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## **Reading readiness, brain intelligence, interest and motivation as predictors to the English reading level among elementary learners: A framework in teaching reading**

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**Abstract**---Several studies show that reading readiness is one of the factors that have to be considered in developing the reading ability of the students. It is a process of preparing a child for reading, encouraging the child to read and engaging that child in reading. In other words, it is a state of development, which prepares the child mentally, physically, and social-emotionally for reading experiences. This study specifically sought to determine the reading readiness, brain intelligence, interest and motivation of the elementary learners and find out if those variables significantly predict the reading levels of the two groups of students, those under inclusion and exclusion of reading speed. 168 fourth grader learners in the Division of Zamboanga City, Philippines had voluntarily participated in this research. The researcher utilized the Philippine Informal Reading Inventory (Phil-IRI) to answer the research question. Research protocols were also observed and followed in this study, Clearance for Ethics Implementation was sought, before the actual data gathering procedure. Data revealed that reading readiness, brain intelligence, interest and motivation of the pupils do not significantly contribute to the Reading Level of Pupils in the Inclusion Group. Moreover, the study found out that reading readiness is significantly and positively predicting the reading level while brain intelligence and, interest and motivation do not significantly predict the reading level of pupils in the exclusion group. Therefore, among the variables correlated, it is safe to conclude that reading readiness is a very significant factor to consider in teaching reading. If learners have the readiness to learn reading, there is a greater chance of improving their reading level.

**Keywords**---reading readiness, brain intelligence, interest, motivation, elementary learners, reading speed, teaching reading.

## **Introduction**

Students are exposed nowadays to different ideas, people and products; and viewpoints increase as rapidly as the changes in the society. Just about everyone in the Philippines knows how to read. As a nation, almost everybody enjoys a high rate of literacy. Unfortunately, not every Filipino is a good reader who can derive meaning from a written material and go on to analyze and apply that meaning. Thus, readers who can only read facts and nothing more can never be called good readers. (Santos et.al, 2013).

Reading readiness according to UNICEF (2012) as cited in the study of Akubuilu (2015), is a process of preparing a child for reading; encouraging the child to read and engaging that child in reading. However, reading readiness entails the maturation of all the mental, physical and socio-emotional factors involved in the reading process. In other words, it is a state of development, which prepares the child mentally, physically, and social-emotionally for reading experiences. Notwithstanding the chronological age of the child, the point at which the child's growth and development have brought about proper maturation of these factors should be the point at which the reading process begins. Schifferdecker (2007) explains that reading readiness actually commences from that particular time when a child transforms from being a non-reader to a reader (Akubuilu,2015).

According to Seymour and Walsh (2006), as cited in the study of Ahmadi (2016), motivation affects learners' reading comprehension activities. While it has a significant role in language learning, many do not know its great importance in reading comprehension. Reading motivation helps EFL learners read more efficiently. This has also been supported by Wang (2008) and Rosenfeld, Leung, and Oltman (2001) who emphasized that learners who learn a foreign language should develop their reading ability for the better comprehension of written texts (Ahmadi 2016).

Although many studies on reading readiness, brain intelligence, motivation and interest were correlated to the reading level, these studies were conducted in the foreign setting. So the researcher was moved to conduct the study with the Filipino elementary. As stated in the study of Saavedra (2020), English reading skills of elementary learners belonged to the lowest level of reading comprehension. Although the present curriculum has made reforms on the competencies in the elementary education, its impact on pupils remains an area of concern on the ground especially among school administrators and reading teachers themselves.

## **Research Question**

1. Do the reading readiness, brain intelligence, interest and motivation significantly predict the reading levels of the two groups of students, those under inclusion and exclusion of reading speed?

## **Related Literature and Studies**

To help students derive meanings from text, a teacher has to understand the process of reading. Reading can easily be defined as the process in which a person receives and interprets a message on how information is processed from the text into meanings, starting with information from the text, and ending with what the reader gains. Reading was traditionally viewed as a passive process in which the readers simply decode the written symbols without bringing their own knowledge to interact with the text (Clarke & Silberteine, 1977; Rudell, 1976). Alderson called these passive decoders of sequential graphic-phonemic-syntactic-semantic systems. But after the emergence of psycholinguistic model of reading (Goodman, 1988), research on reading showed that reading is actually an active process, in which the reader creates meaning from the printed text.

