

The Asian EFL Journal

April 2019

Volume 22, Issue 1



Senior Editor:

Paul Robertson



Published by the English Language Education Publishing

Asian EFL Journal
A Division of TESOL Asia Group
Part of SITE Ltd Australia

<http://www.asian-efl-journal.com>

©Asian EFL Journal 2019

This book is in copyright. Subject to statutory exception no reproduction of any part may take place without the written permission of the Asian EFL Journal Press.

No unauthorized photocopying

All rights reserved. No part of this book may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying or otherwise, without the prior written permission of the Asian EFL Journal.

editor@asian-efl-journal.com

Publisher: Dr. Paul Robertson

Chief Editor: Dr. Paul Robertson

Associate Production Editor: Ramon Medriano Jr.

Assistant Copy Editor: Eva Guzman

ISSN 1738-1460



Lexical inferencing strategies and reading comprehension in English: A case of ESL third graders

Junette Berenguer Buslon

junette.buslon@gmail.com

*Integrated Laboratory School- Elementary Department
Western Mindanao State University
Normal Road, Baliwasan, Zamboanga City, 7000 Philippines*

Ericson Olario Alieto

ericsonalieto@gmail.com

*College of Teacher Education
Western Mindanao State University
Normal Road Baliwasan, Zamboanga City, 7000 Philippines
**Corresponding Author*

*To cite: Buslon, J., & Alieto, E. (2019). Lexical inferencing strategies and reading comprehension in English : A case of ESL third graders. *Asian EFL*, 22(1), 73-94.*

Junette B. Buslon is an Instructor I of the College of Teacher Education of the Western Mindanao State University in Zamboanga City. He earned the degree of Master of Arts in Education, major in English Language Teaching. Currently, he is pursuing a doctorate degree in language teaching from the Western Mindanao State University – the premier state university in region 9 . His research interests include Sociolinguistics, Psycholinguistics, Language Planning and Discourse Analysis.

Ericson O. Alieto is an Assistant Professor III of the Western Mindanao State University. He holds a master's degree in Education with English Language Teaching as area of specialization. Currently, he is finishing a doctorate degree in Applied Linguistics at DLSU, Manila. His research interests are in the field of Sociolinguistics, World Englishes, Language and Gender, and Language Planning.

Abstract

The empirical investigation enlisted seventy-six (76) third graders with age ranging from 8-10. Out of the total number of respondents, males and females are equally represented. The study employed a descriptive-quantitative-correlational design. Moreover, the gathering of data was realized through the use of survey and comprehension reading questionnaires. The analysis of the data disclosed that the strategies 'While reading, I translate word for word in an attempt to guess the word meaning' (M=4.18, SD= 1.029), 'I try to relate the unknown word by its word form (i.e. appearance similarity) to another word I previously learned and generate a hypothesis on the word meaning' (M=4.11, SD= 1.150), and 'I guess word meaning from prior knowledge by examining the title or illustration'(M= 3.84, SD=1.189) are the top most used by the respondents. Furthermore, the strategies 'I guess word meaning from context utilizing semantic cues (i.e. synonyms, restatement, comparison and contrast' (p-value =0.048, r-value= 0.328) and ' I guess word meaning from prior knowledge by examining the title or illustration' (p-value =0.009, r-value= 0.569) were found to significantly correlate with reading comprehension in English among the respondents.

Keywords: *Inferencing, ESL, Reading comprehension, Reading strategies, English*

1. INTRODUCTION

Kaivanpanah and Moghaddam (2012) contend that lexical inferencing plays a central role in reading, because whenever one intends to understand written materials deciphering the meaning of unknown words becomes crucially important. The reason for this is the fact that a written text contains a number of unfamiliar words that need to be comprehended. It must be noted that unfamiliar words pose problem in reading comprehension. This lack of lexical knowledge demands the need for readers to determine the meaning of the difficult word through employment of different strategies. One way of doing this is through the use of lexical inferencing which is a strategy employed to determine the meaning of unfamiliar words through the use of contextual clues (Nation , 1990).

Although varied strategies are employed in unlocking meaning of difficult words in a text, lexical inferencing (LI) is determined to be one of the most used strategy (Wang, 2011). Supporting examples are the investigations of Fraser (1999) and Paribakht and Wesche (1997) conclude that

