

PISA READING LITERACY PERFORMANCE AND ITS CORRELATION WITH ENGAGEMENT IN READING ACTIVITY AND READING INTEREST

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Abstract: This study was aimed at finding out students' PISA reading literacy performance level, their engagement in reading activity, and their reading interest category. It also investigated whether or not there was a correlation between students' engagement in reading activity and PISA reading literacy performance, students' reading interest and PISA reading literacy performance, the predictor variables (students' engagement in reading activity and students' reading interest) and criterion variable (students' PISA reading literacy performance), and whether or not there was contribution between engagement in reading activity aspects and PISA reading literacy performance. The population of this study was state senior high school students in Ilir Timur II and Kalidoni districts in Palembang. The sample of the study was 252 students who were chosen by using Slovin's formula purposive sampling. In collecting the data, the students were asked to answer PISA reading 2009 test and to respond to two questionnaires (engagement in reading activity and reading interest questionnaires). In analyzing the data, Pearson product moment coefficient correlation was used. The results showed that students' PISA reading literacy was categorized in level 3, which is far below the school minimum mastery criteria (KKM). However, their engagement in reading activity was categorized as moderate and their reading interest was categorized as high. There was a very weak correlation between students' engagement in reading activity and their PISA reading literacy performance, and a very weak correlation between students' reading interest and their PISA reading literacy performance. There was a very weak correlation between two predictor variables (students' engagement in reading activity and reading interest) and criterion variable (PISA reading literacy performance), as well.

Keywords: *Engagement In Reading, Reading Interest, PISA Reading Literacy Performance*

Reading is a gate to look up new information. Reading cannot be avoided because to access new information and knowledge people have to read various things such as academic books, magazines, articles and journals. Chettri (2013) points out that reading opens the doors of treasures of knowledge as it is one of the literacy skills that people need to have to be successful in the future. Gallik (1999) adds, "Without the ability to read well, opportunities for personal fulfilment and job success will inevitably be lost." Therefore, students need to further improve their reading skills as the more books they read, the more successful they will be in learning.

Successful reading is related to literacy performance. Literacy means a constructive, integrative, and critical process situated in social practices, and it involves complex, multimodal transactions between readers, texts, activities, and sociocultural contexts (Frankel, Becker, Rowe, & Pearson, 2016). 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). In other words, literacy plays important part in people's lives as literacy can be found in any context of social life as well as literacy includes all the process or skills that people normally have. Moreover, reading literacy is the ability to comprehend the role of reading as a tool to make any reasonable opinions and to use and engage with reading in ways that fulfill the needs of constructive, concerned and reflective society (OECD, 2003).

Students need to have a good reading performance and to possess strong reading engagement. According to Guthrie & Wigfield (2000), engagement in reading refers to interaction with text which is simultaneously motivated and strategic. It means that teachers need to make reading stimulating and strategic, so their students will be motivated to read more. Moreover, readers who are intrinsically drawn in reading will likely build knowledge, use cognitive strategies, and interact socially to learn from text (Guthrie et al, 2004). Otherwise, as Protacio (2013) states,

“Students who are disengaged readers are also those who typically have lower levels of reading achievement”.

Reading sometimes can be categorized as a troublesome and tiresome activity for some students while the other students may think that reading is interesting thing to do. Reading interest plays an important role to improve students’ reading literacy performance. According to Thomas (2001), reading interest refers to how excited an individual is to engage in reading some written material. Referring to the definition, it means that the engagement in reading has something to do with the reading interest and vice versa. Kirby, Ball, Geier, Parrila, & Wade-Woolley, (2011) state that if children were interested in reading they would read more often and therefore have more opportunities to improve their reading ability than children who prefer not to read.

However, Indonesian students’ engagement in reading and their reading interest are still low. This is in line with a research conducted by Siswati (2010, p.124) in one of the public universities in Central Java, in Indonesia, showed that only 23.5% of the respondents chose to read as their source of information. Moreover, The Progress of International Reading Literacy Study (PIRLS, 2006) shows that Indonesia stays in the 41st position of the 46 countries related to reading. According to OECD the Program for International Student Assessment (PISA) from 2000 to 2012 in case of international ranking, Indonesia was below average in reading literacy level. In 2000, Indonesia scored 371 it places the 39th out of 41 countries. In 2003, it was 382 or the 39th of 40 countries. In 2006, the score was 393 or the 48th out of 56 countries. In 2009 although the score was 402, increases from 300s, yet it was still far below average, or the 57 out of 65 countries and in 2012 the PISA results for Indonesian students are the second lowest in the league table, worse than the last PISA in 2009, when Indonesia scored 396, ranked 64th of 65 countries.

