The Relationship Between EFL Underachievers’ Reading Comprehension Skills and Their Academic Achievement

By

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ملخص البحث

العلاقة بين مهارات الفهم القرائي والتحصيل الدراسي لدى منخفضي التحصيل الدراسي من متعلمي اللغة الإنجليزية كلغة اجنبية

يتمثل البحث الحالي دراسة ارتباطية هدفت إلى استكشاف العلاقة بين مستوى مهارات الفهم القرائي والتحصيل الدراسي في اللغة الإنجليزية كلغة أجنبية لدى منخفضي التحصيل الدراسي في المرحلة الإعدادية. وتكونت عينة الدراسة من 80 طالبة بالصف الأول الإعدادي بمدرسة التوفيق الإعدادية للبنات بمحافظة الفيوم. وقد تمثلت أدوات البحث في اختبار يقيس مهارات الفهم القرائي وتم قياس التحصيل الدراسي للغة الإنجليزية من خلال اختبار تحصيلي في اللغة الإنجليزية (الاختباران من اعداد الباحثة). وقد تم تطبيق الأدوات على عينة الدراسة ثم حساب قيمة معامل بيرسون في الارتباط بين درجات الطلاب في مهارات الفهم القرائي والتحصيل الدراسي في اللغة الإنجليزية. وقد أسفرت نتائج الدراسة عن وجود علاقة ارتباطية موجبة ذات دلالة إحصائية بين مستوى مهارات الفهم القرائي والتحصيل الدراسي في اللغة الإنجليزية لدى طلاب العينة (عند مستوى دالة 0.01). حيث أنه كلما ارتفع
مستوى الطالبات في مهارات الفهم القرائي كلما ارتفعت درجاتهم في التحصيل الدراسي للغة الإنجليزية والعكس صحيح. تقدم الدراسة بعض التوصيات والمقترحات في ضوء النتائج. وهذا البحث مشتق من رسالة الدكتوراه الخاصة بالباحثة.

الكلمات المفتاحية: التحصيل الدراسي ، مهارات الفهم القرائي ، منخفضى التحصيل
Abstract

The present research paper is a correlation study that aimed at exploring the relationship between reading comprehension skills level and EFL achievement for underachievers. The study sample were 80 low intermediate-level students at El Tawfik Preparatory school for girls in El Fayoum Governorate in their first semester of the academic year (2018/2019). The participants’ age ranged between twelve and thirteen years old. The low achieving students were selected based on their scores in the reading comprehension and achievement pre-tests. The lowest 25% of them were considered underachievers. The measurement instruments were (1) a reading comprehension skills test (the post-test version, Form B) and (2) an EFL achievement test. The two instruments were prepared by the researcher. Pearson correlation coefficient analysis between the two study variables was calculated. Results indicated a statistically significant positive correlation between reading comprehension skills level and achievement in EFL at (0.01) level. That is, the higher students’ scores in reading comprehension skills test, the higher their scores in EFL achievement test and vice versa. pedagogical implications of these findings are discussed.

Key words: Correlation study, reading comprehension, reading comprehension skills, underachievers, EFL achievement
Introduction

Reading comprehension involves a variety of interactive mental cognitive processes and requires phonological, morphological, semantical as well as syntactical manipulation of the reading material in addition to higher order skills such as drawing inferences by making within text connections (e.g., determining pronoun reference, recognizing causal relationships and relating ideas from preceding parts and across the text) and integrating new textual information with background knowledge and experiences in order to establish local cohesion and global coherence of the text which are necessary skills for reasoning, learning and language achievement and thus necessitates students to deploy effective strategies, which are major determinants of the development of self-autonomy, in order to understand appropriately at different levels of comprehension representation ranging from explicitly stated words and ideas to the more implied meanings of the text. Furthermore, reading comprehension is a multidimensional construct consisting of interrelated skills which enables students to internalize the concepts and ideas presented in the text to construct their own unique interpretation and knowledge of the text. The argument is that learners construct rather than receive knowledge (Cohen, Manion & Morrison, 2004). In this regard, learners relate the individualized prior knowledge and experiences they have and their values with the information presented in the text and as an expected consequence they construct their own meaning of the text and develop intellectually. Thus, reading with comprehension does not stop at just passively receiving information but rather to interpreting, accommodating and assimilating this information, knowledge and skills to utilize them in new learning contexts.

However, without comprehending reading texts, students cannot achieve academically at appropriate level and this can presumably predict or explain the variability in students’ performance in EFL achievement tests in which each test is a composite measure of complex demanding tasks (e.g., speaking and writing tasks) and students need the skills acquired during reading to effectively
communicate their ideas and intended meanings as well as increasing the breadth and depth of their vocabulary knowledge which can subsequently engage them in a more active and direct immersion in the language learning process. Therefore, reading with comprehension is an instrument for increasing students’ achievement in all content areas as well as in the English language. On the other hand, higher levels of achievement provide an avenue for developing students’ understanding by encouraging them to initiate reading activities and read frequently to improve their grades in school which in turn lead to good reading habits, enhanced reading efficacy, and high levels of reading comprehension skills which differentiate low achieving from achieving students and predict their performance on a reading comprehension test. As students read more, this stimulates their recall of previous domain knowledge which can foster their comprehension of the subject matter they study. Consequently, it is expected that the teaching of one can affect the student's learning and functioning in the other. Therefore, the researcher predicted a relation between students’ ability to comprehend a reading text and their achievement in English as a foreign language.