among their adult learners LI is the most frequently used and preferred. It is therefore not a surprise that lexical inferencing has become a central topic to numerous investigations (Nassaji, 2003; Parel, 2004; Bengelil & Paribakht, 2004; Nakagawa, 2006; Tavakoli & Hayati, 2011; Kaivanpanah & Moghaddam, 2012; Safa & Kokabi, 2017; Muikku-Werner, 2017). Moreover, the topic lexical inferencing has also been studied in relation with other variables. Illustrative of this include the study of Nakagawa (2006) which delve into determining the effects of morphological and contextual clues on the inferences of 148 Japanese EFL readers. Addition is the work of Shen (2017) on determining the effect of text type and strategy use on the performance of respondents on lexical inferencing. Another example is the investigation of Chegeni and Tabatabaei (2014) which accounted the influence of number and density of unknown words toward lexical inferencing. Additional is the research of Pourghasemian, Zarei and Jalali (2014) that looked into the influence of learning preference relative to participants lexical inference. Another study proving the point is that of Cain, Lemmon and Oakhill (2004) in which they investigated LI factoring learners' mental capacity. The study of Huckin and Bloch (1993) cited in Nassaji (2013) adds to the list as their investigation include the components of knowledge module and metalinguistic strategic as strategies that play important role in lexical inferencing. One more study illustrative of the point is that of de Bot, Paribakht and Wesche (1997) which investigated the success of inferencing with the type of word and nature of text containing the words. Indeed, lexical inference is a subject of much research accounting the various empirical inquiries done in relation to it. However, there remain a dearth in literature relative to investigations that explore the lexical inferences of Filipino English as second language (ESL) third graders. Moreover, there is no or at best limited studies that relate lexical inferences with reading comprehension of the mentioned respondents. Investigation aimed at such purpose is essential considering that reading comprehension is associated with school success and is one of the primary concerns of parents and learners alike—the gap that this study intended to fill.

1.2. Related Literature

1.2.1 On Lexical Inferencing strategies in Reading

Wang (2011) discussed that inferencing is a cognitive process. Further, Nassaji (2002) maintained that it is one if not the most important cognitive process needed for successful comprehension. On the other hand, Haastrup (1999) claimed that inferencing is a kind of

calculated guessing with reliance on available linguistics cues combined with knowledge of the world and background. Furthermore, since this strategy requires effort from the learners to determine the meaning of unfamiliar words through contextual clues and not simply an act of referring, LI encourages independence (Shen , 2017).

Moreover, Studies have established that whenever learners use inferencing as strategy background knowledge was utilized (Wesche & Paribakht, 2010). This suggests that if a learner has more knowledge about the central topic of the text being read the better the inferencing will be for the case L2 (Zeeland, 2014). In addition, Hu and Nation (2000) maintained that it is a very satisfactory case for ESL/EFL readers to cover 98% of the words in a text. The set standard is ideal and fit for good learners but not for those marginalized ones. Accordingly, for a text to be comprehended well, a reader must at the minimum cover 95% of the words used (Chegeni & Tabatabaei, 2014). This means that another contributor toward success of LI is vocabulary knowledge as strong correlation has been found existing between the two (Puילו, 2007; Wesche & Paribakht, 2010).

The ability to make accurate guesses as a mean of dealing with the complexity of reading is proven to be possessed by good learners (Rubin, 1975). LI is even to an extent claimed to be a form of compensation strategy for low receptive vocabulary (Parel, 2004). Basing on this claims, good learners are strategic learners who are able to use strategies appropriately depending on circumstance (Oxford, 2011). Whenever a reader employs inferencing as a strategy in unlocking meaning of unfamiliar words, he or she is actively and creatively hypothesizing about the meaning of word and testing the correctness of the same (Chegeni & Tabatabaei, 2014).

Because of the linguistic richness of any language, it impossible for an individual to claim full mastery over all the lexical tokens there are in any language. Hence, it remains inevitable for learners to stumble upon unfamiliar words whenever reading or listening to any discourse. This is especially true to young learners as they themselves are still at the stage of building up their vocabulary both in L1 more so in L2.

Pressley, Borkowski, and Schneider (1987) as cited in Nassaji (2003) discussed that there are five factors important in the successful use of LI as strategy, viz: “1. having wide repertoire of general as well as domain-specific strategies; 2. having the ability to use the strategy appropriately and in appropriate contexts; 3. having an extensive task-relevant knowledge base, ranging from general knowledge of the world to knowledge about the specific strategies and their causes of

success and failure; 4. being able to automatically execute and coordinate the use of strategies with various knowledge sources; and, 5. having an awareness that, although success is related to effort, effort alone may not be enough” (p.649).

On another note, there are two aspects to consider in so far as LI is accounted, “the linguistic and other knowledge to infer meaning and the the cognitive processes to infer the meaning of new word” (Roskams, 1998 : 71). Additionally, in the study of Julianna (2017), she noted seven (7) types of LI, to wit: “1. guessing the unfamiliar word from extra textual context (thematic/world knowledge), 2. guessing the unfamiliar word from the discourse context like outside the sentence in which the word occurred (using forward or backward context), 3. guessing the unfamiliar word meaning from local context (sentence level), 4. guessing from association or collocation knowledge (a clue word), 5. guessing from syntactic knowledge, 6. guessing from visual form (similarity or morphological understanding, and 7. Guessing from phonological similarity” (p.2). Another set of category is also provided by Paribakht and Wesche (1997), to wit: 1. homonym, 2. morphology, 3. word associations, 4. sentence-level grammatical knowledge, 5. discourse knowledge, 6. Cognates, 7. world knowledge, and 8. punctuation. There are quite a number of LI strategies discussed in the literature. However, for manageability, the study limits the investigation to the seven (7) noted strategies of Julianna (2017).

