A CORRELATIONAL STUDY BETWEEN STUDENTS’ ANXIETY, VOCABULARY MASTERY, AND SPEAKING SKILL

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Abstract: The study is aimed to find out the correlation between students’ anxiety, vocabulary mastery, and speaking skill of the eleventh grade students of SMA Negeri 1 Kartasura in the academic year of 2011/2012; both partially and simultaneously. The study belongs to a correlational study which uses a questionnaire and a test to collect the data. The population is all of the eleventh grade students while the sample is the students of class XI A3 taken by cluster random sampling technique. The techniques used to analyze the data are simple and multiple regression and correlation by using SPSS 18. The results of the study show that there is a positive correlation between students’ anxiety, vocabulary mastery, and speaking skill, both partially and simultaneously. The positive correlation indicates that students’ anxiety and vocabulary mastery tend to go up together with speaking skill or they tend to go down together with speaking skill. Both students’ anxiety and vocabulary mastery also give contribution to speaking skill.

Keywords: correlation, students’ anxiety, vocabulary mastery, speaking skill, simple and multiple regression and correlation

Speaking is one of the main aspects in daily life. It is the simplest way to deliver message. People send their messages through utterances to carry out communication with other. The importance of speech has been reinforced by many linguists who claim that speech is the primary form of language, and that writing depends on speech.

In an oral communication, people just need to communicate the ideas well so the interlocutor can get their meaning. However, it is not an easy thing to do for some people. In speaking, one should reconsider many aspects like pronunciation, grammar, and ideas to express before he speaks. It is because speaking is an interactive activity which involves the area of knowledge; pronunciation, grammar, vocabulary and fluency.

Speaking as a mean of communication expected the locutor to deliver his utterances fluently in order to be understandable. However, there is one aspect that can disturb the fluency when delivering utterances called anxiety. It is one aspect of speaking skill in which should be considered. Anxiety in communicating in a second or foreign language, especially when that language is English can have a debilitating effect and can influence students’ adaptation to the target environment and ultimately their educational goals. Arnold in Bowen, (2004: 43) proposes that the skill of speaking is greatly influenced by the time factor as it involved producing language spontaneously to a critical audience. The embarrassment that students feel when they expose their language imperfections to others and the possibility of negative feedback from the
instructor increases anxiety levels significantly.

Speaking creates feelings of anxiety because there is (so much) at stake: not only do they have to create their own utterances but most students feel that they have to pronounce properly as well. Highly anxious students indicate that all of the students felt that speaking in their language classes had been the greatest sources of anxiety. Liu (2007: 119) says that anxiety was experienced by a considerable number of students when speaking English in class or giving presentations at the front while the least during pair work, a multitude of variables such as lack of vocabulary, low English proficiency and memory dissociation contributed to students anxiety in class, and most students felt helpless about being anxious when speaking English in class. According to her, language anxiety manifests itself when students avoided conveying complex messages in the foreign language, when they displayed a lack of confidence or froze up in role-play activities, and when they forget previously learned vocabulary or grammar in evaluative situations.

In addition, one of the most important aspects of speaking is vocabulary mastery. Palmer in Nation (2008: 43) stated that memorizing phrases and sentences is one way of developing fluency in speaking at a very early stage in language learning. He emphasized that the first thing to be learnt in language learning is the vocabulary. Vocabulary plays the main role in speaking since it deals with the variations of words. Moreover, someone needs a large number of words to speak a language.

Learning vocabulary means acquiring long lists of words with their meanings, whether through some direct link or via translation into the first language. In addition, knowing words is the key to understanding and being understood. It is the basic of the conversation. It is the key of communication to convey meaning of utterances. Without words to express a wider range of meanings, communication just cannot happen in a meaningful way. Nation (2008: 43) said when learners have enough receptive vocabulary they can be helped to use some of it productively.

Based on the statements above, the researcher is concerned in conducting the research to deduce whether or not there is correlation between students’ anxiety, vocabulary mastery, and speaking skill.

**Speaking Skill**

O’Malley (1990: 66-67) states that speaking is an example of a complex cognitive skill that can be differentiated into various hierarchical sub skills, some of which might require controlled processing while others could be processed automatically. Sub skills here consist of pronunciation, grammar, and vocabulary. In addition, Byrne (1997: 8) states that oral-communication is a two-way process between a speaker and listener and involves the productive skills of speaking and the receptive skill of listening.

Speaking is a very important part of language learning. The ability to communicate in a language, especially in second language, clearly and efficiently gives contribution to the learners’ success in school and their success later in every phase of their life. However, students often face problems when speaking. According to Ur (1996: 121) those problems are inhibition, nothing to say, low or uneven participation, and mother tongue use. Those problems indeed can impede the students in gaining their speaking goal.

