Abstract

Evaluation of oral expression (micara) course shows that students speaking Javanese are frequently influenced by Indonesian. The use of improper ‘unggah-ungguh’ (speech level) from grammatical variety of ‘krama inggil’ (high speech level) is also often found. A positive attitude on Javanese is required in order to succeed in mastering Javanese speaking skill. Another supporting aspect in speaking activities is the logical thinking ability. The speaker should be able to identify messages, ideas, and thoughts, and then deliver them properly and coherently, in a well-organized way. The objectives of this research are to find the strength of the correlation of the students’ logical thinking ability, Javanese speech level mastery, and attitude on Javanese language to Javanese speaking skill both individually and collectively. It was carried out at several Javanese language and literature education departments of private universities in Central Java namely: PBSJ-FKIP Bantara Veteran University of Sukoharjo, Muhammadiyah University of Purworejo, and PGRI Institute of Teacher Training and Education of Semarang. The samples of the research were 90 students and were taken by using the purposive random sampling technique. The data of research were analyzed by using the correlational model of analysis. The results of research show that: (1) there is a positive correlation between the students’ logical thinking ability and their Javanese speaking skill; (2) there is a positive correlation between the students’ Javanese speech level mastery and their Javanese speaking skill; (3) there is a correlation between the students' attitude on Javanese language and their Javanese speaking skill; and (4) there is a simultaneously significant correlation of the students’ logical thinking ability, speech level mastery, and attitude on their Javanese language altogether to Javanese speaking skill. Thus, the proposed hypotheses are verified.

Keywords: Logical thinking ability; Javanese speech level mastery; students' attitude on Javanese; Javanese speaking skill
Introduction

Javanese language has been long since becoming the mother tongue of Javanese people living especially in the provinces of Central Java, Special Region of Jogjakarta, and East Java. In the North Banten, Lampung, near Medan, and transmigration areas in several islands in Indonesia, live also Javanese people speaking Javanese language (Poedjosoedarmo, 1979: 1).

The purpose of Javanese language teaching is to improve the quality of local language teaching in such a way so that the speaker has: a) local language skills, b) good knowledge of local language, and c) positive attitude on his/her language and literature. Moreover, local language teaching also acts as a means of: a) supporting the nurturing of national cultural element, b) directing the language and region development, and c) standardizing its varieties (Halim 1976: 13; Unal, 2013).

Oral expression/ Micara as a learning course is intended to give the students knowledge and ability on speech techniques, on speech text making, and on giving various kinds of speeches. The learning course topics are, to name a few, pranatacara (master of ceremony) and pamedhar sabda (orator) for various necessities: (1) Traditional Javanese ceremonies such as pernikahan (wedding), tingkeban (seven months of pregnancy), birth (sepekenan / five day after the birth, selapanan/thirty five day after birth), supitan (circumcision), tumbuk alit (eight times four = thirty two years of age), tumbuk ageng (eight times eight = sixty four years of age), and death. (2) common speeches such as those in public holiday and observance/remembrance days ceremony, KKN/students’ community work activities, seminar, organizations in the community, and many others. The course activities are in the forms of lecturing, speech practices, and field studies on various Javanese traditions (Sayuti, 2004: 226; Bhaskar: 2013).

The Teacher Training Faculties of Bantara Veteran University, Sukoharjo, Muhammadiyah University, Purworejo, and IKIP PGRI, Semarang as the Education Institutions for the Education Personnel/Lembaga Pendidikan Tenaga Kependidikan (LPTK), have both directly and indirectly given enough skills so that the students have adequate speaking abilities. In all aforementioned universities and institute, Oral Expression course/ Micara is given so that the students will be really able and skilled in conveying concept, idea, thought, and information to the listener through oral means. Speaking skill is productive, generating, giving, and receiving. Speaking is not merely fast producing words out of speech organs. Its main purpose is to deliver the main ideas cohesively, in various local languages, as pursuant to the functions of communication (Jolly, 2004:2; Durer et al., 2013).

When talking, a person uses his/her physical factors, namely his/her speech organs to produce the sounds of the language. Moreover, other body parts such as head, hands, and facial expressions, are all used when speaking something. Psychological factors plays notable role in the speech eloquence. Emotional stability, for example, does not merely influence the speech material coherency. Other psychological factors such as the fear and diffidence that are felt by almost all students when they have to talk also influence the speech delivery fluency. It corroborates the research result of Power (2005:3), who states that the fear that some persons have when talking in front of the public is greater than what they have when facing death, thus causes many persons to feel reluctant and lose their confidence when they have to speak before a number of persons. Therefore, the role of the teacher is needed to improve the students’ skills
and to share strategies that can be used to overcome the problems (Romero, 2009: 86; Bhaskar et al., 13).