1.2.2 On Inferring Strategies in English as L2

The ability to arrive at a successful inference in L2 is relative and variable (Haastrup, 1991; Paribakht & Wesche, 1997). As a result, the way learners deal with unknown words during reading has become the focus of many empirical studies in recent years. These recent researches have tried to discover how lexical inferencing strategies function and what factors affect their success. Also, most research in this area has focused on identifying lexical strategies employed by second language learners in the target language, such as English.

de Bot et al. (1997) identified a set of eight knowledge sources used in inferring meanings of unknown words, based on evidence from their introspective verbal protocols of 10 English as Second Language (ESL) learners. The eight knowledge sources are: 1. sentence level grammar; 2. word morphology; 3. punctuation; 4. world knowledge; 5. discourse and text; 6. homonymy; 7. word associations; and 8. cognates. Although organized in a different way, these knowledge sources generally correspond to categories of Haastrup's (1991) taxonomy.

1.2.3. On Reading Comprehension

Comprehension is the core of reading (Tavakoli & Hayati, 2011). This means that the main reason for engaging in reading is to understand or comprehend the message and meaning of any given or found written texts. Reading is considered to be a cognitive (Julianna, 2017) and a multi-process activity (Block & Pressley, 2002). As a cognitive process, reading involves mental activities such as summarizing and clarifying meaning. In fact, Block and Pressley (2002) claimed that reading process involves more than 30 cognitive and metacognitive processes. Therefore, due to the numerous mental processes involved, reading then is considered as a complex skill requiring subskills (Tavakoli & Hayati, 2011).

Correspondingly, Curtis (2002 in Chegeni & Tabatabaei, 2014) is of the contention that skills such as deciding about the main idea of a text, creating questions relative to the content of the text and summarizing passages are some of the many processes that readers must do in order to maximize comprehension. Moreover, Guterman (2003) discussed that readers employ posteriori knowledge in order to comprehend reading materials. The same researcher explained that the more knowledge the individual has and uses in understanding texts the better one's comprehension is. In addition to the list, Block and Pressley (2002) also explained that prior knowledge about the text to be read or to be understood plays also an imperative role in decoding the meaning of the text and understanding it. On the other hand, Verhoeven and Van Leeuwe (2008) advanced that reading is supported by knowledge of words, orthographic, phonological and semantic representation.

Likewise, reading comprehension is claimed to serve as the foundation of academic success (Alderson, 2000). Considerably, this is a sound conclusion to make noting that most academic output and production is dependent on reading. Before an essay is produced or a research output, students must engage themselves first with reading of various and numerous materials. Moreover, to be able to perform well in written and oral exams, students much read and understand handouts and lectures provided.

However, among the different factors affecting and influencing reading comprehension, lexical problem has been considered to be the most serious (Chi & Chern, 1988 cited in Tavakoli & Hayati, 2011). Therefore, reading comprehension cannot be thoroughly understood without analyzing and determining process known as 'intelligent guessing' or inferencing. The reason behind is the fact that vocabulary is a sizable component; therefore, learners in different

proficiency levels will be confronted with situations where part of the text could only be understood because of the words difficult to understand and are unfamiliar to the readers.

1.2 RESEARCH PROBLEMS

The study primarily aimed to determine the respondents' lexical inferencing strategies and reading comprehension in English. Specifically, this investigation sought to answer the following questions:

1. What are the most employed lexical inferencing strategies by the respondents?
2. What is the English reading comprehension performance of the respondents?
3. Is there a significant relationship between the respondents' lexical inferencing strategies and their reading comprehension performance in English?

2. METHODOLOGY

2.1 RESEARCH DESIGN

The study utilized a quantitative-descriptive-correlational design. Setia (2016) explained that the selection of participants in the cross-sectional design is based on the inclusion and exclusion criteria set for the study. Moreover, the same design is ideal for population-based surveys because the gathering of the data is done for a relatively short period of time. As the study intends to survey a large sample of third graders estimating to be around 76, the use of cross sectional design as approach in the gathering of data for the study is determined both economical and feasible. Additionally, Johnson (2000 cited in Alieto, 2018) claimed that a study with a primary objective of describing the phenomenon is classified as a descriptive study. Furthermore, if the main goal of the study is to predict or forecast an event it is classified as predictive. In the case of this study, the goal is three-pronged. First is to descriptively determine the LIS strategies of respondents when reading English texts. To this end, a quantitative approach was used through the use of survey-questionnaire in determining the strategies used. Second is to determine the English reading comprehension of the respondents. Moreover, to determine if a significant relationship can be drawn between the LIS and reading comprehension in English.

2.2. PARTICIPANTS OF THE STUDY

A total of seventy-six third graders form the sample of the study equally distributed between sexes. The age range of the respondents is 8-10 years old. Moreover, total population sampling was the technique used in this study which involves the examination of the entire population having a set of characteristics.

