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O efeito dos interesses por leitura, habilidade de comunicação e quociente de adversidade em relação à capacidade de resolução de problemas dos alunos do terceiro ano do Ensino Médio

The Effect of Reading Interests, Communication Skill, and Adversity Quotient towards Senior High school Students' Problem Solving Ability

El efecto de los intereses de lectura, la habilidad de comunicación y el cociente de adversidad hacia la capacidad de resolución de problemas de los estudiantes de secundaria superior

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Resumo

Os propósitos da pesquisa são examinar: 1) o efeito dos interesses de leitura na capacidade de resolução de problemas dos alunos do ensino médio em Bekasi, Indonésia; 2) o efeito da habilidade de comunicação para a capacidade de resolução de problemas dos alunos do ensino médio em Bekasi, Indonésia; 3) o efeito do quociente de adversidade em relação à capacidade de resolver problemas em Bekasi, Indonésia; 4) o efeito dos interesses de leitura, habilidade de comunicação e adversidade em relação à capacidade de resolver problemas em Bekasi, Indonésia. O método utilizado é quantitativo. A população da pesquisa é o terceiro ano do Ensino Médio em Bekasi. O número de populações em si é de 488 estudantes. Em seguida, a amostra é retirada por amostragem aleatória usando o Slovin com 10% de margem de erro,

assim, o número obtido é de 83 alunos. As análises de dados utilizadas são análises de correlação e análises de regressão linear múltipla. Na determinação da hipótese, os testes T e F são usados com 5% de alfa. Assim, os resultados mostram que não há efeito significativo dos interesses de leitura para a capacidade de resolver problemas em Bekasi, enquanto que há um efeito significativo da habilidade de comunicação e do quociente de adversidade para a capacidade de resolver problemas em Bekasi.

Palavras-chave: compreensão dos alunos; Ensino Médio; educação.

Abstract

The purposes of the research are to examine: 1) the effect of reading interests on senior high school students' problem solving ability in Bekasi, Indonesia; 2) the effect of communication Skill towards senior high school students' problem solving ability in Bekasi, Indonesia; 3) the effect of adversity quotient towards senior high school students' problem solving ability in Bekasi, Indonesia; 4) the effect of reading interests, communication skill, and adversity quotient towards senior high school students' problem solving ability in Bekasi, Indonesia. The method used is quantitative. Afterward, the population of the research is the tenth grades of senior high school students in Bekasi. The number of populations itself are 488 students. Then, the sample is taken by random sampling using Slovin with 10% of error margin, thus the number obtained are 83 students. The data analyses used is correlation analyses, and multiple linear regression analyses. In determining the hypothesis, T and F test are used with 5 % alpha. Hence, the results shows that there is no significant effect of reading interests towards senior high school students' problem solving ability in Bekasi, meanwhile there is significant effect of communication skill and adversity quotient towards senior high school students' problem solving ability in Bekasi.

Keywords: students comprehension; senior high school; education.

Resumen

Los propósitos de la investigación son examinar: 1) el efecto de la lectura de intereses en la capacidad de resolución de problemas de estudiantes de secundaria superior en Bekasi, Indonesia; 2) el efecto de la habilidad de comunicación hacia la capacidad de resolución de problemas de estudiantes de secundaria superior en Bekasi, Indonesia; 3) el efecto del coeficiente de adversidad hacia la capacidad de resolución de problemas de los estudiantes de secundaria superior en Bekasi, Indonesia; 4) el efecto de los intereses de lectura, la capacidad de comunicación y el coeficiente de adversidad hacia la capacidad de resolución de problemas

de los estudiantes de secundaria superior en Bekasi, Indonesia. El método utilizado es cuantitativo. Después, la población de la investigación es el décimo grado de los estudiantes de secundaria superior en Bekasi. El número de poblaciones en sí son 488 estudiantes. Luego, la muestra se toma por muestreo aleatorio usando Slovin con un 10% de margen de error, por lo que el número obtenido es de 83 estudiantes. Los análisis de datos utilizados son análisis de correlación y análisis de regresión lineal múltiple. Para determinar la hipótesis, las pruebas de T y F se utilizan con un 5% de alfa. Por lo tanto, los resultados muestran que no hay un efecto significativo de los intereses de lectura hacia la capacidad de resolución de problemas de los estudiantes de secundaria superior en Bekasi, mientras que hay un efecto significativo de la capacidad de comunicación y el coeficiente de adversidad hacia la capacidad de resolución de problemas de los estudiantes de secundaria superior en Bekasi.

Palabras clave: comprensión de los alumnos; escuela secundaria superior; educación.

1. Introduction

In daily life, it is impossible for human being without facing problems and therefore the problem solving ability is needed. In this case, it is also needed the understanding of problem solving in early age, especially to be learn by students.