The objectives of this study were to find out the: (1) students’ PISA reading literacy performance levels, (2) students’ engagement in reading activity category and its aspects, (3) students’ reading interest category, (4) correlation between students’ engagement in reading activity and PISA reading literacy performance, (5) the correlation between students’ reading interest and PISA reading literacy performance, and (6) the correlation between predictor variables (students’ engagement in reading activity and reading interest) and criterion variable (PISA reading literacy performance), and (7) the contribution between engagement in reading activity and PISA reading literacy performance.

Methodology

This was a correlational study. Two hundred and fifty two students out of 678 students were selected purposively from three senior high schools in Ilir Timur II and Kalidoni districts in Palembang city as the samples using Slovin’s formula.

In collecting the data, a PISA 2009 reading test, a questionnaire from PISA 2009, and a reading interest questionnaire were used. PISA 2009 reading test consisted of 39 questions had strong appropriateness. This instrument has high levels of validity and reliability for improving students’ skills, attitudes and knowledge (OECD, 2009). However, it was tried out again to non-targeted samples. It was found that it was reliable ($\alpha=0.84$).

The two questionnaires are ready-made. The engagement in reading activity questionnaire was adopted from PISA reading 2009, and the reading interest questionnaire was developed by Thomas (2002). All items of engagement in reading activity questionnaire and reading interest questionnaire are higher than the value of *r table* (0.329). It indicates that all questionnaires items are valid. Engagement in reading activity questionnaire consists of 4 aspects: reading for pleasure (consists of open questions asking about how long the students spent their times to read English books), reading attitude ($\alpha=0.829$), reading diversity ($\alpha=0.951$), and reading online ($\alpha=0.945$), four-point Likert scale forms. In addition, reading interest questionnaire also had reliability ($\alpha=0.921$).

In analyzing the data, Pearson product moment correlation coefficient and Regression analysis were used. Regression analysis in this study was used to find out the correlations among the three variables. The three variables were treated as different variables. This study also used standard score in MS. Excel; z-score and CEEB to find PISA levels which range score is 262 - >698 (OECD, 2010). Besides, Method of Successive Interval (MSI) was applied in order to convert ordinal data to interval data.

Findings

Two hundred and fifty two students took the test in data collection. The result of the test showed that only 6 (2.4%) students were in level 1b, 27 (10.7%) students were in level 1a, 81 (32.1%) students were in level 2, 72 students (28.6%) students were in level 3, 40 (15.9%) students were in level 4 and 11 (4.4%) students were in level 5. The rest, 15 (6.0%) students were in level 6, as summarized in Table 1.

Table 1. Students' PISA Reading Literacy Performance

Level	Range of Score	Frequency	Valid Percent
1b	262 – 334	6	2.4
1a	335 – 407	27	10.7
2	408 – 480	81	32.1
3	481 – 552	72	28.6
4	553 – 625	40	15.9
5	626 – 697	11	4.4
6	>698	15	6.0
Total		252	100.0

Details about students' PISA reading literacy performance based on districts are shown in Table 2.

Table 2. Descriptive Statistics of PISA Reading Literacy Performance based on Districts

Districts	N	Mean	Level	SD	SD of Level
Iilir Timur II	168	27.30	495.26	8.414	84.876
Kalidoni	84	30.21	507.21	13.052	119.494
TOTAL	252	28.27	500.00	10.263	100.000

As shown in Table 2, students in Iilir Timur II district had the lower mean score (27.30, SD=8.414) than students in Kalidoni district (30.21, SD=13.052). Then, in PISA 2009 levels, both districts were in the same level that was level 3 with standard deviation of 84.876 for Iilir Timur and 119.494 for Kalidoni. Further details of PISA reading literacy performance based on schools are shown in Table 3.

