



## The Related Variables and the Reading Proficiency Level of Grade Six Pupils

**Jeremie Monter Maleon**

Malayan Colleges Laguna, Philippines

Correspondence author: [jmmaleon@mcl.edu.ph](mailto:jmmaleon@mcl.edu.ph)

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### Abstract

This study describes the relationship between the respondents' reading proficiency level as demonstrated in their Lexile Scores and the following variables: Respondent- related Factors, Teacher Factors, School Factors, and Home Factors. The Theory of Performance (ToP) by Don Elger served as the basis to develop the research instrument, i.e., survey questionnaire. Seventy (70) grade six pupils were authorized by a private school in the Philippines to become the respondents of the study. Correlated with the aforementioned factors were the pupils' reading Lexile Scores provided by Scholastic Philippines. The data were processed through the SPSS software using the Pearson Product- Moment Correlation Coefficient formula. Results revealed that among the four sets of factors, only Home Factors have a significant relationship with the Lexile Scores of the respondents. Furthermore, specific factors such as gender and mother's occupation relate with the pupils' reading proficiency level.

**Keywords:** *Reading Proficiency, Lexile Scores, Related Factors, Scholastic Reading Inventory (SRI)*

### INTRODUCTION

In the Philippines, various reading intervention programs are being developed and linked to schools' English syllabi to address the learners' reading difficulties. One of these intervention programs is the Scholastic Reading Inventory (SRI); it is a research-based, computer-adaptive reading assessment for Grades K-12 that measures students' level of reading comprehension and reports it using the Lexile Framework for Reading. The Framework is used to match a reader's ability to a text's difficulty, allowing individualized monitoring of progress. The entire program is designed to measure how well students understand literary and expository texts of varying degrees of difficulty. It measures reading comprehension by focusing on



the skills readers use when studying written materials from various content areas; these skills include identifying details in a passage, identifying cause-and-effect relationships and the sequence of events, drawing conclusions, and making comparisons and generalizations. As for the reading passages, SRI uses only authentic text. All items in the item bank are based exclusively on passages from authentic children's books, both fiction and nonfiction, as well as excerpts from young adult and classic literature, newspapers, magazines, and periodicals. SRI tests overall comprehension of these literature, providing educators with actionable data that can be used to improve performance.

Furthermore, no prior knowledge is necessary to take the test. The program uses the Lexile Framework for Reading, a highly accurate system that assesses students' reading comprehension levels and text on the same scale. SRI can be used to place remedial students at the best level in the reading program so they can read successfully and improve their academic achievement. Furthermore, SRI complements any reading curriculum. It can be administered throughout the year to monitor student progress and gauge the effectiveness of a school's reading program. Tests results help teachers improve their plans for instruction and match their students to books through Lexile measures. Leveled books are available so students can practice developing skills in fluency, vocabulary, and comprehension. Nonfiction books can be integrated into the science and history curricula. SRI also gives students test-taking practice. SRI provides each student with a Recommended Reading List, based on his or her reading level and interests. As students independently read engaging leveled books that are available from their list, they practice and develop their reading comprehension, vocabulary, and fluency skills leading to increased reading proficiency.

The Lexile Framework for Reading, developed by MetaMetrics, Inc., is the result of nearly two decades of research by measurement and testing scientists at Duke University, the University of Chicago, Stanford University, and the University of North Carolina-Chapel Hill. Through a series of grants from the National Institute of Child Health and Human Development, the team successfully tested the Lexile Framework with over 500,000 students.

The Student Action Report gives recommendations on how to differentiate instruction to meet remedial student needs. Auto-Alerts and the Intervention Grouping Report let teachers know which students may require additional support. The Targeted Reading Report helps teachers find books at the appropriate level for instructional planning. Meanwhile, the Growth Report and the Student Yearly Progress Indicator give teachers data to track each student's achievement gains over time. Teachers can use the data to identify students who are showing little growth so that intervention may be taken (*SRI Interactive*, n.d.) .

To measure the SRI program users' progress in reading throughout the year, an assessment is usually administered three to four times: at the beginning, middle, and end of the academic year. Spacing the assessments in this way allows time between tests for students to make gains through instruction and practice, and for teachers to make informed instructional decisions. However, aside from the students' exposure to the program, there are, of course, other aspects that could affect their performance. A pupils' SRI Lexile score may be a consequence of several factors influencing the program and its users. Therefore, it is imperative to examine these things to better the pupils' experience in using the reading instruction program that will, in turn, help improve their reading skills.

Performance and performance improvement is explained by Elger (2007) in his Theory of Performance (ToP) as reliant on six components. These components are context, level of knowledge, level of identity, personal factors, level of skills, and fixed factors. In addition, to effectively improve performance, he proposed "three axioms which include performer's mindset, immersion in an enriching environment, and engagement in reflective practice" (Elger, as cited in Acquah & Danso Kwofie, 2021). ToP is a useful in many learning contexts such as in classrooms, workshops, and some other learning contexts where instruction and learning take place. This theory served as the basis in developing the research tool.

