aviation supervision programs and activities.

As civil servants, of course, they must meet several criteria and competencies required, in accordance with MenPAN RB Regulation Number 38 of 2017 concerning Competency Standards for State Civil Apparatus Positions that civil servants are required to have the ability to carry out their work and roles in their respective services.

KemenPAN RB emphasized that every civil servant must possess at least three important competencies: technical competence, managerial competence, and socio-cultural competence. Technical competence is assessed based on the level and vocational education, technical work experience, and functional technical education. Managerial competencies assessed based on the level of education, structural or managerial education, and leadership experience. Socio-cultural competence is assessed based on work experience related to population diversity, especially in ethnic, racial, and religious elements so that they have national insight. From this description, in addition to technical competence, other competencies that are soft skills are also needed so that as civil servants who work in the aviation sector, of course, they must comply with these regulations and have national insight in carrying out their

duties and functions in the agencies where they work and are able to become a tool for unifying the Indonesian nation.

However, the current conditions show the lack of competence mastered by most new workers even though these workers are graduates of Indonesian Aviation Vocational Higher Education at the Ministry of Transportation. For example, graduates with competence in Airport Mechanical Engineering are placed in the financial management section when they become ASN at the Ministry of Transportation. This is the cause of the lack of correlation between the graduates' competencies and the organization's tasks and functions. The quality of graduates with competencies that are not connected (link and match problem) can be seen from the competence of graduates who still do not meet work competencies. It is an obligation in education, especially vocational education, to recognize graduates who have combined competencies in self-efficacy, knowledge, attitude, and skill (Hasibuan, 2019).

The research gap addressed in this study stems from the limited breadth of existing literature concerning the nexus between individual competence and organizational performance, particularly within the domain of vocational education. Prior research has predominantly focused on isolated aspects such as self-efficacy, competence, knowledge, attitude, and skills, without fully exploring their collective impact on organizational success. Furthermore, within the specific context of graduates from Aviation Vocational Higher Education, there remains a dearth of comprehensive investigations into how their competence positively contributes to organizational performance. This paucity of research hampers a thorough understanding of the intricate interplay between these variables and their implications for organizational effectiveness.

This study introduces novel insights on two fronts. Firstly, it delves into the cumulative influence of self-efficacy, knowledge, attitude, and skills on organizational performance, offering a holistic perspective on their combined effects. Secondly, it sheds light on the positive correlation between personnel competence, particularly among graduates of Aviation Vocational Higher Education, and organizational performance, thereby filling a significant gap in the existing literature.

The purpose of this study is to investigate various aspects that affect organizational performance, especially among graduates of Indonesian Aviation Vocational Higher Education who work as State Civil Apparatus (ASN) at the Ministry of Transportation. The objective includes an analysis of the positive influence of factors such as Self-efficacy, Knowledge, Attitude, and Skill on Organizational Performance. In addition, this study also aims to analyze the positive influence of Self Efficacy, Knowledge, Attitude, and Skill on the Competence of Personnel of Indonesian Aviation Vocational Higher Education graduates as ASNs of the Ministry of Transportation. Furthermore, this study also aims to evaluate the positive influence of Personnel Competence on the Organizational Performance of the Ministry of Transportation. In addition, there is an additional analysis related to the effect of mediation, namely the positive influence of Self-efficacy, Knowledge, Attitude, and Skill on Organizational Performance mediated by Personnel Competence.

METHODS

In this study, we employed a quantitative survey research method grounded in a positivist paradigm, aligning with the research design elucidated by Sugiyono (2022). The adoption of a quantitative approach enables researchers to systematically gather data from targeted populations or samples, utilize structured research instruments, and employ statistical analyses to examine predetermined hypotheses. Our study utilized a survey methodology, employing questionnaires as the primary instrument to elicit respondent opinions. The focal variables of our investigation are categorized into three main groups: independent variables (self-efficacy, knowledge, attitude, and skills), dependent variables (organizational performance), and mediation variables (personnel competence). By delineating these variables within a theoretical framework, we aim to elucidate the interrelationships and contribute to a deeper understanding of the study's context and rationale.