Most studies that aimed at investigating the relation between reading comprehension and academic achievement dealt with content specific areas like science & mathematics (e.g., Harlaar, Kovas, Dale, petrill & Plomin, 2012). Different from previous studies pertaining to the relationship between reading comprehension and academic achievement, the present study investigated the relationship between reading comprehension and academic achievement in EFL.

**Statement of the problem**

The problem of the present study lies in exploring the relationship between intermediate-level underachievers’ reading comprehension skills level and their EFL achievement level. Reading comprehension is a complex multidimensional intellectual process that involves a variety of skills and levels of representation of the meaning of the text, subsequently, the acquisition of these comprehension skills and levels can presumably be different for low and high achieving learners. In addition, it is proposed that academic
texts require understanding of lexical items as well as metalinguistic terms and sentences, connecting ideas using cohesive ties and inferential processes and a lack of these skills hampers students from learning the content of different subject matters at school as well as inappropriate academic achievement in English. Moreover, students’ level of achievement might contribute to variation in reading comprehension ability during this developmental period as it encourages or rather demotivates them from reading more texts and engaging in the learning process adequately and as a result fosters or reduces their comprehension skills level.

Therefore, the present study attempted to answer the following question:

1. Is there a relationship between intermediate-level underachievers’ reading comprehension skills level and their achievement in English as a foreign language?

**Significance of the study**

1. Raising students’ awareness of the importance of developing their reading comprehension skills to enhance their EFL achievement level incidentally.
2. Providing students and teachers with a test measuring reading comprehension skills and an achievement test to assess students’ EFL achievement level.
3. Providing empirical research results on the relation between reading comprehension skills level and EFL achievement performance and the magnitude of this relation (if found).

**Hypothesis of the study**

“There is a statistically significant positive correlation between intermediate-level underachievers’ reading comprehension skills level and their EFL achievement level”.

**Delimitations of the study**

1. A sample of low intermediate-level EFL underachievers at El Tawfic governmental school for girls in El Fayoum Governorate.
2. Low intermediate-level EFLs reading comprehension skills.
3. Low intermediate-level students’ EFL achievement.

The rationale for selecting the study sample is that low-achieving students have many deficiencies related to their reading comprehension skills especially higher-order ones which are crucial for them at this developmental stage and thus necessitates a focused training on these higher-level skills for all students especially underachievers who have more difficulty than their more skilled peers in leaning these skills on their own as proved by empirical research evidence which showed that they could not monitor their own learning and used inadequate metacognitive processes. Furthermore, their academic achievement in EFL is not progressed to the level of development appropriate for this stage of schooling. This raised the need for an increased instructional activities and programs focusing on the deficits and elevating the strengths in low-achieving students. Moreover, reading with comprehension inherently involves reasoning, making inferences and connections, predicting and drawing conclusions which require active mental cognitive construction of the new learned knowledge and which are prerequisites for academic achievement in general and in EFL performance in particular. Thus, it is hypothesized that deficiencies in reading comprehension are associated with difficulties and limitations at many levels of achievement including EFL learning. Therefore, it was expected that improving underachievers’ reading comprehension skills level is associated with parallel increase in their academic achievement and that lower levels of achievement in reading comprehension predict lower levels of academic achievement in EFL and vice versa.

**Procedures of the study**

To investigate the relationship between EFL achievement and reading comprehension skills level, the following procedures were followed:

1. Reviewing literature and studies related to reading comprehension and achievement in the English language.
2. Using an EFL achievement test and a reading comprehension test.
3. Administering the instruments to the study sample.
4. Calculating the correlation coefficient between students' scores on the EFL achievement test and the reading comprehension test.
5. Interpreting the findings of the study.
6. Introducing the suggestions and recommendations of the study.

Definition of terms

Reading comprehension skills:

Alptekin (2006) claimed that “reading is viewed as an interaction of the reader’s text-based and knowledge-based processes. In processing texts, readers combine literal comprehension, based on lower-level cognitive processes of reading such as lexical access and syntactic parsing, with inferential comprehension, based on higher-level cognitive processes such as the textbase of comprehension and the situation model of interpretation”. Alyousef (2006:64) defined reading comprehension skills as “interactive processes where the reader interacts dynamically with the text to elicit meaning, which leads to automaticity or reading fluency and constructing the message of the author using the reader’s prior knowledge and linguistic, systematic and schematic knowledge”. The researcher adopted Alyousef’s definition for the purpose of this research.

EFL achievement

“The composite of learner performance and ability in each of the language skill areas, such as: listening, speaking, reading and writing” (Detschelt, 1993).

Literature review

The purpose of this research paper is to investigate the correlation between reading comprehension skills level and academic achievement in EFL of Low intermediate-level underachievers participating in a strategic reading instructional program. Without understanding what is being read, the students’ potential for acquiring
knowledge will be affected greatly as reading for comprehension is an instrument for enlarging knowledge, perspective and insight on readers and a means for a better functioning at school and in everyday life during this developmental period. Therefore, the students’ attention is focused on the main ideas in the reading material while discarding irrelevant details as a result of their sound comprehension. Moreover, achievement in English as a foreign language in the intermediate level requires increasing comprehension of and reasoning with the learned material more than just information recall. Besides, reasoning ability has been shown to be a steady unique predictor of reading comprehension in addition to linguistic predictors in lower grades of primary school (Fuchs et al., 2012 as cited by van Wingerden, Segers, van Balkom, Verhoeven, 2014).