David Moursund (2007) explains that problem solving consists of moving from a given initial situation to a desired goal situation. Hence, it is dealing with the process of designing and carrying out a set of steps to reach a goal. Beghetto (2018) adds that the problem is the task, question, or issue students will address or solve. Then, Educational Research and Innovation (2017) describes problem solving as one of the key competencies human need in the world full of changes, uncertainty and surprise. It is needed in all those situations where we have no routine response at hand. Problem solving requires the intelligent exploration of the world around us, it requires strategies for efficient knowledge acquisition about unknown situations, and it requires creative application of the knowledge available or that can be gathered during the process. The world is full of problems because we strive for so many ambitious goals – but the world is also full of solutions because of the extraordinary competencies of humans who always look for and find its solution.

Afterward, there are actually several competencies factors needed by human in case to solve the problems they have. Several factors which believe can support the ability to solve problems are reading comprehension, communication skill, as well as adversity quotient.

According to Anderson, quoted in Nunan (2003), there are two main definitions of reading. Those are strategic reading and fluent reading. Strategic reading is defined as the ability of the reader to use a wide variety of reading strategies to accomplish purpose for read. Fluent reading is defined as the ability to read an appropriate rate with adequate comprehension. Meaning does not imply in the reader, yet it rest in the text. The reader background knowledge integrates with the text to create the meaning. The act of reading be defined when the text, the reader, fluency and strategies combined together.

Patel and Jain (2008) state reading skill is an important tool for academic success. It is not merely a source of information and a pleasurable activity but also as a means of consolidating and extending one's knowledge of the language. Reading is very necessary to widen the mind, again and understanding of the foreign culture.

Crawley and Mountain (1995) identified six factors that influence the development of students' interests. These factors are as follows:

1) Previous Experience: Students may not develop their interest toward something new that they have never been experienced;

2) Self-Concept. Students may reject information that feels threatened; otherwise the student may receive it if it is felt useful and help them to improve their skill;

3) Values. Student interest arises if a subject is presented by an authoritative people;

4) Understandable Subject Information that is easily understood by students may attract their interest;

5) The Level of Pressure Involvement. If students feel that they have some rate options and is less pressure, their reading interest may be higher.

6. The Complexity of subject material. Students who are better intellectually and psychologically flexible are more attracted to something more complex.

Hereafter, communication etymologically related to both "communion" and "community," comes from the Latin "communicare", which means "to make common" or "to

share” (Weekley, 1967). DeVito (1986) expanded that communication is “the process or act of transmitting a message from a sender to a receiver, through a channel and with the interference of noise”. Some would elaborate on this definition, saying that the message transmission is intentional and conveys meaning in order to bring about change.

National Institute of Agricultural Extension Management (2017) then adds that communication is one of the most basic functions of management, the manager can make a good decision, think out well conceived plans, establish a sound organization structure, and even be well linked by his associates. Communication is essential for achieving managerial and organizational effectiveness. Good communication helps employees become more involved in their work and helps them develop a better understanding of their jobs. Clear, precise and timely communication of information also prevents the occurrence of organizational problems. Without communication, employees will not be aware of what their co-workers are doing, will not have any idea about what their goals are, and will not be able to assess their performance. Managers will not be able to give instructions to their subordinates and management will not receive the information it requires to develop plans and take decisions, hence communication acts as nervous system for any organization.

National Association of Colleges and Employers (2010) Communication skills are important to everyone-they are how we give and receive information and convey our ideas and opinions with those around us. Communication comes in many forms: verbal (sounds, language, and tone of voice), aural (listening and hearing), non-verbal (facial expressions, body language, and posture), written (journals, emails, blogs, and text messages), visual (signs, symbols, and pictures).

Further, Stoltz (1997) perceives the variable of adversity as one which has the capacity to change a learner’s expected performance despite intelligence ability. Usha Parvathy (2014) adds that adversity quotient also plays a very important role in one’s life. Students face a lot of situations or challenges in their daily life. To overcome or to face these problems, adversity quotient is required. A person who has the capacity to face and overcome the adversities can attain his/her goals in life easily. A person should have the ability to respond to a particular adversity situation in an amicable way. This ability is essential for student teachers to solve their day to day problems. According to Al Kumayi (2006) If a person has

a high AQ then he will be able to overcome difficulties and can survive for no despair in addressing the problem.

In summary, this study set out to address the three problems dealing with effect of reading interest toward senior high school students' problem solving ability in Bekasi; effect of communication skill toward senior high school students' problem solving ability in Bekasi; effect of adversity quotient toward senior high school students' problem solving ability in Bekasi; Effect Reading Interests, Communication Skill, and Adversity Quotient toward Senior High School's Problem Solving Ability in Bekasi.