However, up to now their speaking ability has not reached the expected level. As it was already proven from the course evaluation results of oral expression/Micara, when speaking Javanese the students are very much influenced by Indonesian language. Grammar deviations such as mistakes in pronunciation, dictions, word order, and even in stringing sentences happen. Improper uses of ungga-ungguh ragam krama inggil (more polite forms of language) are also present (Witek, 2015).

In the process of speaking, there are several basic points to consider, such as the problem of attitude (Harjasujana, 1993: 14; Kashef et al., 2014). Other aspect supporting the speaking activity is logical thinking ability. The speaker should be able to identify message, idea, and thought to be conveyed. Moreover, he/she should recognize the speech organization spoken by the speaker; whether it is systematic, organized, or coherent. To achieve that level, the logical thinking ability is needed, using a number of evidences such as words or sentences in the speech or by connecting parts of speeches to his/her knowledge and experiences, in order to transfer the message, idea, and thought (Pornsawon, 2012).

In addition to the aforementioned variables, language attitude cannot be ignored in the process of speaking, since it affects a person's speech skill quality. Thus, a positive attitude on Javanese language is needed to be able to master the speaking skill successfully (Unal, 2013). It seems that in all Javanese Language and Javanese Literature Education Programs of all three universities and institute, namely the Teacher Training and Education Faculty, Bantara Veteran University, Sukoharjo, the Teacher Training and Education Faculty, Muhammadiyah University, Purworejo, and IKIP PGRI Semarang, those three aspects mentioned above have not gotten serious attention yet, especially in the subject of oral expression / Micara. The estimated answers offered above have not been verified yet empirically. Therefore, to test the presence of positive relation between logical thinking ability, speech level mastery, and students' attitude on Javanese language with Javanese speaking skill, the researcher is interested in conducting this research.

This research is intended to discover whether or not 1) there is a correlation between the students' logical thinking ability and their Javanese speaking skill, 2) there is a correlation between the students’ speech level mastery and their Javanese speaking skill, 3) whether there is a correlation between the students' attitude on Javanese language and their Javanese speaking skill, 4) whether there is a correlation of those three: the students’ logical thinking ability, speech level mastery, and attitude on Javanese language to their Javanese speaking skill.

**Research method**

This research was taken place in Javanese Language and Literature Education Programs of three private universities and institute in Central Java province: those of PGRI Institute of Teacher Training and Education of Semarang, Muhammadiyah University of Purworejo, and Bantara Veteran University of Sukoharjo. The private universities were selected as the research sites because there has never been related research conducted in Javanese Language and Literature Education Programs in private universities and institute. The students of private universities are also lacking of Javanese speaking skill, especially in using ragam krama (Javanese polite language forms). The research was conducted in first semester of 2013/2014 Academic Year.
The research method used was survey method as proposed below:

Notes:
- $X_1$: Students’ Logical Thinking Ability
- $X_2$: Student’ Speech Level Mastery
- $X_3$: Students’ Attitude on Javanese Language
- $Y$: Javanese Language Speaking skill.

1. The correlation between the students’ logical thinking ability and their Javanese speaking skill
2. The correlation between the students’ speech level mastery and the students’ Javanese speaking skill
3. The correlation between students’ attitude on Javanese language and their Javanese speaking skill
4. The correlation of the students’ logical thinking ability, speech level mastery, and attitude on Javanese language altogether to Javanese speaking skill

Population is all data concerning the research in the appointed scope and sphere (Putrawan, 1990 : 5). The research population was all students of the Javanese Language and Literary Education Program in all private universities in Central Java, who have already taken oral expression / Micara course in the academic year of 2013/2014. They all amounted to 430 students. Those private universities involved in the research were PGRI Institute of Teacher Training and Education of Semarang, Muhammadiyah University of Purworejo, and Bantara Veteran University of Sukoharjo.

Sample is part of population (Putrawan, 1990 : 5). Several methods can be used to determine the size of sample, and to ensure that the selected sample represents the population (is representative). Arikunto (1991: 170) states that if the objects are less than 100, all of them should be taken to make it a population research. Matra and Kusto as cited by Singarimbun states that for the samples classified into large category, at least 30 cases should be taken. Considering Arikunto's opinion, this research took 86 (20%) students as samples.

Because of the researcher’s limitation to investigate the whole population, sampling is commonly done in the research (Purwanta and Sulistyastuti, 2007: 37).

