Assessing EFL Learners’ Awareness of Their Cognitive Engagement in Their English Reading Classes at the University of Hail-KSA

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Abstract
The learner cognitive engagement is widely recognized as an important influence on achievement and learning in higher education. An awareness of the relationship between engagement and comprehension is a means of understanding why students are not excelling within the domain of reading. Accordingly, the current study aimed at assessing EFL learners’ awareness of their cognitive engagement in English reading classes while reading academic materials. Three values were investigated: a) Incorporating prior knowledge, b) Interest in English reading classes, and c) the use of cognitive and metacognitive strategies. They were assessed by 41-item developed questionnaire scored on a five- Likert scale. Participants were 85 undergraduate students studying English as a foreign language at the University of Hail in KSA (Kingdom of Saudi Arabia). They were classified in three sub-groups (Excellent, Fair, Poor). One way analysis of variance and Scheffe’s Post Hoc Tests for Multiple Comparisons were used. The results indicated variance among the three groups on the three variables (values), and thus variance in their awareness. The findings obtained can be used for enhancing assessment, planning instruction, or conducting classroom or clinical research.

Keywords: Awareness, Engagement, Prior knowledge, Interest, Cognitive, Metacognitive.

1. Introduction
Scholars referred to engagement as the process where motivation and thoughtfulness converge when interacting with a text (Guthrie, Wigfield, and Von Secker, 2000; Staples, 2005). Engaged readers, according to Guthrie et al (2000), are seeking to understand; enjoying learning and believing in their reading abilities. Cognitive engagement is defined as the student’s level of investment in learning; it includes being thoughtful and purposeful in the approach to tasks and being willing to exert the effort necessary to comprehend complex ideas or master difficult skills (Fredricks, Blumenfeld, and Paris 2004). Student’s cognitive engagement is widely recognized as an important influence on achievement and learning in higher education in general and in reading in particular and as such is being widely theorized and researched. Moreover, research in the engagement theory emphasized the importance of both cognition and engagement to the reading process (Wigfield, 1997).

It is also noted that engaged readers continually activate and extend their conceptual understanding of text. Some researchers have also stressed the utilization of cognitive and metacognitive processes as a form of engagement. Moreover, the conceptual view of researches highlighted the key role of students’ prior knowledge in their development of new conceptual understanding and in encouraging students’ to be more cognitively engaged (Guthrie, 2004; Novak, 2002; Tsien, 2007; Yazzie-Mintz, 2006). Based on the findings of studies conducted in the area of reading, it had been concluded that learners’ cognitive engagement is influenced by several factors such as learners’ prior knowledge, their interest, and the use of cognitive and metacognitive strategies. And since readers’ cognitive engagement during the reading process is crucial to foreign and second language readers to make them better readers (Singhal, 2001), the current study aimed to assess EFL learners’ awareness of their cognitive engagement in their English reading classes. Learners’ awareness was measured according to the following values: 1- to what extent EFL learners incorporate their prior knowledge in understanding the reading text, 2- to what extent EFL learners are interested in the reading classes, 3- and what cognitive and metacognitive strategies EFL learners apply to understand the reading text.
The main purposes of the current study were to devise a way that would permit one to assess the degree to which a learner is or is not cognitively engaged in reading and to make it possible to learn about the goals and intentions learner holds when coping with academic reading tasks. Such information can increase learners’ awareness of their own comprehension processes. As well, it can help teachers better understand the needs of their students.