The Theory of Performance (ToP) by Elger is often used a basis to "analyze performance, define performance criteria, and develop meaningful performance measures". This theory can be used in many various settings where learning takes place. In school, the theory provides a model for the achievement of certain goals. Identified in the elaboration of the theory are the core components that define performance; these are identity, learning skills, knowledge, context, personal factors, and fixed factors. Identity component is defined as a "shared identity of an individual in a community while elevating their own uniqueness." Next, Learning Skills are the transferable actions and abilities across contexts that allow improvement. Third, Knowledge are the facts, information, concepts, and the like that are gained through education or experience. Meanwhile, Context refers to the "variables associated with the situation in which the individual or organization performs." Personal Factors are the "variables associated with the personal situation of an individual" while Fixed Factors are those that are "unique to an individual that cannot be altered" (Apple et al., 2016).

Variables investigated in this study are those that fall under the Knowledge, Context, Personal and Fixed Factors categories. The respondents' profile, attitude towards reading, and the external factors, i.e., teacher, school, and home, were believed to have connection with their reading proficiency level, as demonstrated in their Lexile Scores. The investigation was deemed imperative as the reading performance of the program users was expected to improve overtime without setting aside the factors that could potentially affect it. Several research have already

conducted the same nature of investigation to improve instruction and assist learning (Tomlinson et al., 2002) For example, a study by Rachmajanti and Musthofiyah (2017) found out about a pattern of relationships based on gender difference, reading efficacy, comprehension, and attitude; the results are recommended as basis to predict EFL reading achievement. Results in another study specifically revealed that female students had higher reading attitude and motivation than male students (Murtafi'ah et al., 2020). However, this is in contrast with the findings of Sinha and Gupta (2007) where they concluded that preschool boys scored higher than girls on the recreational reading attitude measure. Meanwhile, parental support and a child's situation and experience at home are also identified as variables linked to literacy, reading, and progress (Fantuzzo et al., 2000; Mudzielwana, 2014). Moreover, school factors such as a teacher's mastery of a subject or language, literacy, and personality as well as the school's cooperation with the learners' families or homes were found important for shaping reading performance and enjoyment (Galindo, 2011; Harper & Pelletier, 2010; Hill & Tyson, 2009; Ho & Lau, 2018; Sahiruddin & Herminingrum, 2021). In addition, school factors such as venue where learning activities are conducted as well computer use and access were also identified as factors affecting the literacy, i.e. reading and writing, of learners (Huang et al., 2019; Radi, 2002; Razo, 2013; Yang, 2016).

The research locale was a private school in the Philippines where the the Scholastic Reading Inventory (SRI) Program has already been implemented for two years; the school intends to continue using the reading program for the next three years. Since this reading program is considered as an important and separate set of instructions from the offered English subject of the school that aspires to enhance the pupils' reading skills, the researcher realized the necessity to conduct a study about the said program. Specifically, the study inquired about the following: a. The profile of the respondents, i.e., age, sex, parents' educational background, and parents' occupation; b. The Lexile Scores of the respondents; c. The respondents' perceived attitude towards reading and the following factors: Teacher Factors, School Factors, and Home Factors, and lastly; d. The correlation between the Lexile Scores and the respondents' profile, attitude towards reading, and the other factors.

## **METHODOLOGY**

This is a descriptive- quantitative research. Grounded on the Theory of Performance (ToP) by Elger (2007), the survey questionnaire was developed, validated, and pilot- tested; copies were later on distributed among the purposively chosen seventy (70) grade six pupils of a private school in the Philippines. The survey was administered during one of their SRI sessions. Prior to its administration, permission was secured from the school principal. Moreover, the

record of the respondents' Lexile Scores at the beginning of the school year was requested from the school's registrar's office.

The questionnaire presented to the respondents on the day of the survey has two parts. The first part is divided into two. The first division required a respondent to detail his/her complete name, age, gender, his/her parents' educational attainment and occupation, and the language used at home - the profile. The second division of part 1 deals with the respondents' attitude towards reading. On the other hand, the second part covers three sets of items. The first set presents possible qualities of a teacher that contribute to the reading skill of the respondents. The second part is about the factors that can be found in school where they basically learn most about reading. Finally, the third part includes items about factors at home.

All data were organized in tables and then processed for correlation using the Pearson Product- Moment Correlation Coefficient formula, via SPSS statistics software v26.

## **RESULTS**

Among all items under Profile, a respondent's gender and the occupation of his/ her mother have a significant relationship with the Lexile Score. The identification of a parent's occupation as a related variable is reinforced by the significant correlation between Home Factors and the respondents' Lexile Scores; majority of the respondents affirmed that their parents support them in their studies.