Table 3. Descriptive Statistics of PISA Reading Literacy Performance based on Schools

Schools	N	Mean	Level/Mean	SD	SD of Level
SMAN 5 PALEMBANG	84	28.03	491.63	8.192	93.385
SMAN 7 PALEMBANG	84	30.21	507.21	13.052	119.494
SMAN 18 PALEMBANG	84	25.56	499.74	8.616	73.454
TOTAL	252	28.27	500.00	10.263	100.000

Based on the above Table 3, SMAN 7 Palembang had the highest score (mean=30.21) with standard deviation of 13.052, followed by SMAN 5 Palembang (mean=28.03) with standard deviation of 8.192, and SMAN 18 Palembang (mean=25.56) with standard deviation of 8.616. However, these three schools were in the same level of PISA 2009 levels that was level 3.

The Result of Students Engagement in Reading Activity

Table 4. Result of Reading Engagement

Reading Engagement Category	Range of Score	N	% of total N
High	15-54	44	17.5%
Moderate	55-84	198	78.6%
Low	85-14	10	4.0%
Total		252	100%

As shown in Table 4, it can be seen that 44 (17.5%) students were in high category of engagement in reading activity and 198 (78.6%) students were in moderate category. Meanwhile, 10 (4.0%) out of 252 students were in low category of engagement in reading activity.

Engagement in reading activity itself has 4 aspects. Further results in each aspect are shown in the Figure 1, 2, 3 and 4 below,

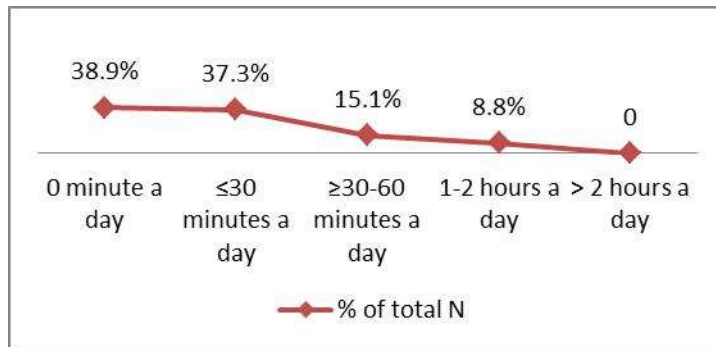


Figure 1. Result of Engagement in Reading Activity Component of Reading for Pleasure

From Figure 1 above, it can be seen that 38.9% students did not read for pleasure. Thirty seven point three percent students spent their time in reading for pleasure in less than 30 minutes a day. Then, 15.1% students spent more than 30 until 60 minutes to read for pleasure and only 8.8% students spent 1 until 2 hours a day to read for pleasure. Moreover, none of the students read more than 2 hours a day.

Table 5. Result of Engagement in Reading Activity Component of Reading Attitude Category

Negative (11-33)		Positive (34-47)	
Frequency	Percent	Frequency	Percent
137	54.4%	115	45.6%

Table 5 showed that 137 (54.4%) students were in negative reading attitude category. Besides, 115 (45.6%) students were in positive reading attitude category. For further information of results of engagement in reading attitude per item can be seen in Figure 2 below.

Based on the Figure 2 above, the students preferred to give disagree responses to the statements which were asked about their attitude toward reading. It can be seen from the blue line, on the average, the values were upper than 50% of the percentage.

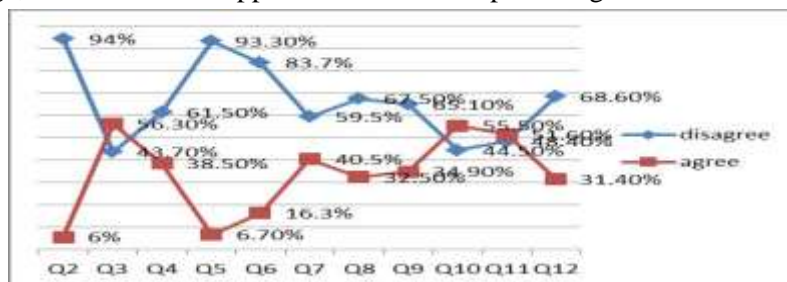


Figure 2. Result of Engagement in Reading Activity Component of Reading Attitude per Item

Based on Table 6 below, two hundred and eighteen students (86.5%) were categorized as students who did not spend or rarely spent time reading various books in English. Meanwhile, 34 (13.5%) students were categorized as students who had enough time reading various books in English. For more information about results of engagement in reading activity component in reading diversity is shown in Figure 3 below.