2. Review of literature

The term ‘engagement’ refers to the process where motivation and thoughtfulness converge when interacting with a text (Staples, 2005). Engaged readers, according to Guthrie, Wigfield, and VonSecker (2000), are intrinsically motivated and have self-efficacy; they believe in their abilities and thus enjoy learning. Moreover, engagement is a multidimensional construct that includes affective, behavioral, and cognitive components. Affective engagement refers to enjoyment of, positive feelings toward, and sense of competence about an activity. Behavioral engagement, which can be observed as an active participation in a task or activity, could be seen as the outcome of intrinsic or extrinsic motivation. Cognitive engagement encompasses thinking about the task at hand, similar to concentration (Fredricks, Blumenfeld, and Paris, 2004). Cognitive engagement is a matter of students’ will that is, how students feel about themselves and their work, their skills, and the strategies they employ to master their work (Metallidou & Viachou, 2007). Teachers may be familiar with the student who always works hard but still seems unable to learn effectively. This student also may be behaviorally engaged but not cognitively engaged. In other words, just because students appear to be working on the task at hand does not mean that they are learning. It is important to note that effort is involved in both behavioral and cognitive definitions of engagement: “In this sense, cognitive engagement refers to the quality of students’ engagement” (Pintrich, 2003, p. 105). The inclusion of cognitive engagement makes an important distinction between students’ efforts to simply do the work and effort that is focused on understanding and mastery (Fredricks et al., 2004).

Constructivism theory is rooted in cognitive schema theory that received special attention as an important theoretical perspective which emphasized the role of the prior knowledge in the teaching and learning process (Treagust, Duit, & Fraser, 1996). Constructivists believe that prior knowledge impacts the learning process. In trying to solve problems, perceptual or conceptual similarities between existing knowledge and a new problem can remind people of what they already know. This is often one's first approach towards solving problems. Information not connected with a learner's prior experiences will be quickly forgotten. In short, the learner must actively construct new information into his or her existing mental framework for meaningful learning to occur. In this study, incorporating prior knowledge is one of the dimensions used to investigate the learners’ awareness of their cognitive engagement.

Constructivist learning theory acknowledges that learner’s motivation is a key component in learning. Among many motivation sources, interest has been considered powerful and effective in increasing students’ engagement during the process of learning (Treagust et al. 1996). Given the above characteristics, individual interest plays a major role in a learner's preference to engage in a task or activity over time and in predicting future motivation (Xiang, Chen, & Bruene, 2005). In educational research, interest is conceptualized as situational and personal. Situational interest refers to learners’ psychological disposition that is triggered by environmental stimuli. Personal interest refers to learners’ relatively enduring disposition based on personal value, belief, and knowledge. Personal interest is internally activated preference for an activity (Hidi & Harackiewicz, 2000; Xiang et al., 2005). Based on the significance of interest in learners’ cognitive engagement, EFL learners’ interests in what they read are investigated in this study. Cognitive engagement which is the main concern of the current study had been recommended by many researchers who stressed the utilization of cognitive processes as a form of engagement (Guthrie et al., 2000). In the domain of reading, Guthrie et al (2000) stressed the importance of strategic reading as an aspect of cognitive engagement. Yazzie-Mintz (2006) clarified that cognitive engagement focuses primarily on engagement during instructional time and with instructional-related activities. Specifically, cognitive engagement includes how engaged students are with homework and classroom discussions and assignments as well as the level of academic challenge. Yazzie-Mintz recommended to: a) create a curriculum that is based on meaningful and engaged learning activities; and that makes connections between what the students are learning and the world beyond the classroom, b) teach advanced critical thinking skills to all students, c) develop specific strategies that help at risk students be engaged, and d) acknowledge students’ different abilities and ways of thinking. EFL learners often have difficulties coping with academic materials and tend not to possess the necessary reading strategies and skills for efficient comprehension (Mokhtari & Sheorey, 2002).
Consequently, to increase students’ awareness of such strategies, it is not easy and not the learners’ responsibilities solely. Surplus (2004) investigated the effect of teaching comprehension strategies to community college students by using active engagement in an action research study. Four college semesters comprised the cycles of the study which included nine course sections. The researcher served as a participant observer, collecting and analyzing data to determine students responses while also reflecting on her leadership of the theory-in-use. Emergent data indicated the need to address social, emotional and cognitive issues of students in order to engage them in an active learning. With community building as a goal, a directive instructional approach was used with various measures of accountability. Mokhtari and Reichard (2008) examined metacognitive awareness and engagement of reading strategies while reading in English for school-related materials. The study consisted of 141 native English-speaking college students in the United States and 209 non-native English learning college students in Morocco. All students from the two groups were considered as proficient readers in English. The researchers used Metacognitive Awareness of Reading Strategies Inventory (MARSII) to compare the significance between the two groups. Both groups revealed a moderate to high level of strategy use and metacognitive awareness while reading in English for academic purposes. Additionally, the Moroccan students’ mean scores of the total, Global Reading Strategies (GLOB), Problem Solving Strategies (PROB), and Support Reading Strategies (SUP) on the MARSII were higher compared with the US students’ mean scores in the four categories used in the study. The results indicated that Moroccan students tended to be engaged in reading strategies more frequently than the native English speakers when reading in English.