2.3 THE RESEARCH INSTRUMENTS

Three instruments were used in the conduct of this study – the reading comprehension test, the vocabulary test and the lexical inferencing questionnaire. Moreover, a reading passage was used to serve as springboard for students to identify their most employed inferencing strategy.

The Reading Passage

The reading passage entitled ‘The Four Silly Schoolmates’ is of 192 words. The number of words in considering the passage to be used is informed by the criteria set such as student factor (Frantzen, 2013), and text factor (Hu & Nation, 2000) The student factor refers to the alignment of the comprehension ability of the students. The two texts were taken from the grade three books ensuring appropriateness of the material and students ability. On the other hand, the text factor means that the text must be related to the learners’ experience. The chosen text revolves around relatable central topics for young graders. The English passage centers about a type of classmate.

The reading comprehension test

For each passage, five (5) research questions were formulated observing Bloom’s Taxonomy. One for each level of cognitive taxonomy, viz: comprehension, application, synthesis, analysis and evaluation. The teacher made test shall underwent validation by three (3) English language teachers for the passage. Moreover, the test was checked for comprehensibility of instruction and face validity.

The vocabulary test

Sixteen (16) items form part of the vocabulary exam. In each item, three options are provided. Also, the difficult words in the items are glossed. Moreover, the instrument was validated and administered for item analysis.

The Lexical Inferencing Inventory

An 8-item Likert-type instrument adapted from Shen (2009) was designed and administered to investigate the LIS used by the students. As modification was made from the original instrument for contextualization of the same for this study, pilot testing was conducted to determine comprehensibility, face validity and reliability and appropriateness.

2.3.1 VALIDITY OF THE INSTRUMENTS

For the reading passage in English

The reading passage in English was checked for comprehensibility of instruction and face validity. The font size and style were also considered and commented on by the validators. Three (3) experts were enlisted for validation. Two (2) of which are master's degree holder in Language Teaching, and one is Ph.D. holder. Comments were limited to the technical characteristics of the passage – spacing, margin, size and style. Moreover, typographic errors and entries were noted and necessary corrections were made.

For the reading comprehension test

The reading comprehension test was a 5-item test. Table of specification (ToS) was developed identifying the cognitive level for each question. Bloom's Cognitive taxonomy was used for the classification of the cognitive level of each question. Three (3) validators, all of which are seasoned teachers, checked and cross-referenced the questionnaire and the TOS. All of the questions were determined appropriate and correlated with the level of cognition determined.

For the Vocabulary Test

The 16-item test was first validated by three (3) teachers – all of which are English Language Teachers with at least a master's degree in either education or in language teaching. Comments were limited to typographic errors and phrasing of options. Choices for each item were ascertained to be of equal length as per recommendation of the validators. After incorporating all comments of the validators, the version of the questionnaire was prepared for pilot testing.

For the Lexical Inferencing Test (LIT)

Adaption was made from the original lexical inferencing inventory of Shen (2009). The choice was made on the consideration of the characteristics of the respondents of this study. Items considered inappropriate were not included. Validation was conducted by three teachers. One of which is a master's degree holder, another is a Ph.D. candidate and the last is a Ph.D. holder.

2.3.2 RELIABILITY

For the Vocabulary Test (VT)

The VT was pilot tested to forty (40) elementary students not forming part of the final sample frame. After the administration, the test was checked and item analysis was conducted. Three items were considered to be very difficult, another three (3) were noted to be very easy, while the remaining items are moderately difficult. In total, six items were removed; the final version of lexical inference test and the lexical inference test version were composed of 10 items.

For the Lexical Inferencing Inventory (LII)

The LII version for pilot testing was of 8-item. After incorporating the comments of the validators, a version for pilot testing was produced and administered to 40 students. The test was subject for reliability testing using Cronbach's alpha reliability test. The result was 0.935 which was identified to have an 'excellent' reliability (George and Maller, 2003); thus, the final instrument for data gathering included all the items.

2.4 PROCEDURE

Upon the approval of the panel and preparation of the instruments, the researcher composed letter of permission and submitted to the principal of the Integrated Laboratory School Elementary Department. After the approval of the request, the researcher made an appointment with the teachers concerned for the schedule of the administration of the research instruments to the respondents. Moreover, consent of participation to the research was given to parents of respective students as the respondents are of minor age and as part of the ethical consideration. A correspondence was provided to the parents explaining details and mechanics of the investigation. Moreover, in the event the parents approved their son's/ daughter's participation, a consent form was asked to be signed and returned to the researcher prior to the dates set for data gathering. Only

students whose parents' consented for the participation of their respected child were allowed to be part of the sampling population. Neither additional points in academic markings nor incentives in whatever form was provided to the pupils. Conversely, no forms of demerits were charged to any students who did not intend to participate. Participation was purely voluntary. Students were allowed to stop answering the questionnaires and allowed to withdraw participation even in the middle of the administration of the research tools. Furthermore, it was declared that the study posts neither apparent harm nor foreseeable risk because the data collection was done at their respective classroom. The answering of the comprehension test and checklist took about 15 to 20 minutes. Moreover, the room capacity to be used as venue was limited only to 40 students. As such, the 76 students were batched with 40 students as maximum number. Batching of the respondents was done through their sections. All information collected was dealt with great confidentiality. Neither demographic profile nor background information was solicited from the respondents. A coding system was utilized simply for filing of the questionnaires.

