Increasing Performance through Interpersonal Communication and Personality of Firefighters Officer in Depok City, Indonesia

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ABSTRACT

This study aims to find efforts increasing officer performance, through interpersonal communication, and personality. The population in this study was fire officers in the Depok City Indonesia area with a total of 161 fire officers. The sampling technique used proportional random sampling with the slovin formula with an error margin of 5%, the sample size was 115 fire officers. The data analysis method used in this research is path analysis. This research resulted in the conclusion 1) There is a positive direct effect of interpersonal communication on officer performance. 2) There is a positive direct effect of personality on officer performance. The most dominant variables in improving officer performance are interpersonal communication.

Keywords: Firefighters Officer, Interpersonal Communication, Performance, Personality

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1. INTRODUCTION

Based on Depok City Regional Regulation number 08 of 2008 concerning Regional Apparatus Organizations, the fire department agency was transformed into the Depok City Fire Department. This change certainly has logical consequences for improving the ability of facilities and infrastructure as well as human resources to fulfill the main tasks and functions carried out as one of the Regional Apparatus Organizations.

In terms of the duties and functions of the organization including the human resources within it, especially officers, the officers who work as firefighters and rescuers in each regional office have duties and responsibilities that must be carried out properly, namely as follows. 1) Providing professional public services in fire and rescue response, 2) Realizing responsive fire and disaster management services, and 3) To prevent, prevent and control fires and disasters in accordance with the achievements in the implementation of the strategic plan with minimum service standards.

There are several obstacles and problems related to human resources in carrying out tasks and functions [1], among others. 1) The intensity of the implementation of fire suppression exceeds the capacity of the ratio of members or firefighters, 2) Human Resources are not yet ideal with the needs, both in quantity and...
quality in order to carry out the duties and functions of the work unit, 3) Response time to the number of fires is not well met, 4) There are no functional human resources for fire analysts and disaster management analysts.

Depok City is part of West Java Province, Indonesia. Depok City has 11 subdistricts and 63 urban villages. In 2017, its population reached 1,809,120 people with an area of 200.29 km² and a population distribution of 9,032 people/km. With an area of 200.29 km², when talking about ideal conditions in the needs of firefighting and rescue services for the realization of responsive and professional fire and disaster management services, at least 43 units of fire trucks are needed. Referring to the Standard Operating Procedure book in terms of the implementation of fire incident management, at least 4 members are required who have the qualification of executors, namely fire inspectors, extinguishers, fire communication operators, and operational vehicle operators. In the span of 2018 to 2023, fire and rescue officers in the city of Depok have not met the minimum ideal ratio of the number of officers to the quantity needed in order to carry out the duties and functions of the work unit. So that this results in the intensity of the implementation of fire suppression exceeding the capacity of the ratio of members or firefighters which has an impact on the performance of officers in terms of achieving response time.

To strengthen the study of the importance of the performance of firefighters and rescuers, preliminary research was conducted in order to obtain an overview of the problems that arise related to the performance of firefighters and rescuers. The initial research was conducted on 36 respondents consisting of 36 firefighters and rescue officers from 3 squads located at the Command Headquarters and 1 team located at the Mayor's Post in the Depok City area. This initial research was conducted on June 19-21, 2023. The results of the initial research show the following data:

1. There are 13% of fire and rescue officers who have problems with work quantity.
2. There are 76% of firefighters and rescue workers who have problems in work quality.
3. There are 53% of fire and rescue officers who have problems with work effectiveness.
4. There are 63% of fire and rescue officers who have problems with work efficiency.
5. There are 49% of firefighters and rescue workers who have problems in task achievement.
6. There are 88% of fire and rescue officers who have problems with work productivity.

