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# Analysis of The Relationship Between Personal Competencies and Individual Work Performance with Job Specialization, Formalization, and Centralization as Moderators

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**Abstract.** *This research examines the impact of personal competencies on individual work performance when performing maintenance activities and examines job specialization, formalization, and centralization as moderator variables. For the analysis, we use questionnaires data from 741 respondents of maintenance officers in the Signalling and Telecommunication Departement at PT KAI (Persero). The results showed that personal competencies significantly affecting individual work performance with a correlation value of 0.001 ( <0.05), and other results related to job Specialization and Centralization as moderator variables demonstrated that these two variables could not be treated as moderators in strengthening the relationship between personal competencies and performance. The results showed correlation value of 0.847 ( >0.05) and 0. 173 (>0.05), respectively. This research's formalization variable was not used in the hypothesis testing stage as a moderator because it lacked instrument validity. This study recommends that maintenance officers have better individual work performance when management focuses on increasing the personal competencies or focuses on increasing competencies in work fields that require special skills by the scope of work they face.*

**Keywords:** *Personal Competencies. Individual Work Performance. Job Specialization. Formalization. Centralization*

## 1. Introduction

Signalling and Telecommunication maintenance officers are workers at PT Kereta Api Indonesia (Persero) or PT KAI (Persero), whose duties and functions are to perform maintenance activities for signalling and telecommunications system equipment. These maintenance activities perform to maintain the equipment's reliability so that it is always ready for operation to support the expeditious operation of the railway.

In their daily activities, maintenance officers face signalling and telecommunication equipment systems with very complex technology-based characteristics. Thus, it requires them to be able to adjust their competencies. These competencies require many skills, a great deal of knowledge, and interpersonal relationships while demanding greater understanding and more effective collaboration. Essential for these competencies set for maintenance officers includes emotional, social, and cognitive intelligence (ESCI). ESCI plays a critical role in our personal and professional lives' overall quality. It is even more critical than our actual measure of brain intelligence (Arora, 2017). ESCI represents "a set of interrelated abilities for identifying, understanding and managing emotions both in the self and others" (Matthews et al., 2006)

Concerning competency, their performance also influenced by organizational structure factors, which have an essential role in its objectives related to expected performance in their work activities. Dalton, D. R., Todor, W. D., Spendolini, M. J., Fielding, G. J., & Porter (1980) suggested that organizational structure has two primary functions, each of which tends to influence individual behaviour and organizational performance. Individual

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behaviour concerning organizational structure design to minimize or at least regulate individual variations on the organization. Individual behaviour in the organizational structure gives the term " Structuring, " defined as policies and activities that occur within the organization that regulates or limit organizational members (Dalton et al., 1980)

The intelligibility of specific work skills possessed standard work procedures, and hierarchy clarity authorization in decision making is crucial to prescribing behaviour affecting performance that must be considered by management in the organizational structure (Dalton et al., 1980).

The dimensions which regulate individual behaviour in structuring the organizational structure consist of job specialization, formalization, and centralization. In a complex work scope, structuring the organizational structure is crucial to the workers' attitudes and behaviour to produce the expected performance.

Based on the existing discussion, the emotional and social side of maintenance officers is neglected and frequently looked down upon as a hindrance to their performance. It shows that emotional insensitivity and lack of ability to understand and manage emotions and those they interact with major weaknesses in the workplace. That is why it is vital to understand what it is ESCI and its importance in the workplace. Different personalities, emotional capabilities, and strengths, and these factors can significantly impact the way they work. The next question is how these factors can significantly impact individual work performance in maintenance activities besides cognitive intelligence?

In the current scope of work, apart from competencies, organizational functions through work roles, work procedures, and decision-making also influence maintenance personnel's performance. This happens because the status of their work role affects the number of skills required so that the more precise the field of work they carry out, the clearer the limitations of the required skills; understanding the work procedures also have an impact on their performance when carrying out maintenance activities, the more they understand maintenance officers will ensure that they can master the work at hand, while the level of decision making affects how quickly decisions can be made so that they can carry out their work immediately.

looking at the discussion that has been explained, then the question arises as to what conditions occur between maintenance personnel in the current organizational structure as follows:

Does the current work role impact individual work performance as expected when faced with a complex job? Are the current work procedures effective in supporting individual work performance in maintenance activities? Furthermore, at which level of decisions can a person's performance impact individual work performance as expected when carrying out maintenance activities?