Table 6. Result of Engagement in Reading Activity Component of Reading Diversity Category

Reading Diversity Category	1 (5-15)		2 (16-25)	
	Frequency	Percent	Frequency	Percent
	218	86.5%	34	13.5%

(1) Students did not spend or rarely spent time reading various books in English

(2) Students had enough time reading various books in English

Figure 3 showed the result of reading diversity of the students who were asked about the amount of time students spent reading various types of text. The result showed that 29.00% of the students read magazines only a few times a year, 29.80% students read comics for about once a month, 32.10% students read fictions only a few times a year, 30.20% read non-fictions also only a few times a year and most of them were never or almost never reading newspaper.

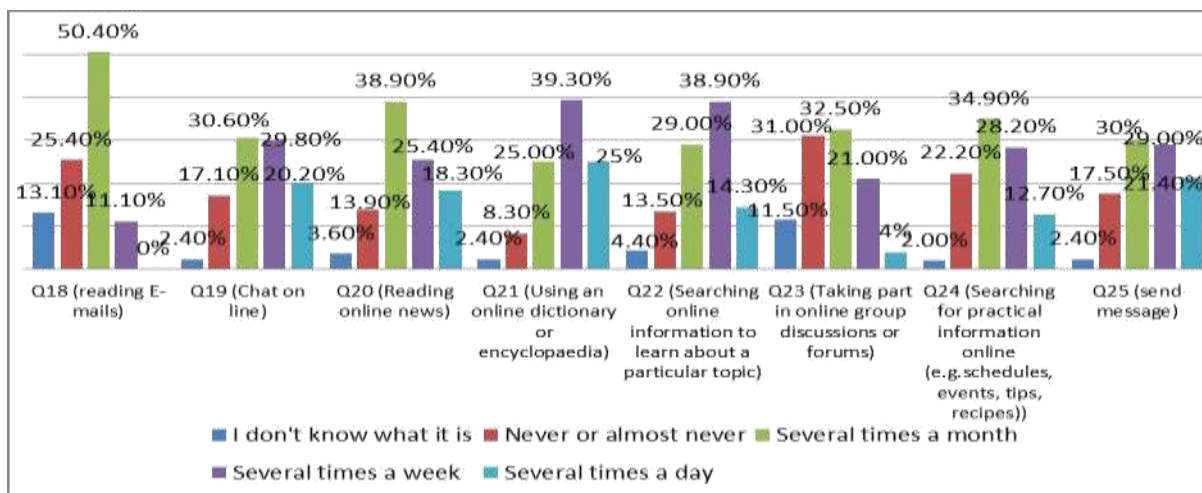


Figure 3. Result of Engagement in Reading Activity Component of Reading Diversity

For more information about books the students like spending more their time to read is shown in Figure 4.

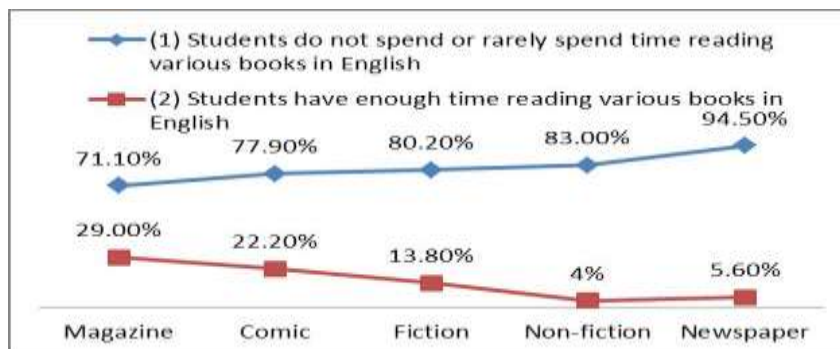


Figure 4. Result of Engagement in Reading Activity Component of Reading Diversity