Although excessive research and reliable instrument in assessing reading awareness of native English speakers had been done, Mokhtariand Reichard (2002) stated that there is a specific design to measure metacognitive awareness of adolescent and ESL learners, SORS. The significance of using SORS was to measure awareness of ESL learners’ reading strategy as well as to provide suggestions to improve their reading skills. It helped identify the learners’ strategies in comprehending and acquiring the academic text. SORS were categorized in three different strategies which were Global Learning Strategies, Problem Solving Strategies and Support Strategies, which helped the readers to control, evaluate and manipulate the reading materials during the process of reading. Perencevich (2004) investigated in a study which consisted of 244 fourth- and fifth-grade students the associations of autonomy support and conceptual press, with reading engagement and conceptual learning from text through helping students use information integration strategies during reading, such as concept mapping, brainstorming. It was hypothesized that as students perceived their instruction to be motivating, their reading engagement would increase. In turn, as engaged reading increased, conceptual learning from text also increased. Reading engagement was defined as the manifestations of affective, behavioral, and cognitive processes during reading. In addition, participants completed a reading performance assessment in the domain of science designed to measure prior knowledge, strategic reading, and conceptual learning from text. Structural equation modeling was used to compare alternative theoretical models (direct and indirect models) depicting the relations among motivated reading instruction, engaged reading, and conceptual learning from text.

Abdul Aziz et al (2011) conducted a study that aimed to measure the awareness level of reading strategies of the English as second Language (ESL) Learners in Penang. This study included the measurement of their perceived use of reading strategies while reading academic materials since reading of specialized academic material in the second language is a beginning to receive attention. A survey instrument consisted of three broad categories of reading strategies namely, Global Reading strategies, Problem Solving strategies and Support strategies. The results of the analysis revealed that the learners perceived the three strategies with a different frequency level depending on the purpose of reading academic materials. The data also provided evidence that they were able to practice them. The researchers recommended that the awareness of reading strategies (SORS) should be instilled or rather inculcated in students as the advantages of realizing and putting them into actual use when reading academic materials far outweigh the disadvantages and the lack of awareness on these selected strategies. The realization on the relevance of this skill for the learners is basically for their daily academic tasks and for the performance and achievement in it. This may result in becoming active readers and thinkers. Based on the extensive research in the field of reading strategies and their impact on students’ engagement cognitively and that cognitive engagement can be operationalized through applying variant cognitive and metacognitive strategies, it is important to examine EFL learners’ use of strategies in reading. Accordingly, learners’ use of reading strategies is examined in the current study.
However, Skalsky (2009) carried out his study to seek to determine the differences in school engagement and achievement levels between students from low and high backgrounds, and between Caucasian and Hispanic students. The study examined the engagement and achievement levels of approximately 1,200 sixth grade middle school students in a suburban Colorado school district.

The students’ responses were then analyzed using independent sample t-tests to determine differences. The major findings of this statistical analysis were that slight differences exist between Caucasian and Hispanic students as well as low and high students on the scores in reading, writing, math, and science scores. In addition, there were minimal differences between Hispanic and Caucasian students and low and high students in behavioral engagement, but not in cognitive or emotional engagement. The study took an in-depth look at engagement levels, and differences in achievement were also explored. It confirmed that an achievement gap exists. However, the results of the study showed that the achievement gap cannot be explained by an engagement gap. It was concluded that stressing the importance of engagement in school is not likely the answer for closing the achievement gap.

