Improving Teacher Communication Skills Through Personality Variables and Perceptions of The Social Environment

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Abstract: Improving Teacher Communication Skills through Personality Variables and Perceptions of the Social Environment. Objective: This study aims to comprehensively understand the influence of perceptions of personality and social environment on the communication skills of high school teachers. **Methods:** The research approach is quantitative with a survey method. The total sample is 209 teachers as a sample of 439 teacher population in Central Java Province, Indonesia by simple random sampling method. Data analysis used prerequisite analysis test and inferential statistics with path analysis. **Findings:** Analysis and interpretation of the data shows that an increase in the dominant type of flexibility of the teacher's personality improves the teacher's communication skills. The increased similarity of perceptions of the teacher's social environment results in an increase in the teacher's communication skills. Increasing the dominant type of teacher personality flexibility results in an increase in the similarity of perceptions of the teacher's social environment. **Conclusion:** improving teacher communication skills can be conducted by improving personality flexibility and perception of the social environment.

Keywords: communication skills, personality, social environment, path analysis

Abstrak: Meningkatkan Keterampilan Komunikasi Guru melalui Variabel Kepribadian dan Persepsi Lingkungan Sosial. Tujuan: Penelitian ini bertujuan untuk memahami secara komprehensif pengaruh persepsi kepribadian dan lingkungan sosial terhadap kemampuan komunikasi guru Sekolah Menengah Atas. Metode: Pendekatan penelitian adalah kuantitatif dengan metode survey. Jumlah sampel adalah 209 guru sebagai sampel dari 439 populasi guru di Provinsi Jawa Tengah, Indonesia dengan metode simple random sampling. Analisis data menggunakan uji analisis prasyarat dan statistik inferensial dengan analisis jalur. Temuan: Analisis dan interpretasi data menunjukkan bahwa peningkatan tipe fleksibilitas kepribadian guru yang dominan meningkatkan kemampuan komunikasi guru. Meningkatnya kesamaan persepsi lingkungan sosial guru mengakibatkan meningkatnya kemampuan komunikasi guru. Peningkatan tipe fleksibilitas kepribadian guru yang dominan mengakibatkan peningkatan kesamaan persepsi lingkungan sosial guru. Kesimpulan: meningkatkan kemampuan komunikasi guru dapat dilakukan dengan meningkatkan fleksibilitas kepribadian dan persepsi lingkungan sosial.

Kata kunci: kemampuan komunikasi, kepribadian, lingkungan sosial, analisis jalur.

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■ **INTRODUCTION**

Communication is an important indicator in creating an effective and efficient learning process (Zlatiæ et al. 2014). Various previous research results have proven that the learning process goes well if the teacher has good communication skills. Teachers who have good communication can convey to students about a scientific concept, attention, and motivation so that it has a positive impact on learning achievement (Ophir et al. 2016). This effective and efficient learning process has an impact on student achievement. The student's learning achievement is influenced by students' motivation, group learning, and teachers' performance in teaching (Prasetyono et al. 2020). The results of previous studies stated that character education can be carried out optimally by providing positive reinforcement through effective communication in improving student learning achievement (Prasetyono et al. 2018)

Teachers are professionals whose main task is to educate and teach their students and all of this is it viewed in their performance results (Zackoff et al. 2019). High school teachers' performance, especially private school teachers, still needs improvement. One of the successful indicators of teachers' performance helping student overcame their difficulties, in learning or social issues in the school environment (Doležalová 2015). One of the characteristics of teachers' success in helping students in their learning process is having good communication between teachers and students (Gartmeier, Gebhardt, & Dotger, 2016). In addition, students who have better communication with their teachers will be better at their achievements and have more fun learning.

However, the current condition of students is still reluctant or afraid to start a conversation with their teacher (Zlati, Bjeki, & Bojovi, 2014). There are still quite a number of students who are at the secondary and high education levels who are afraid, feel uncomfortable, and do not want to communicate with their teachers (Schneider & Arnot, 2018). The findings were reinforced by research results which stated that there were still quite a number of students in class who were embarrassed or afraid to talk to their teacher (De Coninck et al. 2020). Nevertheless, the communication effectiveness between teachers and students is one of the determining factors in the success of learning in school (Gartmeier, Gebhardt, & Dotger, 2016).

