

READING LITERACY PERFORMANCES OF STATE SENIOR HIGH SCHOOL STUDENTS IN ILIR BARAT I DISTRICT AS MEASURED BY PISA READING LITERACY TEST 2009 IN ENGLISH AND BAHASA INDONESIA

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Abstract: This study was aimed to find out the descriptions of students' PISA reading literacy performances in English and Bahasa Indonesia and whether or not there was a significant difference between students' performance in PISA literacy reading test in English and Bahasa Indonesia. The population of this study was state senior high school students in Ilir Barat I district in Palembang and the sample of study was selected by using purposive sampling. PISA reading literacy 2009 tests written in Bahasa Indonesia and English were used to collect the data which were analyzed statistically by applying Descriptive Statistics and Independent Sample t-test. The result showed that the average scores of students' PISA reading literacy test 2009 in Bahasa Indonesia and English were 39.18 and 24.86, respectively, suggesting they were far below from the standard of National Education in Indonesia (75.00). The result also showed that the students' PISA reading literacy performance in Bahasa Indonesia was categorized in Level 3, and in English was Level 2. The Independent t-test showed that there was a significant difference between students' performance in PISA reading literacy test in English and Bahasa Indonesia.

Keywords: *Reading, PISA Reading Literacy 2009, Reading in English, Reading in Bahasa*

Reading is essential to get information. People read many kinds of written materials to get information that they may need for supporting their lives. As Khairuddin (2013) states, "Living in a largely literate society, we are surrounded by written materials covering almost all aspect in our lives." (p.2). Literacy is the power to comprehend and use printed information in daily activities to get one's objectives and to expand one's knowledge and potential (OECD, 2000). By the definition of literacy, it can be inferred that literacy plays important part in people's lives as literacy can be found in any context of social life and also, literacy includes all the process or skills that people normally have. Reading literacy takes into account the higher order thinking skill. Higher order thinking skill (HOTS) is a crucial thing which is emphasized in *Kurikulum 2013* (Kemendikbud, n.d.). It includes creative, metacognitive, reflective, logical and critical thinking (King, Goodson & Rohani, n.d.).

Someone need to be literate in reading in order to develop the knowledge through reading skill. Reading literacy is the ability to understand, use, reflect on and engage with written texts for the purpose of achieving someone's objective, evolving his/her knowledge and potential, and cooperating him/her effectively in society (OECD, 2009). For Indonesian students, reading in both English and Bahasa Indonesia are important. Both Bahasa Indonesia and English are compulsory subjects for Indonesian secondary school students. Peraturan Menteri Pendidikan dan Kebudayaan (Regulation of Ministry of Education and Culture) Number 59 (2014) states that the purpose of learning English in high school is to develop the potential of students. Students are asked to have communicative competence in interpersonal, transactional, and functional spoken and written English text which applies accurate and acceptable linguistic elements.

Assessing students' reading skills is an important part of the teaching and learning process of the language. Afflerbach (2016) states that when teachers assess, they make inferences about the

nature of a student's reading from a sample of reading behavior. These inferences about students' reading ability can be useful in helping teachers understand students' needs and in helping students become better readers. PISA (Program of International Students' Assessment) reading test is the test conducted to measure students' literacy in terms of reading. OECD (2009) shows that the function of PISA itself is as the government's responsibility in overseeing education systems' outcomes by monitoring students' performance internationally. This survey is conducted by OECD in three-yearly cycles since 2000 which has translated into native language, with one subject area becoming the main focus of the assessment in each cycle. Reading was the main focus of the assessment when PISA was first conducted in 2000 and 2009.

In relation to the education quality, the study of PISA (Program for International Student Assessment) shows that Indonesian students have low quality. The reports of program show that the students of Indonesia are lack of critical, analytic, and procedural competences. The latest PISA data (2015) reports that more than 86% of Indonesian 15-year old read at PISA Level 2 or below. The

Progress of International Reading Literacy Study (PIRLS, 2006) shows that Indonesia stays in the 41st position of the 46 countries related to reading. In addition, PIRLS measures student's reading comprehension in English. In conclusion, from the both facts, Indonesian students' reading comprehension is still low. Vianty (2007) also found that students used analytic reading strategies more frequently when they read in Bahasa Indonesia than in English.

PISA reading literacy performance is a reading test taken from PISA 2009 test items and given to the 15-year-old students who are in 10th grade. This test is to measure the ability of 10th graders from their performance in considering and understanding the whole written text for the purpose of being knowledgeable and being able to apply the gathered facts in community.

This study will see the students' ability in reading as measured by using PISA reading test 2009 in English and Bahasa Indonesia. Focusing on comparing student abilities within English and Bahasa Indonesia. Four state senior high schools, accredited A in one district, will participate in this study (SMAN 1, SMAN 2, SMAN 10, SMAN 11).

The objectives of this study were to find out: (1) the descriptions of students' PISA reading literacy performance in English and Bahasa Indonesia, and (2) whether or not there was a significant difference between students' performance in PISA reading literacy test in English and Bahasa Indonesia.