Meanwhile, a greater number of the respondents fall under the "Basic" category or proficiency level. Despite this, they are able to perform in the SRI reading program. These pupils responded that their teachers who were assigned to conduct SRI activities were well-prepared and good in administering the program. However, these same teachers were given a fair rating in terms of their English fluency and observance of the language in school.

Lastly, the classrooms, computer laboratory, and the library were rated comfortable and conducive to conduct the SRI activities. However, majority of the respondents implied through their feedback the suggestion to procure a new SRI kit as the only set used was already a bit worn out. Furthermore, computer use was also identified as a specific factor that may affect performance in the SRI Reading program.

## **DISCUSSION**

Tables with corresponding analyses and interpretations from statistical treatments are used to present in a sequential manner the findings of this study.

**1. What is the profile of the respondents in terms of age, gender, parents' educational background, and parents' occupation?**

The first query under the statement of the problem is about the profile of the respondents based on the following: age, gender, parents' educational background, parents' occupation, and language used at home.

**Table 1**

*Frequency Distribution and Percentage of Age*

Age	Frequency	Percentage
10	3	4.3
11	36	51.4
12	30	42.9
13+	1	1.4
<b>Total</b>	<b>70</b>	<b>100 %</b>

Table 1 clearly presents the number or frequency of respondents as well as the percentage of the frequency of each age bracket. Three pupils are 10 years old, covering 4.3% of the total population. Thirty-six are 11- 51.4%. Thirty are 12, which is 42.9 % and only 1 which is 1.4 % of the whole population is 13 years old. Most respondents are of ages 11- 12.

**Table 2**

*Frequency Distribution and Percentage of Gender*

Gender	Frequency	Percentage
Male	40	57.14
Female	30	42.86
<b>Total</b>	<b>70</b>	<b>100.00</b>

Table 2 presents that majority, more than half of the total population, are males (57.14%). Thirty, 42.86%, are females.

**Table 3**

*Frequency Distribution and Percentage of Father's Educational Background*

Father's Educational Background	Frequency	Percentage
PhD/ Master's Degree	7	10.0
College	58	82.9
High School	5	7.1
Elementary	0	0.0

No Formal Schooling	0	0.0
<b>Total</b>	<b>70</b>	<b>100 %</b>

Table 3 shows that 82.9% of the population has fathers who are college graduates. Second in rank, are seven of the respondents who have fathers with Master's and/ or Doctorate degree. Five which is 7.1% of the population have fathers who made it only to high school.

**Table 4**

*Frequency Distribution and Percentage of Mother's Educational Background*

<b>Mother's Educational Background</b>	<b>Frequency</b>	<b>Percentage</b>
PhD/ Master's Degree	4	5.71
College	60	85.71
High School	5	7.14
Elementary	1	1.43
No Formal Schooling	0	0.00
<b>Total</b>	<b>70</b>	<b>100 %</b>

Table 4 reveals a somehow the same result as the previous table. Majority of the respondents has mothers who are college graduates; the frequency covers 85.71% of the total population. Second in rank are mothers who are high school graduates- 7.14%. It is followed by 4, 5.71%, with MA/ Ph. D. Only one falls under the Elementary level which covers only 1.43% of the population.

**Table 5**

*Frequency Distribution and Percentage of Father's Occupation*

<b>Father's Occupation</b>	<b>Frequency</b>	<b>Percentage</b>
No Job	1	1.4
Entrepreneur	23	32.9
Industry (Manufacturing)	13	18.6
Education	2	2.9
OFW	5	7.1
Medicine	5	7.1
Law	1	1.4
Government Employee	3	4.3
Engineer	13	18.6

Manager	4	5.7
<b>Total</b>	<b>70</b>	<b>100 %</b>

The table above shows the occupations of the respondents' fathers. On top of the list are fathers who have their own businesses. The frequency of entrepreneur fathers covers 32.9 % of the population. It is followed by two groups with an identical number of 13 fathers who work as manufacturers in companies and as engineers, each group covering 18.6 %. Five work as overseas workers, 7.1 %. Another five work in the field of medicine, 7.1 %. Four are managers, 5.7%. Three work for the government, 4.3%. Two work in the field of education, 2.9 %. One is a lawyer and the other one doesn't have a job.

**Table 6**

*Frequency Distribution and Percentage of Mother's Occupation*

<b>Mother's Occupation</b>	<b>Frequency</b>	<b>Percentage</b>
Housewife	27	38.6
Entrepreneur	10	14.3
Industry (Manufacturing)	13	18.6
Education	2	2.9
OFW	3	4.3
Medicine	5	7.1
Law	0	0.0
Government Employee	3	4.3
Engineer	2	2.9
Manager	5	7.1
<b>Total</b>	<b>70</b>	<b>100 %</b>

Table 6 presents the occupations of the respondents' mothers. According to the table, majority of the mothers or 38.6 % are housewives. Thirteen which is 18.6% of the population work in manufacturing companies. It is followed by a number of 10 mothers who have businesses of their own which is 14.3% of the population. Five work in the field of medicine, 7.1%. Another five work as managers, 7.1%. Three are overseas workers, 4.3%. The same number works for the government, 4.3%. Two work in the field of education, 2.9% and another two work as engineers, 2.9%.