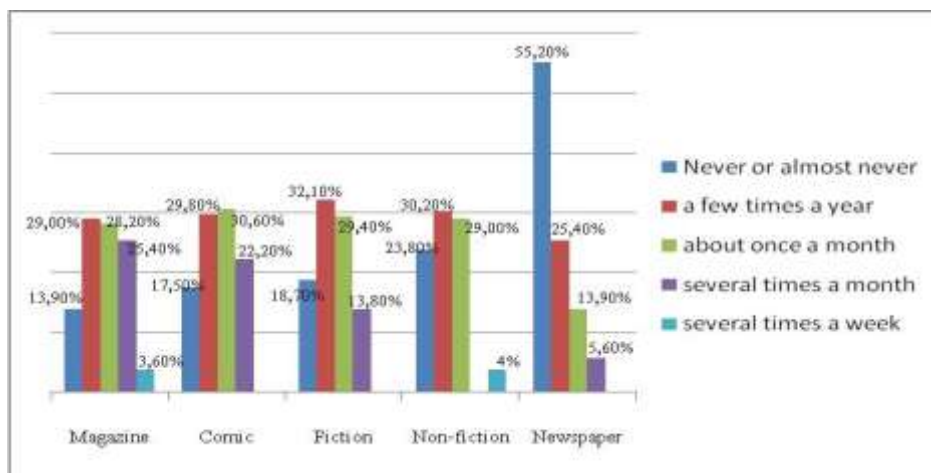
From the Figure 4 above, it can be seen that more than 70.00% of the students did not spend or rarely spent their time in reading various books in English. However, from the 5 types of books given in the questionnaire, students in state senior high schools in Kalidoni and Ilir Timur II preferred in reading magazines (29.00%) and comics (22.20%).

Table 7. Result of Engagement in Reading Activity Component of Reading Online Category

Reading Online Category	1 (8-24)		2 (25-40)	
	Frequency	Percent	Frequency	Percent
	112	44.4%	140	55.6%

(1) Students never or rarely had time to read online
 (2) Students had enough time to read online

There were two categories of students reading online. First, students who read online at least several times a week were categorized as students who had enough time to read online and another one was students who did not read at least several times a week were categorized as students who never or rarely had time to read online. As presented in Table 11 above, 112 students (44.4%) were categorized as students who never or rarely had time to read online and 140 students (55.6%) were categorized as students who had enough time to read online. Further information about result of engagement as reading activity component in reading online is shown in the Figure 5 below.



Result of Engagement in Reading Activity Component in Reading Online

Figure 5 showed that 50.40% of the students read E-mails for several times a month, 30.60% students chatted online for several times a month, 38.90% students read online news for several times a month, and almost 40% students used an online dictionary or encyclopaedia and searched online information to learn about a particular topic for several times a week. Further, more than 30% of the students took part in online group discussions or forums, searched for practical information online and sent messages for several times a month.

Result of Reading Interest

Table 8. Result of Reading Interest

Reading Interest Category	Range of Score	N	% of total N
High	61 – 80	234	92.9%
Moderate	41 – 60	18	7.1%
Low	20 – 40	0	0%
Total		252	100%

As shown in Table 8, most of the students (92.9%) were in high category of reading interest. Besides, 18 (7.1%) students were in moderate category. There was no student in low category of reading interest.

Statistical Analysis

There were three statistical analyses applied in this study, those were (1) normality test, (2) correlation analyses, (3) regression analyses. Child (2017) explains that there are three considering things in using Pearson product moment coefficient correlation. First of all, the variables should be in interval/ ratio data. Second of all, the data should be in normal distribution and another is that the total number of the sample should be at least 30 people as samples in a research. The data had been in interval data because the questionnaires data had been converted by using MSI (Method of Successive Interval) and the total number of sample was 252 students. Another is the normality of each instrument.

Normality of the Data

Normality test was conducted to see if the data distribution was normal or not. The normality data of this study was checked by using One-Sample Kolmogorov-Smirnov test. The result of normality test is presented below.

Table 9. Tests of Normality

	Kolmogorov-Smirnov ^a		
	Statistic	Df	Sig.
PISA_Reading	.103	252	.000
reading_engagement	.068	252	.007
reading_interest	.072	252	.003
Reading_attitude	.068	252	.007
REading_Diversity	.069	252	.006
Reading_online	.050	252	.200*
Pleasure	.258	252	.000

a. Lilliefors Significance Correction

From Table 9, it can be seen that the value of PISA reading literacy test was 0.000, the value of engagement in reading activity was 0.007, the value of reading interest was 0.003, the value of reading attitude was 0.007, the value of reading diversity was 0.006, the value of reading online was 0.200 and the value of pleasure was 0.000, which meant that only reading online that was normally distributed because the value was higher than 0.05 (see column Kolmogorov-Smirnov^a). Meanwhile, according to Pallant 2007 (cited in Ghasemi and Zahediasl, 2012) if the data samples were more than 30 or 40 samples, then the data was normal. Since the data samples of this study were more than 40, that were 252 samples, it can be concluded that all instruments were in normal distribution.