However, reading comprehension is a complex process including interaction, perception, experience (as students bring the knowledge and experiences acquired from their every-day life to the reading text), thinking, learning, integration, and affect (Kent, 2002 as cited by Yogurtcu, 2013). For example, failing to distinguish relevant information from irrelevant details which are a prerequisite skill for reading comprehension makes learning inefficient and ineffective, both of which undermine achievement and which at the same time characterizes the superior performance of high achievers as compared to low-achievers in English tests. In addition, the acquired knowledge from reading enhances the students’ ability to use it in communication tasks like writing and speaking. Moreover, EFL achievement tests in the intermediate level focus more on students’ inferential, critical, appreciative and creative thinking abilities rather than recalling explicitly acquired knowledge such as writing the spelling of words which prevails the English tests at the primary stage. Also, at this level of schooling, students begin to compose their paragraphs. Therefore, reading with comprehension is crucial in the English language growth or decay.

However, high achieving readers are different from underachievers in their reading comprehension skills level and their use of higher order cognitive processes as evident from empirical
research. The former has increased ability of inhibiting contextually irrelevant details and using their prior knowledge to fill in conceptual gaps when comprehending new information (Pyburn, Pazicni, Benassib, & Tappinc, 2013) which are prerequisites for efficient processing of academic tasks that include both content and/or language achievement. On the other hand, in order to comprehend, readers need to construct an integrated and coherent representation of a text’s meaning (Gernsbacher, 1997 as cited by Cain, 2003). Coherence necessitates the reader to infer relations among ideas, events, and states that are described in the text (van den Broek, 1994 as cited by Smith & Hancox, 2001). Thus, cohesion and coherence which are included in text comprehension are necessary mechanisms for assimilating and accommodating new presented information to learners’ schemata and, consequently, lead to higher levels of language and subject matters’ achievement.

In support of the formentioned claim is a study results which indicated that integration failure which characterizes low-performing students was the major reason for inability to answer inference questions and that poor comprehenders were able to build adequate representations of parts of a text, but failed to relate and integrate these partial representations to produce a coherent representation of the text as a whole (Oakhill & Cain, 1998 as cited in Barth, Barnes, Francis, Vaughn, & York, 2015). Furthermore, a study results showed that there is a considerable growth across the middle and high school years, particularly, for adequate comprehenders in those text integration processes that maintain both local (i.e., cohesion) and global coherence. Participants were 1,203 students (Barth et al., 2015). Therefore, there are cognitive processes that are involved in reading comprehension and which are prerequisites for academic achievement.

The composite measure of achievement total score obtained by each student reflects the learner’s overall performance on the test sub-components (listening, speaking, vocabulary, structure, reading both informational and narrative texts and writing). Concerning listening comprehension in native speakers of English, research evidence
demonstrated that there was a high correlation between reading and listening comprehension especially for proficient learners although the strength of the correlation did not reach a perfect value. In this vein, a pilot study aimed at investigating whether parallel measures of narrative-based listening comprehension and reading comprehension reflected the same construct and yielded comparable scores from a diverse sample of second and third grade students. Participants were 110 students. Measures included the narrative language measures of listening and reading subtests of the CUBED assessment. Results indicated a strong correlation between the listening and reading comprehension measures (Petersen, Spencer, Konishi, Sellars, Foster, & Robertson, 2020). Moreover, the results of a 5-year longitudinal study, starting at age 7.5 years (N. = 198), revealed that listening comprehension was a predictor of both early and latter growth of reading comprehension skills (Lervåg, Hulme, Melby-Lervåg, 2020). Thus reading comprehension and listening comprehension share many commonalities since many component skills that are prerequisites for reading comprehension are also necessary for listening comprehension. In addition, the claim was that English language skills are interrelated and integrated processes and that practicing in one of them enhances development in the others (Echevarria, Vogt & Short, 2008 as cited in Sung, 2009).

On the contrary, in the Egyptian milieu where students especially intermediate-level and underachievers are not in favor of listening to English in the surrounding environment, so it is required to investigate whether there is a difference between the reading and listening performance of below average achieving learners. In Al Thowaini’s (2018) study the listening participants were divided into three groups: 20 native speaker controls, 20 high-proficiency, and 20 low-proficiency English listeners. One of the main finding of this study was that the high- and low-proficiency listeners’ scores on the content comprehension assessment were significantly lower than the scores of the native controls. This may be due to the fact that native speakers of English hear auditory language in an affective and purposeful, interactive context (Tomasello, 2003 as cited by Caplan, Waters, Bertram, Ostrowski & Michaud, 2015) whereas EFLs only
listen to language during formal instruction. Besides, each modality has distinct demands on a learner, in addition, students have various backgrounds and different abilities as they possess different potentials in thinking pattern and performance and these may explain the discrepancies between high achieving and low achieving learners’ listening and reading abilities. Listening comprehension requires oral language competencies such as the ability to analyze the speech into morpheme and syntactic units and students need to attend selectively to the most important information while discarding irrelevant points and not to let the surrounding noise to interfere with their focus of attention, besides, they need to hold prior statements and ideas in conversation in their short term memory for later integration with incoming information and background knowledge without being able to refer back to the text as distinct from reading comprehension. Furthermore, the context in which the utterance was said affects listeners’ comprehension.

However, the claim was that written and auditory language do not present exactly the same information to the comprehender since letters and words are often separated in orthography whereas phonemes and words occur continuously and are subject to articulatory and acoustic overlap in speech, besides, punctuation marks and paragraph spacing mark sentence and discourse structure in written language while intonation contours do so in a different way in spoken language (Caplan et al., 2015; Chafe & Danielewitz, 1987; Halliday, 1987). In accordance with that claim were the results of a study which was conducted on native speakers of English and revealed that language processing in the auditory and written modalities involves significantly separate skills in middle and high school and that each of these skills is divisible into separate abilities to process related aspects of language (Caplan et al., 2015).