Based on research relevant to the performance of officers or employees, the results of research conducted by Diamantidis, A. D. say that management support have the strongest impacts on job performance [2]. Then according to Afrianti et al., 2022 Officer task performance will increase if you can improve leadership behavior through increasing decision-making, ability, motivating ability, communication ability, ability to control subordinates, and responsibility [3]. According to Lusianingrum et al., 2020 increased employee task performance can be contributed through work engagement and coworker support [4]. Research conducted by Krishnan & Loon, 2018 suggests that job satisfaction tends to be a predictor of an academic's task performance compared to an academic's work-life balance [5]. In research Elvie, M. said that employees who have high interpersonal communication may not necessarily have high employee performance [6].

From the explanation the background of the problem above, it can be identified that there are several variables that can affect the performance of firefighters and rescue officers, namely as follows:

1. Weak interpersonal communication when officers work from preparation to implementation can have an impact on officer performance, moreover it can have an impact on organizational performance.
2. Personality that is not aligned with the firefighting and rescue work process can have an impact on officer performance.

Based on the background explanation, the problems that can be formulated in this research are as follows:
1. Is there a direct effect of interpersonal communication on officer performance?
2. Is there a direct effect of personality on officer performance?

2. LITERATURE REVIEW

The theoretical model (Grand theory) underlying this research is the theory proposed by Colquitt. The theory Colquitt in organizational behavior focuses on improving performance and commitment in the workplace in terms of organizational mechanisms, group mechanisms, individual characteristics, individual mechanisms, and individual outcomes.

2.1 Jobs Performance

According to Stephen P. Robbins, et. al. [7] (2019; p.492), performance (Jobs performance) is defined as the end result of an activity, with the criteria of whether these results can be said to be efficient and effective. Furthermore, according to Jason A. Colquitt, et.al (2021) p.38-42, 52-57, said that performance is a number of behaviors and contributions of organizational members to the achievement of organizational goals. Performance is reflected in the work results shown by employees [8].

According to Wibowo. [9] (2015), employee performance includes the level of success of employees in achieving targets set by the organization and the quality of work produced by employees. According to As'ad. [10] (2014), employee performance is the end result of an interaction between employees and the work environment and the suitability of employees' personal characteristics with job demands. According to Schermerhorn, J. R. (2018) [11], employee performance is the level of achievement of work objectives and the employee's contribution to the achievement of overall organizational goals. According to Armstrong, M., & Taylor, S. (2019), said that employee performance is the ability of employees to complete tasks in an effective and efficient manner, and achieve the standards set by the organization [12]. According to Sulaiman, Z., et. al. (2019) p.113-129, employee performance includes achievement of work goals, productivity, work quality, compliance with work procedures, and employee involvement in work [13]. According to Kreitner, R., & Kinicki, A. (2020), employee performance includes the level of success in achieving job goals, quality of work results, involvement in work, and consistency in achieving satisfactory work results [14].

Furthermore, according to Luthans, F., & Youssef-Morgan, C. M. (2021), employee performance includes the ability to achieve predetermined quality, quantity, and time targets, as well as contributions to the achievement of overall organizational goals [15]. According to Greenberg, J., & Baron, R. A. (2022), employee performance is the end result of the interaction between employee personal characteristics, job demands, and the work environment which includes physical, social, and psychological aspects [16]. According to Kahneman, D. (2011) said that effective decision making can affect workplace performance [17]. Then according to Gallwey W. T. (2001) underlines the importance of positive and effective internal communication as a key factor in improving personal and professional performance [18]. Furthermore, Hogan, R. (2007) classifies personality traits into three layers: core layer, emergent layer, and social layer. The influence of personality on performance is the result of the interaction between these three layers [19].

Based on the definitions of performance from the experts mentioned above, it can be synthesized that employee or officer performance is
result of an activity that is assessed based on its efficiency and effectiveness and includes the behavior and contribution of organizational members in achieving organizational goals, which is reflected in the quality of employee work. The indicators are as follows.