Dornyei (2006) and Grabe (2009) conducted a study and discovered that there is a strong impact of motivation on reading comprehension proficiency. They postulated that motivation covers all features of motivation and affected on reading comprehension; which enabled reading in different levels of learners. Schutte and Malouff (2007) as cited in the study of Ahmadi (2016), described that learners' motivation affects their readings. The higher the motivational level of learners, the wider the variety they are expected to read. In addition, Gottfried (1990) also conducted a study and posited that reading comprehension positively relates with intrinsic motivation for reading. In the study carried out by Gottfried, Cook, Gottfried, and Morris (2005), it was found out that learners from the basic education levels with strangely high academic intrinsic motivation accomplished better on different reading measures. Morgan and Fuchs (2007) explained that motivation is an important aspect which helps learners read more and it has an important relationship with reading and recognizing texts. Similarly, Ahmadi and Hairul (2012) stated that many researchers have been well aware of the significance of motivation in target language learning and how motivation increases comprehension among language learners (Cox & Guthrie, 2001). This was shown in the study of Sandal, Saavedra, Madrazo & Ramos (2022) where Junior high school students had manifested high motivational level on the English language.

According to Schutte and Malouff (2007), it is essentially of value to encourage learners to read, to allowing them to pick materials that of their interest. Learners would be able to read more when they are allowed to choose their reading materials. Consequently, it can be concluded that learners with high motivation would read more than learners with lower motivation (Pachtman & Wilson, 2006).

## **Methodology**

This study evaluated the pupils' reading level correlating to the intervening variables; reading readiness, brain intelligence, interest and motivation: predictors to the English reading level among elementary learners. It is confined to the selected Grade IV pupils in one of the districts in the Division of Zamboanga City, Philippines. A total of 168 respondents voluntarily participated in this study which comprised of 80 pupil-respondents who were also part of the group with the inclusion of the reading speed (control group), 80 pupil-

respondents who belonged to the group with the exclusion of the reading speed(experimental group) and the eight (8) teacher-respondents who are also teaching in the four (4) participating schools in the District where the study was conducted.

To answer the requestion, the Philippine Informal Reading Inventory (Phil-IRI) was utilized by the researcher. It is reading inventory composed of graded passages designed to determine the individual student's performance in silent reading. The Phil-IRI Silent Reading Test (Morris and Gunning, 2008) gives quantitative information about the pupil's silent reading capabilities. Quantitative information shows the reading levels namely: frustration, instructional and independent. Furthermore, it uses predetermined set of criteria in identifying the reading levels of the pupils such as the reading speed and percentage of correct answers to comprehension questions. It has adapted the combination of bands of reading rate (words per minute) proposed by Morris and Gunning (2008).

Research protocols were also observed and followed in this study, Clearance for Ethics Implementation was sought, before the actual data gathering procedure. Both the teacher-respondents and the pupil-respondents were be properly coordinated and oriented under the guidance of the respective school heads. The rights and privileges of the respondents were also discussed wherein it was made clear to them that their identity will be dealt with utmost confidentiality and their participation should be voluntary. Parents' Assent for the pupil-respondents and informed consent for the teacher-respondents were secured before the data gathering.

### **Data Analysis Procedure**

The scores of the pupil-respondents in the control group with the inclusion of the reading speed were encoded in the Phil-IRI template and were interpreted automatically by the software. Table 0.3 below shows the rubric used to interpret the reading level of the pupil-respondents in the group with the inclusion of speed.

Reading Level	Reading Speed Word Per Minute (WPR)	Comprehension
Independent	160 below	90% -100% correct answers
Instructional	161-189	75%-89% correct answers
Frustration	190 above	74% below correct answers

Table 1. Phil-IRI Silent Reading Test Criteria for Control Group

### **Results and Discussion**

Table 2. and 3. below present the Multiple Regression Model Summary Table of students grouped under Inclusion of Reading Speed that shows Their Reading Readiness, Brain Intelligence, and Interest and Motivation as Predictors to their Reading Levels. The table above reveals that the regression model is a significant fit of the data overall,  $F = 6.709$ ,  $p < .001$ . Reading Readiness, Brain Intelligence and, Interest and Motivation accounts 20.9% in the variation of Reading Level in

in the Inclusion Group. However, each predictor does not significantly contribute to the Reading Level of Pupils in the Inclusion Group with  $\beta = .11$ ,  $p > .05$ ,  $\beta = .258$ ,  $p > .05$  and  $\beta = .103$ ,  $p > .05$ , respectively.