## 2. *What are the Lexile Scores of the respondents?*

Table 7 presents how Lexile Scores are categorized based on the shown scale. Pupils who get Lexile Scores ranging from 50 (Beginner Reader) to 500 are considered to have minimal reading skills. Those with Lexile Scores of 500- 800 have basic skills. Pupils with Lexile Scores of 800- 1050 are proficient while those who score more than 1050 are advanced readers. On the other hand, table 12.a. is simply a more detailed explanation of how students' Lexile Scores are categorized.

**Table 7**

*Lexile Scores by Performance*

<b>Lexile</b>	<b>Category/ Grade Level Proficiency</b>
50	below basic/ minimal
100	below basic/ minimal
150	below basic/ minimal
200	below basic/ minimal
250	below basic/ minimal
300	below basic/ minimal
350	below basic/ minimal
400	below basic/ minimal
450	below basic/ minimal
500	basic
550	basic
600	basic
650	basic
700	basic
750	basic
800	proficient
850	proficient
900	proficient
950	proficient
1050	advanced proficient

The Lexile Scores of the respondents range from 49- 1318. The respondent who got the lowest Lexile score did not even get the least 50. Still, he/ she is considered to be having minimal reading skills, falling under the “Below Basic” category. The highest which is 1318 falls under the Advanced Proficient level. The computed statistics of all Lexile Scores reveals a mean of 754. 4429. This means that most respondents got Lexile Scores under the “Basic” category.

**Table 8**

*Frequency Distribution and Percentage of Lexile Scores*

<b>Level</b>	<b>Lexile Scale</b>	<b>Frequency</b>	<b>Percentage</b>
Minimal	BR- 500	14	20.00
Basic	500- 800	25	35.71
Proficient	800- 1050	21	30.00
Advanced	1050 above	10	14.29
<b>TOTAL</b>		<b>70</b>	<b>100 %</b>

Table 8 presents the frequency distribution of the Lexile Scores as well as their corresponding percentage. Fourteen out of 70 respondents fall under the Minimal Level which is also sometimes called the Below Basic Category/ Level; it covers 20 % of the whole population. Twenty- five (35.71%) fall under the Basic Level. Twenty- one (30%) fall under the Proficient Level and 10 (14.29%) are considered to be advanced readers. Based on the results, it is therefore obvious that majority of the respondents have basic reading skills.

### **3. What is the perceived attitude of the respondents towards reading and other factors, i.e., Teacher Factors, School Factors, and Home Factors?**

The third problem is a question about the perceived attitude of the respondents towards reading and the other sets of factors (Teacher factors, School factors, Home factors). The tables that follow present the respondents' perceptions on the stated variables. Answers were derived through the computation of the mean and standard deviation of data.

The mean describes the central location of the data, and the standard deviation describes the spread. In order to get the mean and the standard deviation of all data, the statistician had to use the respondents' answers to each item. Respondents specify their level of agreement to a statement based on the given Likert Scale ranging from 1- 5, with 1 as the lowest (Strongly Disagree), 2 for a Disagree, 3 for an Undecided, 4 for an Agree and 5 for the highest agreement (Strongly Agree).

**Table 9***Mean and Standard Deviation of Responses on Statements about Reading Attitude*

<b>Attitude towards Reading (AR)</b>	<b>Mean</b>	<b>Standard</b>	<b>N</b>
AR1	3.8571	0.8893	70
AR2	3.5857	0.8927	70
AR3	4.1857	0.7669	70
AR4	3.9000	1.0653	70
AR5	3.6286	0.9195	70
AR6	3.4429	1.1627	70
AR7	3.5429	1.0860	70
AR8	3.6143	0.9823	70
AR9	2.9000	0.9502	70
AR10	4.0286	0.9004	70
AR 11	3.8714	0.9156	70
<b>Overall Mean</b>	<b>3.6857</b>	<b>0.3672</b>	<b>70</b>

Table 9 presents the computed mean and standard deviation of the respondents' answers for the second part of part 1. This set deals with statements about the respondents' attitude towards reading has 11 items. The table above shows that all mean ranged from the lowest 2.900 (AR9) to the highest 4.1857 (AR3). That gave an overall mean of 3.6857 for the respondents' attitude toward reading. A mean of 3.6857 reveals that the respondents feel that their attitude towards reading neither affects nor does not affect their Lexile Scores. However, the mean which is an almost 4 also shows that the respondents have a positive attitude towards reading.

Of all items, only item number 9 got a mean of 2.9000. This means that most respondents were undecided or indifferent with the statement. Statement number 9 states: *I think Filipino when I read English texts*. The mean (2.9000) reflects that most respondents do not think Filipino when they read English. It means that their English reading skill has been developed and reading English texts does not give them a hard time to comprehend. However, since it is almost a three, some are still undecided and see that they still think Filipino when they read English texts.