Regarding reading and writing skills, they are recursive processes as a writer attempts to communicate his/her intended meaning to the reader. on the other hand, readers utilize different processes and mechanisms in order to grasp the conveyed meaning. Research evident demonstrated that organization and connection
which are features of writing are also crucial elements to text comprehension (e.g. Grabe & Kaplan, 1996 as cited by Plakansa & Gebril, 2017). Besides, poor readers do not read much and subsequently get less experience of text structures and ideas, which also endangers their writing development (Juel, 1988 as cited by Mäki, Voeten, Vauras & Poskiparta, 2001). Moreover, Kırmızı (2009) attributed one of the reasons for writing difficulty to insufficient reading comprehension. The relation between reading and speaking is indirect since wide reading increases word knowledge which in turn fosters improvement in speaking skills. But oral communication depends on learners’ usage of other cognitive and linguistic processes such as connected speech, expressive devices, grammar, negotiation and language (Harmer, 2001; Mart, 2012). So more investigation is needed to examine whether enhanced reading comprehension skills is accompanied with a corresponding improvement in speaking capabilities.

Related studies

Correlational studies on reading comprehension and academic achievement in English

García-Madruga, Vila, Gómez-Veiga, Duque & Elosúa (2014) conducted a study which main result showed that there is a significant positive correlation between reading comprehension and Language achievement and Mathematics and that reading comprehension contributed to the variance explained in language achievement and Mathematics. Participants were 77 third-grade primary students.

Correlational studies on reading comprehension and academic achievement in subject areas other than English

Harlaar, Kovas, Dale, Petrill, & Plomin (2012) study results revealed genetic and environmental correlations among mathematics, reading comprehension and word decoding in middle school years but correlations between mathematics and reading comprehension were significantly greater than those between math and word decoding.
Neri, Guill & Retelsdorf, (2019) study results showed a significant interaction of students’ reading comprehension and word count on science performance; students with high reading comprehension benefit from science items with increasing word count. The sample consisted of N = 2051 German students in grades 10 and 11.

In Pyburn, Pazicni, Benassib & Tappinc’s (2013) conducted longitudinal investigation into the ability of language comprehension measures to predict performance in university introductory chemistry courses. Results indicate that comprehension ability correlates with general chemistry performance.

Commentary

Reading comprehension supported academic achievement across different content areas such as science and mathematics. Empirical research revealed that students’ reading comprehension highly correlates with their academic achievement in specific content areas (e.g., Harlaar, Kovas, Dale, Petrill, & Plomin, 2012; Neri, Guill & Retelsdorf, 2019), indicating that reading comprehension in academic contexts is an important prerequisite for the acquisition of school-related skills and for students’ achievement level in general. Furthermore, low achieving learners performed significantly worse in reading comprehension measures than more achieving learners. It is noted that a few research studies have examined the relationship of language achievement to reading comprehension.

Method

Participants

Participants were low achieving low intermediate-level students at El Tawfik Preparatory school for girls in El Fayoum Governorate in their first term of the academic year (2018/2019) who attended the strategic reading instructional program (N=40) and their peers in the control group (N=40). These participants were selected according to the following procedures:
1. Students who can read accurately at appropriate level for their age but have poor reading comprehension.
2. The lowest 25% of students based on their scores at the pretests (of reading comprehension & achievement)

**Instruments of the study**

The instruments of the study included:

1. An EFL achievement test.
2. A reading comprehension test.

**EFL achievement test**

The achievement test is a composite measure of vocabulary, structure, reading, listening, speaking and writing.

**Description of the test**

The test comprised 28 items and was divided into 6 sections. The first section was listening (3 Marks, one mark each). Students listen to a text of about 30 words. The topic was from the Set Books (New Hello! English for Preparatory Schools: Year One- First Term 2018/2019 by Pelteret & Hancock, 2015). Students listened and answered three multiple choice questions with three options each. The second section was Language Functions (24 Marks, twelve mark each). Students were required to answer two mini-dialogues; in the first, the stimulus was deleted; in the second, the response was deleted. The topics of the mini-dialogues were from the students’ Set Books. The third section was Reading comprehension (5 Marks, one mark each). A text (unseen in the Set Books) of about 83 words was provided. Most lexical items and all structures in the text were from the Set Books. The students were required to answer five multiple choice questions with three options each. These questions test the following reading comprehension skills: 1) understanding pronoun reference (inferential level comprehension) and 2) recognizing explicit stated details (literal level comprehension). The forth section was the Reader (5 Marks, one mark each). Students were asked to choose the correct answer from three options. The questions tested the following levels of comprehension: 1) critical questions requiring students to evaluate an idea, 2) literal questions requiring students to
find an answer stated directly in the story, and 3) inferential questions requiring students to guess word meaning from context and connecting ideas within different parts of the story and with prior knowledge. The fifth section was vocabulary and structure (12 Marks, one mark each). Twelve varied multiple-choice items (6 vocabulary & 6 structure) based on the Set Books were given. The students were required to choose the correct answer from the four options provided. The sixth section was writing (15 Marks). Students were asked to write a paragraph of six sentences about one of two given topics related to the Set Books. For this type of question, a rating scale (rubric) was developed by the researcher to specify the scoring criteria followed.

Test validity:

The test was submitted to 6 jury members to establish its content validity concerning the following points:

1. Whether the test objectives were appropriate for the purpose of the study
2. Consistency of test items with the aim and construct intended to be measured
3. whether the test covers the intended content in sufficient depth and breadth and that no items that were not included in the program were in the test
4. Whether the content of the test suits the students’ linguistic level
5. Clarity of instructions
6. Some modifications were made and some items were deleted in light of their comments.