2.5 METHOD OF ANALYSIS

2.5.1 DATA ANALYSIS PROCEDURE

To determine the Lexical Inferencing strategies utilized for English passage, the responses of the respondents were coded as: 5 for always, 4 for frequently, 3 for sometime, 2 for rarely and 1 for never. The scores then mean score for each strategy was computed and the ranked to determine the top 3 most used strategy and be given interpretation through the use of table 1.

Table 1. Scale of Measurement for the Inferencing Strategies

Range Score	Description
4.2 – 5.0	Always
3.4 –4.19	Frequently
2.6 –3.39	Sometimes
1.8 –2,59	Rarely
1.0 –1.79	Never

For the determination of the reading achievements in English, correct respondents were given varying points according to the level of cognition involved, viz: evaluation – 5, synthesis –

4, analysis – 3, application – 2, comprehension – 1. The highest possible points is 15. The scores for the reading comprehension was interpreted using table 2.

Table 2. Scale for Reading Comprehension Performance

Range of Score	Description
11 – 15	Proficient
6 – 10	Somehow Proficient
1 – 5	Less Proficient

2.5.2 STATISTICAL TREATMENT OF THE DATA

Upon determination of the nature of the data and the normality of the distribution, the following statistical tools were employed for analysis of data:

1. To answer research question aimed at determining the most used inferencing strategies, descriptive statistics (mean and standard deviation) was used.
2. To determine the reading comprehension performance of the respondents, descriptive statistics (percentage) was employed.
3. To determine the significant correlation between the lexical inferencing strategies used and English reading comprehension achievement, Pearson Product Moment Coefficient was used.

3. RESULTS AND DISCUSSION

3.1 MOST USED INFERENCING STRATEGY

To determine the most utilized LIS when reading in English, the mean scores of the 8 LIS were computed. Moreover, the items are ranked.

Table 3. Most utilized LIS when reading in English

No	Lexical Inferencing Strategies	M	SD	Rank
7	While reading, I translate word for word in an attempt to guess the word meaning.	4.18	1.029	1
1	I try to relate the unknown word by its word form (i.e. appearance similarity) to another word I previously learned and generate a hypothesis on the word meaning.	4.11	1.150	2
4	I guess word meaning from prior knowledge by examining the title or illustration	3.84	1.189	3

From Table 3, it can be seen that the most frequently used inferencing strategy is (7) '*While reading, I translate word for word in an attempt to guess the word meaning.*' (M-4.18, SD-1.029) , following next is (1) '*I try to relate the unknown word by its word form (i.e. appearance similarity) to another word I previously learned and generate a hypothesis on the word meaning.*' (M-4.11, SD-1.150), and (4) '*I guess word meaning from prior knowledge by examining the title or illustration.*' (M-3.84, SD-1.189).

Further probing of the data revealed that the strategy '*While reading, I translate word for word in an attempt to guess the word meaning.*' was reported to be utilized by 41 (53.9%) respondents 'always', 14(18.4%) 'frequently', 16 (21.1%) 'sometimes', 4 (5.3%) 'rarely', and 1 (1.3%) 'never'. Moreover, for the strategy '*I try to relate the unknown word by its word form (i.e. appearance similarity) to another word I previously learned and generate a hypothesis on the word meaning.*', 39 (51.3%) claimed to have done it 'always', 19 (25%) 'frequently', 7 (9.2%) 'sometimes', 9 (11.8%) 'rarely', and 2 (2.6%) 'never'. For the case of the strategy '*I guess word meaning from prior knowledge by examining the title or illustration.*', 32 (42.1%) of the respondents reported to have used it 'always', 14 (18.4%) 'frequently', 18 (23.7%) 'sometimes', 10 (13.2%) 'rarely', and 2 (2.6%) 'never'.

Moreover, the data proved that for the respondents of this study, learners at the early stage of basic education, capitalize on schema and experiences to go through unfamiliar words. This implies that teachers must account students' personal experiences in introducing reading texts because if students are knowledgeable about the topic of the text, they are likely to perform good inferences (Zeeland, 2014). Furthermore, for the strategy that relates to use of knowledge about words previously encountered to make sense of newly read unfamiliar words, the claim of Dunmore (1989) that vocabulary enrichment and reading comprehension bear a 'cyclical' relationship. As the data reports the strategy to be among the most used LIS, teachers must expose the students to more reading activities as these activities shall enrich students' vocabulary bank and lead to better performance at inferencing.

3.2 READING COMPREHENSION (RC) OF THE RESPONDENTS

To determine the reading comprehension of the students, the scores of the students in the English reading comprehension questions were computed for average. In addition, the standard deviation and interpretation were also given.