Among eleven items, two got a mean of more than 4. Item number 10 which got a mean of 4.0286 states: *I feel challenged when I know that questions and exercises will be answered after reading a selection*. The respondents' positive responses on the item reveal their positive attitude towards reading. The exercises that follow

texts are not considered to be a burden by the pupils. Statement number 3 got the highest mean of 4.1857 and it states: I understand the text I'm reading thoroughly. The mean is another positive one since it reflects that the respondents do not haste while reading. They, instead, make sure that when they read, they understand.

**Table 10**

*Mean and Standard Deviation of Responses on Statements about Teacher Factors*

<b>Teacher Factors (TF)</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>N</b>
TF1	4.2000	0.6724	70
TF2	4.2000	0.6937	70
TF3	4.6571	0.5617	70
TF4	3.5857	0.9853	70
TF5	4.1286	0.8151	70
TF6	2.8714	1.0891	70
TF7	3.9857	0.8596	70
TF8	4.3000	0.6449	70
TF9	4.2143	0.8146	70
TF10	4.1143	0.7902	70
<b>Overall Mean</b>	<b>4.0257</b>	<b>0.4494</b>	<b>70</b>

Table 10 shows the derived mean and standard deviation of set one of part two which is basically about the Teacher Factors. This part of the questionnaire entailed the respondents to evaluate their English teachers' performance during the SRI classroom activity. The overall mean, 4.0257, exhibits a fact that the pupils consider their English teachers good and prepared during SRI Sessions.

Among ten items, only statement number 6 got a mean of 2.8714. The mean shows that majority of the respondents gave either a 2 or 3. Item 6 states: *Our English teacher allows us to use Tagalog if we cannot answer in English.* The mean explains that the pupils hardly had an experience of their teacher allowing them to use Tagalog during English time. The private school strictly implements the use of English in subjects that require English as a medium of instruction. Administrators and Coordinators regularly observe classes to make sure that teachers abide by the rules. The guidance office also regularly evaluates the teachers' performance through student evaluation. This means that the culture of speaking English in English classes has been imbibed and pupils clearly see how teachers strictly implement the rule.

Items 4 and 7 come next in line after item 6. Item 4 got a mean of 3.5857. This shows that most respondents answered either a 3 or a 4. Item 4 states: *Our English teacher asks us to bring a handy dictionary for us to look up on words we do not know.* The mean explains that some respondents were still hesitant to agree with the statement. Therefore, the use of a handy dictionary during SRI Sessions is sometimes not allowed. It is perhaps because of the fact that SRI texts are followed by vocabulary exercises and a handy dictionary can lead a reader to just look up a word in the dictionary instead of looking for the meaning of the word based on context clues.

On the other hand, item 7 got a mean of 3.9857. Just the same with item 4, the mean shows that most respondents answered either a 3 or a 4. Item 7 states: *Our English teacher is fluent in English.* The result implies that despite the strict implementation of English usage in schools, fluency in the language needs to be enhanced still.

**Table 11**

*Mean and Standard Deviation of Responses on Statements about School Factors*

<b>School Factors (SF)</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>N</b>
SF1	4.1857	0.6872	70
SF2	4.2000	0.8781	70
SF3	4.1571	0.7734	70
SF4	3.7286	1.1154	70
SF5	4.6429	0.5118	70
SF6	4.5000	0.6968	70
SF7	4.0286	0.7416	70
SF8	3.8429	0.8277	70
<b>Overall Mean</b>	<b>4.1757</b>	<b>0.4261</b>	<b>70</b>

Table 11 presents the descriptive statistics of set two of the second part of this paper's questionnaire. School Factors pertain to the materials and the environment to which the respondents are exposed during the implementation of the SRI Program. The students used the Likert scale to indicate the degree of their approval to each statement. As a result, the set got an overall mean of 4.1757. Majority of the respondents agreed that their school provides all the necessary materials to maximize the SRI Program. They agreed that the classrooms, the library, and the computer lab where they conduct the SRI Learning Activities are comfortable and conducive enough to aid learning. However, items 4 and 8 didn't get a mean of 4. Item 4 states: *The SRI kit is not worn out and exciting to use.* The

mean explains that most respondents think that the SRI kit needs to be replaced with a new one. The school has been implementing the program for two years now and will still be implementing it for the next three years. The years of use of a single kit can definitely cause it to deteriorate since a big group uses it.

However, item 8 somehow contradicts the result of item 6 in set one (Teacher Factors). The mean of item 6 reveals that the respondents disagreed to the statement that their English teachers allow them to speak Tagalog when they cannot express in English. This implies that English teachers use English during their English class- the rule of speaking English at all times is strictly followed. On the other hand, item 8 mean (3.8429) shows that most respondents answered a 3. Item 8 states: *Teachers in our school speak English and that makes us motivated to use English.* The mean reveals that although English teachers speak English in their classes and that the school strictly implements the use of English in school, not all teachers abide by the rule. Perhaps, pupils hear their teachers speak Filipino during break time and when they are in their offices.