This study aims to investigate the relevance of personal competencies related to emotional, social and cognitive competency intelligence on individual work performance in maintenance activities and examines the function of the organizational structure through job Specialization, Formalization, and centralization as moderators to strengthen the relationship between personal competencies and individual work performance in maintenance activities.

## 2. Literature Study / Hypotheses Development

### *A. Personal Competencies and Individual work Performance*

Competency is a characteristic that underlies an individual that is causally related to functional and superior performance, which refers to the criteria in a job or situation (Spencer & Spencer, 1993.). Personal competency consists of personal attributes,

skills, and behaviour to perform a function or job task in a determined but superior way (Murray, 2003). Other researchers define competencies as capability or ability (Boyatzis, 2008). Competencies are a set or series of related but different behaviours arranged around the underlying construction called 'motive/intention.' Table 1 shows 3 (three) clusters of competencies that distinguish outstanding individual competencies from average in many countries in the world (Boyatzis, 2011).

Table 1.
*The Scales and Clusters of the Emotional and Social Competency Inventory Emotional Intelligence competency*

| |
|---|
| **Emotional Intelligence competencies:** |
| **Self-Awareness cluster** concerns knowing one's internal states. preferences, resources, and intuitions. The Self-Awareness cluster contains one competency: |
| Emotional Self-Awareness: Recognizing one's emotions and their effects. |
| **Self-Management cluster** refers to managing ones' internal states, impulses, and resources. The Self Management cluster contains four competencies: |
| Emotional Self-Control: Keeping disruptive emotions and impulses in check. |
| Adaptability: Flexibility in handling change. |
| Achievement Orientation: Striving to improve or meeting a standard of excellence. |
| Positive Outlook: Seeing the positive aspects of things and the future. |
| **Social Intelligence competencies:** |
| **Social Awareness cluster** refers to how people handle relationships and awareness of others' feelings, needs, and concerns. The Social Awareness cluster contains two competencies: |
| Empathy: Sensing others' feelings and perspectives and taking an active interest in their concerns. |
| Organizational Awareness: Reading a group's emotional currents and power relationships. |
| **Relationship Management cluster** concerns the skill or adeptness at inducing desirable responses in others. The cluster contains five competencies: |
| Coach and Mentor: Sensing others' development needs and bolstering their abilities. |
| Inspirational Leadership: Inspiring and guiding individuals and groups. |
| Influence: Wielding effective tactics for persuasion. |
| Conflict Management: Negotiating and resolving disagreements. |
| Teamwork: Working with others toward shared goals, creating group synergy in pursuing collective goals. |
| **Cognitive Intelligence Competencies:** |
| Systems Thinking: perceiving multiple causal relationships in understanding phenomena or events. |
| Pattern Recognition: perceiving themes or patterns in seemingly random items, events, or phenomena |

*Source: (ESCI) (Boyatzis & Goleman, 2001; Boyatzis. Goleman and Hay Acquisition, 2007).*

ESC is part of personal competencies. This competency approach emphasizes work attitudes and behaviour performing factors emotionally and socially when working as individuals and groups plus the need for strong individual analytical skills related to their performance in maintenance activities (Vito Aliaga Araujo & Taylor, 2012). One's ability to recognize, understand and use emotional information about oneself and others and one's ability to think or analyze information and situations that lead to or cause effective performance is a definition of ESC (Boyatzis, 2011). Emotional and social competency is the ability to understand our own and others' emotions and to use this knowledge to effectively manage our own and others' emotions (Goleman, 2001).

The value of a series of individual behaviours that positively or negatively contributes to organizational goals is the formal definition of Individual work performance. This definition of performance includes behaviour within the individual's control, but it limits where the behaviour is relevant to work scope (Colquitt, Lepine, & Wesson, 2019) The things people do or their actions that contribute to the organization's goals should be the definition of Individual work performance. One must identify related actions to the organization's goals and those not, regardless of whether those actions are in the written job description (Campbell & Wiernik, 2015). The individual work performance consists of 3 (three) categories that constitute Task Performance. Citizenship Behaviour. and Counterproductive Behaviour (Colquitt et al., 2019). The two categories of Task Performance and Citizenship Behaviour are individual performances that contribute positively to individuals and organizations. while the other category. Counterproductive behaviour is a performance that contributes negatively to individuals and organizations.