The impact which arises from ineffective communication between teachers and students are inadequate learning outcomes, decreased learning achievement, student *misbehavior*, misunderstanding between teachers and students, also less development of the students' personalities (Claro et al. 2018). One of the causes of misunderstanding between teachers and students is due to the perceived differences in the communication process. Students sometimes misinterpret the instructions given by the teacher and sometimes the teacher also misunderstands what the student's explanation means because the student is not confident or afraid to talk to the teacher (Eftimie 2013).

Several previous studies have shown that effective teacher communication is influenced by the teacher's personality, communication skills, maturity and behavior (Lawless et al. 2020; Treiman et al. 2018). No research has been conducted using perceptions of the social environment as a predictor variable for communication variables. Even though the perception of the social environment is one of the important points that must be observed in carrying out an effective communication process (Haines 2016). Effective communication will be difficult to achieve if the surrounding environment is not conducive so that it can lead to a process of interpreting different messages (Liaw 2017). This is of course very dangerous because in addition to causing harm or having an unfavorable impact,

it can also cause what is an important point in the message not to be conveyed.

Individuals, in interpreting the messages their received, depend on the social environment in which the communication process takes place (Saborit et al. 2016). For example, a conversation that occurs in a crowded place will cause disruption in the communication process. Consequently, the messenger will increase the volume of his voice in order to be heard by the other person. This can lead to multiple interpretations or misunderstandings in communication. It is possible that the recipient of the message will interpret that the other person is angry or being emotional with themselves (Chandra, Situmorang, & Situmeang 2020). The results of these different interpretations are influenced by individuals' personalities (Zhang, 2007). Hence the concept of personality affects directly and indirectly on communication. Meanwhile, social environment perceptions have a direct effect on communication.

Teachers in teaching are also often biased by their perceptions in capturing the stimulus given by students (Kraft & Rogers 2015). This misperception naturally occurs because there are many factors that interfere with the teacher in formulating an understanding of a stimulus that appears. These disturbances are due to noise, differences in understanding of individual character and personality. Therefore a teacher must be able to minimize these distractions to get the correct perception and become the core of the stimulus that appears. But this is not easy because one of them is determined by the personality of the individual (Lekhanova & Glukhova 2016).

These unique characteristics of personality influence the individuals' interaction and adaptation towards the environment (Reeve, Jang, & Jang, 2018). These environment include the intra-psychological, physical and social environments. It is clear that many factors influence a person's behavior when interacting or reacting when experiencing certain situations. In the workplace, it therefore stands to reason that both environmental factors and employees' personalities are important predictors of focus (or other indicators of productivity) and wellbeing and that the two act in concert (Baranski, et al., 2023). So that personality is one of the key factors in determining the effectiveness of communication when viewed from the internal aspects of the individual.

However, personality knowledge can be used to predict a person's behavior when interacting or facing certain situations (Albu, Vasile, & Pescaru, 2011). Several factors are known able to shape or influence a person's personality, including heredity, environmental and situational factors. Heredity refers to factors that are determined from birth. Physical size, facial attractiveness, gender, temperament, muscle composition and reflexes, energy levels, and also biological rhythms are characteristics that are generally considered to be either fully or substantially influenced by who are the child's parents (Harrington & Loffredo, 2010). Because of this, it becomes very natural if there are differences in the interpretation of the message between one individual and another because of the differences in the personality of each individual.

From the explanations above, it can be synthesized that personality is a set of unique traits patterns, and characteristics that are relatively stable and organized within an individual that provides consistency and individuality to the individual's behavior thus it affects behavior tendencies when interacting and adapting to the surrounding environment with indicators: (1) response to the environment, (2) gathering information, (3) making decisions, and (4) flexibility in life. It can be concluded that the social

environment perception is an active process when individuals receive information stimulation in the form of events, activities, situations and especially people in the surrounding social environment through their senses then organized and interpreted to give meaning, impressions, and responses accordingly with the framework of that individual's knowledge.

Through this research, it will be known the efforts that can be made to improve high school teacher communication in terms of the perception of the teacher's personality and social environment. These efforts can be made after knowing the magnitude of the path coefficient generated by each dependent variable on the independent variable. Communication is influenced by personality and how communication variables are also influenced by perceptions of the social environment. The results of this study have an impact on efforts to improve communication skills for teachers in each school.