Table 4.0 English Reading comprehension performance of the respondents

Variables	M	SD	Descriptor
Reading Comprehension in English	12.18	2.424	Proficient

Legend: 15 to 11 – Proficient; 10 to 6 – Somehow Proficient; and 5 to 1 – Less Proficient

Table 2.0 presents the reading comprehension performance (RCP) of the respondents. The data revealed that the respondents are ‘proficient’ (M-12.18) in their reading performance. It can be further seen from the table that the lowest score attained by the respondents in reading English is only 4.

Further analysis of the data provide that for RCP in English, 57 (75%) answered the comprehension level correctly, 54 (71%) for the application level question, 69 (90.8%) for the analysis, 66 (86.8%) for the synthesis level, and 65 (85.5%) for the evaluation level. From these data, a similar result was found, and that is students performed least in application (only 54 correctly answered the questions) level questions. However, students performed best in analysis level question (69 correctly answered the question).

As reading is a cognitive process (Julianna, 2017) , the study probed into the level of cognitive processes in which students made correct responses. It was found out that the students, on the average, find application questions in reading comprehension test in English challenging. It is contended that because application involves a myriad of processes in order to be performed, processes like deciding the main idea of the text and understanding the whole idea of the text and considering the new context presented by the question. These complex processes contribute to the difficulty in correctly answering application question.

Further, the difficulty students have in answering application type of question can be alluded to the limited exposure provided to students in answering this type of question. Practices in answering higher order type of question may have not been provided in abundance enough to develop and train students. Supportive of this claim is the findings of Silva, Rosaldo and Tendero (2011). In their study which documented descriptively the types of questions asked by teachers, their data revealed that most of teachers' questions are 'knowledge type' which accounted nearly half (42.9%) of the total questions asked in class, and application types (9.5%) are those least inquired. Although this cited empirical investigation was in the context of college instructors, the practice of teachers asking mostly low-level type of questions has been found across teachers in various levels (Silva et al., 2011).

3.3 LEXICAL INFERENCE STRATEGIES AND READING COMPREHENSION PERFORMANCE (RCP) OF THE RESPONDENTS

To determine the significant relationship between the inferencing strategies and the respondents reading comprehension, Pearson r was the statistical tool used to draw the relationship.

Table 5.0 Correlation: Inferencing strategies and RC in English

No.	Strategies	English RCP		Intpn.
		p-value	r-value	
1	I try to relate the unknown word by its word form (i.e. appearance similarity) to another word I previously learned and generate a hypothesis on the word meaning.	0.817	0.027	Not significant
2	I guess word meaning from context utilizing morphological analysis (i.e. prefix, suffix).	0.720	0.042	Not significant
3	I guess word meaning from context utilizing semantic cues (i.e. synonyms, restatement, comparison and contrast).	0.048*	0.328	Significant

4	I guess word meaning from prior knowledge by examining the title or illustration	0.009*	0.569	Significant
5	When appropriate, I try to visualize the content in an attempt to guess the meaning of the unknown words.	0.125	-0.177	Not significant
6	While I am reading, I try to produce synonyms to substitute for the unknown word in an attempt to guess the word meaning.	0.908	-0.014	Not significant
7	While reading, I translate word for word in an attempt to guess the word meaning.	0.869	0.019	Not significant
8	While reading, I distinguish between words that are unimportant and those that seem critical to the meaning of the text, I skip the unimportant words.	0.921	0.012	Not significant

Note: *Significant at $\alpha=0.05$

As it can be gleaned in Table 5.0, LIS numbers 3 (p-value = 0.048) and 4 (p-value = 0.009) significantly impacted RCP in English. Strategy (3) 'I guess word meaning from context utilizing semantic cues (i.e. synonyms, restatement, comparison and contrast.' has a significant correlation with RCP in English, and the relationship is low and positive (p-value = 0.328). On the other hand, strategy (4) 'I guess word meaning from prior knowledge by examining the title or illustration' has a moderate positive relationship (p-value = 0.569) with RCP in English. This means that the higher frequency strategies numbered 3 (synonyms, restatement, comparison and contrast) and 4 (guess word meaning form prior knowledge, title of the story, and illustration) are employed by the students the higher their RC scores are in English. Conversely, in the case of the respondents of this study, the lesser times the strategies 3 and 4 are used the lower their RCP scores are. This implies that, as evidenced by this data, frequent use of strategies 3 and 4 impacts English reading comprehension performance of the students.

This finding corroborates with claims that LIS influence comprehension (Nassaji, 2002; Puילו, 2007; Wesche & Paribakht, 2010). At this juncture, it must be pointed that these studies have claimed LIS, in general, influences reading comprehension. This study

however provided an extension to these findings by probing which particular strategies significantly relate to reading comprehension.

On another note, the finding that LIS relate with English reading comprehension supports research findings of Schmitt (2010), Haastrup (1999), Paribakht and Wesche (1997), de Bot et al. (1997), Nassaji (2002), and Puildo (2007). However, the study provides more specific findings.