1. Quantity of work, the amount of work produced by employees.
2. Quality of work, the quality of work produced by employees.
3. Effectiveness, the ability of employees to achieve goals set by the organization or supervisor in an effective manner.
4. Efficiency, which is the employee's ability to complete work by using available resources effectively.
5. Task achievement, the ability of employees to complete predetermined tasks and achieve the expected results in their work.
6. Productivity is the ratio between output and its input or the output produced per unit of input.

2.2 Interpersonal Communication

According to Knapp, M. L., & Daly, J. A. (2022), interpersonal communication is a process that involves the exchange of messages that include verbal, nonverbal, and contextual aspects between two or more individuals with the aim of building mutually beneficial social relationships [20]. Then according to Adams, K., & Galanes, G. (2021), interpersonal communication is a process of interaction between individuals or small groups that involves the use of verbal and nonverbal messages to build understanding and develop close social relationships [21]. According to Wood, J. T. (2020), interpersonal communication is a process that involves the exchange of information, ideas, and feelings between individuals through verbal and nonverbal language, which has the aim of building positive interpersonal relationships [22]. According to Gudykunst, W. B., & Kim, Y. Y. (2019), interpersonal communication is the process of giving and receiving verbal and nonverbal messages between individuals who interact directly, with the aim of building better interpersonal relationships [23]. According to Chen, M., & Liu, Y. (2019) p.325-341, interpersonal communication is the exchange of information and experiences between individuals through verbal or nonverbal messages with the aim of building better social relationships [24]. According to Guerrero, L. K., et. al. (2018), interpersonal communication is a process that involves the exchange of information, understanding, and emotions between two or more individuals who interact directly, with the aim of building healthy and productive relationships [25].

Furthermore, according to Chen, Y. J., & Martin, M. J. (2018) p.112-121, said that interpersonal communication is a communication process that occurs between two or more people in the context of personal relationships, which involves the exchange of verbal and nonverbal messages and the development of mutually beneficial understanding [26]. According to Lamb, C. W., & Hair, J. F. (2017), interpersonal communication is the process of exchanging messages between two or more individuals directly involving the use of language, intonation, gestures, and specific situational contexts [27]. According to Brennan, E., & Croft, R. (2017), interpersonal communication is a two-way interaction process between two or more individuals who influence each other, respond to each other, and create mutual understanding [28]. According to Floyd, K. (2017), interpersonal communication is the process of exchanging messages between two or more people in an interpersonal relationship that occurs in a mutually influencing social, psychological, and cultural context [29]. According to Bazerman, M. H., & Moore, D. A. (2009) interpersonal communication can influence decision-making by exploring aspects such as confirmation bias,
negotiation, and influence from teammates [30]. Then according to Gallwey W. T. (2001) underlines the importance of positive and effective internal communication as a key factor in improving personal and professional performance [31].

Based on the definitions of interpersonal communication from the experts above, it can be synthesized that “interpersonal communication is an interaction by exchanging information between two or more people through verbal and non-verbal language related to experiences, ideas, feelings, and responses with the aim of building good, productive and positive working relationships”. There are seven indicators, namely.

1. Respond to each other; the ability of individuals to respond and provide feedback on what others say or do.
2. Build shared understanding; the process of developing mutual understanding and reaching agreement in interpersonal relationships.
3. Empathic; which is the ability to see the other person’s perspective and feel their feelings. This helps in building healthy and supportive interpersonal relationships.
4. Politeness; which is the use of polite and respectful language in an interpersonal interaction.
5. Information clarity; which is a person’s ability to convey messages clearly and easily understandable.
6. Information disclosure; namely a person’s ability to be open in communicating with others, including in sharing personal information or feelings that may be difficult to talk about.
7. Topic suitability; a person’s ability to choose appropriate and relevant topics in communicating with others.