■ METHODS

This study used a survey research method with data collected by selecting a sample in the The population in this study were vocational high school teachers in Central Java Province. The sampling technique used simple random sampling, which means that there are no specific considerations in taking the sample, the most important is that they are private vocational school teachers (Prasetyono, Abdillah, Widiarto, & Sriyono, 2018). The number of samples is calculated using the Slovin formula with a tolerance of 5% which is 209 teachers. All male and female teachers who teach in vocational high schools can be sampled in this study

This study uses a quantitative approach to the survey method. The research was conducted for 5 months from November 2021 until March 2022. The research begins with making research instruments and then testing the validity and reliability of 30 respondents. Then distributing

questionnaires to a number of respondents, namely 209 vocational high school teachers. The next step is to test the data analysis with the following stages: normality test, linearity test, and hypothesis test.

Research data were collected using non-test instruments, namely questionnaires compiled by the research team based on the indicators of each research variable. Data collection used questionnaires with 5 answer choices: always, often, sometimes, ever, and never. The questionnaire content outline for communication variables with the indicators is information transmission, message understanding, channel selection, communication context, communication effects, and feedback. The questionnaire content outline for personality variables with the indicators of a response to the environment, gathering information, making decisions, and flexibility in life. Questionnaire content outline for social environment perception variables with the indicators stimulation, meaning interpretation, messages interpretation, and responses. The hypothesis in this study is as follows:

H_1: Personality has a positive direct effect on communication

H_2: Social Environment Perception has a positive direct effect on communication

H_3: Personality has a positive direct effect on social environment perception

■ RESULTS AND DISCUSSION

The data used in arranging the regression model must fulfill the assumption that the data comes from a normally distributed population (Singh, 2007). The normality assumption basically states that in a regression model, the regression error estimates must be normally distributed (Meyers, Gamst, & Guarino, 2010). The criteria for calculating the normality test is $L_{count} < L_{table}$ with an error rate of 5%. After being calculated, it turns out that all of them have normal distribution which is presented in the following table 1:

Table 1. Normality test results summary for estimated regression error

Estimated Regression Error	n	L_{count}	L_{table}		Explanation
			$\alpha = 5\%$	$\alpha = 1\%$	
X_3 over X_1	209	0.0539	0.061	0.070	Normal
X_3 over X_2	209	0.0428	0.061	0.070	Normal
X_2 over X_1	209	0.0586	0.061	0.070	Normal

Before using the regression equation in order to draw conclusions in hypothesis testing, the regression model which is obtained needs to be tested for its significance and linearity using the F test in the ANOVA table (Gorard, 2004). The overall results of the significance and linearity regression tests are summarized in the following Table 2:

Table 2. Significance and regression linearity test results summary

Reg	Equation	Regression Test		Linearity Test		Conclusion
		F_{count}	$\dfrac{F_{table}}{0.01}$	F_{count}	$\dfrac{F_{table}}{0.05}$	
X_3 over X_1	$\hat{X}_3 = 72.93 + 0.32X_1$	23.78 **	6.76	1.16 ^{ns}	1.45	Very Significant
X_3 over X_2	$\hat{X}_3 = 81.42 + 0.29X_2$	30.19**	6.76	1.07 ^{ns}	1.42	Very Significant
X_2 over X_1	$\hat{X}_2 = 63.61 + 0.36X_1$	20.21**	6.76	1.40 ^{ns}	1.45	Very Significant

Reg : Regresi Regression

** : Very Significant

^{ns} : Non-significant (linear regression)

Table 3. Simple correlation coefficient matrix between variables

Matrix	Correlation Coefficient		
	X_1	X_2	X_3
X_1	1.00	0.298	0.321
X_2		1.00	0.357
X_3			1.00

The results of the analysis process and simple correlation calculations are presented in table 3 below:

From table 3 it can be seen that the correlation between personality and social environment perceptions is $r_{12} = 0.298$. The correlation between personality and communication is $r_{13} = 0.321$. The correlation between social environment perceptions and communication is $r_{23} = 0.357$. After the correlation coefficient value for each variable is obtained, next the path coefficient can be calculated by substituting the correlation coefficient value into a predetermined recursive equation. By using the determinant matrix calculation, the coefficient value of each path is obtained. Furthermore, calculating the value of the t_{count} coefficient on the path coefficient to determine the significance of the effect exogenous to the endogenous variable.