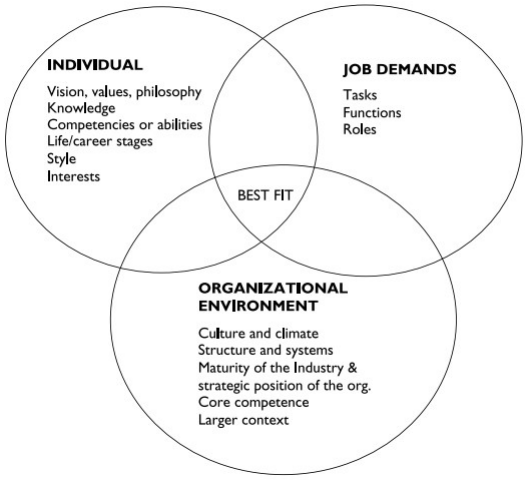


*Figure.1*
Theory of Action and Job Performance: Best Fit (Maximum Performance. Stimulation. and Performance)= Area of Maximum Overlap or Integration (Boyatzis. 2011)

They see that competencies come from performance inductively. They reflect compelling performances. Competencies are identified and articulated in terms of actions and intentions. A competency is a behavioural approach to one's talents (Boyatzis, 2011). Maximum performance occurs when a person's capabilities or talents match the needs of the job demands and the organizational environment (Boyatzis, 2011). Talent defines by personal values, visions, philosophies; knowledge; competencies; life and career stages; interest, and style. In contrast, job demands can describe by responsibility and the tasks that must complete. Those aspects of the organization's environment expect to have a significant impact on the demonstration of competencies and job design and roles include culture and climate; structures and systems; industrial maturity and strategic position therein; and aspects of the economy, political, social, the environmental, and religious environment around the organization (Boyatzis, 2011). (ESC) positively correlated with superior performance in several work-related sales performance (Wong, Law, & Wong, 2004), task performance (Côté and Miners, 2006), call centre performance (Higgs, 2004), supervisor ratings of job performance (Law, Wong, & Song, 2004; Slaski & Cartwright, 2002), and general leadership performance (Dulewicz, Young, & Dulewicz, 2005). Based on the theories and previous discussion. The proposed hypothesis regarding the relationship between individual

competencies and performance of maintenance personnel is specified as follows: ***H**1 = Personal Competencies Maintenance Officers (Emotional, Social, and Cognitive Competency) positively associated with Individual Work Performance.*

*B. Job Specialization, Formalization, Centralization*

Job specialization refers to the process by which work activities become fragmented, simplified, and repetitive and limits individual workers' autonomy or discretion (Taveggia & Hedley, 1976). Specialization in organizational structure reflects the extent to which a job involves executing specific tasks or having specific knowledge and skills (Morgeson & Humphrey, 2006). Job specialization arises due to its complexity. High work complexity in an organization seeing by the number of job roles, sub-units (divisions and departments), levels of power, and organizational operations (Price, 1997). Dewar, Whetten, and Boje (1980) defined complexity as the number of different specializations of work. where complexity and work specialization are similar concepts. Dalton et al. (1980) results showed two different results related to job specialization and the resulting performance. The results showed that the relationship between job specialization and performance gave a positive relationship or no relationship.

Formalization refers to the extent to which appropriate behaviour describe in writing (Dalton et al., 1980). Standardization is closely related to formalization. Standardization regulates or limits the behaviour and procedures of organizational members. In this sense, formalization may be a job description that describes the activities expected in the job classification. Two different points of view are evident in terms of formalization and performance. Without a minimal formalization and standardization level, job role ambiguity can affect individual attitudes and Performance (Dalton et al., 1980). A review of the results of their research (Dalton et al., 1980). showed three different results related to this research. They conveyed that the relationship between formalization and performance showed positive, negative, or no relationship.

Centralization involves the locus of authority for making decisions in the organization (Dalton et al., 1980). One of the relatively few individuals executed the power to make decisions; the structure is considered centralized. The one person who makes every decision is the last in centralization. A minimum level of centralization (decentralization) shall exist in an organization if the decision-making authority is executed equally by every organization member.

The centralization level refers to the spread of decision-making authority throughout the organization (Dalton et al., 1980). A review of research results by (Dalton et al., 1980) showed two different results related to this research. The findings conveyed that the centralized relationship to work performance showed the results of a negative relationship or no relationship.