Among all items, number 6 of set two got the highest mean of 4.5000, if rounded, an almost 5. Item 6 states: *The library is comfortable enough to conduct the SRI.* The mean implies that the respondents find the library the best spot to conduct the SRI. Commonly, the SRI is conducted in the classrooms, but English teachers sometimes choose to bring their pupils to the library for a different set up. There, the pupils get to read books of their choice and even use the computer units. It seems that the respondents prefer to work in the library than in classrooms. Maybe it's because they see it as a refreshing change of setting.

**Table 12**

*Mean and Standard Deviation of Responses on Statements about Home Factors*

<b>Home Factors (HF)</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>N</b>
HF1	4.3143	0.8261	70
HF2	4.0571	0.9307	70
HF3	3.6714	1.0032	70
HF4	3.1143	0.8261	70
HF5	3.0286	0.9004	70
HF6	4.3429	0.8145	70
HF7	4.1571	0.8450	70
HF8	3.4754	1.0584	61
HF9	2.6885	1.0254	61

<b>Overall Mean</b>	<b>3.5614</b>	<b>0.5478</b>	<b>70</b>
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Table 12 presents the last set of factors (Home Factors). Home Factors pertain to the parental support, the language used by the family at home, as well as the learning environment/s in the house. The result shows an overall mean of 3.5614. This means that most respondents answered 3 than a 4. The score 3 based on the given Likert scale means “undecided”. Of all items, numbers 9, 5, 4 and 8 got a mean that does not reflect favorable responses from the respondents.

The item that got the least mean is item 9. It got a mean of 2.6885. Item 9 states: *My siblings use English in communicating*. The mean simply puts the idea that the respondents’ siblings use Tagalog more often than English at home. In addition to this, item 5 with a mean of 3.0286 reveals the fact that Tagalog is often used by the parents of the respondents when at home. Item 5 states: *My parents talk to me in English*. Meanwhile, item 4 with a mean of 3.1143 strengthens the fact that parents of the respondents use Tagalog more often than English since they use their lingua franca even when they speak to people. Item 4 states: *My parents use English when they talk to other people*. The outcome of these items support the results reflected on table 7. According to the table, 74.3 % of the population claims that they use both English and Tagalog in communicating when at home while the other 25.7 % uses only Tagalog.

On the other hand, items 1 and 6 got the highest mean. Item 1 got a mean of 4.3143 while item 6 got 4.3429. Most respondents answered 4 for each item. Item 1 states: *My parents support me in the preparation of my assignments, homeworks, school projects, etc*. The respondents approved that their parents support them in their studies.

Item 6 states: *My parents allow me to use computer at home*. SRI is a computer-adaptive assessment designed to measure how well readers read literature and expository text of varying difficulties. To determine a pupil’s reading level, he or she will have to read texts and answer follow up questions using a computer where the SRI assessment is installed. Without proper knowledge on how to use a computer, a child will probably have difficulties reading texts and answering questions.

**4. Do the Lexile Scores of the respondents significantly relate to the following: Respondent- related Factors (age, gender, parents’ educational background, parents’ occupation), Attitude towards Reading, and other Factors (Teacher Factors, School Factors, Home Factors)?**

The last question under the statement of the problem asks about the significant relationship between the Lexile Scores of the respondents and the given variables.

It is a hypothesis that the SRI Lexile Scores of the pupils do not significantly

relate to the following factors: Respondent- related Factors: age, gender, parents' educational background, parents' occupation, and Other Related Factors: School Factors, Teacher Factors, and Home Factors.

In contrary, the results of the correlations reveal that one among all sets of factors/ variables has a significant relationship with the Lexile Scores of the respondents. A significant relationship is manifested if the r- value is greater than 0.232 and the p- value is below 0.05.

**Table 13**

*Test of Correlation between the Respondent Related Factors and the Lexile Scores*

<b>Respondent- Related Variables</b>			
<b>Variable</b>	<b>r-value</b>	<b>p- value</b>	<b>Interpretation</b>
<b>Profile</b>			
Age	0.051	0.673	No Significant Relationship
Gender	0.290	0.015	Significant
Father's Education	-0.056	0.643	No Significant Relationship
Mother's Occupation	0.273	0.022	Significant
<b>Attitude towards Reading (AR)</b>			
AR1	0.245	0.041	Significant
AR2	0.367	0.002	Significant
AR3	0.204	0.090	No Significant Relationship
AR4	0.233	0.052	Significant
AR5	0.158	0.191	No Significant Relationship
AR6	-0.059	0.628	No Significant Relationship
AR7	-0.220	0.670	No Significant Relationship
AR8	0.143	0.238	No Significant Relationship
AR9	-0.301	0.011	No Significant Relationship
AR10	-0.050	0.684	No Significant Relationship
AR11	0.195	0.106	No Significant Relationship
<b>AR Mean</b>	<b>0.204</b>	<b>0.091</b>	<b>No Significant Relationship</b>

Table 13 shows the results of the test of correlation between the Respondent Related Factors and the pupils' Lexile Scores. Moreover, it also presents the correlation between the variables under the first part of the set which mainly deals with the respondents' profile and the Lexile Scores.