McElhone (2009) focused substantial attention on the multidimensional construct of reading engagement and aligned this construct with the broader construct of engagement. In addition to comprehension achievement, the study assessed affective, behavioral, and cognitive components of reading engagement. The data for this study were collected over the course of a school year in 21 fourth- and fifth-grade classrooms. The 495 students in these classes completed a series of measures keyed to comprehension achievement and engagement once in the fall of 2007 and again in the spring of 2008. The study indicated that in classrooms where teachers use a pattern of talk that tended to reduce the cognitive load on students, such as offering hints and narrowing open-ended questions to make them easier, students scored lower on the comprehension achievement measure and rated their affective and cognitive engagement lower. The findings indicated that teachers should observe and consider the patterns of talk they enact with their students. Teachers should limit practices such as giving hints, narrowing questions to make them easier, answering their own questions, and gathering up student responses without truly examining them. However, teachers need not fixate on enacting a particular pattern of discourse perfectly; they should do the best they reasonably can to enact discourse patterns conveying a sense that reading is about thinking, that texts have multiple valid interpretations, and that students are capable of doing important thinking about texts.

Perry (2011) investigated students’ perceptions of engagement in Schools. The study aimed to identify the important factors from the students’ perspective that influence the degree which they can be engaged in, their learning experience explored and whether values, norms, and requirements were similar elements of a student’s life outside school. The analysis of participant responses supported the notion that these learners want their learning experiences to be personal, relevant, meaningful, and active. If they felt they were not getting these experiences, they shut down and/or turned the teacher off in their own head. Participants reported numerous examples of data that supported their need to be heard as students in the learning environment. They know what they want as learners and expect their teachers to provide the learning experiences they desire for their improvement. Participants in the study of engagement placed a high degree of emphasis on authentic learning. The data supported the notion that these participants want to have fun as they are learning but far more importance, the data showed that they want their learning to be meaningful beyond the classroom setting.

Based on the literature review, awareness has two main benefits: a) it transfers responsibility for monitoring learning from teachers to students themselves; b) it promotes positive self-perceptions, feelings, and motivation among students. Considering that learners’ awareness of their cognitive engagement is crucial in language learning in general and in reading in particular, three main related values are examined in this study; first, to what extent EFL learners incorporate their prior knowledge to understand what they are reading; second, to what extent EFL learners are interested in reading classes; third, to what extent EFL learners use strategies to help them in reading. Based on the fact that awareness provides personal insights into one’s own thinking and fosters independent learning, the main goal of the current study is to recognize the main reasons that may hinder learners’ cognitive engagement so as to find remedial answers which may in turn lead learners to better increase their reading comprehension. Accordingly, in the current study, students’ cognitive engagement in English reading classes is conceptualized in terms of: a) incorporating prior knowledge (world and text knowledge (IPK) to comprehend the text; b) their interest in English reading classes (IERC); and c) the use of cognitive and metacognitive strategies while reading (CMS).
3. Statement of the problem

University education is learner-centered; and it is therefore important to consider students’ awareness of their learning. Such awareness and monitoring one’s comprehension processes are critically important aspects of skilled reading. Recent trends within the domain of reading comprehension have led to an increasing emphasis on the role of awareness of one’s cognitive and motivational processes while reading. Therefore, it is vital for EFL learners to be aware of their cognitive engagement while reading in order to aid their comprehension in the tasks assigned. However, in contrast to the abundance of research on measuring the effect of different reading strategies in increasing reading comprehension, there is a surprising lack of studies that deal with learners’ awareness of monitoring their reading comprehension. Therefore, the current study aimed to assess learners’ awareness of their cognitive engagement in English reading classes within university courses in light of prior knowledge incorporation, interest in English reading classes, and the use of cognitive and metacognitive strategies. Such information from assessment can increase learners’ awareness of their own comprehension processes. As well, it can help teachers better understand the needs of their students.

4. Questions of the study

The main question that the current study aimed to answer is: Are the EFL learners aware of their cognitive engagement while reading academic materials?