The gap between the theoretical concepts discussed with the conditions that occur in the current organizational structure-function is the first is the ambiguity of maintenance officers' work roles in dealing with complex work scopes. Conditions that occur today in management shape the job roles given to maintenance officers as a generalist work role in dealing with this complex work scope, which causes difficulties in determining the required competency model that affects their performance in maintenance activities. Second. The work procedures/formalization established to be obeyed and implemented by maintenance officers in support of maintenance activities cannot measure with a certainty of their effectiveness in their performance. Understanding work procedures is still low due to the many work procedures they must understand related to complex work scope. Third, ideally, the more complex a job is, the lower the level of decision making should be so that this can speed up decision making in the performance

of maintenance personnel in maintenance activities. However, in reality, the current conditions for determining the level of decisions are still carried out centrally, it is necessary to make decisions quickly in the performance of maintenance activities to prevent.

Although the central premise in structural contingency theory states that there is no one best organizational structure, the theory states that organizations will be successful if individuals are under organizational characteristics such as structure and all the possibilities in their environment (Donaldson, 2006). Contingency theory states that organizational success does not mean adopting the maximum level but adopting an appropriate level of structural arranging and depending on some level of contingent structuring (Donaldson, 2006). Based on the research results shown previously and the theories put forward. The research hypotheses are specified as follows:

***H*$_2$** = *Job Specialization shall strengthen the relationship between personal competencies possessed with performance performed by maintenance employees.*
***H*$_3$** = *Maintenance personnel' understanding of work procedures/formalization shall strengthen the relationship between personal competencies and performance performed by maintenance employees.*
***H*$_4$** = *The level of centralized decision-making (centralization) shall strengthen the relationship between personal competencies possessed by the performance performed by maintenance employees.*

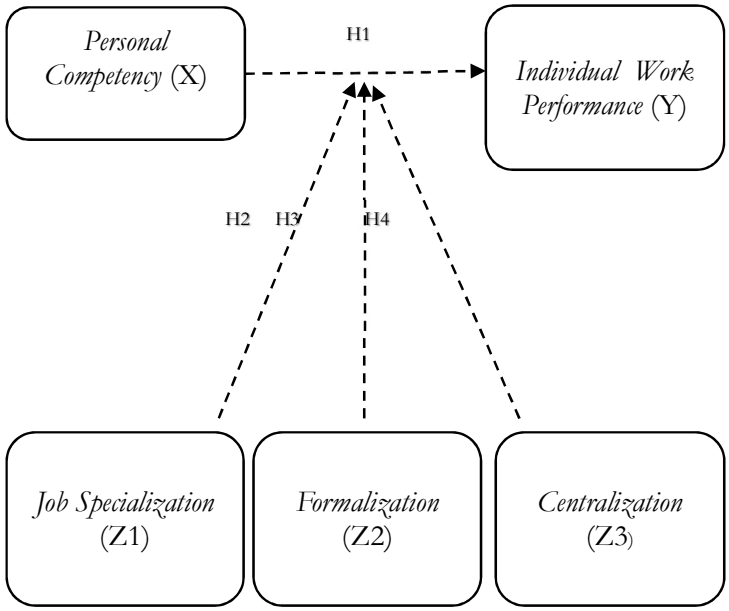


Figure 2.
*Conceptual Model*

## 3. Methodology

*A. Sample*

Data sets obtained from 741 maintenance employees at PT Kereta Api Indonesia (Persero) outspread over 9 (nine) Operational Areas in Java Island and 4 (four) Regional Divisions in Sumatra Island (Table 2).

Table 2.
*Research Sample Distribution*

| No | Operational /Regional Areas | Sample | No | Operational/Regional Areas | Sample |
|---|---|---|---|---|---|
| 1. | Ops. Area 1 Jakarta | 136 | 8. | Ops. Area 8 Surabaya | 57 |
| 2. | Ops. Area 2 Bandung | 64 | 9. | Ops. Area 9 Jember | 26 |
| 3. | Ops. Area 3 Cirebon | 39 | 10. | Regional Area I Medan | 45 |
| 4. | Ops. Area 4 Semarang | 68 | 11. | Regional Area II Padang | 12 |
| 5. | Ops. Area 5 Purwokerto | 54 | 12. | Regional Area III Palembang | 97 |
| 6. | Ops. Area 6 Yogyakarta | 49 | 13. | Regional Area IV Tanjungkarang | 54 |
| 7. | Ops. Area 7 Madiun | 40 | | | |
| | **Total** | | | | **741** |