Correlation between Students' PISA Reading Literacy Performance and Their Engagement in Reading Activity

To find out whether or not there was a significant correlation between independent and dependent variable, the Pearson Product Moment Correlation Coefficient Formula was used. The following are the degrees of correlation coefficients.

Table 10. The Degree of Correlation Coefficient

Correlation Interval	Degree of Correlation
0.80 – 1.000	Very Strong
0.60 – 0.799	Strong
0.40 – 0.599	Moderate
0.20 – 0.399	Weak
0.00 – 0.199	Very Weak

Source : Evans (1996)

Table 11. The Correlation between Students' PISA Reading Literacy Performance and Their Engagement in Reading Activity

		Reading_Engagement
PISA_Reading_Literacy	Pearson Correlation	.120
	Sig. (2-tailed)	.057
	N	252

As shown in Table 11 the result of Pearson product moment correlation coefficient test showed that the correlation coefficient was .120 and the ρ - value was 0.057. It meant that there was a very weak correlation between students' PISA reading literacy performance and their engagement in reading activity in Ilir Timur II and Kalidoni districts. It was categorized into very weak correlation because the range of correlation between 0.00 until 0.19 (Evans, 1996). Because the ρ - value (0.057) was higher than 0.05 means that H_0 is accepted and H_1 is rejected. Therefore,

there was no a significant correlation between students' PISA reading literacy performance and their engagement in reading activity in Ilir Timur II and Kalidoni districts.

Correlation between Students' PISA Reading Literacy Performance and Their Engagement in Reading Activity Components

From Table 12, it can be inferred that one component of engagement in reading activity that was significantly correlated to PISA reading literacy performance. It was reading for pleasure with the p -value (0.015), because the p -value was lower than 0.05, H_0 was rejected and H_1 was accepted which meant there was significant correlation between reading for pleasure and PISA reading literacy performance. The r-coefficient of reading for pleasure was (0.153), it is categorized into very weak correlation. Meanwhile, the three components were not a significant correlation with PISA reading literacy performance because the p -value were higher than 0,05, those p -values were 0.167 for reading attitude, for reading diversity the p -value was 0.236 and the p -value for reading online was 0.068, because the p -values were higher than 0.05, H_0 was accepted and H_1 was rejected which meant there was no significant correlation between the three components with PISA reading literacy performance. However, the r-coefficient of the three components were 0.087 for reading attitude, 0.075 for reading diversity and the r-coefficient for reading online was 0.115 those were categorized into very weak correlation because the r-coefficients were between 0.00 until 0.19 (Evans, 1996).

Table 12. The Correlation between Students' PISA Reading Literacy Performance and Their Engagement in Reading Activity Components

		PISA_score
Reading_attitude	Pearson Correlation	.087
	Sig. (2-tailed)	.167
	N	252
Reading_diversity	Pearson Correlation	.075
	Sig. (2-tailed)	.236
	N	252
Reading_online	Pearson Correlation	.115
	Sig. (2-tailed)	.068
	N	252
Reading_for_pleasure	Pearson Correlation	.153*
	Sig. (2-tailed)	.015
	N	252

*. Correlation is significant at the 0.05 level (2-tailed).

The Correlation between Students' PISA Reading Literacy Performance and Their Reading Interest

Table 13. The Correlation between Students' PISA Reading Literacy Performance and Their Reading Interest

		reading_interest
PISA_Reading_Literacy	Pearson Correlation	.058
	Sig. (2-tailed)	.362
	N	252

As shown in Table 13, the result of Pearson product moment correlation coefficient test showed that the correlation coefficient was 0.058 and the p -value was 0.362. It means that there was a very weak correlation between students' PISA reading literacy performance and their reading interest in Ilir Timur II and Kalidoni districts. It was categorized into very weak correlation

because the range of correlation between 0.00 until 0.19 (Evans, 1996). Because the p -value (0.362) was higher than 0.05 means that H_0 is accepted and H_1 is rejected. Therefore, there was no a significant correlation between students' PISA reading literacy performance and their reading interest in Ilir Timur II and Kalidoni districts.

