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UTILIZING THE COGNITIVE LEARNING-CENTERED APPROACH TO ENHANCE READING COMPREHENSION SKILLS AND METACOGNITIVE AWARENESS FOR EFL PROSPECTIVE TEACHERS AT FACULTIES OF SPECIFIC EDUCATION

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Abstract

The current study aimed at investigating the effectiveness of utilizing the cognitive learning-centered approach to enhance reading comprehension skills and metacognitive awareness for EFL prospective teachers at Faculties of Specific Education, Zagazig University. It was a one group pre-, post-test, quasi experimental design. The participants were forty fourth year English Department students at the Faculty of Specific Education, Zagazig University. The instruments were an English reading comprehension skills test and a metacognitive awareness scale for assessing the treatment group's reading comprehension skills and metacognitive awareness before and after the experiment. The researcher taught reading comprehension passages to the treatment group by using the cognitive learning-centered approach. The obtained data was statistically treated by using the SPSS. The results revealed that the treatment group's reading comprehension skills and metacognitive awareness were enhanced as a result of using the cognitive learning-centered approach in teaching them reading comprehension. Therefore, the cognitive learning-centered approach was found to be effective in enhancing reading comprehension skills and metacognitive awareness for EFL prospective teachers at Faculties of Specific Education.

Keywords: EFL Reading Comprehension Skills, Metacognitive Awareness, Cognitive Learning-Centered Approach.

INTRODUCTION

In English language learning reading is considered the most frequently used skill out of the four language skills. It is a necessary skill that students of foreign languages need to master to successfully learn the language and gain knowledge. It is multifaceted and requires simultaneous interaction of numerous cognitive, metacognitive, and linguistic skills and competencies.

Reading is an essential study skill in EFL learning. It is a complex cognitive process that helps students enhance many other skills. Academic and even technical courses demand substantial reading, so there is a need for student-readers to be acquainted with the strategies that can be utilized for improving their skills of reading. Reading comprehension, on the other hand, is a skill that is essential for everyday life activities. It allows learners to understand the written materials effectively and interpret visual symbols by retrieving the related background knowledge related to the words they read (Rraku, 2013).

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Reading Comprehension represents a meaning-making process that requires student-readers to contextualize their schemata with the writer's background. This leads to a high level of comprehension which therefore, directs their thinking process during reading to cognitively optimal outputs, especially in narrative and expository text comprehension (Yussof et al., 2013).

Baker et.al. (2002) stated that there are four difficulties that face EFL learners in improving their reading comprehension skills. The first is related to the limitations in vocabulary and background knowledge. The second is related to the breakdowns in strategic processing of text and how well students monitor their understanding of what they are reading. The third is related to limitation in knowledge of how various types of texts are organized and structured. For example, many students cannot even realize the distinction between the standard organization of narrative texts versus the organization of expository texts. Finally, when much attention is allocated to low-level processes, as word recognition, not enough resources are available to accomplish the higher-order processing involved in comprehension.

Ormrod (2004) defined metacognition as the activity of monitoring and controlling one's cognition. It can further be defined as what we know about our cognitive processes and how we use these processes in order to learn and remember. Metacognition refers to individuals' awareness of and control over the way they process information (Meltzer et al., 2007).

Metacognition or metacognitive awareness entails thinking of one's own thinking process and also organizing that process by arranging necessary strategies to employ, after observing his own performance by checking the effectiveness of the strategies and lastly by judging the strategy implementation on a given task (Chamot, 1998). A major claim of metacognitive research is that MS enables to reflect on one's own thinking, develop and use practical problem-solving skills to resolve learning difficulties (Joseph, 2009).

Moreover, metacognitive awareness allows individuals to plan, manage and monitor their own thinking in a way that directly effects performance and also gains the ability to master information and employ necessary strategies to solve problems more easily (Schraw & Dennison, 1994). In a sense, high metacognitive users are likely to plan for effective learning, organize when to use specific strategies, know how to check the use of strategies, learn how to integrate different strategies and evaluate the effectiveness of strategy use (Anderson, 2015).