*B. Research Instruments*

Questionnaire items for competency variables consisted of 17 statements researched and developed by Braun, Woodley, Richardson, and Leidner (2012) with instrument measurements using 5 (five) Likert scales ranging from "very dissatisfied" to "very satisfied." Questionnaire items for organizational structure variables consist of 15 statements which divided into 3 (three) parts consisting of job Specialization with 4 (four) statements researched and developed by Morgeson and Humphrey (2006). with measurements using 5 (five) Likert scale from "Strongly disagree" to "Strongly Agree"; Formalization has 6 (six) statements researched and developed by Podsakoff, Niehoff, MacKenzie, & Williams (1993). with measurements using 5 (five) Likert scales ranging from "Strongly disagree" to "Strongly Agree"; Centralization has 5 (five) statements researched and developed by Iverson and Roy (1994). with measurements using 5 (five) Likert scales ranging from "No freedom at all" to "Much freedom" for numbers 1. 2, and from "Never" to "Most of the time" for numbers 3. 4, and 5. While the questionnaire items for performance variables consisted of 21 statements researched and developed by Williams and Anderson, (1991) with measurements using 5 (five) Likert scales ranging from "Never" to "Always."

*C. Data Analysis Technique*

The instrument's validity tested using an analysis factor, and the instrument's reliability tested using Cronbach's Alpha. Hypotheses testing used Regression analysis.

## 4. Findings and Discussion

From 741 respondents, the results obtained were 531 respondents who filled out the questionnaire online. Then checked the data on the answers to the questionnaire indicated by outliers. We exclude 10 outliers data and use 521 final questionnaire data.

*A. Validity and Reliability Test*

The results of the instrument validity test showed there were several invalid indicators because they had a loading factor < .50; thus must be removed from the research model. and re-validated. The validity test results after reconstruction shown in Table 3. This research model's formalization variable was not used in the hypothesis testing stage as a moderator besides having a loading factor of less than 0.5. Also, it did not consistently converge on one factor; for the reliability test, Table 4 shows that this research instrument was reliable and feasible to proceed to the next stage.

Table 3.
*Validity Test Results*

| Variable | Questioner Items | *Loading Factor* |
|---|---|---|
| Personal Competencies | X1.1 | 0.691 |
| | X1.2 | 0.683 |
| | X1.3 | 0.697 |
| | X1.4 | 0.737 |
| | X1.5 | 0.652 |
| | X1.6 | 0.711 |
| | X1.7 | 0.691 |
| | X1.9 | 0.564 |
| | X1.10 | 0.676 |
| | X1.11 | 0.712 |
| | X1.12 | 0.688 |
| | X1.15 | 0.658 |
| | X1.16 | 0.655 |
| Specialization | Z1.3 | 0.832 |
| | Z1.4 | 0.811 |
| Centralization | Z3.1 | 0.907 |
| | Z3.2 | 0.899 |
| Individual Work Performance | Y1.6 | 0.719 |
| | Y1.7 | 0.721 |
| | Y1.17 | 0.602 |
| | Y1.18 | 0.666 |
| | Y1.19 | 0.726 |

Table 4.
*Reliability Test Results*

| Variable | Cronbach's Alpha |
|---|---|
| Personal Competencies | 0.908 |
| Job Specialization | 0.684 |
| Centralization | 0.832 |
| Individual Work Performance | 0.732 |

*A. Classic Assumption Test*

*Multicollinearity Test*

The test results indicated no severe multicollinearity, where the VIF value did not exceed a value of more than 10, and no Tolerance value is less than .10 (Table 5).

Table.5
*Multicollinearity Test Results*

| **Coefficients** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
| | | B | Std. Error | Beta | | | Tolerance | (VIF) |
| 1 | (Constant) | 4.245 | .028 | | 149.949 | .000 | | |
| | Personal Competency | .109 | .031 | .164 | 3.507 | .000 | .831 | 1.203 |
| | Job Specialization | .083 | .030 | .125 | 2.709 | .007 | .846 | 1.182 |
| | Centralization | -.024 | .020 | -.050 | -1.172 | .242 | .980 | 1.021 |
| a. Dependent Variable: Individual Work Performance | | | | | | | | |

*B. Hypothesis Testing*

*Simultaneous Test (F Test)*
In Table.6, the Anova or F test results showed that the calculated F value is 7.348 with a significance level of .000 below .05. This value explains that Personal Competencies, Job Specialization. Centralization variables and the results of the interaction between variables together or simultaneously affected maintenance employees' performance.