The sampling technique employed in this study aimed to ensure the validity and generalizability of the findings. Participants were selected using a stratified random sampling method, ensuring representation from various demographic groups within the target population. This approach enhances the likelihood of capturing diverse perspectives and experiences, thus strengthening the validity of the study's conclusions. Additionally, efforts were made to mitigate potential biases by randomly selecting participants within each stratum. Overall, the sampling strategy employed in this study aimed to maximize the reliability and generalizability of the findings to the broader population.

RESULTS

Self-efficacy (X1)

The results of processing descriptive statistical data for self-efficacy variables are presented in the table below.

Table 1. Results of Descriptive Statistical Test of Self-Efficacy Variables

No. Item	Indicators	Mean	Standard Deviation
Level			
SE1	The level of confidence of employees to withstand obstacles.	4,030	0,892
SE2	The level of confidence of employees can face all levels of difficulty of their work.	4,020	0,912
Generality			
SE3	The level of confidence can complete a particular task.	4,000	0,940
SE4	The level of confidence in completing tasks that have a wide range as well as a narrow (specific) one.	4,040	0,922
Strength			
SE5	The level of confidence can motivate oneself to take the necessary actions in completing the work	4,020	0,933
SE6	The level of confidence that employees are able to try hard, persistently and diligently.	4,060	0,955
Self Efficacy (X1)		4,028	0,926

Source: Primary Data (2024)

Based on the results of the descriptive statistical test presented in the table above, the mean value for the self-efficacy variable is 4.028. The lowest mean value comes from the generality dimension, which indicates that there is still a lack of confidence among aviation civil servants within the Ministry of Transportation in completing certain tasks. The highest value comes from the Strength dimension, which indicates that aviation civil servants within the Ministry of Transportation have a level of confidence that employees can try hard, persistent, and diligent. The standard deviation value for this variable is 0.926.

Knowledge (X2)

The results of processing descriptive statistical data for Knowledge variables are presented in the table below.

Table 2. Descriptive Statistical Test Results of Knowledge Variables

No. Item	Indicators	Mean	Standard Deviation
Education			
KNW1	Have knowledge of procedures in carrying out tasks	4,100	0,917
KNW2	Understand task execution procedures	4,090	0,911
KNW3	Have above-average work performance	4,090	0,914
KNW4	Have knowledge of employment	4,060	0,919

No. Item	Indicators	Mean	Standard Deviation
KNW5	Have knowledge and skills	4,070	0,961
KNW6	Gain knowledge from observations in the surrounding environment	4,080	0,918
Experience			
KNW7	Have a background that matches your expertise	4,070	0,902
KNW8	Have work experience	4,110	0,893
KNW9	Have peace of mind at work	4,090	0,925
KNW10	Have freedom in applying professional skills	4,060	0,954
KNW11	Willing to share knowledge;	4,070	0,936
Interest			
KNW12	Passion for work	4,070	0,927
KNW13	Obey superiors	4,080	0,950
KNW14	Support the surrounding environment	4,080	0,919
KNW15	Employee awards	4,040	0,900
KNW16	Willing to share knowledge;	4,100	0,939
Average Knowledge Variable (X2)		4,079	0,924

Source: Primary Data (2024)

Based on the results of the descriptive statistical test presented in the table above, the mean value for the knowledge variable is 4.079. The lowest mean value is in the dimension of interest, which indicates that there is still a lack of appreciation for aviation civil servants within the Ministry of Transportation. The highest value comes from the experience dimension. This shows that the average aviation civil servant within the Ministry of Transportation has qualified work experience in their fields. The standard deviation value for this variable is 0.924.