Methodology

This study was a survey research design. According to Creswell (2012), survey research design is a method used to describe the attitudes, opinions, behaviors, or characteristics of the sample by administering a survey to them. In this study, the writer analysed the data from the reading tests that had been filled and answered by the students. This study obtained descriptive information and examined the difference between students' performance in PISA reading literacy test written in English and Bahasa Indonesia. In this study, three hundred and twenty-eight students out of 1780 students were selected purposively using Slovin's formula became the sample of this study.

To collect the data, there were reading literacy tests, ready-made, from PISA reading literacy 2009 written in Bahasa Indonesia and English. The tests consist of 39 questions. In the tests there are two types of question: 18 multiple choices and 21 essay questions. The tests in two versions had been tried out in SMA Xaverius 3, this school has the same degree in terms of its accreditation with the four schools of this study, although one from private school and others from state schools. The value of the r table = 0.329. An item is considered valid if the value of r obtained is higher than the value of r table. The result showed that all items in the two reading tests have the value of r obtained that is higher than the value of r table. For the reliability, the result showed that the value of reliability of PISA reading 2009 test in English was 0.844 and in Bahasa Indonesia was 0.712. It meant that the reliability of the tests was good since the reliability of the tests were between the range of 0 and + 1. In Bahasa Indonesia, the test had been used by OECD because they used native language in doing the survey. Therefore, as stated by OECD (2009) that the instruments that is used by PISA have high quality which have high levels of validity and

reliability, so the test in Bahasa Indonesia is considered reliable. It can be concluded that these instruments are reliable and can be used for research.

An analysis of Descriptive Statistics and Independent Sample t-Test were performed on the data using program Statistical Package for Social Science (SPSS) 23rd version. Descriptive statistics in this study was used to find out the students' reading literacy performance and Independent Sample tTest was used to find out the difference between students' performance in PISA reading literacy test in English and Bahasa Indonesia.

Findings

Results of Students' PISA Reading Literacy Tests in Bahasa Indonesia and English

PISA reading literacy test 2009 consists of 39 questions. Three hundred and twenty-eight students took test in data collection. The test given was written in English and Bahasa Indonesia. The result of the test showed that the minimum score of the students who did the PISA reading literacy test in Bahasa Indonesia was 7.14, in English was .00. For the maximum score of the students who did the PISA reading literacy in Bahasa Indonesia was 85.71 and in English was 71.43. Furthermore, the mean score of students' PISA reading literacy in Bahasa Indonesia was 39.18 and in English was 24.86. This is in scale 1-100. In PISA level, the result of the test showed that the minimum score of the students who did the PISA reading literacy test in Bahasa Indonesia was 353.93, in English was 310.03. For the maximum score of the students who did the PISA reading literacy in Bahasa

Indonesia was 836.80 and in English was 749.00. Furthermore, the mean score of students' PISA reading literacy in Bahasa Indonesia was 550.84 and in English was 462.55, which meant that students were categorized in level 3 after they did the PISA reading literacy test in Bahasa Indonesia and categorized in level 2 after they did the PISA reading literacy test in English. In conclusion, the students were better in doing the PISA reading literacy test in Bahasa Indonesia than in English.

Table 1. Students' PISA Reading Literacy Performance in Bahasa Indonesia and English (Based on Range Score 1-100 and PISA Level)

| | N | Mean | Std. Deviation | Std. Error | Min | Max |
|--------------------|-----|----------|----------------|------------|--------|--------|
| SCORE English | 328 | 24.8617 | 12.7186 | .70521 | .00 | 71.43 |
| Bahasa Indonesia | 328 | 39.1839 | 15.55512 | .85889 | 7.14 | 85.71 |
| Total | 656 | 32.0228 | 15.92455 | .62175 | .00 | 85.71 |
| PISA_LEVEL English | 328 | 462.5557 | 78.86117 | 4.35438 | 310.03 | 749.00 |
| Bahasa Indonesia | 328 | 550.8415 | 95.59762 | 5.27850 | 353.93 | 836.80 |
| Total | 656 | 506.6986 | 98.07568 | 3.82921 | 310.03 | 836.80 |

There were three statistical analyses applied in this study, those were (1) normality test, (2) homogeneity test, (3) independent sample t-test.

Normality and Homogeneity of the Tests

Before the data were analyzed statistically the normality and the homogeneity tests were conducted. Normality test is the most common assumption used in computing statistical analysis (Thode, 2002). Table 1 below represents the normality of the data,

Table 2 . Tests of Normality

| | |
|--|---------------------------------|
| | Kolmogorov-Smirnov ^a |
|--|---------------------------------|

| | Statistic | Df | Sig. |
|------------------|-----------|-----|------|
| English | .067 | 328 | .001 |
| Bahasa_Indonesia | .092 | 328 | .000 |

The result of Kolmogorov-Smirnov test showed that Bahasa Indonesia and English which the r-value were lower than .05. Meanwhile, according to Pallant 2007 (as cited in Ghasemi & Zahediasl, 2012), if the data samples are more than 30 or 40 samples, then the data are normally distributed. Since the data samples of this study are more than 40, which are 328 students, it can be concluded that all instruments are in normal distribution.