Based on the statements above, it can be concluded that speaking is an interactive activity which involves the area of
knowledge; pronunciation, grammar, vocabulary and fluency.

**Students' Anxiety**

Anxiety is described by psychologists as a subjective feeling of tension, apprehension, nervousness, and wrong associated with an arousal of the autonomic nervous system (Horwitz and Young in Bowen 2004: 28). Different from Horwitz and Young, White (1964: 192) defines anxiety as the term most often encountered, but it is used in a sense that includes all degrees of the fear reaction. Anxiety is functioning as a mechanism that protecting the ego since anxiety gives signal to us that it will be keep increasing until the ego is defeated. Freud in Semiun (2006: 87) states that anxiety is a physical condition that warns a person of a dangerous situation will be faced. People want to defend against making a mistake, or any other action that might make us look stupid and unimportant. This often makes them dislike trying to figure out things they are not sure about. When anxiety strikes, people feel unsafe.

In relation with language learning, language anxiety can be defined as a distinct complex of self-perceptions, beliefs, feelings and behaviors related to classroom language learning arising from the uniqueness of the language learning process. Anxious learners report feeling apprehension, worry and even dread of their language class. In addition, they report experiencing difficulties concentrations, become forgetful, sweat, and have palpitations.

It is widely accepted in the research literature that the act of speaking in a foreign or second language is the most anxiety-provoking activity for the majority of students. Since speaking can cause feeling of anxiety, the students often reluctant to deliver their speech because they not only need to make their own utterances but also they should reconsider the pronounciation as well. Mostly of the students afraid of making mistake when delivering their speech.

Language anxiety may be a result as well as a cause of insufficient command of the target language. That is to say it may be experienced due to linguistic difficulties L2/FL learners face in learning and using the target language. Within social contexts, language anxiety may be experienced due to extrinsic motivators such as different social and cultural environments, particularly the environments where L1 and L2/FL learning takes place. Also, the target language is a representation of another cultural community. There is a predisposition among some people to experience such anxiety because of their own concerns about ethnicity, foreignness, and social status of the speaker and the interlocutor, a sense of power relations between them, and gender could also be important factors in causing language anxiety for L2/FL speakers.

Based on the ideas above, it can be concluded that anxiety is an unpleasant emotion that is characterized by feeling of tension, worriedness, nervousness, and fear.

**Vocabulary Mastery**

In English learning, vocabulary is an un-separated part for understanding the language. Hornby (1995: 1331) defines vocabulary as a total number of words which make up the language. In addition, Hatch and Brown (1995: 1) define vocabulary as a list or a set of words for particular language, or a list of words that individual speaker of a language might use. Vocabulary is central to language and of critical importance to the typical language learner (Coady and Huckin, 1998: 5). Knowing words is the key to understanding
and being understood. The bulk of learning a new language consists of learning new words. Grammatical knowledge does not make for great proficiency in a language. Knowing a word involves knowing its pronunciation, spelling, part of speech, definitions (polysemy), usages, and collocations. Research has also demonstrated that learning to spell involves generalizing principles from specific words, rather than simply memorizing every word as an individual unit.

In relation to the importance of vocabulary, D’Angelo (1980: 400) says that a communication can be done clearly and effectively only with limited vocabulary, but limited vocabulary also means limitation to actualize oneself in the language community. Therefore, Gorrel and Laird (1964: 415) suggest some ways: (1) studying words which will be used, (2) studying and using the new words intensively until those words are comprehended well, (3) studying the words and their relation with other words, (5) after studying it, using and applying those words in communication.

Based on the explanation above, it can be concluded that vocabulary mastery means the complete knowledge of the words in a language. It includes the definition, synonym, antonym, derivation, inflection, collocation, word in context, and spelling.

**RESEARCH METHOD**

The method used in this study is a correlational method. Correlational method is a method which has a goal of describing the strength of the relation between two or more events or characteristics (Halonen and Santrock, 1999: 20). In this study, the researcher tries to find out the correlation between two kinds of variables, namely: independent variables (X) which includes students’ anxiety (X₁) and vocabulary mastery (X₂), and dependent variable (Y), speaking skill. The relationship between those variables can be drawn as the following figure:

**Figure 1. Diagram of the relationship between student’s anxiety (X₁), vocabulary mastery (X₂) and speaking skill (Y).**

The researcher formulates three hypotheses stating that there is a negative correlation between students’ anxiety and speaking skill, there is a positive correlation between vocabulary mastery and speaking skill, and between students’ anxiety and vocabulary mastery simultaneously and speaking skill. Afterwards, the researcher also formulates the statistical hypotheses as follows:

1. \( H₀ : \rho_{y1} = 0 \)  \( Hₐ : \rho_{y1} < 0 \)
2. \( H₀ : \rho_{y2} = 0 \)  \( Hₐ : \rho_{y2} > 0 \)
3. \( H₀ : R_{y12} = 0 \)  \( Hₐ : R_{y12} > 0 \)
In this case, if null hypothesis (H₀) is rejected, it means that there is a positive or negative correlation between the variables. The positive correlation indicates that the variables tend to go up together or they tend to go down together.