To answer the main question, three questions were considered:

1- Do EFL learners incorporate their prior knowledge to understand the reading text?
2- Are EFL learners interested in English reading classes?
3- Do EFL learners use cognitive and metacognitive reading strategies when reading academic materials? What types of strategies they employ?

5. Methodology

5.1. Participants

The participants were 85 undergraduates EFL learners enrolled in English reading classes at the University of Hail in KSA. All the participants were Saudi learners classified into three sub-groups (Excellent, Fair, Poor) based on a series of measurements to their reading abilities. Excellent were 22, Fair were 48 and Poor were 15.

5.2. Instrument of the Study

The instrument used in this study to collect data came as a result of review of recent research literature on cognitive engagement, metacognition, and reading comprehension. Responses on conversely worded items were reversed, so that a higher score indicated a higher degree of engagement in that variable. The questionnaire included three values (variables): Incorporating prior knowledge in reading classes, Interest in reading classes, and the use of the cognitive and the metacognitive strategies. Each variable included a number of statements. The questionnaire consisted of forty one statements: Statements that represent prior knowledge incorporation in English reading classes (number one to thirteen), statements that represent EFL learners’ interest in reading classes (number fourteen to nineteen), and statements that represent the use of cognitive and metacognitive strategies in reading (number twenty to forty one). A five-point Likert Scale was used in the study. The response alternatives for each item were: Almost Always, Often, Sometimes, Seldom, and Almost Never. The participants were expected to choose one option from the five given options to represent their opinion. Each variable was designed to obtain students’ awareness of their cognitive engagement through their frequencies of occurrence in the English learning environment in general, and in English reading lessons in particular. The options “Almost always”, “often”, and “Sometimes” (indicated by 5, 4, 3 respectively) While “Seldom”, and “Almost Never” (indicated by 2 and 1 respectively). Therefore, a higher score indicated a higher degree of engagement in that variable. To analyze the obtained data, one-way analysis of variance was used followed by Scheffe’s Post Hoc for multiple comparisons.

5.3. The values (variables) of cognitive engagement used in the current study

The first value (incorporating prior knowledge) focuses on the connectedness of English reading subjects to students’ experiences, and with making use of students’ everyday experiences as a meaningful context for the development of English reading comprehension.
It assesses the extent to which opportunities in English reading lessons are provided for students to experience English knowledge as arising from human experience (prior knowledge) and values. The second value, Interest in reading classes, assesses the extent to which EFL learners reveal any interest toward reading classes, show willingness to learn new methods in learning the reading skill, and have any sense of enjoyment. The third value, the use of Cognitive and Metacognitive strategies, is used to identify learners’ awareness in employing reading strategies to highlight the effectiveness of some reading strategies that help learners understand the text better. Apart from that, analysis was also conducted on the overall means of each value so as to shed some light on the answers to our research questions:

Are the EFL learners aware of their cognitive engagement while reading academic materials? To answer the main question, three questions were considered:
1- Do EFL learners incorporate their prior knowledge to understand the reading text?
2- Are the EFL learners interested in English reading classes?
3- Do EFL learners use cognitive and metacognitive reading strategies when reading academic materials? What type of reading strategies they employ?

5.4. The Reliability and the Validity of the Instrument

To establish the reliability of the questionnaire, a pilot study of 30 students was carried out. These students were asked to fill in the questionnaire. After two weeks, they were asked again to fill in the questionnaire for the second time. And the scores from the pilot study on the questionnaire were collected; and a set of reliability tests were conducted to determine the Cronbach Alpha reliability coefficients. The result was found to be (0.88). The reliability coefficients for the instrument used in this study showed that the study instrument was satisfactorily reliable. To ensure the validity of the research instrument, the instrument of the study was given to a jury of three specialists at the University of Hail in KSA. They suggested replacing, deleting and adding some statements on the three variables used in the questionnaire. Their suggestions and comments were highly considered; and the instruments of the study were modified accordingly.