Akin et. al. (2016) investigated the validity and reliability of the Turkish version of the Metacognitive Awareness Inventory. Participants were 607 university students who were enrolled in different programs at Sakarya University. Results of language equivalence indicated that the correlations between Turkish and English forms of the MAI were quite high (r = .93). As a result of a series of factor analyses eight subscales have emerged under the knowledge and regulation of cognition. These subscales were declarative knowledge, procedural knowledge, conditional knowledge, planning, monitoring, evaluation, debugging, and information management. The internal consistency of the entire inventory was .95. The item-total correlations ranged from .35 to .65 and test-retest reliability coefficient was .95. Results showed that Metacognitive Awareness Inventory is a valid and reliable instrument that can be

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used in the field of education. Cognition is a concept which refers to the mental activity involving thinking, remembering, learning and language usage during learning. It is a significant and comprehensive approach for such students who can focus on understanding information and concepts, students' retention and understanding will be improved. Cognitive learning-centered approach is a process of understanding and acquiring knowledge through thoughts, experiences and senses. It encompasses such as knowledge, attention, memory working, judgment and evaluation, reasoning, problem solving and decision making, comprehension and production of language. Cognitive processes use existing knowledge and generate new one.

Cognitive learning-centered approach is to help students to think and apply problem-solving strategies to craft activities that will make students apply logic, creativity, and close examination on the spot to produce an answer. Also to encourage them to question and debate on the content of the reading in order to gain a deeper understanding.

Davidko (2011) claimed that the cognitive approach depends mainly on learning mental processes in which perception and logical thinking information are presumed to be dependent on students' prior knowledge. As a result, language is considered a method for yielding cognitive mental content which helps students acquire faster and easier learning of the cognitive content of language. However, comprehension and acquisition of learning represent a cognitive process in which recognizing concepts is formulated and encoded in words of the language (lexicalization) interrelated with specific conceptual content. Some linguists postulated that content concepts are not engraved separately otherwise, they are acquired and brought to students' minds in a conceptual system and by experience with non-linguistic information. Scientists suggested that conceptual systems of language are responsible for organizing and categorizing every conceivable perspective of students' experience.

Tsvetkova (2016) clarified that the aim of the cognitive approach is to help students compare between the familiar and the new knowledge, grammatical rules comprehension, and memorization to the use of a language. The cognitive approach stresses using a model with a high cognitive value, which develops and improves logical thinking and enriches imagination in its implementation. Thus, it aims to convert students from passive recipients to active constructors of knowledge. Meanwhile, knowledge is obtained through individual participation and contact with the contents (information) rather than by imitation or repetition, as in traditional didactic memory-based models.

Suyitno et. al. (2017) investigated the cognitive learning strategies administered by foreign students in learning the Indonesian language. The students, engaged in the research, were restrained to critical language scholarship (CLS) students, specifically, 5 students at the beginner level. They were chosen amongst a large number of foreign students to enhance a more in-depth understanding of the cognitive learning strategies they administered. The data sources of the research were students' behaviors that demonstrated the cognitive learning strategies they researched in learning the Indonesian language. Data were gathered by interviews and observations and were analyzed by identifying, categorizing, demonstrating the data, and drawing conclusions. The results revealed that in learning the Indonesian language,

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students used different learning strategies. These strategies ranged from applying their understanding of language structures and punctuations to strategies that drew on higher-level thinking processes. BIPA students selected and applied the learning strategies relying on the types of learning tasks they encountered. Apart from that, individual-factors and the learning environment was also prominent in students' selection of learning strategies.

Aims and Significance of the Study

Study Aims

The aim of the current was to investigate the impact of cognitive learning-centered approach on EFL learners' reading comprehension skills and metacognitive awareness performance.

Significance of the Study

1. EFL prospective teachers as it might help them to enhance their reading comprehension skills and metacognitive awareness.
2. EFL in-service teachers as it might provide them with an effective approach to teach reading comprehension skills and enhance their students' metacognitive awareness.

LITERATURE REVIEW

Reading Comprehension

Reading can be considered as an active and interactive process of communication that enhances the process of language acquisition and generates an interest to develop general language competence.

According to Yee (2010) reading comprehension is the process through which known words are converted into a meaningful idea. It is a complex activity requiring the activation of many cognitive skills. It begins with decoding words, accessing their related meanings, processing words related to one another, and then grasping the ideas within the text to understand the overall meaning. If the reader can decode and comprehend the printed word, he/she has acquired a necessary skill that provide a strong foundation for future success in reading.