Correlation between Two Predictors (Engagement in Reading Activity and Reading Interest) and Criterion (PISA Reading Literacy Performance)

Table 14. The Correlation between Two Predictors (Engagement in Reading Activity and Reading Interest) and Criterion (PISA Reading Literacy Performance)

	Variables	Pearson Correlation	p-Value
PISA Reading Literacy	Engagemet in Reading Activity Reading Interest	.094	0.333

Based on Table 14, it is shown that the sig. F change was 0.333. Because the sig. F change was higher than 0.05 means that H_0 was accepted in which there was no significant correlation between two predictors (engagement in reading activity and reading interest) and criterion (PISA reading literacy performance).

Regression Analysis

Table 14. The Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.153 ^a	.023	.020	10.162	.023	6.009	1	250	.015

a. Predictors: (Constant), Pleasure

Table 14 showed that the adjusted r square were 0.020 which means that the contribution of reading for pleasure towards PISA reading literacy performance were 2%.

The Interpretation of the Study

Based on the findings of the study, several points need to be discussed. The specific question addressed in this study is: "Is there any significant correlations among engagement in reading activity, reading interest and PISA reading literacy performance?". The discussion is as follows.

The first finding showed that the average score of students in state senior high schools in Ilir Timur II and Kalidoni districts using PISA 2009 level was 500.00, which was categorized in level 3, moderate performance. 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. However, the average score of students' PISA reading literacy in English was 28.27 (scale 1 – 100) which still far below from the criteria score minimum (KKM) of Indonesia that is 75. It can be concluded that if the students are going to test their reading literacy in English, they might get low results. This is not surprising, because students' reading literacy in Bahasa Indonesia is still low. According to OECD (2012), PISA reading literacy results for Indonesian students are the second lowest in the league table, worse than the last PISA in 2009, ranked 64th of 65 countries.

The second finding showed that most of the students' engagement in reading activity (78.6%) was categorized in moderate. Moreover, 44 students (17.5%) were categorized in high category and only 10 (4.0%) students were categorized in low category. It can be concluded that most of the students are engaged in reading activity; they read for pleasure, they read a wide diverse books, read online and they have good attitudes toward reading (OECD, 2010). The finding

also showed that there was a correlation between students' PISA reading literacy and their engagement though it was in very weak category (the r-coefficient was 0.120). In other words, engagement in reading activity is quite related to reading performance. This is in line with a study conducted by Wigfield, Guthrie, Perencevich, Taboada, Klauda, Mcrae, & Barbosa, (2008) that reading engagement was correlated with reading motivation. However, although engagement in reading activity was correlated with PISA reading literacy performance, yet it was not significant. It was consistent with a study by Guthrie, Wigfield, Metsala, & Cox, 1999 (cited in Guthrie, Wigfield, Barbosa, Perencevich, Taboada, Davis, Scaffiddi, and Tonks, 2004) which found a very weak correlation between engagement and reading comprehension. It can be implied that although they have good engagement in reading activity, it does not guarantee that their reading literacy will be high.

Engagement in reading activity itself has 4 components. The first component was reading for pleasure. From the finding, it can be concluded that 38.9% students did not read for pleasure. They did not read outside the class. Meanwhile, there are only 8.8% students who read book in 1 - 2 hours a day. It means that, many of the students did not spend their time outside the school to read for pleasure. Clark (cited in "Research Evidence", 2012) found that students preferred in watching TV to reading. Students who do not enjoy reading books will get low reading achievement (OECD, 2010). This finding showed that there was a significant correlation between students' PISA reading literacy performance and reading for pleasure. It was supported by OECD (2009) that people who read for pleasure perform significantly better in reading literacy than people who do not read for pleasure. However, although there was a significant correlation yet it was very weak correlation because the r-coefficient was 0.153.

The second component of engagement in reading activity was reading attitude. Reading attitude is divided into two category, those are positive and negative attitude toward reading. This study found that 54.4% of the state senior high school students in Kalidoni and Ilir Timur II were in negative category toward reading attitude. However, 115 students out of 252 (45.6%) were categorized in positive category toward reading attitude. It can be implied that less than a half of the students have positive attitude toward reading. Positive attitude toward reading may influence the decision toward reading. This is in line with a study conducted by Cunningham (2008) which concluded that students who have a positive attitude toward reading have a good achievement in reading. This study found a very weak correlation between students' PISA reading literacy and their reading attitude yet it was not a significant correlation. This finding was consistent with the study by Wade, 2012 (cited in Mohd-Asraf & Abdullah, 2016) which showed that there was a very weak correlation between reading attitude and reading achievement. According to Kush et al (cited in Sundari, 2013) reading attitudes grow throughout the repeated achievement and failure in reading impression over time. In other words, attitudes do not automatically get ability in reading literacy.