Table 3 . Test of Homogeneity of Variances English

| Levene Statistic | df1 | df2 | Sig. |
|------------------|-----|-----|------|
| 2.502 | 3 | 324 | .059 |

Bahasa_Indonesia

| Levene Statistic | df1 | df2 | Sig. |
|------------------|-----|-----|------|
| 4.280 | 3 | 324 | .006 |

The data were homogeneous if the significance higher than 0.05. The result of Levene test showed that the p-value of students' reading test in English was (.059 > 0.05), the data set have the same distribution. The result of Levene test showed that the p-value of students' reading test in Bahasa Indonesia was (.006 < 0.05), the data set do not have the same distribution. However, Azwar (2000) states that the data sets are considered having the same distribution as long as the data sets have the same number of samples. Hence, all of the data sets are considered homogeneous or have the same distribution.

Result of Independent Samples t-Test Analysis

In order to find out whether or not there was a significant difference between students' performance in PISA reading literacy test in English and Bahasa Indonesia, the writer analyzed their scores statistically by using Independent Sample t-Test (see Tables 4 and 5)

Table 4. The Result of Independent Samples t-Test (Based on Range Score 1-100)

| Test | N | Mean (Score) | Mean Dif | Sig. |
|------------------|-----|--------------|----------|------|
| Bahasa Indonesia | 328 | 39.18 | 14.32 | .000 |
| English | | 24.86 | | |

Table 5 . The Result of Independent Samples t-Test (PISA Level)

| Test | N | Mean (Level) | Mean Dif | Sig. |
|------------------|-----|--------------|----------|------|
| Bahasa Indonesia | 328 | 550.84 | 88.29 | .000 |
| English | | 462.55 | | |

As shown in Tables 4 and 5, the result of Independent Sample t-Test showed that the p-value is 0.000. Since the p-value (0.000) was lower than 0.05, there was a significant difference between students' performance in PISA reading literacy test in English and Bahasa Indonesia.

Interpretation

The finding of this study showed that the average score of students' reading tests in Bahasa Indonesia and in English were 39.18 and 24.86. This means were far below the standard of National Education in Indonesia (75.00). While in PISA level the average score of students' reading tests in Bahasa Indonesia and in English were 550.84 and 462.55. It means students were better in doing the PISA reading literacy test written in native language that is Bahasa Indonesia than in English. This is not surprising because students understand better in their native language. This is in line with University (2009) that the process of L2 acquisition is more complicated as learners already have knowledge of their L1. Therefore, OECD chose native language of each country in doing the test (OECD, 2013). The findings also show that students were categorized in level 3, moderate performance, after they did the PISA reading literacy performance written in Bahasa Indonesia. Students whose competence at level 3 are capable to integrate several parts of a text to identify main idea, understand the text and able to evaluate a feature of a text (OECD, 2010). Students are able to read any tasks that have fair difficulties such as locating multiple pieces, relating and linking different parts of a text with common and general knowledge. Furthermore, they were categorized in level 2, moderate performance, after they did the PISA reading literacy written in English. Students at level 2 in some cases are able to find information of the text, make single comparison and relate the text with their personal experiences (OECD, 2010).

The second finding showed that there was a significant difference between students' performance in PISA reading literacy test in English and Bahasa Indonesia. It means that students had difference in answering the test written in Bahasa Indonesia and in English. This is in line with a study conducted by Vianty (2007) showed that on average the students report using some of the analytic reading strategies more frequently when they read in Bahasa Indonesia than in English.

Conclusion and Suggestions

The conclusions can be drawn based on the findings and interpretation presented in the previous chapter. First, students PISA reading literacy levels in Bahasa Indonesia was categorized in level 3 and in English was level 2. Therefore, there was a significant difference between students' performance in PISA reading literacy test in English and Bahasa Indonesia.

Based on the conclusion above, the suggestions are pointed to teachers, and other researchers. First, for the teachers, they need to improve students' reading literacy in Bahasa Indonesia moreover in English. They should teach the students more about higher order thinking skills. For the future researchers who are interested with this topic, they can conduct the study with the broader area, they can also conduct the study by investigating the questions in PISA reading literacy.

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APPENDIX

Students' PISA Reading Literacy Level

| Score Interval | Level | Category |
|----------------|-------|---------------------|
| 262 - 334 | 1b | Lowest performers |
| 335 - 407 | 1a | |
| 408 - 480 | 2 | Moderate performers |
| 481 - 552 | 3 | |
| 553 - 625 | 4 | Strong performers |
| 626 - 697 | 5 | Top performers |
| >698 | 6 | |

Source: OECD (2010c)