This implies that strategies 3 (synonyms, restatement, comparison and contrast) and 4 (guess word meaning from prior knowledge, title of the story, and illustration) are factors influencing comprehension in reading texts in English. The study however is limited in further providing empirical data to probe explanation for this result. It is however speculated that since English is a second language and that more materials are produced in the language, the students have had abundant experiences in reading in English.

4. CONCLUSION

The following are reasonable conclusions to make:

As regards the lexical inferencing strategies utilized by the young learners in English, the most utilized strategies are translation, appearance similarity, and the use of prior knowledge.

As regards the extent of comprehension of the respondents, they are proficient in comprehending texts in English. In addition, lexical strategies 3 (synonyms, restatement, comparison and contrast) and 4 (guess word meaning from prior knowledge, title of the story, and illustration) significantly correlate with reading comprehension in English.

These imply that students must be exposed by the teachers to the varied strategies apart from the ones mentioned as it is always beneficial to learn as many lexical inferencing strategies as possible, exposure of students to varied reading materials across media should be done as a regular academic practice to train students both for reading and inferencing activities. Such practice would continuously enhance and develop students ability to comprehend and infer; teachers must ascertain appropriateness of reading materials. Which would allow students background knowledge to serve as learning resource enabling correct inferences; teachers must ensure that reading materials to be introduced are within students circumference of interest and reading ability.

Doing so, students could be encouraged to read with minimal guidance eventually developing independent readers; and practice test relating to use of inferences must be given. Inferencing strategies must be explicitly taught and assessed like the teaching and assessment of macro skills despite being a micro one. The rationale is that the macro skill reading is largely dependent on the skill of inferencing as dictated by the literature.

References

- Alderson, J. (2000). *Assessing reading*. United Kingdom: Cambridge
- Alieto, E. (2018). Change of ‘Tongue’ from English to a local language: A correlation of mother tongue proficiency and mathematics achievement . *Asian ESP Journal 14* (7.2).
- Bengeleil, N & Paribakht, T.S. (2004). L2 reading proficiency and lexical inferencing by university EFL learners. *The Canadian Modern Language Review*, 6 (2), 225-251.
- Block, C.C. & Pressley, M. (2002). *Comprehension instruction: Research-based practices*. San Francisco: Jossey-Bass.
- Cain, L. , Lemmon, K. , Oakhill, J. (2004). Individual differences in the in the inference of word meanings from context: The influence of reading comprehension, vocabulary knowledge, and memory capacity. *Journal of Educational Psychology*, 96 (4), 671 - 668.
- Chegeni, N. & Tabatabaei, O. . (2014). Lexical inferencing: The relationship between number and density of lexical items and L2 learners' reading comprehension achievement. *Journal of Language Teaching and Research*, 5 (2) , 306 -312.
- Chi, F. & Chern, C. (1988). The study of English teaching and learning in senior high school. In Tavakoli, M. & Hayati, S. (2011). The relationship between lexical inferencing strategies and L2 proficiency of Iranian EFL learners. *Journal of Language Teaching and Research*, 2 (6), 1227 - 1237. doi:10.4304/jltr.2.6.1227-1237.
- Curtis, M. (2002). Adolescent reading: A synthesis of research, adolescent literacy - research informing practice: A series of workshops. In Chegeni, N. & Tabatabaei, O. (2014). Lexical inferencing: The relationship between number and density of

- lexical items and L2 learners' reading comprehension achievement. *Journal of Language Teaching and Research*, 5 (2) , 306 -312.
- de Bot, K. , Paribakht, T.S. , Wesche, M. B. . (1997). Toward a lexical processing model for the study of second language vocabulary acquisition : Evidence from ESL reading. *Studies in Second Language Acquisition*, 19, 309-329.
- Dunmore, D. (1989). Using contextual clues to infer word meaning: an evaluation of current exercise types. *Reading Research Quarterly* , 24, 162-73.
- Frantzen, D. (2013). *Using literary texts to reveal problematic rules of usage. Foreign Language Annals*, 46(4), 628–645.doi:10.1111/flan.12057
- Fraser, C. (1999). Lexical processing strategy use and vocabulary learning through reading. *Studies in Second Language Acquisition*, 21, 225-241.
- George, D., & Maller, P. (2003). *SPSS Windows step by step: A simple guide and reference. 11.0 update (2nd edition)*. Boston: Allyn & Bacon.
- Guterman, E. (2003). Integrating written metacognitive awareness guidance as a psychological tool to improve student performance. *Learning and Instruction*, 13 (6), 633-651.
- Haastrup, K. (1991). *Lexical inferencing procedures or talking about words*. Tubingan: Gunter Narr.
- Haastrup, K. (1999). *Lexical inferencing procedures or talking about words*. Halow, England: Longman.
- Hu, H.C. & Nation, P. . (2000). Unknown word density and reading comprehension. *Reading in Foreign Language*, 13 (1), 403-430.
- Huckin, T & Bloch, J. (1993). Strategies for inferring word meaning from context : A cognitive model. In Nassaji, H. (2013). The relationship between depth of vocabulary knowledge and L2 learners' lexical inferencing strategy use and success. *The Modern Language Journal*, 90 (3), 387 - 401.
- Johnson, B. (2000). Toward a New Classification of Nonexperimental Quantitative Research. *Educational Researcher*, 30 (2), 3-13.
doi:10.3102/0013189x030002003. In Alieto, E. (2018). Change of ‘Tongue’ from English to a local language: A correlation of mother tongue proficiency and mathematics achievement .