Radojevic (2009) stressed the importance of reading comprehension as it relies on two kinds of information: one is received from the text and the other is received from readers' memory. It is an interactive mental process between readers' previous knowledge about a given topic. The knowledge of past experiences and prior knowledge in the readers' memory are critical in assisting them to construct meaning from a text. By relating new ideas encountered in a text to familiar ideas and mental construction, readers can be engaged in reading different materials successfully and learn new information that is required for success in an EFL setting.

According to Shanahan and Beck (2006) reading comprehension is necessary for successful reading as it includes the construction of meaning more than passive remembering. It is a form of active and dynamic thinking which includes interpreting information through one's own knowledge, inferring what the author does not tell explicitly, and many other cognitive processes. Thus, comprehension can be considered as the act of understanding and interpreting

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the information within a text, as it requires thoughtful interaction of a reader with a text.

Williams and Moran (1989) declared that there are four types of reading comprehension (skimming, scanning, extensive reading and intensive reading). Those four types of reading are recognized "on the basis of observable behavior, notably speed of reading."

A. Skimming

Gower, Phillips and Walters (1995) described skimming as when reading a newspaper, the reader often glances over the headlines until, she/he finds an article that catches her/his interest. If she/he is in a hurry, she/he reads through the article quickly-probably not reading every word, may be reading only the first sentence of each paragraph. When she/he does this, she/he is actually reading for the general sense of gist of the article she/he wants to know what is in the article but only on a rather superficial level.

A. Scanning

According to Harmer (1999), scanning is the students' ability to read a text for particular bits of information they are searching for. While Beilby (1999) assured that scanning means that a reader's brain is seeking specific information, such as words, names and answers to specific questions, that is meaningful to him/her faster than he/she can consciously pay attention to.

B. Extensive Reading

Richards and Schmidt (2010) stated that extensive reading means reading in quantity and in order to gain a general understanding of what is read. It is intended to develop good reading habits, to build up knowledge of vocabulary and structure and to encourage a liking of reading. Intensive reading is generally at a slower speed and requires a higher degree of understanding than extensive reading.

C. Intensive Reading

Grellet and Francoise (1981) indicated that intensive reading is a correctness activity including reading for detail.

Richards and Schmidt (2010) believes that intensive reading requires a higher degree of understanding and a slower speed than extensive reading.

Macalister (2011) pointed out that, there are four learning goals of intensive reading:

- Focusing on a new language as grammar and vocabulary.
- Focusing on ideas as topics and themes.
- Learning new skills as making inferences and identifying main ideas.
- Paying attention to text features as cohesion and genre structure.

Reading comprehension is a thinking activity as the reader uses his/her mental abilities to deal with the text. It occurs when extracting meaning from the printed texts or symbols. It is expected that individuals read and get the idea at different levels of comprehension. In other

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words, levels of comprehension mean different levels of comprehension. In other words, levels of comprehension mean different depth of understanding and different analysis of meaning.

According to many researchers who investigated the levels of comprehension, there are four levels such as literal, critical, creative and inferential levels.

Abu-Shamla, (2009) classified reading comprehension skills into four levels as:

1. Literal level; read and understand exactly what is on the page. The teacher can ask students to find information and ideas that are explicitly stated in the text. Whitten (2004) stated that the literal level as what is actually stated in terms of facts and details, memorization, and surface understanding.

According to EL-Kahlout (2010) the literal level as reading the lines, which occurs when the reader interacts with the written form of language in some direct straightforward manner such as, recognizing the main idea, identifying supporting details, and determining the meaning of the vocabularies according to the text.

Carnine et al. (2020) pointed out that literal comprehension, or reading on the lines, engages a student in the process of extracting information explicitly stated in a passage. This level of understanding depends on learners' word-level processing capacity, or their ability to exactly identify individual words and apprehend the meaning created by the combination of words into longer strings including propositions and sentences (Perfetti et al. 2005).

Goff (2010) stated that the components of literal comprehension include text, facts and sequence. A mental integration of these three building-block components is vital in attaining literal comprehension of at text: context can be envisaged as the whole mental image created by the interrelations and interdependencies of facts; facts as the core information put across in the reading text; and sequence as the chronological procession of events.