Table 6.
*Simultaneous Significance Test Results*

| **ANOVA** | | | | | | |
|---|---|---|---|---|---|---|
| **Model** | | Sum of Squares | df | Mean Square | F | Sig. |
| **1** | Regression | 15.381 | 5 | 3.076 | 7.348 | .000[b] |
| | Residual | 215.608 | 515 | .419 | | |
| | Total | 230.989 | 520 | | | |
| *a. Dependent Variable: Individual Work Performance* | | | | | | |
| *b. Predictors: (Constant). Personal Competency. Centralization. Job Specialization. Personal Competency*Centralization. Personal competency*Job Specialization* | | | | | | |

*Partial Test (t-Test)*
Multiple Regression Analysis is used to test the hypothesis for testing whether the coefficient interactions/cross product differs from 0, and testing whether the partial correlation between variable dependent and independent when controlling for variable dependent differs from 0 (Whisman & McClelland, 2014). Fairchild and MacKinnon (2009) state when all predictor variables and their interaction terms are centred before model estimation to improve regression coefficients.

Table 7 shows the results of the Multiple Regression Analysis test according to the proposed research model as follows:

Individual Work Performance = 4.252 + 0.113 Personal Competencies + 0.084 Job Specialization – 0.055 Centralization + 0.006 Personal Competencies*Job Specialization – 0.038 Personal Competencies*Centralization + e

*Personal Competencies and Individual Performance*
The linear regression test results showed a unidirectional and significant relationship between Personal Competencies and Individual Work Performance. This value

showed in the resulted coefficient value of .113 and the t count value of 3.466, and Sig <.05; the result shows a positive and significant relationship between personal competencies and individual work performance. This result means that the hypothesis (H1) that formulated previously received.

These results interpreted that maintenance officers shall provide better performance through work attitudes and behaviour when they have strong self-confidence in their competencies. It can also describe based on their emotional, social, and cognitive intelligence competencies: adaptability, emotional self-awareness, emotional self-control, achievement orientation, empathy, influence, inspirational leadership, system thinking, and pattern recognition.

This result explains that their emotional, social, and cognitive abilities when acting as individuals or groups are considering by the scope of work they face. Several competencies are not so prominent in their work roles individually and group roles through competencies such as Positive Outlook. Coach and Mentor and Team Work.

In work performance, task performance attitudes and behaviour showed only focus on completing work final assignments and attention to aspects of the work process. For citizenship behaviour, they are shown by self-compliance with work rules such as using rest hours according to the specified time did not make a fuss about unimportant things at work, and does not prioritize personal interests at work. For counterproductive behaviour, there is no demonstrable performance.

Table 7.
*Results of the Significance of Individual Parameters*

| **Coefficients** | | | | | |
|---|---|---|---|---|---|
| **Model** | **Unstandardized Coefficients** | | **Standardized Coefficients** | **t** | **Sig.** |
| | **B** | **Std. Error** | **Beta** | | |
| (Constant) | 4.252 | .031 | | 135.519 | .000 |
| Personal Competency | .113 | .033 | .168 | 3.466 | .001 |
| Specialization | .084 | .034 | .128 | 2.484 | .013 |
| Centralization | -.055 | .031 | -.082 | -1.783 | .075 |
| Personal Competency*Specialization | .006 | .033 | .009 | .193 | .847 |
| Personal Competency*Centralization | -.038 | .028 | -.062 | -1.365 | .173 |

*a. Dependent Variable: Individual Work Performance*

*Job Specialization as Moderator Variable*

For the second hypothesis (H2), the regression test results showed no significant relationship to the Job Specialization variable in its role as a moderator. This result showed a (t) value of .193 and Sig > .05; thus, for the second hypothesis, it can be concluded that Job Specialization did not play a sufficient role as a moderator to strengthen the relationship between personal competencies and Performance (H2: rejected).

These findings illustrated that the demands for specific work skills and expertise with personal competencies are two different contexts that are unlikely to be performed by maintenance employees to produce the expected performance. This result was evidenced by the regression test result on the Job specialization variable when it put as a moderator. in a linear relationship; this variable initially showed a unidirectional and significant relationship to Individual Work Performance.

This result showed a coefficient value of .084 and (t) value of 2.484, and Sig < .05.

Through the perception accepted in this condition, it can be interpreting that when maintenance employees have specific knowledge and skills, they will perform better. This result can be interpreting that when they have specific knowledge and work skills. They shall produce a work attitude that is always focused on completing every work done and would try hard to avoid failure on every task or job performed.