H$_1$: Personality has a positive direct effect towards communication.

The path analysis calculation for the direct effect of personality over communication, the calculation result is that the path coefficient value is 0.236 and the t$_{count}$ coefficient value is 3.559. The t$_{table}$ coefficient value for á = 0.01 is 2.58. Because the coefficient value of t$_{count}$ is bigger than the value of t$_{table}$, thus Ho is rejected and Ha is accepted, which is personality has a direct effect on communication can be accepted. The results of the analysis of the first hypothesis provide findings that personality has a positive direct effect on communication. Thus it can be concluded that communication is directly influenced positively by personality.

The calculations results in the previous section showed that personality has a positive direct effect towards communication (**H$_1$**), the correlation coefficient value is 0.321 and the path coefficient value is 0.236. This means that personality will have a direct effect on communication. The results of this study are in accordance with the results of previous research which concluded that personality directly affects communication (Klassen & Tze, 2014; De Coninck, Walker, Dotger, & Vanderlinde, 2020). The natural traits of a personality involved, the process of perception and motivation immensely influence communication (Musakophas & Polnigongit, 2017).

Personality diversity and individual abilities also perceptions and motivations affect communication (Luthans, 2011). Meanwhile personality diversity and individual abilities, apart from influencing communication, also affect perception and motivation (Hellriegel & Slocum, 2008). Perception, communication, and motivation are influenced by personality and its diversity also individual abilities simultaneously affect individual effectiveness (van der Kleij,

2019). It is clear that personality affects many aspects of a person in an organization or work environment.

At least three individual characteristics mediate the influence of cultural individualism-collectivism on an individual's communication: their personality, their individual values, and their self-construct (Albu et al., 2011). Individual communication can be influenced by their personality, values, or self-construals (Kraft & Rogers, 2015). Every communication is different because it is influenced by the personality of each individual involved in it. A person's personality provides a characteristic in behavior that affects a person's communication (Maican, Cazan, Lixandroiu, & Dovleac, 2019). The MBTI can influence a person in interacting with the environment around them. This research states that the caregiver's personality type will affect the way they communicate and interact with others. Based on the explanation above, it is clear that personality has a positive direct effect towards communication.

H$_2$: The social environment perceptions have a positive direct effect towards communication

The path analysis calculation for the direct effect of the social environment perceptions towards communication, the calculation result is that path coefficient value is 0.287 and the t$_{count}$ coefficient value is 4.334, while the t$_{table}$ coefficient value for á = 0.01 is 2.58. Because the t$_{count}$ coefficient value is bigger than the t$_{table}$ coefficient value, Ho is rejected and Ha is accepted, which is the social environment perceptions directly affect communication can be accepted. The results of the second hypothesis analysis is that the social environment perceptions have a positive direct effect on communication. Based on these findings, it can be concluded that communication is directly affected positively by the social environment perceptions.

The calculations results in the previous section showed that the social environment perceptions will have a direct effect on communication (H_2). Based on the calculation result, it is obtained the correlation coefficient value 0.357, and the path coefficient value 0.287. Some factors can influence communication and one of it that affect communication are perception (Powell & Bodur, 2019). Communication becomes effective when the stimulus is initiated and addressed by the sender or source, which is closely related to the stimulus which is felt and responded to by the receiver. Communication will be effective when the sender and recipient of the message have similar perceptions (Bordalba & Bochaca, 2020). The calculation result showed that personality have a direct effect towards social environment perceptions.

H_3: Personality has a positive direct effect towards the social environment perceptions

The path analysis calculation for the direct effect of personality towards the social environment perceptions, the calculation result is that path coefficient value is 0.298 while the t_{count} coefficient value is 4.503. The t_{table} coefficient value for á = 0.01 is 2.58. Because the coefficient of t_{count} is bigger than the value of t_{table}, Ho is rejected and Ha is accepted, which is personality directly affect the social environment perceptions can be accepted. The results of the first hypothesis analysis provide finding that personality has a positive direct effect on social environment perceptions. Thus it can be concluded that the social environment perception is directly positively influenced by personality.