This research was carried out at SMA Negeri 1 Kartasura in May 2012 to the eleventh grade students. The sample of the research is class the students of XI A3 taken by cluster random sampling. The data are collected by using tests and questionnaire. The tests are used to collect the data of vocabulary mastery (in the form of multiple choice which consist of 50 items) and speaking skill (in the form of performance test), while the questionnaire is used to collect the data of students’ anxiety which consists of 33 items having five alternatives. In this research, the validity and the reliability of all items of each instrument above have been examined through try-out. Meanwhile, the techniques used to analyze the data are simple and multiple regression and correlation by using SPSS 18.

In this research, before testing the hypotheses, it is necessary to do prerequisite test which includes normality, linearity, and significant of regression of the data. Afterwards, the researcher uses Product Moment formula to figure out the strength of the association between two variables, and Multiple Correlation formula to find out the strength of the association between several independent variables and one dependent variable.

RESULTS AND DISCUSSION
The results of data computation by using SPSS 18 can be described as follows:

<table>
<thead>
<tr>
<th>Table 1. The Result of Normality Test</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable</strong></td>
</tr>
<tr>
<td>Students’ Anxiety</td>
</tr>
<tr>
<td>Vocabulary Mastery</td>
</tr>
<tr>
<td>Speaking Skill</td>
</tr>
</tbody>
</table>

From the table above, it showed that the value of p-table at the significance level 5% is 0.05 and the p-value of each variable is higher than p-table. It can be concluded that all the data of the research are in normal distribution since the p-value is greater than 0.05.

<table>
<thead>
<tr>
<th>Table 2. The Result of Linearity Test</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable</strong></td>
</tr>
<tr>
<td>Students’ Anxiety and Speaking Skill</td>
</tr>
<tr>
<td>Vocabulary Mastery and Speaking Skill</td>
</tr>
</tbody>
</table>

From the table above, it can be seen that the regression of students’ anxiety and speaking skill at the 5% significance level it is found that F table is 2.70. Because F observation is lower than F table (F₀ = 1.545 < F₁ = 2.70), the regression is linear. Meanwhile, the
regression of vocabulary mastery and speaking skill at the 5% significance level with df = 17 : 20, it is found that F table is 2.16. Because F observation is lower than F table ($F_o = 0.777 < F_t = 2.16$), the regression is linear. Based on the explanation above, it can be concluded that all the data of the research are linear.

### Table 3. The Result of Significance of Regression Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>F-table</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ Anxiety and Speaking Skill</td>
<td>31.81</td>
<td>8</td>
<td>the regression is significant</td>
</tr>
<tr>
<td>Vocabulary Mastery and Speaking Skill</td>
<td>14.20</td>
<td>3</td>
<td>the regression is significant</td>
</tr>
<tr>
<td>Students’ Anxiety, Vocabulary Mastery, and Speaking Skill</td>
<td>25.64</td>
<td>4</td>
<td>the regression is significant</td>
</tr>
</tbody>
</table>

Based on the table above, it can be said that the regression of all the research data are significant because the $F$-obtained is higher than the F-table.

### Table 4. The Result of Hypothesis Test

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>R</th>
<th>Square</th>
<th>t</th>
<th>t-table</th>
<th>F</th>
<th>F-table</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>-0.680</td>
<td>0.4624</td>
<td>5.203</td>
<td>2.048</td>
<td>-</td>
<td>-</td>
<td>$H_o$ is rejected</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>-0.527</td>
<td>0.2778</td>
<td>3.306</td>
<td>2.048</td>
<td>-</td>
<td>-</td>
<td>$H_o$ is rejected</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>0.7665</td>
<td>0.5876</td>
<td>-</td>
<td>-</td>
<td>25.644</td>
<td>3.28</td>
<td>$H_o$ is rejected</td>
</tr>
</tbody>
</table>

In the first hypothesis, the value of t-obtained (-5.203) which is greater than t-table (2.048) indicates that the correlation is significant in which the equation of the simple linear regression is $\hat{Y} = 118.540 - 0.582 X_1$. Since the null hypothesis ($H_o$) is rejected and the value of the coefficient of correlation/ $r$ (-0.680) is negative, it can be concluded that there is a negative correlation between students’ anxiety and speaking skill. $r^2$ (coefficient of determination) shows that 46.2% variance of speaking skill is determined by students' anxiety.