Test reliability

The test was conducted on learners with similar achievement level. The reliability of the achievement test was calculated and the estimated reliability was (0.88). Therefore, it exhibited an acceptable level of reliability.

Scoring procedures
The maximum score for the test was (64). A 0. Point was given for students who wrote nothing in the answer part or who wrote the question itself instead of the answer. Each question of the multiple-choice type was given a score of one point for a correct answer and a zero for a wrong or no answer. For the open-ended response question type, a scoring rubric was developed by the researcher. To assess students’ performance, four features were considered. For each feature, three levels of performance were described on a three-point rating scale ranged from 1 to 3. So, the total mark of rubric was 12. A rubric for paragraph writing was developed by the researcher to assess students’ performance in the writing section. It included five features. For each feature, 3 levels of performance were described on a 3-point rating scale ranged from 1 to 3. So, the total mark of rubric was 15.

**The reading comprehension skills test**

The post version of the reading comprehension test (Form B) was used to measure five levels of comprehension (Literal, inferential, critical, appreciative & creative). The test comprised two reading passages followed by open ended and multiple choice questions on guessing word meaning in context, main idea identification, stating details, recognizing text structure (i.e., descriptive & problem/solution), making inferences, recognizing author’s purpose, finding pronoun reference, recognizing relationships within and between sentences; cause and effect, purpose and contrast, finding alternative title for the passage, predicting by imaging what would happen if…., searching alternative ways to stay healthy and expressing emotions and feelings).

**Scoring procedures**

The total mark for the test was (84). For multiple-choice question type, each item was given a score of one point for a correct response and a zero for an incorrect one. For the open-ended response question type, a scoring rubric was developed by the researcher. To assess students’ performance, four features were considered. For each
feature, three levels of performance were described on a three rating scale ranged from 1 to 3. So, the total mark of rubric was 12.

**Test Validity**

The validity of the test was verified by a jury of EFL specialists to indicate: the aim of the test, whether each item in the test addressed a reading comprehension skill, consistency of test items to the linguistic level of participants, suitability of the test items to the objectives of the training program, clarity of instructions, consistency of test items with the aim and construct intended to be measured, and whether the test was suitable to differentiate students with reading comprehension difficulties from students who comprehend at adequate levels. According to their comments, some test items were revised, deleted or added.

**Test Reliability**

The estimated reliability coefficient for the post-test (Form B) was (0.87).

**Findings, Discussion and Recommendations**

**The correlation between underachievers’ reading comprehension skills level and their EFL achievement**

**Testing the research hypothesis:**

The study hypothesis stated that:

“There is a statistically significant positive correlation between intermediate-level underachievers’ reading comprehension skills level and their achievement in English as a foreign language”.

To test the study hypothesis, a Pearson product-moment correlation analysis was calculated to examine the relationship between the total scores of the reading comprehension skills post-test (form B) and the total scores of the EFL achievement post-test obtained by the administration of the study instruments to low intermediate-level EFL underachievers.
Table (1)
The correlation coefficient between the reading comprehension skills post-test and EFL achievement post-test for the study sample

<table>
<thead>
<tr>
<th>Reading comprehension skills post-test</th>
<th><strong>0.71</strong></th>
<th>1</th>
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<tbody>
<tr>
<td></td>
<td>N.80</td>
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<tr>
<td>EFL achievement post-test</td>
<td>1</td>
<td><strong>0.71</strong></td>
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<tr>
<td></td>
<td>N.80</td>
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</table>

**Correlation is significant at 0.01 level**

As shown in table (1), the correlation coefficient of the total scores between the reading comprehension skills post-test and EFL achievement post-test was \( r=0.71, p< 0.01 \). This coefficient value indicated that the reading comprehension skills test significantly correlated positively with EFL achievement test at \( 0.01 \) level and the magnitude of the correlation was strong. Thus, as reading comprehension skills level increases, EFL achievement increases and vice versa. According to Cohen (1988:77-81 as cited in Hemphill, 2003), an absolute value of \( r \) of 0.1 is classified as small, an absolute value of 0.3 is classified as medium and of 0.5 is classified as large.

**Discussion**

The results revealed that the estimated correlation was \( r=0.71, p< 0.01 \). It can be concluded that there was a positive strong correlation between the study sample’s scores on the reading comprehension skills test and EFL achievement test at \( 0.01 \) level of significance. The correlation of variables included the post results in regards to test scores. This indicated that students with higher levels of reading comprehension skills tend to have higher levels of achievement in English as a foreign language and vice versa as the association between the two variables was positive and significant. This can be illustrated through the following points:
1. The researcher can infer that when underachieving students developed their reading comprehension skills as a result of using comprehension fix-up strategies of predicting, self-questioning, making connections and visualizing, their EFL achievement enhanced, too.

2. In addition, poor reading comprehension skills predict lower levels of achievement in English as a foreign language.

3. Composite measures of achievement which assess different language skills (i.e., listening, speaking, reading informational and narrative texts, vocabulary and structure, and writing) are expected to have stronger correlation with reading comprehension tests than the achievement test sub – components.