- Julianna, J. (2017). The comparative impacts of using lexical glossing and inferencing strategies on students' reading comprehension. *Advances in Language and Literary Studies*, 9 (1), 1-4.
- Kaivanpanah, S. & Moghaddam, M.S. (2012). Knowledge sources in EFL learners' lexical inferencing across reading proficiency levels. *RELC Journal*, 43 (3), 373 - 391. doi:10.117/0033688212469219.
- Muikku-Werner, P. (2017). Lexical inferencing and the mutual intelligibility of Estonian and Finnish. *Nordic Journal of Linguistics*, 40 (2), 201 - 223.
- Nakagawa, C. (2006). The effects of morphological and contextual clues on EFL readers' lexical inferencing. *ARELE : Annual Review of English Language Education in Japan*, 17, 151-160.
- Nassaji, H. (2002). Schema theory and knowledge-based processes in second language reading comprehension: A need for new perspectives. *Language Learning*, 52 (2), 439 - 481.
- Nassaji, H. (2003). L2 vocabulary learning from context: Strategies, knowledge sources, and their relationship with success in L2 lexical inferencing. *TESOL QUARTERLY* , 37 (4), 645 - 670.
- Nation, P. (1990). *Teaching and learning vocabulary*. New York: Heinle & Heinle .
- Oxford, R. (2011). *Teaching and researching language learning strategies*. Pearson Longman.
- Parel, R. (2004). The impact of lexical inferencing strategies on second language reading proficiency. *Reading and Writing: An Interdisciplinary Journal*, 17 (9) , 847–873.
- Paribakht, T. S. & Wesche, M. (1997). Reading and incidental L2 vocabulary acquisition: An introspective study of lexical inferencing. *Studies in Second Language Acquisition*, 21, 195-224.
- Pourghasemian, H. , Zarei, G.R. , & Jalali, H. (2014). L2 learners lexical inferencing: Perceptual learning styles preferences, strategy use, density of text and parts of speech as possible predictor. *Issues in Language Teaching*, 3 (2), 287 - 315.
- Pressley, M. , Borkowski, J. , & Schneider, W. (1987). Cognitive strategies: Good strategy users coordinate metacognition and knowledge. *Annals of Child Development*, 4, 89-129.

- Puילו, D. (2007). The effects of topic familiarity and passage sight vocabulary on L2 lexical inferencing and retention through reading. *Applied Linguistics*, 28, 66-68.
- Roskams, T. (1998). What's a guess worth? Chinese students' inferencing strategies for unknown words while reading. *Hongkong Journal of Applied Linguistics*, 3 (2), 65 - 102.
- Rubin, J. (1975). What the "good language learner" can teach us. *TESOL Quarterly*, 9 (2), 6-10.
- Safa, M.A & Kokabi, M.Y. (2017). The role of lexical inferencing and morphological instruction on EFL learners' reading comprehension development. *Iranian Journal of Applied Language Studies*, 9 (1) , 1- 32.
- Schmitt, N. (2010). *Researching Vocabulary*. United Kingdom: University of Nottingham.
- Setia, M. (2016). Methodology series module 3: Cross-sectional studies. *Indian Journal of Dermatology*, 61 (3), 261-264.
- Shen, M.-Y. (2009). Technical university EFL learners' reading proficiency and their lexical inference performance. *Electronic Journal of Foreign Language Teaching - Center for Language Study*, 6 (2), 189 - 200.
- Shen, M.-Y. (2017). The role of text type and strategy use in L2 lexical inferencing. *International Review of Applied Linguistics in Language Teaching*, 56 (2), 1-21.
- Silva, R., Rosaldo, F., & Tendero, J. (2011). Levels of questions and student responses in the tertiary classroom interactions. *WMSU Research Journal*, 55-66.
- Tavakoli, M. & Hayati, S. (2011). The relationship between lexical inferencing strategies and L2 proficiency of Iranian EFL learners. *Journal of Language Teaching and Research*, 2 (6), 1227 - 1237. doi:10.4304/jltr.2.6.1227-1237.
- Verhoeven, L. & Van Leeuwe, J. (2008). Prediction of the development of reading comprehension: A longitudinal study. *Applied Cognitive Psychology*, 22, 407-423.
- Wang, Q. (2011). Lexical inferencing strategies for dealing with unknown words in reading—A contrastive study between Filipino graduate students and Chinese graduate students. *Journal of Language Teaching and Research*, 2 (2), 302-313.

Wesche, M. & Paribakt, T.S. (2010). *Lexical inferencing in a first and second language : Cross-linguistic dimension*. Clevedon: UK:Multilingual Matters.