From the result, it showed that anxiety gives contribution to speaking skill. Horwitz and Young in Bowen (2004: 32) say that the anxious learner will tend go to great length to miss class, postpone homework and avoid studying. Price in Bowen (2004: 43) discovers that students were also concerned about making pronunciation errors and expresses great embarrassment at their “terrible” pronunciation. It cannot be denied that the very act of pronouncing is an essential part of what one communicates about her selves as people. When working with speaking in the language classroom, pronunciation is not always given sufficient prominence. It is well-documented that speaker with poor intelligibility has long-ranged difficulties in developing into confident and effective oral communicators. Students frustrate at not only being able to communicate effectively and at expressing
themselves in a way which is inconsistent with their self-image. When learning a foreign language, feelings of uncertainty, insecurity and even fear often develop in the learner. The oral skill appears to be the most problematic area in terms of its relationship to anxiety levels and its potentially negative effect on self-esteem.

In the second hypothesis, the value of t-obtained (3.306) which is greater than t-table (2.048) indicates that the correlation is significant in which the equation of the simple linear regression is $\hat{Y} = 15,863 + 0,652 X_2$. Then, as the null hypothesis ($H_0$) is rejected and the value of $r$ (0.527) is positive, it can be concluded that there is a positive correlation between vocabulary mastery and speaking skill. $r^2$ (coefficient of determination) shows that 27.8% variance of speaking skill is determined by vocabulary mastery.

Based on the result, it is believed that vocabulary mastery gives contribution to speaking skill. The biggest component of any language course is vocabulary (McCarthy, 1990: 1). It is the basic of the conversation. It is the key of communication to convey meaning of utterances. In order to express the idea in a meaningful way, people need to master vocabulary. Indeed, vocabulary plays an important role to convey meaning. On the contrary, there are so many vocabulary of English in which is not easy to master. It has to be learnt through memorizing and practice. The more practice the more vocabulary will be got. As a student, it will be much easier for him to learn vocabulary since in young age.

In the third hypothesis, the value of F-obtained (25.644) which is greater than F-table (3.28) indicates that the correlation is significant in which the equation of the multiple linear regression is $\hat{Y} = 75,354 - 0,496 X_1 + 0,455 X_2$. Hence, since the null hypothesis ($H_0$) is rejected and the value of $R$ (0.7665) is positive, it can be concluded that there is a positive correlation between students’ anxiety, vocabulary mastery, and speaking skill simultaneously. $R^2$ (coefficient of determination) shows that 58.9% variance of speaking skill is determined by students’ anxiety and vocabulary mastery and 41.1% variance of speaking skill is determined by other factors.

From the result, it can be concluded that students’ anxiety and vocabulary mastery simultaneously gives contribution to speaking skill. Anxiety was experienced by a considerable number of students when speaking English in class or giving presentations at the front while the least during pair work, a multitude of variables such as lack of vocabulary, low English proficiency and memory dissociation contributed to students anxiety in class, and most students felt helpless about being anxious when speaking English in class (Liu, 2007: 119). Additionally, when students speak English and they master vocabulary, it can be beneficial to them in regard with empowering their speaking skill because learners can explore more their utterances. Vocabulary is an un-separated part for understanding the language. Mastering vocabulary will enable the students with a bulk of words in which can used to avoid monotonous in delivering speech. It also determines whether their utterances can be understood by the interlocutor or not.

**CONCLUSION AND SUGGESTIONS**

Based on the results of the study, it can be concluded that there is a positive correlation between students’ anxiety and speaking skill, between vocabulary mastery and speaking skill, and between students’ anxiety, vocabulary mastery, and speaking skill simultaneously of the eleventh grade students of SMA Negeri 1 Kartasura in the academic year of 2011/2012. It indicates that
Speaking skill tends to go up or to go down together with students’ anxiety and vocabulary mastery.

Considering to the positive association between students’ anxiety, vocabulary mastery and speaking skill, EFL students should decrease their anxiety and improve their mastery in vocabulary. It will ease them in improving their skill in speaking. Meanwhile, EFL teachers should monitor their students’ level of anxiety. They should encourage the students to speak more in the English class. It can be done by giving bait, question, or having a class discussion. They also need to improve the students’ vocabulary mastery. It is very useful for them in avoiding monotonous words when delivering utterances. The variation of words will affect the listener understanding depend on what context do the utterances occur. The teachers should provide the most appropriate techniques and method in teaching vocabulary. By accommodating the students with such appropriate techniques, the learning goals can be achieved.

**BIBLIOGRAPHY**