4. The strong but less than perfect correlation coefficient between reading comprehension skills and EFL achievement implies that there were students who had deficits in just one of these two variables. As noted, not all students who performed poorly on the reading comprehension skills test (i.e., below the 25 percentile) performed poorly in the EFL achievement test. A plausible explanation may be that those students faced obstacles when reading such as a difficult unknown word that was repeated and hindered comprehension and failed to use adequate comprehension fix-up strategies which their more skilled peers adopted to help them construct a mental representation of the gist of the passage which paved the way to a deeper understanding and their failure was a valid evidence of deficits in higher level skills which were likely to interfere and hinder comprehension. Another possible reason could be that they were not acquainted for these types of questions and were not able to understand what was required from the questions. The composite measure of achievement involved a sub-component of speaking ability in the form of mini dialogues and a sub-component of paragraph writing task which were expected to have significant correlations, but associations that may be weaker than the whole composite measure. Furthermore, research evidence showed that the
correlation between reading and listening at the beginning of literacy acquisition was small, but when students were able to read, the association between the two modalities increased and reached 0.9 by college level (Gernsbacher, 1990; Sticht & James, 1984 as cited by Gerosa & Narayanan, 2008). Although listening comprehension and reading comprehension are alike in many aspects, there are important differences between them (Bormuth, 1972; Devine, 1978; Goodman & Goodman, 1980; Griese, 1977; Harris & Sipay, 1985; Hildreth, 1948; Lundsteen, 1979; Ruddell, 1966; Schreiber, 1980; Smith, 1978; Sticht, Beck, Hauke, Kleiman, & James, 1974; Taylor, 1964 as cited by Wales, 1987). While readers can slow down and reread parts of the text as well as using cohesive clues and signals to better grasp a coherent representation of the meaning of the text, listeners on the other hand, are not in favor of doing so and instead of that they should focus their attention on the intonation and stress to maximize their learning opportunities. Additionally, other cognitive skills that differentiate between comprehension of the two modalities include word decoding skills which contribute to comprehension of a reading text, but not to a listening text comprehension. Besides, students who are studying in an English as a foreign language context do not generally hear English spoken outside the formal classroom instruction. Moreover, it was argued that teaching reading would not necessarily improve students’ listening ability nor would teaching listening necessarily improve their reading ability (Devine, 1968 as cited by Wales, 1987). This leads to conclude that it is not a guarantee of effective reading comprehension performance to be associated with competent listening comprehension or vice versa.

Recommendations
Based on the study findings, the researcher recommended the following:

1. Training pre-service teachers on instructional practices that foster students’ language achievement and comprehension in EFL academic contexts.
2. Reading while listening to native speakers of English should be taught as an integrated skills task at early age of schooling.

3. Developing oral language comprehension of explicit and implicit information by training students at the middle and high school on higher level related skills and strategies.

4. Curriculum designers should integrate activities that train students on establishing cohesion and coherence in the text during reading and writing instruction which foster their reading comprehension and overall achievement in EFL.

5. Supporting students during the later years of intermediate and high school levels in order to maintain the gains obtained by training them on comprehension fix up strategies and which resulted in improved reading comprehension skills level and enhanced achievement.

Suggestions for further research

The following research areas are suggested:

1) Examining the relation between reading comprehension skills level and EFL achievement in other populations, across grades and in longitudinal studies.

2) A correlation study exploring whether reading comprehension skills level predicts performance on listening comprehension in EFL learners.

3) A study investigating the underlying cognitive factors that contributed to the correlation between reading comprehension and language achievement in EFL learners.

4) A study examining factors related to students and/or assessment characteristics which influence the strength of the relationship between reading comprehension skills level and achievement in EFL.

5) Exploring the relationship between reading comprehension skills level and composition writing performance.

6) A correlation study exploring whether there is a relationship between reading comprehension skills level and oral language performance.

7) A correlational study investigating other predictors of English language achievement.
8) A study comparing the differences in listening comprehension performance between students with high and low levels of academic achievement in English.

9) A correlational study on the relationship between the sub-dimensions of reading comprehension (literal, inferential, critical, appreciative and creative) and each component of the EFL achievement test (listening, reading, speaking & writing).

10) Conducting a study to examine whether there is a causal relation between reading comprehension skills level and EFL achievement and, if evident, examining the direction of this causal relation.

Summary

The results indicated a significant strong overall correlation between reading comprehension skills level and academic achievement in EFL. Therefore, high levels of academic achievement in EFL are always associated with high levels of reading comprehension and vice versa.

References


Journal of Developmental Psychology, 21, (pp. 335–351).


Wales, M. K. (1987). The effect on reading comprehension and on listening comprehension of two different methods of teaching comprehension (reading vs. listening) to seventh grade students. Ph.D. Dissertation, the Temple University, USA.

## Appendices

### Appendix A

List of Jury Members

<table>
<thead>
<tr>
<th>Name of the Jury</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof. Dr. Zinab Ali El Nagar</td>
<td>professor of Curriculum and Instruction, Faculty of Education, Ain Shams University.</td>
</tr>
<tr>
<td>Prof. Dr. Asmaa Ghanem</td>
<td>professor of Curriculum and Instruction, Faculty of Education, Ain Shams University.</td>
</tr>
<tr>
<td>Prof. Dr. Gamal Mohamed Shehata</td>
<td>Associate Professor of Curriculum and Instruction, Faculty of Education, Minia University</td>
</tr>
</tbody>
</table>
Appendix (B)

Post - Reading Comprehension Skills Test

Name:                                                                   School:
Time:                                                                    Score:

Read the title, what do you predict the text is about?

a. The weather of Aswan
b. A trip to Aswan
c. Wonders of the world

A visit to Aswan

1. Aswan is a wonderful place for a holiday. 2. In Aswan you can see and do lots of things. 3. When you arrive there, enjoy a sailing trip on the Nile by the felucca to the Elephantine Island. 4. Aswan has many attractive tourist sites to visit. 5. Philae temple is one of ancient Egypt's most interesting temples. 6. You can sail on a felucca to the Botanic Garden of Aswan. 7. It attracts visitors to Egypt. 8. Visit the High Dam. 9. It is built across the Nile in Aswan in order to stop flooding and to save water. You can buy a lot of souvenirs from Aswan's bazaars. It is warm in Aswan in winter.