Specific work skills and centralized decision-making as a moderator in this study did not provide significant test results to strengthen the relationship between personal competencies and maintenance employees' performance. Specific job skills could affect the performance of maintenance employees when working as an independent variable.

These findings reinforce previous research conducted by Dalton et al. (1980) in examining the relationship between Job Specialization and Work Performance. Job specialization shall positively correlate with a worker's performance when faced with demanding performance criteria.

*Centralization as Moderator Variable*

For the fourth hypothesis (H4), the regression test results showed the same results as Job Specialization; there was no significant relationship between centralization in its role as a moderator. This result showed (t) value of -1.365 and the Sig > .05. Thus for the fourth hypothesis, centralization did not play a sufficient role as a moderator to strengthen the relationship between Personal Competencies and Individual Work Performance (H4: rejected).

These findings explicated that every action or attitude that must decide within the work scope had not influenced an employee's work performance even though individually, he had sufficient personal competencies to provide good performance.

These findings reinforce previous research conducted by Dalton et al. (1980) in examining the relationship between Centralization and Work Performance. The results showed that centralization had no relationship with one's competencies and performance.

## 5. Conclusions

The performance showed by the maintenance officers in an attitude manner in completing their work currently only focuses on how to perform each task instructed and not to undergo failure and makes every effort not to neglect aspects of the work that must complete. This condition illustrates that maintenance employees currently have low cognitive intelligence levels when faced with a complex work environment. Thus, they must be allowed to increase their competence by training or other activities to improve their cognitive intelligence for the future. Meanwhile, their current individual condition has a relatively good behavioural performance, prioritizing company interests over personal interests.

The contributions the study adds to this literature are threefold. First, we found there was a significant relationship between personal competencies and individual work performance. This result is not surprising given the findings of other research by (Côté and Miners, 2006; Dulewicz et al., 2005; Higgs, 2004; Law et al., 2004; Slaski & Cartwright, 2002; Wong et al., 2004). Second, Although the relationship between personal competence and individual work performance indicates significant results, maintenance officers' overall related performance has not been able to provide maximum results according to the theory performance (Boyatzis, 2011); third, our study revealed that job specialization and centralization, in particular, does not have a significant effect on individual work performance maintenance as a moderator, this is by the research (Donaldson, 2006) organizational success does not mean adopting the maximum level

but adopting an appropriate level of structural arranging and depending on some level of contingent structuring.

Management strives to invariably identify the roles and scope of work that will be faced by its workers because this could make it easier for management to make modelling plans for management and development of competency models needed by maintenance employees following the scope of work. Attention to individual competence must consider since it has a significant influence on one's performance. Management and development of individual competencies in the form of emotional, social, and cognitive intelligence functions must be done consistently and continuously by management to produce a quality performance as expected by the organization. The level of decision making is to be considered more towards decentralization, which expected to have a positive impact on improving the performance of maintenance employees in the process of maintenance activities, for ideally when the complexity of the work is higher, the level of decisions made must be lower (decentralization).

Sampling only conducts with maintenance officers, generalization must interpret with caution. Therefore, the first recommendation for further research expects to select and interpret the research instruments used to produce valid and reliable research data. Second, further research recommended expanding the sample of different respondents, such as employees one or two levels above maintenance personnel, since they have almost the same job characteristics. Third, other recommendations related to research on organizational structure variables through job specialization, formalization, and centralization as moderator variables need to be review for the possibility of other variables that can strengthen the relationship between the competencies possessed and the performance resulted. Finally, this study serves as the first cross-cultural validation study of the ESC PT KAI (Persero). We believe it is essential for future work to increase sample sizes and examine the relationship between ESC and Performance using various objective measures of performance in various professional settings.

## References


Arora, B. (2017). Importance Of Emotional Intelligence In The Workplace. *International Journal of Engineering and Applied Sciences*, *4*(4), 43-45.

Boyatzis, R. E. (2008). Competencies in the 21st century. *Journal of management development, 27*(1), 5–12.

Boyatzis, R. E. (2011). Managerial and leadership competencies: A behavioral approach to emotional, social and cognitive intelligence. *Vision*, *15*(2), 91-100.

Boyatzis, R. E., and Goleman, D. (2001), *Emotional Competency Inventory*. Boston, MA: The Hay Group.

Boyatzis, R.E., Goleman, D. and Hay Acquisition (2007), *Emotional and Social Competency Inventory*. Boston, MA: The Hay Group..