2. Methodology

This study is a quantitative and relational study aimed at examining the relationships among reading interests, communication skill, and adversity quotient towards problem solving. The data of the research were collected by questionnaire. Validity test of data instrument used product moment correlation and reliability test used alpha Cronbach. For all scales used in this study, reliability test was undertaken by calculating Cronbach's alpha. The result of reliability test was 0.829. It means that the instrument was reliable.

Afterward, the population of the study is the students of the tenth grades students of Senior High School of Bekasi, including SMAN 21 Bekasi and SMAN 5 Bekasi. The number of population is 488 students. Sample of this study is taken by random sampling. The formulation of determining the sample used Slovin with 10 % error of margin, so that the number of sample is 83 students.

Three types of analyses were conducted for this study, namely correlation analyses, and multiple linear regression analyses. In examining the hypothesis is used t and f test with 5 % alpha.

Three types of analyses were conducted for this study, namely correlation analyses, simple linear regression analyses and multiple linear regression analyses.

3. Results

Results of Correlation Analyses

The Correlation between reading interests, communication skill, and adversity quotient towards problem solving ability at the students of Senior High School in Bekasi is 0.450. It means that the Correlation between reading interests, communication skill, and adversity quotient towards problem solving ability is enough.

Results of Multiple Linear Regression Analyses

The result of multiple linear regression analyses of the effect of reading interests, communication skill, and adversity quotient towards problem solving ability is $\hat{Y} = 2.521 + 0.070 X_1 + 0.140 X_2 + 0.139 X_3$. If variable of reading interests increases 1 unit, the variable of problem solving ability will increase 0.070. Then, if variable of communication skill increases 1 unit, the variable of problem solving ability will increase 0.140. Then, if variable of adversity quotient increases 1 unit, the variable of problem solving ability will increase 0.139. If there are no variables of reading interests, communication skill, and adversity quotient, the score of variable problem solving ability will be constant or 2.521.

Results of Hypothesis Test

The Effect of Reading Interests toward Senior High School's Problem Solving Ability in Bekasi

There is no a significant effect reading interests towards problem solving ability at the students of Senior High School in Bekasi because $\text{sig} > 0.05$ ($0.301 > 0.05$).

The Effect Communication Skill toward Senior High School's Problem Solving Ability in Bekasi

There is a significant effect communication skill towards problem solving ability at the students of Senior High School in Bekasi because $\text{sig} < 0.05$ ($0.021 < 0.05$).

The Effect of Adversity Quotient toward Senior High School's Problem Solving Ability in Bekasi

There is a significant effect adversity quotient towards problem solving ability at the students of Senior High School in Bekasi because $\text{sig} < 0.05$ ($0.050 < 0.05$).

Effect Reading Interests, Communication Skill, and Adversity Quotient toward Senior High School's Problem Solving Ability in Bekasi

There are significant effect reading interests, communication skill, and adversity quotient towards problem solving ability at the students of Senior High School In Bekasi because $\text{sig} < 0.05$ ($0.000 < 0.05$).

Results of Coefficient Determinant

The value of coefficient determinant test is 20.3 %. It means that problem solving ability at the students of Senior High School In Bekasi can be increased by the variables of reading interests, communication skill, and adversity quotient by 20.3% and 79.7% are from other variables.

4. Discussion

The result of the research has approved that there are effect of reading interests, communication skill, and adversity quotient toward Senior High School students' problem solving ability in Bekasi. The problem solving ability of the students seen from the way students can determine the goal of learning before they study, the students can finish the task of their learning, and the students can finish their problems in daily activities. Those indicators can be improved by the variables of reading interests, communication skill, and adversity quotient.

The indicators of reading interest are the students read all of the books, use their knowledge after reading interest to read the best seller book, the students read book with the highest motivation, and the students read a meaningful and quality book. The indicators of communication skill are the students speak with appropriate language, communicate the message with the polite language, listen the people's opinion well, and use suitable gesture along with the content of the talking while they were talking, suitable expressions, the students convey the message with the best language, and the students write email, letter, etc. with the correct grammar. The indicators of adversity quotient are the students do not give up to face the risk, the students are enthusiast to finish their task learning, the students revise their mistakes in finishing their job of learning, the students find the solution of the problem, the students are optimist in which all of the problems are having solution, and the students do not overestimate existing problems.

The problem solving ability of the students can be improved by the teacher by giving learning process that involves the activity of the students to obtain knowledge based on the

problem of the learning. Therefore, the teacher should use the problem based learning in teaching the students in the classroom or outside learning.