Choose the correct answer:

1. What does the underlined word 'there' in the text refer to?
   a. Aswan   b. holiday   c. things

2. What does the underlined word 'It' in the text refer to?
a. Felucca  b. Aswan  c. Botanic garden

3. The word 'site' in sentence 4 is closest in meaning to:
   a. place  b. ancient  c. time

4. What is the main idea of the text?
   a. Visit the High Dam
   b. Philae temple is one of ancient Egypt's most interesting temples
   c. Aswan is a wonderful place for a holiday

5. What is the text structure?
   a. Cause and effect
   b. Problem and solution
   c. Descriptive

6. What is the author's main purpose in writing this text?
   a. To inform the readers about the High Dam in Aswan
   b. To persuade the readers to visit Aswan
   c. To entertain the readers with an adventure story in Aswan

7. What is another good title for this text?
   a. Aswan: a tourist attraction
   b. Cities around the world
   c. A trip to Aswan's beach

8. The words 'in order to' in sentence 9 indicate .............................................................
   a. definition  b. purpose  c. contrast

9. Which statement shows a prior knowledge related to the text?
   a. This text reminds me of a story of a tourist lost in a big town
   b. This reminds me of a documentary about living in the woods
   c. This reminds me of a tourist brochure about Egypt

10. Which picture would help a reader understand information in the text
    a. A picture of a Philae temple
    b. A picture of crops in a field
    c. A picture of passengers on a train

11. Which word in the text describes Aswan?
12. The word 'wonderful' in sentence 1 is closest in meaning to:
   a. Very good
   b. very sad
   c. very fast

Answer the following questions:

1. How do you feel when you go on a trip?
2. Where is the High Dam?

Read the title, what do you predict the text is about?

b. Healthy and unhealthy food
   c. Losing weight
   d. Fast-food restaurants

Food and health

We all need healthy food, but it is also important for the food to taste good. Do you like a lot of toppings? The taste of spices and toppings make food delicious. But there is a problem, foods that are high in calories and fats are fattening and unhealthy. The problem is that people go to fast-food restaurants. Hot dogs and burgers cooked with hot spices are the most popular. They are tasty but bad for you. Let's all eat healthy food that is tasty too. Nuts and dates instead of sweets are healthy and taste delicious. You can eat food that has protein like chicken or fish with rice, yoghurt and green salad. You should eat fruit and vegetables in every meal. These have a lot of vitamins.

Choose the correct answer from a, b, c, or d:

1. What does the underlined word 'These' in the text refer to?
   a. vitamins
   b. vegetables
   c. fruit and vegetables

2. The word 'meal' in sentence 11 is closest in meaning to:
   a. day
   b. menu
   c. food

3. What is the main idea of the text?
   a. We all need healthy food, but it is also important for the food to taste good.
   b. Hot dogs and burgers cooked with hot spices are the most
popular.

c. Foods that are high in calories and fats are fattening and unhealthy.

4. What is the text structure?
a. Cause and effect  
b. Problem and solution  
c. Description

5. What is the author's main purpose in writing this text?
a. To entertain readers with facts about food  
b. To persuade the readers to eat healthy food  
c. To inform the readers about kinds of fast food

6. What is another good title for this text?
a. Healthy eating  
b. Food safety  
c. Shopping for food

7. The word 'but' in sentence 4 indicates ....................
a. definition  
b. reason  
c. contrast

8. Which statement shows a prior knowledge related to the text?
a. This text reminds me of a science lesson about parts of the body  
b. This text reminds me of a magazine article about healthy diets  
c. This text reminds me of a program about exercising

9. Which picture would help a reader understand information in the text?
a. A picture of a fat girl eating burger  
b. A picture of a woman cleaning the kitchen  
c. A picture of a runner drinking a glass of water

10. Which word does 'delicious' describe?
a. Chicken or fish  
b. nuts and dates  
c. sweets

Answer the following questions:

One way to stay healthy is to eat healthy food

1. What other ways you can think of to stay healthy?
2. Predict what would happen to people if there weren’t any crops?
3. Why is eating healthy food important?

Appendix C
The Achievement Test

Name:                                               School:

Time:                                               Score:

A. Listening
Listen and choose the correct answer from a, b or c

1. Where do we buy vegetables?
   a. at the greengrocer's    b. at the butcher's   c. at the
chemist's

2. Fruit and vegetables contain ----------------------------------
   a. fat  
   b. protein  
   c. vitamins

3. People who eat too much fat, sugar and salt---------------------
   a. are healthy  
   b. are fit  
   c. get sick

B. Language Functions

Supply the missing parts in the following mini-dialogue

1. Student A: -----------------------------------------------
   ---?
   Student A: It is my bag. I bought it in Alexandria.
2. Waiter: What would you like to eat?
3. Customer: -----------------------------------------------
   ---
   c. Reading Comprehension

Read the following and answer the following questions

Last weekend Soha traveled to Alexandria. She met her friend Sara there. They visited the ancient lighthouse of Alexandria. It is one of the Seven Wonders of the World. They didn't go home for lunch; they ate at a restaurant. The restaurant sold seafood. It was fresh and delicious. For dessert, they enjoyed eating cupcakes. The next day they enjoyed a sailing trip on the sea. They went into Fort Qaitbey and from its walls; they get a beautiful view of the sea.