Braun, E., Woodley, A., Richardson, J. T., & Leidner, B. (2012). Self-rated competences questionnaires from a design perspective. *Educational Research Review*, *7*(1), 1-18.

Campbell, J. P., & Wiernik, B. M. (2015). The modeling and assessment of work performance. *Annual Review of Organizational Psychology and Organizational Behavior,2,* 47-74.

Colquitt, J., Lepine, J. A., & Wesson, M. J. (2019). *Organizational behavior: Improving performance and commitment in the workplace* (6th edition). NY: McGraw-Hill Irwin.

Côté, S., & Miners, C. T. (2006). Emotional intelligence, cognitive intelligence, and job performance. *Administrative science quarterly*, *51*(1), 1-28.

Dalton, D. R., Todor, W. D., Spendolini, M. J., Fielding, G. J., & Porter, L. W. (1980). Organization structure and performance: A critical

review. *Academy of management review*, *5*(1), 49-64.

Dewar, R. D., Whetten, D. A., & Boje, D. (1980). An examination of the reliability and validity of the Aiken and Hage scales of centralization, formalization, and task routineness. *Administrative Science Quarterly, 25*(1),120-128.

Donaldson, L. (2006). The contingency theory of organizational design: challenges and opportunities. In *Organization design* (pp. 19-40). Springer, Boston, MA.

Dulewicz, C., Young, M., & Dulewicz, V. (2005). The relevance of emotional intelligence for leadership performance. *Journal of General Management*, *30*(3), 71-86.

Fairchild, A. J., & MacKinnon, D. P. (2009). A general model for testing mediation and moderation effects. *Prevention Science*, *10*(2), 87-99.

Goleman, D. (2001). An EI-based theory of performance. In C. Cherniss & D. Goleman (Eds.,) *The emotionally intelligent workplace: How to select for, measure, and improve emotional intelligence in individuals, groups, and organizations*, (pp. 27-44).

Higgs, M. (2004). A study of the relationship between emotional intelligence and performance in UK call centres. *Journal of Managerial Psychology*,*19*(4), 442-454.

Iverson, R. D., & Roy, P. (1994). A causal model of behavioral commitment: Evidence from a study of Australian blue-collar employees. *Journal of management*, *20*(1), 15-41.

Law, K. S., Wong, C. S., & Song, L. J. (2004). The construct and criterion validity of emotional intelligence and its potential utility for management studies. *Journal of applied Psychology*, *89*(3), 483.

Matthews, G., Emo, A. K., Funke, G., Zeidner, M., Roberts, R. D., Costa Jr, P. T., & Schulze, R. (2006). Emotional intelligence, personality, and task-induced stress. *Journal of Experimental Psychology: Applied*, *12*(2), 96-107.

Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of applied psychology*, *91*(6), 1321–1339.

Murray, P. (2003). Organisational learning, competencies, and firm performance: empirical observations. *The learning organization, 10,* (5), 305-316.

Podsakoff, P. M., Niehoff, B. P., MacKenzie, S. B., & Williams, M. L. (1993). Do substitutes for leadership really substitute for leadership? An empirical examination of Kerr and Jermier' s situational leadership model. *Organizational Behavior and Human Decision Processes*, *54*(1), 1-44.

Price, J. L. (1997). Handbook of organizational measurement. *International journal of manpower*, *18*(4-1), 305-558.

Slaski, M., & Cartwright, S. (2002). Health, performance and emotional intelligence: An exploratory study of retail managers. *Stress and Health: Journal of the International Society for the Investigation of Stress*, *18*(2), 63-68.

Spencer, L. M., & Spencer, P. S. M. (1993). *Competence at Work models for superior performance*. Toronto: John Wiley & Sons.

Taveggia, T. C., & Hedley, R. A. (1976). Job specialization, work values, and worker dissatisfaction. *Journal of Vocational Behavior*, *9*(3), 293-309.

Vito Aliaga Araujo, S. & Taylor, S.N. (2012). The influence of emotional and social competencies on the performance of Peruvian refinery staff. *Cross Cultural Management: An International Journal*, *19*(1), 19-29.

Whisman, M. A., & McClelland, G. H. (2005). Designing, testing, and interpreting interactions and moderator effects in family research. *Journal of family psychology*, *19*(1), 111-120.

Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of management*, *17*(3), 601-617.

Wong, C. S., Law, K. S., & Wong, P. M. (2004). Development and validation of a forced choice emotional intelligence measure for Chinese respondents in Hong Kong. *Asia Pacific Journal of Management*, *21*(4), 535-559.