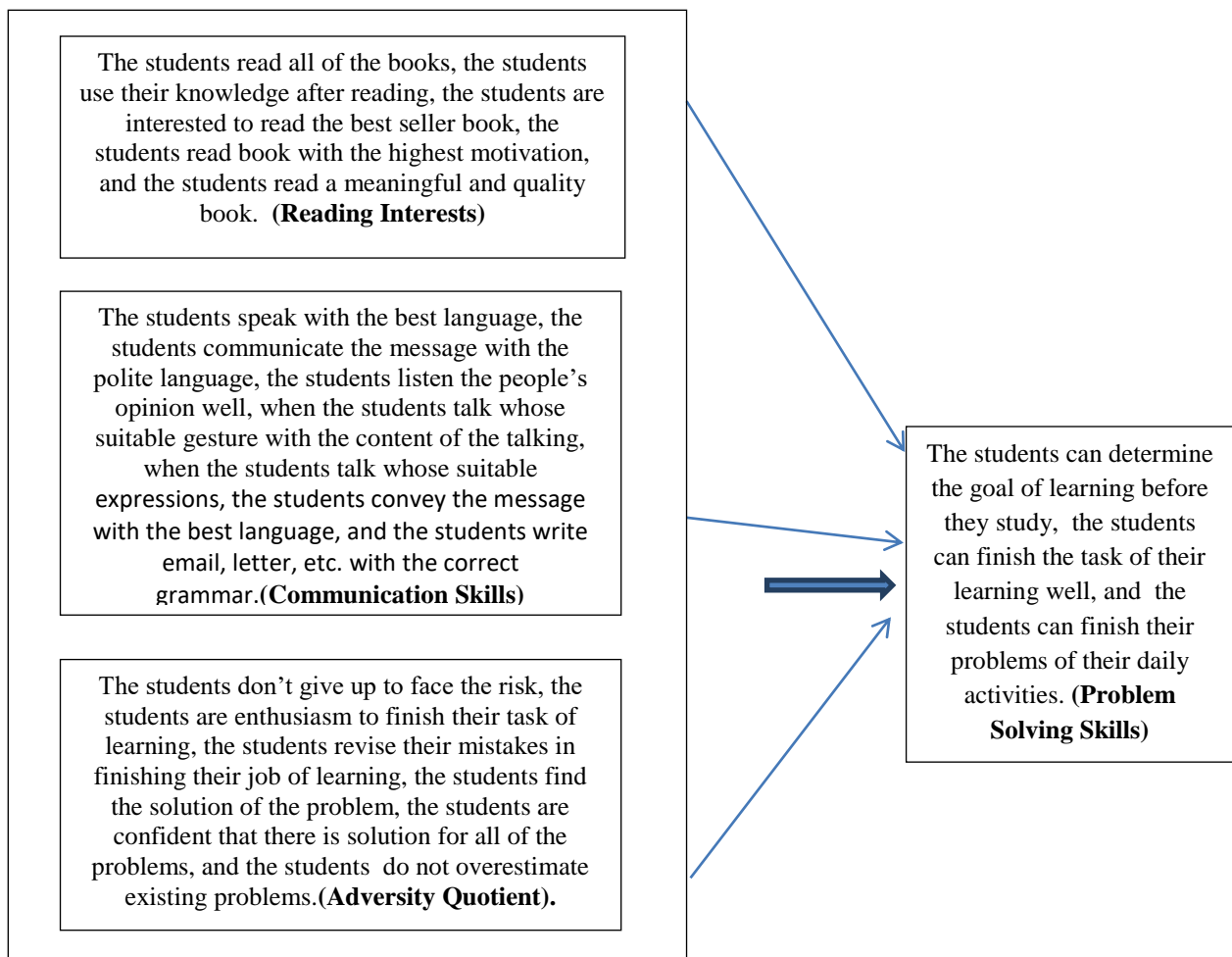


Figure 1. The design of the effect of the reading interests, communication skill, and adversity quotient toward senior high school students' problem solving ability in Bekasi.

As stated in figure 1, reading interests, communication skill, and adversity quotient can improve problem solving ability of the students because they have indicators that support the indicators of the problem solving skills of the students.

5. Conclusions

The conclusion of the research result as follow as:

- a. There is no significant effect of reading interests toward senior high school students' problem solving ability in Bekasi.

- b. There is significant effect of communication skill toward senior high school students' problem solving ability in Bekasi.
- c. There is significant effect of adversity quotient towards senior high school students' problem solving ability in Bekasi.
- d. There are significant effect of reading interests, communication skill, and adversity quotient toward senior high school students' problem solving ability in Bekasi.

6. Suggestions

- a. The teacher must build the problem solving ability of the students by providing the learning process that use problem based learning. The students must be taught by the active learning and learning by doing. Beside that, the students must be motivated by giving the program to develop their reading interests, communication skills, and adversity quotient.
- b. The school can give the competition of debate, speech, etc. to improve the communication skills of the students and adversity quotient. The school also can develop the program of literacy to improve reading interests of the students.

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