This result may be due to the fact that students' motivation and level of engagement in reading can change over time. Students who are motivated to read for pleasure typically do so for about 20 minutes longer per day than students who are less motivated to read (Wigfield & Guthrie, 1997). Fifty-four percent of 9 year old students read for pleasure, although by 13 years of age only 28% of students read for pleasure each day (Campbell, Hombo & Mazzeo, 2000). Data highlights that as students get older they engage in less recreational reading on a daily basis.

As students read they transform printed texts while at the same time emotionally transform themselves (Mizokawa & Hansen-Krening, 2000). Without an emotional connection to texts, students will not positively engage in reading and consequently their academic achievement levels will suffer. Teachers need to make reading irresistibly attractive to students to enhance their positive reading attitudes (Deford, 2004).

Variable	R	R Square	F	P
Reading Readiness, Brain Intelligence, and Interest and Motivation as Predictors to Reading Levels	.458	.209	6.709	<.001

Table 2. Multiple Regression Model Summary Table: Students Grouped under Inclusion of Reading Speed, Their Reading Readiness, Brain Intelligence, IQ and Interest and Motivation as Predictors to their Reading Levels

Variables	Standard Coefficients	Beta	T	P
Reading Readiness	0.11		0.435	.665
Brain Intelligence	0.258		1.005	.318
Interest and Motivation	0.2		1.879	.064

Table 3. Beta Coefficient Table: Students Grouped under Inclusion of Reading Speed, Their Reading Readiness, Brain Intelligence, and Interest and Motivation as Predictors to their Reading Levels

Tables 4. and 5. present the Multiple Regression Model Table of the Students Grouped under Exclusion of Reading Speed that shows their Reading Readiness, and Interest and Motivation as Predictors to their Reading Levels. The table above reveals that the regression model is a significant fit of the data overall,  $F = 59.477$ ,  $p < .001$ . Reading Readiness, Brain Intelligence and, Interest and Motivation accounts 70.1% in the variation of Reading Level in the Exclusion Group. Reading Readiness is significantly and positively predicting the Reading Level with  $\beta = .832$ ,  $p < .05$ . While Brain Intelligence and, Interest and Motivation do not significantly predict the Reading Level of Pupils in the Exclusion Group with  $\beta = .031$ ,  $p > .05$  and  $\beta = .103$ ,  $p > .05$ , respectively.

The same finding was noted in the report of UNICEF (2012). Accordingly, reading readiness is a process of preparing a child for reading; encouraging the child to read and engaging that child in reading. However, reading readiness entails the maturation of all the mental, physical and socio-emotional factors involved in the reading process. In other words, it is a state of development, which prepares the child mentally, physically, and social-emotionally for reading experiences. Schifferdecker (2007) also explains that reading readiness actually commences from that particular time when a child transforms from being a non-reader to a reader. According to him, this can be a tough transition but is very rewarding. Not only are children very proud of themselves as they learn to read, but children who learn to read well are better learners throughout their school years.

Variable	R	R Square	F	P
Reading Readiness, Brain Intelligence, and Interest and Motivation as Predictors to Reading Levels	.837	.701	59.477	<.0004459748 <sup>b</sup>

Table 4. Multiple Regression Model Table: Students Grouped under Exclusion of Reading Speed, Their Reading Readiness, Brain Intelligence, and Interest and Motivation as Predictors to their Reading Levels

Variables	Standard Coefficients	Beta	T	P
Reading Readiness	0.832		3.852	<.001
Brain Intelligence	+0.031		-0.143	.887
Interest and Motivation	0.103		1.583	.118

Table 5. Beta Coefficient Table: Students Grouped under Exclusion of Reading Speed, Their Reading Readiness, Brain Intelligence, and Interest and Motivation as Predictors to their Reading Levels

## Conclusion

The regression model is a significant fit of the data overall. However, reading readiness, brain intelligence, interest and motivation of the pupils do not significantly contribute to the Reading Level of Pupils in the Inclusion Group. Moreover, the study found out that reading readiness is significantly and positively predicting the reading level while brain intelligence and, interest and motivation do not significantly predict the reading level of pupils in the exclusion group. Therefore, among the variables correlated, it is safe to conclude that reading readiness is a very significant factor to consider in teaching reading. If learners have the readiness to learn reading, there is a greater chance of improving their reading level.

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