Sampling technique used in this research was Purposive Random Sampling, meaning that the samples were taken randomly for specific purposes. The sampling was carried out with students who had already taken Oral Expression Course. Both Bantara Veteran University of Sukoharjo, and Muhammadiyah University of Purworejo, each had 5 classes while PGRI Institute of Teacher Training and Education of Semarang had 3 classes. There were 13 classes totally. For the sampling, 6 students were taken from each class in Bantara Veteran University of
Sukoharjo, and Muhammadiyah University of Purworejo, while 9 students were taken from each class in PGRI Institute of Teacher Training and Education of Semarang.

There were four variables used in this research. The data collection in this research was conducted using both test and non-test techniques. The test was employed to gather data on the logical thinking ability and Javanese speech level mastery variables. Questionnaire was used to collect data on the students' attitude on Javanese language. Performance test was used to get the data on the Javanese speaking skill. The data collection was planned for two days in each university.

The data of research were in the forms of logical thinking ability, speech level mastery, students' attitude on Javanese language, and Javanese speaking skill scores.

The scores of logical thinking ability and Javanese speech level mastery were gained through instruments in the form of objective test. The scores of students' attitude on Javanese language was acquired using questionnaire/attitude scale, and the scores of Javanese speaking skill were obtained using performance test.

The instruments used to obtain the research data should meet certain quality. The instrument quality is generally indicated with two kinds of indicators: (1) validity and (2) reliability. Validity refers to how far the instrument items measure what is being measured and should be measured, while reliability is connected to how far the instruments has the degree of consistency in the measurement (Tuckman, 1978:160).

Each item of the instrument was considered valid, so all of them can be used. Therefore, an empirical item analysis should be done by correlating each item score with the total score. To do so, two kinds of correlation techniques were used: (1) the product moment correlation technique and (2) the point-biserial correlation technique. In this research, product moment correlation technique from Pearson (Popham, 1981: 87-93) was used to correlate each item score with the total score on the attitude scale instrument (questionnaire), because the item score of the attitude scale instrument was a continuum (1-5). Meanwhile, to correlate each item score with the total scores on the logical thinking ability and the Javanese speech level mastery test instruments, point-biserial correlation technique was applied since those two instruments scores were discontinuous / dichotomous (1-0) (Djaali et al, 2000: 122).

The reliability of each instruments are described as follow. The calculation of instrument reliability involved two things; the one: (1) related to the consistency of the answers of the measurement objects and (2) related to the consistency of each instruments item. Thus, the reliability coefficient calculation for (1) logical thinking ability and (2) Javanese speech level mastery was conducted using KR-20 formula. KR-20 formula was implemented because those two instruments were dichotomous (Popham, 1981: 143), meaning that each correct answer got 1 and each incorrect answer was scored 0.

The test instrument of students' attitude on Javanese language (attitude scale) was in the form of rating scale whose answer choices were polytomous. The reliability calculation was conducted using Alpha Cronbach formula (Popham, 1981:145). The reliability rating formula was used to calculate the reliability of the performance instrument of Javanese speaking skill.

Regression and correlation analysis techniques, both simple and plural regression and correlation were implemented to test all four research hypotheses. Simultaneously, regression
analysis was used to find out the functional relation or the form of the correlation between the variables (Sudjana, 1992: 310). Correlation analysis was used to find out the degree or the strength of the relation between variables (Sudjana, 1992: 367).

**Research Result**

Theoretically, the scores for the Javanese speaking skill that can be gained are between 100 and 300, each of which serves as lowest and highest scores. But empirically, the results of data collection and processing showed that out of ninety respondents (n = 90), the scores spanned from 195 as the lowest score, to 300 as the highest score. From the value distribution, it can be seen that mean score was 243.861; median was 246.25; and mode was 222.5; while standard deviation was 26.814, with the variant of 718.983.

The variable data was in the form of logical thinking ability score of ninety respondents (n = 90). Theoretically, the scores that can be gained are from 0 to 33, each as the lowest and the highest score. Yet empirically, the results of the data collecting and processing showed that the lowest score gained is 21 and the highest one is 33. Out of value distribution, mean score is 28.92; median was 30.00; and mode is 30; while standard deviation is 3.184 with the variant of 10.140.

Thirty six respondents (40.00%) get lower than average score, thirty three respondents (36.67%) gain above the average score, while the other twenty one respondents (23.33%) are placed exactly on the interval class of average score.