Attitude (X3)

Table 3. Results of Descriptive Statistical Test of Attitude Variables

No. Item	Indicators	Mean	Standard Deviation
Trust or Cognitive			
ATT1	Believe in the importance of attitude in work	4,130	0,917
ATT2	Confident in an attitude that can improve performance in carrying out tasks	4,110	0,872
Feeling or Affective			
ATT3	Love his job	4,130	0,864
ATT4	Likes to develop competencies to improve performance	4,140	0,907
ATT5	Love the challenges of work	4,110	0,913
Behavioral or Conative Tendencies			
ATT6	Have a feeling of pride in their work	4,100	0,955
ATT7	Tendency to carry out activities that are positive for their work	4,110	0,919
Average Attitude Variable (X3)		4,119	0,907

Source: Primary Data (2024)

Based on the results of the descriptive statistical test presented in the table above, the mean value for the attitude variable is 4.119. The lowest mean value comes from the Behavioral or Conative Tendency dimension which indicates that there are still Aviation ASNs within the Ministry of Transportation who lack feelings of pride in the work they do. On the other hand, the highest mean value comes from the Feeling or Affective dimension. This shows that aviation civil servants within the Ministry of Transportation like to develop competencies to improve performance. The value of the standard deviation value for this variable is 0.907.

Skill (X4)

Table 4. Results of Descriptive Statistical Test of Skill Variables

No. Item	Indicators	Mean	Standard Deviation
Skills			
SKL1	Proficiency will master the task	4,200	0,892
SKL2	The ability will complete the task	4,150	0,855
SKL3	Thoroughness will complete the task	4,150	0,863
Personality			
SKL4	The ability to control oneself	4,150	0,907
SKL5	Confidence will get the job done	4,160	0,897
SKL6	Commitment to work	4,180	0,876
Exercise			
SKL7	Ability to train yourself to be better	4,160	0,826
Skill (X4)		4,164	0,874

Source: Primary Data processed (2024)

Based on the results of the descriptive statistical test presented in the table above, the mean value for the skill variable is 4.164. The lowest mean value is in the proficiency dimension, which indicates that there is still a lack of ability to complete tasks and accuracy in completing tasks owned by aviation civil servants within the Ministry of Transportation. On the other hand, the mean value is highest on the Proficiency dimension. This shows that aviation civil servants within the Ministry of Transportation have good skills in mastering the tasks given. The standard deviation value for this variable is 0.874.

Personal Competence (Mediating)

The results of processing descriptive statistical data for the Personnel Competence variable are presented in the table below.

Table 5. Descriptive Statistical Test Results of Personnel Competence Variables

No. Item	Indicators	Mean	Standard Deviation
Knowledge			
PC1	Have a formal learning experience	4,120	0,875
PC2	Have experience of training or courses related to the field of work he handles	4,140	0,895
Skills			
PC3	Have expertise in the field of work he handles	4,120	0,909
PC4	Have the ability to solve problems	4,150	0,855
PC5	Able to solve problems quickly and efficiently	4,170	0,866
Attitude (Attitude)			
PC6	Have a positive attitude (friendly and polite) in action.	4,130	0,892
PC7	Carry out the work correctly	4,140	0,908
Average Variable Personnel Competence		4,139	0,886

Source: Primary Data processed (2024)

Based on the results of the descriptive statistical test presented in the table above, the mean value for the personnel competence variable is 4.139. The lowest mean value in the Knowledge dimension indicates that there is still a lack of formal learning experience possessed by Aviation ASNs within the Ministry of Transportation. On the other hand, the highest mean value is in the Skill

dimension. This shows that aviation civil servants within the Ministry of Transportation are able to solve problems quickly and efficiently. The standard deviation value for this variable is 0.886.

Organization Performance (Y)

Based on the results of the descriptive statistical test, the mean value for the Organization Performance variable was 4.130. The lowest mean value is in the Task Performance dimension, which indicates that task completion is still not optimal in terms of converting material goods into quality goods carried out by Aviation ASNs within the Ministry of Transportation. On the other hand, the highest mean value in the Civic Virtue dimension explains that the Aviation ASNs within the Ministry of Transportation have a high commitment to the organization. The standard deviation value for this variable is 0.905.