2.3 Personality

According to Cervone, D., & Pervin, L. A. (2019) p.2, personality is a combination of individual psychological aspects, such as patterns of thought, emotion, and behavior that are relatively stable and last for a long time [32]. Furthermore, according to Carver, C. S., & Scheier, M. F. (2018) p.2, personality is a collection of individual characteristics that include patterns of thinking, feeling, and behavior that are relatively stable and consistent in various situations [33]. According to Cloninger, S. C. (2016) p.3, personality is an individual characteristic that includes the tendency to behave, feel, and think in relatively stable and consistent ways [34]. According to Costa, P. T., & McCrae, R. R. (2018) pp. 179-197, personality is a combination of individual psychological aspects that include patterns of thinking, feeling, and behavior that are relatively stable and last over a long period of time [35]. According to Pervin, L. A., & Cervone, D. (2018) p.3, personality is a relatively stable pattern in the way individuals respond and interact with the world around them [36]. According to Mayer J. D., et. al. (2016) said that personality can affect decision-making abilities related to emotions [37]. Furthermore, Hogan, R. (2017) classifies personality traits into three layers: core layer, emergent layer, and social layer. The influence of personality on performance is the result of the interaction between these three layers [38].

Based on the definitions of personality from the experts above, it can be synthesized that personality is a tendency in a person that is reflected through a characteristic pattern of thinking, emotions, and behavior that distinguishes one person from another in responding, interacting in various situations relatively stable and consistent. The indicators are as follows.

1. Conscientiousness (Awareness / Earnestness), namely reliable, ambitious, hard work, organized, desire for achievement, careful work, discipline, punctual / time-oriented.
2. Agreeableness: trusting others, cooperative/ willing to help, sympathetic, liked by many people, attractive, polite


4. Extraversion (Ability to establish relationships) namely happy to talk, warm in sociable / affectionate, easy interaction / joiner, passionate / energetic / passionate, active action / brave, dominant, assertive


3. METHODS

This research design is quantitative research. The quantitative research was conducted to test the research hypothesis. The population in this study was fire officers in the Depok City area of Indonesia with a total of 161 fire officers. The sampling technique used proportional random sampling with the slovin formula with an error margin of 5%, the sample size was 115 fire officers.

4. RESULTS AND DISCUSSION

Analysis requirements test; Normality, Homogeneity, and Linearity Test.

The Normality Test is carried out to determine whether a data distribution is normal or not, this is important to know regarding the accuracy of selecting the statistical test to be used. Because parametric statistical tests require the data to be normally distributed. Furthermore, homogeneity testing is carried out in order to test the equality of variances for each group of data. Homogeneity test requirements are needed to carry out inferential analysis in the comparison test. Then, linearity testing is carried out in order to test the regression equation model of an independent variable on a dependent variable [39], Supardi U.S., (2013).

Normality Test Result

In the officer performance variable, the value of Chi square = 3.99 is obtained, while from the Chi square table for $\alpha = 0.05$ and $df = 7$, the value of Chi square table = 14.1 is obtained. Because the value of Chi square $< \text{Chi square table}$, then $Ho$ is accepted and concluded that the data or samples of officer performance variables are normally distributed.

In the interpersonal communication variable, the value of Chi square = 4.98 is obtained, while from the Chi square table for $\alpha = 0.05$ and $df = 7$, the value of Chi square = 14.1 is obtained. Because the value of Chi square $< \text{Chi square table}$, then $Ho$ is accepted and concluded that the data or samples of interpersonal communication variables are normally distributed.

In the personality variable, the value of Chi square = 4.26 is obtained, while from the Chi square table for $\alpha = 0.05$ and $df = 7$, the value of Chi square table = 14.1 is obtained. Because the value of Chi square $< \text{Chi square table}$, then $Ho$ is accepted and concluded that the data or samples of personality variables are normally distributed.

Homogeneity Test Result;

a. Interpersonal Communication and Performance Officer.

It is known that the $F$ value = 1.2924 and $F$ table at a significant level of 0.05 obtained $F$ table = 2.11. It turns out that $F$ value $= 1.2924 < F$ table $= 2.11$ then $Ho$ is accepted and concluded that the two groups of interpersonal communication data and officer performance have the same variant or homogeneous.

b. Personality and Performance Officer.