The data of speech level mastery is also in the form of scores gotten out of ninety respondents (n = 90), which theoretically will range between 0 and 31. Yet empirically, the results of data collection and processing show that the lowest score that has been gained is 21 and the highest one is 31. Out of that value distribution, mean score is 26.66, median is 27.00; and mode is 26. The standard deviation is 2.884, with the variant of 8.318

Theoretically, the data of the students' attitude on Javanese language variable can range between 37 and 185. Nonetheless, empirically, the results of data collection and processing show that out of all ninety respondents (n = 90), the lowest score gained is 126 and the highest score reached is 180. Mean score is 155.92; median is 158.00; mode was 160; and standard deviation is 12.535 with the variant of 157.129.

Summary of statistical data obtained from the research respondents (n = 90) is presented below to clarify the result of descriptive analysis related to research variables expounded previously.

The procedure of the data processing in this research involved the calculation of the descriptive statistic of each variable, requirement analysis testing, and hypothesis testing. The result of the descriptive statistic calculation is presented in table 1 while the results of the requirement analysis which encompass normalcy tests and variance of homogeneity tests were presented in tables 2 and 3.
Table 1: Summary of statistical data of each Research Variable

<table>
<thead>
<tr>
<th>Data Types</th>
<th>Y</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>90</td>
<td>90</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Mean</td>
<td>243.861</td>
<td>28.92</td>
<td>26.66</td>
<td>155.92</td>
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<tr>
<td>Median</td>
<td>246.250</td>
<td>30.00</td>
<td>27.00</td>
<td>158.00</td>
</tr>
<tr>
<td>Modus</td>
<td>222.5</td>
<td>30</td>
<td>26</td>
<td>160</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>26.813</td>
<td>3.184</td>
<td>2.884</td>
<td>12.535</td>
</tr>
<tr>
<td>Variance</td>
<td>718.983</td>
<td>10.14</td>
<td>8.318</td>
<td>157.129</td>
</tr>
<tr>
<td>Range</td>
<td>105</td>
<td>12</td>
<td>10</td>
<td>54</td>
</tr>
<tr>
<td>Lowest Score</td>
<td>195</td>
<td>21</td>
<td>21</td>
<td>126</td>
</tr>
<tr>
<td>Highest Score</td>
<td>300</td>
<td>33</td>
<td>31</td>
<td>180</td>
</tr>
<tr>
<td>Total</td>
<td>21947.5</td>
<td>2603</td>
<td>2399</td>
<td>14033</td>
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</table>

Table 2: Normality Test Result

<table>
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<th>Ltable</th>
<th>Note</th>
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<tr>
<td>Ŷ and X1</td>
<td>0.063</td>
<td>0.093</td>
<td>Normal</td>
</tr>
<tr>
<td>Ŷ and X2</td>
<td>0.077</td>
<td>0.093</td>
<td>Normal</td>
</tr>
<tr>
<td>Ŷ and X3</td>
<td>0.087</td>
<td>0.093</td>
<td>Normal</td>
</tr>
</tbody>
</table>

Table 3: Variance of Homogeneity Test Result

<table>
<thead>
<tr>
<th>The Variance of Y on</th>
<th>$X^2_{count}$</th>
<th>$X^2_{table}$</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>8.519</td>
<td>21.026</td>
<td>Homogenous</td>
</tr>
<tr>
<td>X2</td>
<td>7.201</td>
<td>18.307</td>
<td>Homogenous</td>
</tr>
<tr>
<td>X3</td>
<td>17.006</td>
<td>46.194</td>
<td>Homogenous</td>
</tr>
</tbody>
</table>

Notes:

Y = Javanese speaking skill
X1 = logical thinking ability
X2 = speech level mastery
X3 = attitude on Javanese language

Discussion

The results of the analysis and hypothesis testing show that the four hypotheses proposed in this research are supported. It means that generally, for the students of the Javanese Language and Literature Education Program in the private universities in Central Java (IKIP Institute of Teacher Training and Education of Semarang, Muhammadiyah University of Purworejo, and Bantara Veteran University of Sukoharjo) there is a positive correlation between the students’ logical thinking ability, speech level mastery, and attitude on Javanese language to their Javanese speaking skill, either partially or simultaneously.

Firstly, the analysis on the correlation between students’ logical thinking ability and their Javanese speaking skill shows that there is a positive correlation between these two variables, meaning that the better the students' logical thinking ability, the better is their Javanese speaking ability. Since the degree of correlation strength is 0.327 and coefficient of determination is 0.107, it can be stated that about 10.7% variation of the students' Javanese speaking skill can be rationalized by their logical thinking ability. In other words, logical thinking ability contributes about 10.7% to the Javanese speaking skill scores.
After controlling the other two independent variables: the speech level mastery and attitude on Javanese language simultaneously, the coefficient of second-order partial correlation is 0.239, meaning that there has been a 0.088 point decrease in correlation coefficients (0.327 – 0.239), followed with a decrease in contribution percentage on the scores of Javanese speaking skill variable.