In hypothesis testing, evaluation is based on t-statistical and probability values (p-values). In the context of alpha 5%, the value of the t-statistic used is 1.96, where the criterion of acceptance or rejection of the hypothesis is H_a accepted, and H_0 rejected when the t-statistic > 1.96 . In addition, to reject or accept a hypothesis using probabilities, H_a is accepted if the p-value < 0.05 . The results of direct effect testing on graduates of Indonesian Aviation Vocational Higher Education as ASN of the Ministry of Transportation show that all hypotheses tested are supportive. This can be seen from the relevant coefficient, t-calculate, and p-values. For example, the H_2 hypothesis states that Knowledge positively affects Organization Performance, and the test results show a coefficient of 0.257, a t-count of 3.696, and a p-value of 0.000, all of which support this hypothesis. Similar evaluations are applied to all hypotheses tested, so it can be concluded that the results of the hypothesis test show a positive influence of Self Efficacy, Knowledge, Attitude, Skills, and Personnel Competence on Organization Performance in graduates of Indonesian Aviation Vocational Higher Education as ASN of the Ministry of Transportation.

This study evaluates the effect of Self Efficacy, Knowledge, Attitude, and Skill on Organization Performance and Personnel Competence in graduates of Indonesian Aviation Vocational Higher Education as ASN of the Ministry of Transportation. The results of the hypothesis test support all exogenous variables (Self Efficacy, Knowledge, Attitude, and Skill) that positively affect Organization Performance and Personnel Competence. Specifically, Self-efficacy, knowledge, attitude, and skill each positively influence organizational performance and personnel competence. Furthermore, personnel competence has also been proven to positively affect organisational performance. In addition, the findings show that Self-efficacy, Knowledge, and Attitude have a positive effect on Personnel Competence. Thus, this study provides a further understanding of the interrelationship between these factors in the context of graduates of Indonesian Aviation Vocational Higher Education as ASN of the Ministry of Transportation.

CONCLUSION

Civil Servants (ASN), especially graduates of Vocational Higher Education in Aviation in Indonesia working in the Ministry of Transportation, play a crucial role in the continuity of government programs. The performance of these ASNs is influenced by factors such as Self-efficacy, Knowledge, Attitude, and Skill. Vocational education, as mandated by the law, is designed to provide applied skills to students. Self-efficacy, or self-confidence, positively impacts individual and organizational performance. The quality of human resources, including ASN, is measured through technical, managerial, and socio-cultural competencies. However, research indicates limitations in the correlation between graduate competencies and organizational tasks. This study identifies knowledge gaps in self-efficacy, knowledge, attitude, and skill competencies, as well as a lack of research exploring the positive impact on organizational performance among graduates of Vocational Higher Education in Aviation. Therefore, this research provides further understanding of the interplay between these factors in the context of graduates of Vocational Higher Education in Aviation in Indonesia as ASN in the Ministry of Transportation.