The results reveal that among all items under Profile, a respondent's gender and the occupation of his/ her mother have a significant relationship with the Lexile score. The respondents' gender profile resulted to an  $r$ - value of 0.290 and a  $p$ - value of 0.015 which conclude a significant correlation.

Reading is a cognitive process. Piaget's theory of cognitive development is a comprehensive theory about the nature and development of human intelligence first developed by Jean Piaget. As seen in Table 1, 94.3 % of the population are respondents of ages 11 and 12. This age scale according to Piaget's Theory falls under the fourth and final of the periods of cognitive development- the Formal Operational Period. This stage, which follows the Concrete Operational stage, commences at around 11 years of age (puberty) and continues into adulthood. In this stage, individuals move beyond concrete experiences and begin to think abstractly, reason logically and draw conclusions from the information available, as well as apply all these processes to hypothetical situations (Feist, et al., 2021).

On the other hand, the table also reveals a significant correlation between the mothers' occupation and the Lexile Scores. The results are an  $r$ - value of 0.273 and a  $p$ - value of 0.022. Table 6 which presents the frequency distribution and percentage of the occupations of the respondents' mothers discloses a 38.6% of mothers who stay at home as plain housewives. These mothers, therefore, attend to their kids' needs at home and spend enough time with their children after school hours. The attention given by these mothers to their children perhaps helped the children develop a positive attitude towards studying and reading.

With regard to the respondents' attitude towards reading, items 1, 2, and 4 were found to have significant correlation with the Lexile Scores. Item 1 gave an  $r$ - value of 0.245 and a  $p$ - value of 0.041. Item 2 has an  $r$ - value of 0.367 and a  $p$ - value of 0.002 while item 4 got an  $r$ - value of 0.233 and a  $p$ - value of 0.052.

Statement 1 affirms: I do not hurry when I read. Item 2 states: I read all printed materials such as newspapers, magazines, books, periodicals, journals, and even dictionaries. Statement 4 affirms: I search for unfamiliar words in the dictionary. All three items confer about the respondents' reading attitude. These statements unveil a positive reading outlook. For these items, the pupils answered either a 3 or a 4. This means that they neither agree nor disagree with the statement.

On the other hand, items 2 and 4 deal with the respondents' reading attitude. Just the same with item 1, the pupils answered either a 3 or a 4. They admit that they neither agree nor disagree with the statements.

Table 9 revealed that most respondents got Lexile Scores under the "Basic" category. The scale of the majority of Lexile Scores is probably the result of a declining reading interest among the respondents. They basically know how to read and comprehend texts, but do not have enough motivation to make reading a habit. And because there is minimal reading interest, vocabulary learning is as well

hampered.

**Table 14**

*Test of Correlation between the Teacher Factors and the Lexile Scores*

<b>Teacher Factors (TF)</b>			
<b>Variable</b>	<b>r-value</b>	<b>p- value</b>	<b>Interpretation</b>
TF1	0.113	0.351	No Significant Relationship
TF2	0.050	0.678	No Significant Relationship
TF3	-0.802	0.502	No Significant Relationship
TF4	-0.051	0.678	No Significant Relationship
TF5	0.153	0.205	No Significant Relationship
TF6	0.001	0.991	No Significant Relationship
TF7	0.058	0.636	No Significant Relationship
TF8	0.044	0.720	No Significant Relationship
TF9	0.147	0.224	No Significant Relationship
TF10	0.148	0.222	No Significant Relationship
<b>TF mean</b>	<b>0.102</b>	<b>0.403</b>	<b>No Significant Relationship</b>

Table 14 presents the results of the test of correlation between the teacher factors and the Lexile Scores of the respondents. Apparently, no significant relationship was found. The respondents probably do not find their teachers to be a factor affecting their reading skills.

**Table 15**

*Test of Correlation between the School Factors and the Lexile Scores*

<b>School Factors (SF)</b>			
<b>Variable</b>	<b>r-value</b>	<b>p- value</b>	<b>Interpretation</b>
SF1	0.323	0.006	Significant
SF2	-0.750	0.537	No Significant Relationship
SF3	0.310	0.009	Significant
SF4	0.166	0.170	No Significant Relationship
SF5	-0.128	0.290	No Significant Relationship
SF6	0.211	0.790	No Significant Relationship
SF7	-0.026	0.830	No Significant Relationship

SF8	0.154	0.204	No Significant Relationship
<b>SF mean</b>	<b>0.220</b>	<b>0.648</b>	<b>No Significant Relationship</b>

Table 15 shows the results of the test of correlation between the school factors and the Lexile Scores. Only 2 among 8 items show a significant correlation. Item 1 got an r- value of 0.323 and a p- value of 0.006 while item 3 has an r- value of 0.310 and a p- value of 0.009.