1. Where did Soha and Sara go last weekend?
   a. to Aswan  
   b. to Alexandria  
   c. to Alaska
2. What did they eat for lunch?
   a. fresh meat  
   b. salad  
   c. seafood
3. The underlined pronoun 'It' refers to -------------------------
   ---
   a. restaurant  
   b. seafood  
   c. dessert
4. The underlined word 'there' refers to -------------------------
   ---
   a. restaurant  
   b. last weekend  
   c.
Alexandria

5. Why did they go into the fort?
   a. to enjoy the view of the sea
   b. to enjoy a sailing trip
   c. to enjoy eating cupcakes
   C. The Reader
Choose the correct answer from a, b or c

1. Santiago wanted to catch a big fish because -------------------
   ----
   a. he was rich          b. he was old          c. he was poor
2. The word exhausted means --------------------------------------
   ----
   a. very tired          b. very old          c. very sad
3. What did Manolin mean when he said, "There are many fishermen but you are the best"?
   a. Santiago was old
   b. he respected Santiago
   c. Santiago was not hardworking
4. Who ate the marlin?
   a. the sharks        b. the whales        c. the turtles
5. Santiago sailed his boat far out to sea because -------------------
   ----
   a. he was impatient
   b. he was alone
   c. he wanted to catch a big fish

D. Vocabulary and Structure
Choose the correct answer from a, b, c or d

1. Paris is the ---------------- of France.
   a. countryside   b. village    c. city      d. capital
2. Ahmed met his friend ------------------ he was walking to school.
   a. what          b. while       c. so        d. at
3. Salma was ------------------ and couldn't wait in a queue for the bus.
   a. patient       b. successful  c. impatient  d. clever
4. I was ill yesterday ---------------- I stayed at home.
   a. so                      b. while       c. because     d. for

5. Ola is always ---------------- She will pass the exam.
   a. noisy            b. lazy              c. hardworking  d. naughty

6. Soha sent ---------------- an email.
   a. me               b. I                  c. mine          d. hers

7. The train was full of ------------------.
   a. customers  b. passengers   c. waiters    d. sales assistants

8. Football is the most ------------------ sport in the world.
   a. tasty        b. enormous      c. popular   d. proud

9. We should eat ------------------ fruits and vegetables.
   a. little       b. few              c. many      d. lots of

10. Are those books yours? No, they aren't ------------------.
    a. me               b. I                  c. mine          d. her

11. I can't buy a mobile. I don't have ------------------ money.
    a. enough       b. many              c. too many    d. not enough

12. She always ------------------ to school.
    a. walk               b. walks       c. walked      d. is walking

Write a paragraph of six sentences about one of the following topics:

1. Your favourite dish
2. shopping

Tape script for the listening task:

We buy vegetables at the greengrocer's. Fruit and vegetables give us vitamins we need to stay healthy. Some people eat too much fat, sugar and salt so they get sick.
Appendix (D) Rubric for paragraph writing

<table>
<thead>
<tr>
<th>Category</th>
<th>Scoring Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ideas &amp; Relevancy</strong></td>
<td>Good: The student writes a simple topic sentence that conveys the main idea.</td>
</tr>
<tr>
<td></td>
<td>Average: The student partially identifies a main idea in a simple sentence.</td>
</tr>
<tr>
<td></td>
<td>Poor: The student writes irrelevant sentences considering the topic or writes incomplete sentences or fragments in an attempt to state the main idea and details.</td>
</tr>
<tr>
<td></td>
<td>The student writes 5 relevant supporting details.</td>
</tr>
<tr>
<td></td>
<td>The student partially identifies a main idea in a simple sentence.</td>
</tr>
<tr>
<td></td>
<td>The student writes repetitive sentences to support the main idea.</td>
</tr>
<tr>
<td><strong>Cohesion</strong></td>
<td>The student uses cohesive devices appropriately.</td>
</tr>
<tr>
<td></td>
<td>The student uses some cohesive devices inaccurately.</td>
</tr>
<tr>
<td></td>
<td>The student doesn't use any cohesive devices.</td>
</tr>
<tr>
<td><strong>Grammar</strong></td>
<td>The student writes syntactically correct sentences.</td>
</tr>
<tr>
<td></td>
<td>The student makes some errors in grammar but they don't impede comprehension</td>
</tr>
<tr>
<td></td>
<td>The student makes frequent grammatical errors that impede comprehension.</td>
</tr>
<tr>
<td><strong>Vocabulary</strong></td>
<td>The student uses appropriate.</td>
</tr>
<tr>
<td></td>
<td>The student uses some words inappropriately but they don't interfere.</td>
</tr>
<tr>
<td></td>
<td>The student frequently uses words.</td>
</tr>
<tr>
<td>Category</td>
<td>Scoring Criteria</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Good 3</td>
</tr>
<tr>
<td>Ideas &amp; Relevancy</td>
<td>The student's response is related to the task</td>
</tr>
<tr>
<td></td>
<td>The student's answer relates the topic to prior knowledge</td>
</tr>
<tr>
<td>Grammar</td>
<td>The student's answer is a complete grammatically correct sentence</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>The student uses some words</td>
</tr>
<tr>
<td>Mechanics (Spelling &amp; punctuation)</td>
<td>word choice is appropriate</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>The student uses punctuation marks and spelling rules correctly</td>
<td>The student makes some spelling and punctuation errors that don’t impede comprehension</td>
</tr>
</tbody>
</table>

A 0- Point: Nothing is written in the space provided or the student writes the question itself instead of the answer