REFERENCES

- Azzahra, A. (2023). Implementation Of Good Governance in Public Services at Local Government. *International Journal of Social Service and Research*, 3(7), 1899–1906. <https://doi.org/10.46799/ijssr.v3i7.594>
- Carter, W. R., Nesbit, P. L., Badham, R. J., Parker, S. K., & Sung, L.-K. (2018). The effects of employee engagement and self-efficacy on job performance: a longitudinal field study. *The International Journal of Human Resource Management*, 29(17), 2483–2502.
- da Motta Veiga, S. P., & Turban, D. B. (2018). Insight into job search self-regulation: Effects of employment self-efficacy and perceived progress on job search intensity. *Journal of Vocational Behavior*, 108, 57–66.
- Destiana, R., & Putra, D. T. F. (2022). Leadership Patterns in Improving the Quality of State Civil Apparatus (ASN) Training in the Human Resources Development Agency (BPSDM) of Riau Islands Province. *KEMUDI: Jurnal Ilmu Pemerintahan*, 7(1), 85–101.
- Hadi, P. (2023). The influence of self-efficacy on employee performance mediated by work motivation and work engagement. *International Journal of Research in Business and Social Science (2147-4478)*, 12(2), 653–661.
- Ingusci, E., Spagnoli, P., Zito, M., Colombo, L., & Cortese, C. G. (2019). Seeking challenges, individual adaptability and career growth in the relationship between workload and contextual performance: A two-wave study. *Sustainability*, 11(2), 422.
- Knill, C., Bayerlein, L., Enkler, J., & Grohs, S. (2019). Bureaucratic influence and administrative styles in international organizations. *The Review of International Organizations*, 14(1), 83–106. <https://doi.org/10.1007/s11558-018-9303-x>
- Ma, Z., Gong, Y., Long, L., & Zhang, Y. (2021). Team-level high-performance work systems, self-efficacy and creativity: differential moderating roles of person–job fit and goal difficulty. *The International Journal of Human Resource Management*, 32(2), 478–511.
- Nasution, A. F., Sihombing, M., & Ridho, H. (2024). The Impact of Bureaucratic Reform Policy on Public Services at the Population and Civil Registration Service of North Padang Lawas Regency. *PERSPEKTIF*, 13(1), 231–243.
- Olan, F., Liu, S., Neaga, I., Chen, H., & Nakpodia, F. (2019). How cultural impact on knowledge sharing contributes to organizational performance: Using the fsQCA approach. *Journal of Business Research*, 94, 313–319.
- Petrou, P., Demerouti, E., & Schaufeli, W. B. (2018). Crafting the change: The role of employee job crafting behaviors for successful organizational change. *Journal of Management*, 44(5), 1766–1792.
- Pujo, P., & Mursyidah, L. (2020). Performance Quality of the State Civil Apparatus of the Sidoarjo Regency Transportation Service. *Indonesian Journal of Public Policy Review*, 12, 10–21070.
- Rahdiyanta, D., Nurhadiyanto, D., & Munadi, S. (2019). The Effects of Situational Factors in the Implementation of Work-Based Learning Model on Vocational Education in Indonesia. *International Journal of Instruction*, 12(3), 307–324.
- Ramdani, H. T., Faizurahman, A. N., & Gunawan, D. (2023). A Study on the Correlation Between Organizational Activity and Academic Achievement among Students. *Journal Medika Cendikia*, 10(1), 80–88.
- Salas-Velasco, M. (2023). Vocational education and training systems in Europe: A cluster analysis. *European Educational Research Journal*, 14749041221151188.
- Sudiyono, M. P., & Relisa, S. S. (2022). Dampak Pandemi terhadap Transisi Lulusan Pendidikan Vokasi ke Dunia Kerja.
- Tantuka, Z. (2024). Kinerja Kepala Desa Terhadap Tingkat Kesejahteraan Masyarakat. *Jurnal Pendidikan Ekonomi Dan Bisnis*, 1(1), 18–31.

- Tian, G., Wang, J., Zhang, Z., & Wen, Y. (2019). Self-efficacy and work performance: The role of work engagement. *Social Behavior and Personality: An International Journal*, 47(12), 1–7.
- Tims, M., B. Bakker, A., & Derks, D. (2014). Daily job crafting and the self-efficacy–performance relationship. *Journal of Managerial Psychology*, 29(5), 490–507.
- Tran, C.-T. T. D. (2021). Efficiency of the teaching-industry linkage in the Australian vocational education and training. *Empirical Research in Vocational Education and Training*, 13(1), 11.
- Winangun, K. (2017). Pendidikan vokasi sebagai pondasi bangsa menghadapi globalisasi. *Jurnal Taman Vokasi*, 5(1), 72–78.
- Zhang, F., & Parker, S. K. (2019). Reorienting job crafting research: A hierarchical structure of job crafting concepts and integrative review. *Journal of Organizational Behavior*, 40(2), 126–146.

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