5.5. Procedures

Firstly, the participants were classified into three groups: Excellent, Fair, and Poor. This classification came as a result of a series of evaluation processes which consisted of a series of achievement tests in addition to the learners’ academic portfolios which were also considered. Although there is no time limit set for the instrument, the average administration time is between 10 and 15 minutes, depending on the students’ academic level and overall reading ability. Secondly, learners were directed to read each statement and respond by rating the frequencies of occurrence in the English reading lessons using a 5-point Likert-type scale. Learners were encouraged to respond honestly to each statement in the questionnaire and to ask questions about any aspect that they did not understand. The following were the procedures carried out:

1. The copies were distributed to each student.
2. The directions were read aloud and represented through examples.
3. The response options were discussed to make sure that the students understand the rating scale.
4. The students were allowed to ask any question about any aspect in the questionnaire.
5. Students were instructed to read each statement carefully and to circle the appropriate responses.
6. Students were encouraged to work at their own pace.
7. The individual scores were recorded to get the total score of each dimension in the current study (Incorporating prior knowledge in reading, interest in reading classes, and the use of the cognitive and the metacognitive strategies).
6. Findings of the Study

Table (1): One-Way Analysis of Variance Results

<table>
<thead>
<tr>
<th>Value (Variables)</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior Knowledge</td>
<td>Excellent</td>
<td>22</td>
<td>3.35</td>
<td>.292</td>
<td>.062</td>
<td>30.878</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Fair</td>
<td>48</td>
<td>2.97</td>
<td>.346</td>
<td>.050</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor</td>
<td>15</td>
<td>2.45</td>
<td>.392</td>
<td>.101</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>85</td>
<td>2.98</td>
<td>.447</td>
<td>.048</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest</td>
<td>Excellent</td>
<td>22</td>
<td>3.90</td>
<td>.691</td>
<td>.147</td>
<td>25.813</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Fair</td>
<td>48</td>
<td>3.07</td>
<td>.844</td>
<td>.122</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor</td>
<td>15</td>
<td>1.97</td>
<td>.827</td>
<td>.213</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>85</td>
<td>3.09</td>
<td>1.015</td>
<td>.110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive and Metacognitive Strategies</td>
<td>Excellent</td>
<td>22</td>
<td>3.16</td>
<td>.348</td>
<td>.074</td>
<td>27.821</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Fair</td>
<td>48</td>
<td>2.83</td>
<td>.383</td>
<td>.055</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor</td>
<td>15</td>
<td>2.14</td>
<td>.565</td>
<td>.146</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>85</td>
<td>2.80</td>
<td>.527</td>
<td>.057</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In Table (1), one-way analysis of variance shows the mean scores and the standard deviations on the three variables used in this study (Prior knowledge, Interest, Cognitive and Metacognitive strategies) for the three subgroups (Excellent, Fair, Poor). Moreover, analysis of the 41-Likert items on the test indicated that there were statistically significant differences at (α =.05) in Prior Knowledge, Interest and Cognitive and metacognitive strategies among the three sub-groups. Excellent group got the highest mean score on the three dimensions of the study (N=22, M1=3.35, M2=3.90, M3=3.16 with SD1=.062, SD2=.691, SD3=.348 respectively) While Fair subgroup ranked second (N=48, M1=2.97, M2=3.07, M3=2.83 with SD1=.050, SD2=.844, SD3=.383 respectively). Finally came the Poor sub-group (N=15, M1=2.45, M2=1.97, M3=2.14, SD1=.392, SD2=.827, SD3=.565 respectively). Post hoc test using Schaffe method was used for Multiple Comparisons as shown in Table (2) below.