Secondly, the analysis on the correlation between the student’s speech level mastery and their Javanese speaking skill shows that the research hypothesis stating that there is a positive correlation between the students’ speech level mastery and their Javanese speaking skill is supported, meaning that the better the students' speech level mastery, the better is their Javanese speaking skill. Since the correlation coefficient is 0.365 and the determination coefficient is 0.133, it can be stated that about 13.3% variation of the students' Javanese speaking skill is determined by their speech level mastery. In other words, the speech level mastery contributes about 13.3% to the Javanese speaking skill.

Thirdly, the analysis on the correlation between the students' attitude on Javanese language and their Javanese speaking skill shows that as the coefficient of correlation is significant, as reflected on the correlation coefficient of 0.398, those two variables are clearly positively correlated. It means that the better the students' attitude on Javanese language, the better is their Javanese skill. The students' attitude on Javanese language variable contributes 15.8% to the score variations of Javanese speaking skill, since the coefficient of determination is 0.158.

By controlling the other two independent variables, the students' logical thinking ability and the speech level mastery, there is a decrease in the correlation coefficients, from 0.398 to 0.376. After its significance was tested using t-test, the 0.376 coefficient of second-order partial correlation was deemed significant. It indicates that the students' attitude on Javanese language is proven to be a predictor for the variable of Javanese speaking skill.

The fourth discussion is related to the correlation of the three independent variables to Javanese speaking skill. The acceptance to research hypothesis stating that there is a positive correlation of the students’ logical thinking ability, speech level mastery, and attitude on Javanese language to Javanese speaking skill means that those three independent variables undoubtedly act as predictors of the Javanese speaking skill.

Since multiple-correlation coefficient is 0.561 and the multiple-determination coefficient is 0.315, the contribution given by the students’ logical thinking ability, speech level mastery, and attitude on Javanese language to their Javanese speaking skill is about 31.5%. The rest, about 68.5%, is determined by other variables.

Of those three, it can be seen that the biggest contribution is given by attitude on Javanese language and the smallest one is given by the logical thinking ability.

The 31.5% simultaneous contribution of those three independent variables was smaller than the whole contribution of each independent variable; 39.8%. Apparently it is due to the presence of inter-correlation between each independent variable, resulting in a tug of war between. As a psychological phenomenon, although theoretically those three independent variables are considered independent, they are difficult to control.
## Conclusion

The result of the hypothesis testing shows that the four hypotheses proposed in this research (H1) are supported and the null hypothesis (H0) is not supported. It means that: (1) there is a positive correlation between the students’ logical thinking ability and Javanese speaking skill; (2) there is a positive correlation between the students’ speech level mastery and their Javanese speaking skill; (3) there is a positive correlation between the students’ attitude on Javanese language and their Javanese speaking skill; and (4) there is a positive correlation of the students’ logical thinking ability, speech level mastery, and attitude on Javanese language to Javanese speaking skill. The detailed conclusions of the research are as follows.

Firstly, even though other independent variables are controlled individually and simultaneously, the logical thinking ability (X1) positively correlates to Javanese speaking skill (Y). It shows that logical thinking ability correlates consistently to Javanese speaking skill. It also means that the higher their logical thinking ability, the better is their Javanese speaking skill.

Secondly, even though other independent variables are controlled individually and simultaneously, speech level mastery (X2) positively correlates to Javanese speaking skill (Y). It shows that speech level mastery correlated consistently to Javanese speaking skill. It also means that the higher their speech level mastery, the better is their Javanese speaking skill.

Thirdly, even though other independent variables are controlled individually and simultaneously, the students' attitude on Javanese language (X3) positively correlate to Javanese speaking skill (Y). It shows that the students' attitude on Javanese language correlates consistently to Javanese speaking skill. It also means that the better their attitude on Javanese language, the better is their Javanese speaking skill.

Fourthly, overall, logical thinking ability (X1), speech level mastery (X2), and attitude on Javanese language (X3) has positive correlation to Javanese speaking skill (Y). It means that the students' Javanese speaking skill can be improved through the improvement of students’ logical thinking ability, speech level mastery, and attitude on Javanese language as a whole. The contributions of the independent variables on the dependent one from the largest to the smallest are: firstly, the students' attitude on Javanese language (X3), secondly, speech level mastery (X2), and thirdly, logical thinking ability (X1).

## References


Durer et al. (2013). *An analysis of Turkish students’ attitude towards English in speaking classes: voice your thoughts!* Turkey: Elsevier.