The third component was reading diversity. Reading diversity means that reading many kinds of books. In this study the students were asked about the amount of time they spent reading various types of text. The finding showed that more than 80% of the students did not spend or rarely spent their time in reading various books in English. It can be concluded that they do not read in a wide variety of books. Krashen (cited in "The Life-Enhancing", 2013) found that averse readers are those who do not read variety of books. The finding also showed that students preferred in reading magazines and comics. This is can be useful for the teachers to gain students interest in reading by choosing magazines or comics as the materials. As Cameron says, "The teachers must take on the responsibility for adjusting tasks and topics so that they relate to the students interests" (cited in Apriani, Vianty & Loeneto, 2015). Moreover, the finding showed that there were a very weak correlation between reading diversity and PISA reading literacy performance. This was consistent with a study by Clark and Poulton (2011) which found that students who read variety of books enjoy reading more and gain good reading achievement. However, the correlation was no significant. It can be implied that, reading a wide diversity books might not really impact the reading literacy performance.

The last component of engaging in reading activity was reading online. As the result, 140 (55.6%) students were categorized as students who have enough time to read online. In other words, more than a half of the students were engaged in reading online. It is not surprising because

in this era data from United Nations showed that over 6 billion out of the estimated 7 billion people now have mobile phone, therefore many of them can engage in reading online (cited in UNESCO, 2014). This finding obtained a very weak correlation between reading online and PISA reading literacy yet it was not significant correlation. It can be implied that reading online is not really matter students reading literacy. Beimers (2014) also found that reading e-books do not really help students reading achievement.

The next finding, in terms of reading interest, the result showed that most of the students that is, 234 (92.9%), were in high category of reading interest and only 18 (7.1) students were in moderate category. None of them was in low category. It can be concluded that most of the students in state senior high schools in Ilir Timur II and Kalidoni districts had a good interest in reading. Kirby et al (2011) found that students who have high reading interest would read books more often than students who have not. However, this research found a very weak correlation between reading interest and PISA reading literacy performance yet it was not significant correlation. It can be implied that reading interest is quiet related to reading literacy. This study was consistent with a study by Meniado (2016) which found that there was a very weak correlation between reading interest and reading comprehension. According to Cambria & Guthrie (2010) interest comes from two forms, situational and enduring. Situational interest is fascination with the detail of the book. They concern about the information of the book, the looks, the comments and others. This situational interest does not produce achievement because it is only temporary interest.

A study conducted by Pope (2016) found that students are more productive in the morning than the afternoon. In his study, students who were given the test in the morning gain a better score than students who were given the test in the afternoon. In line with that, this study took the test in the afternoon, this is the reason why some of the predictor variables of this study have no significant correlation with the criterion variable.

Conclusions and Suggestions

Several conclusions can be drawn based on the findings and interpretation presented in the previous chapter. First, students PISA reading literacy level was categorized in level 3, their engagement in reading activity was categorized in moderate category and their reading interest in high category. However, the average score of students' PISA reading literacy test in English was still far below from the criteria score minimum (KKM) of Indonesia. Second, there was a very weak correlation between PISA reading literacy and students' engagement in reading activity. Third, there was a very weak correlation between PISA reading literacy and students' reading interest. Forth, there was a very weak correlation between predictor variables (students' engagement in reading activity and reading interest) and criterion variable (PISA reading literacy performance). Last, students preferred in reading magazines and comics.

Based on the conclusion above, the suggestions are pointed to students, teachers, and other researchers. First, the students who have moderate engagement in reading activity and high reading interest are still not enough. They still need improvement in their English due to the low score of their PISA reading literacy. Second, for the teachers, they need to provide more strategies in teaching English. They can also use magazines and comics as the materials for teaching reading due to the students' preference in those materials. Last, for future researchers who are interested with this topic, they are expected to conduct the study with the broader area and correlate more with other variables since there are still many unexplained factor that can influence students' PISA reading literacy.

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