Table (2): Scheffe's Post Hoc Tests for Multiple Comparisons

<table>
<thead>
<tr>
<th>Value (Variable)</th>
<th>(I) GROUP</th>
<th>(J) GROUP</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior Knowledge</td>
<td>Excellent</td>
<td>Fair</td>
<td>.38*</td>
<td>.088</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poor</td>
<td>.90*</td>
<td>.114</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Excellent</td>
<td>Fair</td>
<td>-.38*</td>
<td>.088</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poor</td>
<td>-.52*</td>
<td>.101</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Fair</td>
<td>Excellent</td>
<td>-.90*</td>
<td>.114</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poor</td>
<td>-.52*</td>
<td>.101</td>
<td>.000</td>
</tr>
<tr>
<td>Cylinder</td>
<td>Excellent</td>
<td>Fair</td>
<td>-.93*</td>
<td>.207</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poor</td>
<td>1.93*</td>
<td>.269</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Fair</td>
<td>Excellent</td>
<td>-.83*</td>
<td>.207</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poor</td>
<td>1.11*</td>
<td>.238</td>
<td>.000</td>
</tr>
<tr>
<td>Cognitive Metacognitive Strategies</td>
<td>Excellent</td>
<td>Fair</td>
<td>-.193*</td>
<td>.269</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poor</td>
<td>-1.11*</td>
<td>.238</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Excellent</td>
<td>Fair</td>
<td>-.33*</td>
<td>.106</td>
<td>.011</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poor</td>
<td>1.02*</td>
<td>.138</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Fair</td>
<td>Excellent</td>
<td>-.33*</td>
<td>.106</td>
<td>.011</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poor</td>
<td>0.69*</td>
<td>.122</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Poor</td>
<td>Excellent</td>
<td>-1.02*</td>
<td>.138</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fair</td>
<td>-0.69*</td>
<td>.122</td>
<td>.000</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the .050 level.
Table (2) above depicts that there were statistically significant differences at \((\alpha = .05)\) between Excellent and Fair in favor of Excellent, between Excellent and Poor in favor of Excellent and between Fair and Poor in favor of Fair on the three variables used in this study (Prior Knowledge, Interest and Cognitive and metacognitive strategies).

7. Discussion

The present study assessed EFL learners’ awareness of their cognitive engagement in English reading classes in three selected values (variables) based on the literature review. To answer the main research question of the current study: Are the EFL learners aware of their cognitive engagement while reading English academic materials? Three questions were considered:

1-Do EFL learners incorporate their prior knowledge to understand the reading text?
2- Are EFL learners interested in English reading classes?
3-Do EFL learners use cognitive or metacognitive strategies to understand the reading text? And what are the most prominent types of cognitive and metacognitive reading strategies employed by EFL learners when reading academic materials?

One way analysis of variance and Scheffe's post hoc multiple comparisons were used to answer the questions of the study. Moreover, EFL learners’ responses on the items of the questionnaire were classified based on their reading abilities (Excellent, Fair, Poor) to investigate how each sub-group is similar or different from the other two, and thus assess their awareness of their cognitive engagement. This study is a descriptive study that is mainly concerned with assessing learner’s awareness of their cognitive engagement.

In response to the first question, the data which were collected from the questionnaire showed that readers who rate their reading ability as excellent have a significantly higher use of their prior knowledge in reading than readers who rate their reading ability as Fair or Poor. In fact, there are two types of prior knowledge that are critical to the reading comprehension process which were represented in thirteen items: (1) world knowledge, and (2) text knowledge. World knowledge is the total amount of information a reader has accumulated through day-to-day living experiences (McNeil, 1987). Text knowledge, on the other hand, is information accumulated from reader's experiences with print (Lapp and Flood, 1992). Some EFL learners expressed that they think about what they know to help them understand what they read, and thus relate text content to their prior knowledge as part of constructing interpretations to the text.

This result indicates that prior knowledge becomes an important component to learn new information and construct meaning. In the current study, prior knowledge refers to what the readers already know or have experienced that they bring to the act of reading to construct meaning. Sadoski (1991) concluded that a reader's ability to comprehend and construct meaning is clearly dependent on his or her prior knowledge, his or her ability to access that prior knowledge base, his or her ability to use actively that prior knowledge, and his or her ability to use information available in the text. This relationship could almost be viewed as reciprocal in that prior knowledge promotes reading comprehension and reading comprehension extends and increases the prior knowledge of the reader. Thus, readers who are able to use their world knowledge or text knowledge (prior knowledge) in an attempt to comprehend the reading texts are cognitively engaged readers. Therefore, the activation of prior knowledge provides the rationale for making links between readers’ own prior knowledge and specific information in the text. Therefore, helping readers to become aware of, develop, access, organize, and actively use their prior knowledge is crucial to improve their reading comprehension. In response to the second question which asks about learners’ interests in the reading classes, the data indicated that Excellent as well as Fair learners enjoy reading classes, are willing to read, pay attention and above all are aware of the importance of English reading classes. On the other hand, Poor readers revealed low interests compared with Excellent and Fair readers as the data indicated.