It is known that the $F$ value = 1.4628 and $F$ table at a significant level of 0.05 obtained $F$ table = 2.11. It turns out that $F$ value $= 1.4628 < F$ table $= 2.11$, so $Ho$ is accepted and it is concluded that the two groups of personality data and
officer performance have the same or homogeneous variants.

**Linearity Test Result:**

a. **Interpersonal Communication to Performance Officer;**

From the calculation results show that the F value = 0.782 and F table at a significant level α 0.05 obtained F table = 1.50. Because F value = 0.782 < F table = 1.50 then Ho is accepted, and it is concluded that the regression model of Interpersonal Communication variables (X1) with Officer Performance (Y) is linear.

b. **Personality to Performance Officer;**

The calculation results show that the F value = 1.145 and F table at a significant level α 0.05 obtained F table = 1.58. Because F value = 1.145 < F table = 1.58, Ho is accepted, and it is concluded that the regression model of the Personality variable (X2) with Officer Performance (Y) has a linear pattern.

**Indicator Analysis:**

Indicator analysis aims to identify independent variable indicators that are related to dependent variable indicators [41] Sugiono (2017).

This aims to see which indicators are weak and need to be strengthened from the independent variable to improve the dependent variable.

Based on the correlation analysis, it can be seen that the indicator (X1.2) Building mutual understanding with the indicator (Y5) Task achievement has the highest correlation coefficient value of 0.657 which means that, the relationship between these variable indicators is in the strong category and these indicators are the most dominant among other indicators.

Then in indicator (X2.1) Serious or awareness with indicator (Y5) Task achievement has the highest correlation coefficient value of 0.640 which means that, the relationship between these variable indicators is in the strong category and these indicators are the most dominant among other indicators.

**Path Analysis:**

Path analysis is used to analyze the pattern of relationships between variables with the aim of determining the direct or indirect influence of a set of independent (exogenous) elements on the dependent (endogenous) variable [40] Supardi U.S., (2013).

From Table 1 and Figure 1, it can be seen that the regression coefficient path of the interpersonal communication on officer performance βYX1 is 0.43, which means that there is a strong positive effect of interpersonal communication on officer performance, then the regression coefficient path of the personality on officer performance βYX2 is 0.20, which means that there is a positive moderate effect of personality on officer performance.

Based on Table 1, it is known that the R-squared output value is 0.34. This means that 34% of the officer performance variable (Y) can be explained by the variables of interpersonal communication (X1), and personality (X2), so that the remaining 66% or ε_z = 0.66 is influenced by other variables which are factors that are not in this study.
Table 1. Result of Standardize Coefficient Beta (source from STATA software)

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<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>Number of obs</th>
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<th>R-squared</th>
<th>Adj R-squared</th>
<th>Root MSE</th>
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<td>961.636463</td>
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<td>28.89</td>
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<td>112</td>
<td>33.2903427</td>
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<td>49.5771157</td>
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</tr>
</tbody>
</table>

| Officer_Performance | Coefficient Std. err. | t | P>|t| | Beta |
|---------------------|------------------------|---|-----|-----|
| Interpersonal_Communication | .3302423 | .0731168 | 4.52 | 0.000 | .4383976 |
| Personality | .1312876 | .0636299 | 2.07 | 0.041 | .2007968 |
| cons | 77.3405 | 9.418975 | 8.21 | 0.000 |      |

Figur 1. empirical causal relationship model between variables

5. CONCLUSION

This research has successfully found efforts and strategies to improve the performance of firefighters in Depok City. Based on these findings, it can be explained as follows: There is a positive direct effect, interpersonal communication has a significant effect on the performance of firefighters. Strengthening interpersonal communication can improve the performance of firefighters in Depok City. There is a positive direct effect, Personality has a significant influence on the performance of firefighters. Strengthening Personality can improve the performance of firefighters in Depok City.

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REFERENCES

### BIOGRAPHIES OF AUTHORS

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