The calculations results in the previous section showed that personality has a positive direct effect towards the social environment perceptions (H_3). This is proven by the acquisition of a correlation coefficient of 0.298

and a path coefficient of 0.298. This study results are in accordance with previous research which states that individual social environment perceptions are influenced by personality (Clark, Durbin, Hicks, Iacono, & McGue, 2017; Maican et al., 2019; van der Kleij, 2019). All psychological indicators eventually will influence individual behavior directly when the individual acts intuitively or impulsively or indirectly through the media of the mind (Maican et al., 2019). In terms of determining perceptions, it tends to be influenced by personal factors or characteristics of people who respond to stimuli (Ye & Law, 2019).

When an individual sees a target and attempts to interpret what he sees, that interpretation is strongly influenced by the personal characteristics of the preceptor individual. Personal characteristics which influence perception include a person's attitude, personality, motives, interests, past experiences and expectations. Interpretation is highly influenced by the personal characteristics of individual receptors (Magyar, Krausz, & Hab, 2020). Personal characteristics that affect perception include a person's attitude, personality, motives, interests, past experiences and expectations (Tümen & Çelik, 2020). This is clarified by Ye & Law (2019) which states that the characteristics of the preceptor also influence the selective attention process. Every outstanding characteristic or uniqueness make a person, object or event more likely to be recognized. This is because the uniqueness is selected and involved in selective perception. Based on the above explanation, it is clear that there is a positive direct influence of personality towards social environment perceptions.

The results of the structural model path analysis can be described in Figure 1 as follows:
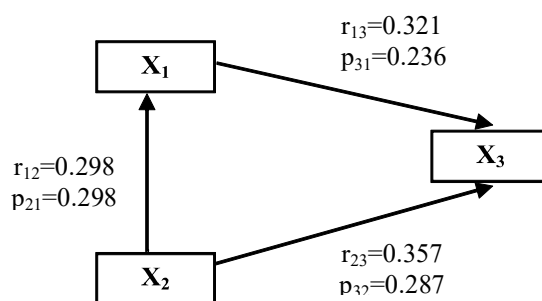
Figure 1. Empirical model between variables

Based on all these discussions, it can be concluded that the increase in the dominant flexibility types of teachers' personalities resulted in an increase in the success of high school teachers' communication. The rise in the similarity of teachers' social environment perceptions resulted in a rise in the success of high school teachers' communication. For this reason, teachers need to improve their communication skills in the classroom which include face to face interactions and the necessary communications between the participants involved in the classroom to ensure that learning takes place. In addition, communication in a classroom setting is unique because it has highly regulated patterns of communication between teachers and students, both of whom have a different status (Yusof & Halim, 2014). The raise in the dominant flexibility types of teachers' personalities resulted in a raise in the similarity of teachers' social environment perceptions. Consequently, the implications of this study's results will be directed to the efforts to improve communication through personality variables and social environment perceptions. Efforts that can be made to increase the teachers' flexibility dominant personality type so it will have an impact on improving successful communication is to know, and understand oneself and who we are speaking to. Teachers must care about the dominant personality type in themselves and the one they are speak to, then determine how to communicate respectively. The teacher must understand the main purpose of a communication process and then determine the

appropriate responses. Efforts that can be made to improve the success of communication through the social environment perceptions are by maximizing feedback. Teachers should be able to maximize feedback as an effort to equalize perceptions or ensure the one they speak to has the same perception. One way to be sure is to ask or confirm directly.

■ **CONCLUSIONS**

Based on all these discussions, it can be concluded that the increase in the flexibility of the dominant type of teacher personality resulted in an increase in the communication success of high school teachers. The increase in the common perception of teachers about the social environment resulted in an increase in the success of high school teacher communication. The increase in flexibility of the dominant type of teacher personality resulted in an increase in the similarity of high school teachers' perceptions of the social environment. So the implications of the results of this study will be directed to efforts to improve communication through personality variables and perceptions of the social environment. Efforts that can be made to increase the flexibility of the dominant type of teacher personality so that it has an impact on increasing communication success are by knowing, understanding oneself and the other person. The teacher must care about the dominant personality type in himself and the other person, then determine the appropriate way of communicating. The teacher must understand the main purpose

of a communication process, then determine the appropriate response. Efforts that can be made to increase the success of communication through perceptions of the social environment are to maximize feedback. Teachers can maximize feedback in an effort to equalize perceptions or ensure the other person has the same perception. One way to be sure is to ask or confirm directly.

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