Researchers expressed concerns about reading attitudes in classrooms where a general lack of interest prevails. They pointed out that those considered hesitant readers are not just the poor readers, but also include many capable readers. A major goal in the teaching of reading is to develop the desire to read so they will become life-long readers. Although instruction in reading strategies and skills are important, teachers must remember to provide time for students to enjoy good books and have positive reading experiences and this will make them more engaged. This may be especially crucial for those readers who experience difficulty in learning to read.
Regarding the third question which asks about the use of cognitive and metacognitive strategies, the test included 22 items which consisted of many cognitive and metacognitive strategies that readers may use to understand the reading texts.

The findings revealed that all readers regardless of their reading abilities used strategies while reading but in different rates and types as the mean scores indicated. For example, Excellent group got the highest mean score (3.16) in using strategies while reading, then Fair (2.83) and finally Poor (2.14). However, the types of strategies used by the three of them differed. Excellent, for example, take notes, scan and skim, select relevant information to help them understand, visualize information, critically analyze, evaluate the information, question themselves, generate hypotheses, predict text content, and make inferences when the information are not explicitly stated and critical to comprehension of the text. Fair readers; for example, preview the text to see what it is about, depend on their own English structure to comprehend the text, clarify the goal, read aloud, paraphrase, and relate important points in text to one another in order to understand the text as a whole. Poor, on the other hand, use pictures and titles of the texts to help them comprehend the text, read slowly, read aloud, guess the meaning of unknown words or phrases, and underline the main ideas. The collected data showed that the three groups shared the use of some strategies, such as, summarizing important information, using context clues to help them better understand what they read, guessing the meaning of unknown words or phrases.

Researchers distinguished between skilled and unskilled readers. Skilled readers, according to Snow, Burns, and Griffin (1998), are good comprehenders. They differ from unskilled readers in their use of general world knowledge to comprehend text literally as well as to draw valid inferences from texts, in their comprehension of words, and in their use of comprehension monitoring and repair strategies. Pressley and Afflerbach (1995) pointed out that skilled readers approach the reading task with some general tendencies. For example, they tend to be aware of what they are reading; they seem to know why they are reading; and they have a set of tentative plans or strategies for handling potential problems and for monitoring their comprehension of textual information. Unskilled readers, on the other hand, are quite limited in their metacognitive knowledge about reading (Paris & Winograd, 1990). They do relatively little monitoring of their own memory, comprehension, and other cognitive tasks and tend to focus on reading as a decoding process rather than as a meaning-getting process. To conclude, awareness of one’s cognitive processes while reading is the first important step toward achieving the type of thoughtful and constructive reading which is always emphasized by many current models of reading.

8. Conclusions and Recommendations

1-The findings obtained can be used for enhancing assessment, planning instruction, or conducting classroom or clinical research.
2-Awareness of one’s own cognitive engagement may provide a hint about how the students approach the reading task. For example, focusing only on guessing the meaning of every single word may indicate lack of awareness of other reading strategies and may also indicate the inadequacy of monitoring one’s own comprehension processes.
3-The information derived in this study will allow EFL learners to evaluate themselves in comparison with other readers and also to modify their conceptions about reading and learning from text.
4-Awareness provides personal insights into one’s own thinking and foster independent learning.
5-The information can provide teachers with useful means of assessing, monitoring, and documenting the type and number of the reading strategies used by learners.
6-Generalizability of the findings to different educational circumstances may be limited, and therefore, more studies are necessary.
9. References