Item 1 states: *The classroom is comfortable enough to conduct the SRI.* On the other hand, statement 3 affirms: *The computer laboratory is conducive enough for the conducting of SRI.* These items are about the rooms used for the SRI activities. Table 10 reveals that items 1 and 3 of the School Factors got a mean of 4. The majority of respondents agreed that the classrooms and the computer laboratory are favorable environments to carry out the SRI activities.

**Table 16**

*Test of Correlation between the Home Factors and the Lexile Scores*

<b>Home Factors (HF)</b>			
<b>Variable</b>	<b>r-value</b>	<b>p- value</b>	<b>Interpretation</b>
HF1	0.255	0.033	Significant
HF2	0.252	0.360	No Significant Relationship
HF3	0.133	0.274	No Significant Relationship
HF4	0.228	0.057	No Significant Relationship
HF5	0.250	0.370	No Significant Relationship
HF6	0.277	0.020	Significant
HF7	0.331	0.005	Significant
HF8	0.116	0.374	No Significant Relationship
HF9	0.157	0.228	No Significant Relationship
<b>HF mean</b>	<b>0.348</b>	<b>0.003</b>	<b>Significant</b>

Table 16 presents the results of the last test of correlation between Home Factors and the Lexile Scores of the respondents. This set of factors reveals a number of 3 items which significantly correlate with the Lexile Scores. These items are numbers 1,6, and 7. Item 1 got an r- value of 0.255 and a p- value of 0.033. Item 6 got an r- value of 0.277 and a p- value of 0.020 while item 7 got an r- value of 0.331 and a p- value of 0.005.

Item 1 states: *My parents support me in the preparation of my assignments, homeworks, school projects, etc.* Most respondents answered 4 to specify their level of agreement to the statement.

Tables 5 and 6 summarize the frequency distribution and percentage of the parents' occupations. It is revealed that most mothers as revealed by a percentage of 38.6% are plain housewives. It can be, therefore, assumed that these mothers provide assistance to their kids' academic tasks.

As for item number 6, most respondents also answered a 4. This means that they agree with the statement. Item 6 states: *My parents allow me to use computer at home.*

Computer literacy is defined as the knowledge and ability to use computers and related technology efficiently, with a range of skills covering levels from elementary use to programming and advanced problem solving. Computer literacy can also refer to the comfort level someone has with using computer programs and other applications that are associated with computers. Another valuable component of computer literacy is knowing how computers work and operate. Since SRI involves the use of computer, it is a must that a pupil has at least basic computer knowledge in order to correctly answer items that are flashed on the computer screen.

Last on the list is item 7. Statement 7 affirms: *The atmosphere at home is favorable for studying (reading).* It is not a surprise that this item also reveals a significant correlation since it also inquires about the learning environment. The result of the correlation for this item strengthens the result shown in Table 16.

After a detailed discussion of all sets of factors and the resulting correlations, the following table shows the summary of all the test of correlations.

The results of all the correlations reveal that one among the sets of factors/variables has a significant relationship with the Lexile Scores of the respondents. A significant relationship is manifested if the r-value is greater than 0.232.

**Table 17**

*Summary of Tests of Correlation between Related Variables and Lexile Scores*

<b>Variable</b>	<b>r-value</b>	<b>Interpretation</b>
Attitude towards Reading	0.2040	No Significant Relationship
Teacher Factors	0.1020	No Significant Relationship
School Factors	0.2200	No Significant Relationship
Home Factors	0.3480	Significant

The last table, table 17, presents the summary of tests of correlation between all the related variables and the respondents' Lexile Scores. The r-value of each set of factors was computed by getting the mean of all the r-values per set. As a result, the Attitude towards Reading (AR) variables got an r-value of 0.2040. Since the computed value is less than 0.232, the correlation is therefore insignificant. Teacher Factors got an r-value of 0.1020. It is less than 0.232 so there's no significant

relationship between these factors and the Lexile Scores. School Factors' r- value of 0.2200 also reveals no significant relationship since the value is again less than 0.232. However, Home Factors with an r- value of 0.3480 depict that there lies a significant correlation between the stated factors and the Lexile Scores of the respondents.

### CONCLUSION

Results show that a pupil's gender, mother's occupation, specific home factors, i.e., parental support, computer access, and home atmosphere, seem to affect his or her SRI Lexile Score which reflects his or her reading proficiency.

These findings confirm Elger's Theory of Performance that posits that specific factors can indeed affect performance. Therefore, it is safe to conclude that these components that interact regardless of where a pupil performs the skill of reading should be considered in structuring, for example, procedures to secure and guarantee effective performance.

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