Jude and Ajayi (2012) pointed out that literal comprehension involves students' ability to identify the exact meaning of the vocabulary utilized in the passage, read for information, as well as their capability to paraphrase or summarize what they understand from the text.

2. Inferential level; read between the lines. Students read critically and analyze carefully what they read. Alptekin (2006) assured that in inferential comprehension, or reading between lines, readers transcend the literal meaning of the text to understand the implications of the text through knowledge-driven processes such as synthesizing, generalizing, summarizing, and extrapolating; therefore, inference by its very nature, involves reasoning beyond the text.

Vacca et al. (2009) viewed that at the inferential level, the reader is expected to engage in the process of manipulating information in the text to search for relationships among the main idea and details which is helpful in interpreting and drawing conclusions about the author's intended meaning.

According to El-Naggar (2020) the inferential level is in which the reader is able to go beyond the text and deduce other details. This level is related to imply and mean further than what is actually said. The information is distracted by questions like why, what if, how in order to read

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critically and get relationships among ideas. This level takes the reader on a subjective reading, where he/she starts to play a role as an active reader; the reader faces the text.

Grabe and Stoller (2019) pointed out that this level entails developing entire intellectual images that facilitated students' think sensibly about a topic, recounting it to their experience and linking it to additional information. Principally, student need to go beyond what is inserted and read critically reading and analytically for deeper meanings through merging textual information with their own ideas.

3. Critical level; read beyond the lines. At this level students can differentiate between facts and opinion, recognize persuasive statements and judge the accuracy of the given information in the text. According to Huggins (2009) the critical level is indicated with the readers opinion about the text and making judgment of what they have read based on many factors that include the quality of writing, the determination if specific information is an opinion or a fact, the objectivity of the author, and if the text is reasonable or not.

Arici (2012) defined critical reading as "ideal reading". He supports that critical reading is being in a communicational interaction with the text and the ability to comment and evaluate the text. An individual's ability to keep what he has read in his mind for a long time can only be possible with critical reading.

According to Özdemir (2007) critical reading can be conducted by people who can be called "intellectual", he also emphasized that the way to enlightenment passes through critical reading, developing a personal competency limitation for critical reading.

4. Creative level; read beyond the lines and create new ideas. This level occurs after the students have understood the text and started to draw new ideas about the text. According to Marin and Halpern (2011) unlike critical reading, creative reading is a reading that involves creative thinking. Creative thinking skill is Identified with the emerging of new ideas or the combination of several ideas in the form of new ideas.

The creative level is related to some situations or contexts in which one can grasp diverse concepts entailed in the deep structure of the written text

(El-Kahlout, 2010).

Metacognitive Awareness

Jaleel (2016) explained that metacognitive awareness means being aware of how you think. Drikes (1985, as cited in Bakkaloglu, 2020) defined the awareness as metacognition. He added that this awareness affects the comprehension of what is they learned and how to utilize the new information to solve a problem, as well as development of effective learning, improvement of problem-solving and critical thinking skills. Metacognitive awareness permits thinking and thinking on the processes and products of learning, and its control over learning and self-assessment.

Ahmadi et al (2013) asserted that metacognitive awareness is a term that is referred to as an individual reader awareness of using her/his thinking processes for achieving reading

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comprehension. This awareness is to control the thinking or cognitive process of the reader which leads to his/her reading strategies.

According to Hartman (1998) metacognitive awareness is important because it effects comprehension, acquisition, implementation, and retention of learning. It also affects critical thinking, learning efficiency, and problem solving as well. Metacognitive awareness permits self-regulation over thinking on the learning process and products.

Abou-Hadid (2000) indicated that developing students' cognitive and metacognitive skills helps them be self-directed learners, responsible for their learning, able to self-instruct themselves, able to understand the reading comprehension texts by the minimum help of the instructor.

Cognitive Learning-Centered Approach

According to Forehand (2005) learning is not obtained by chance, it should be sought with ardor and attended to with diligence. Learning teaching identifying educational goals, and thinking are all complicated concepts interwoven in a complicated web.

According to Tsvetkova (2016) the aim of cognitive approach is to help students compare between the familiar and the new knowledge, grammatical rules comprehension, and memorization to the use of a language. The cognitive approach stresses using a model with a high cognitive value, which develops and improves logical thinking and enriches imagination in its implementation. Thus, it aims to convert students from passive recipients to active constructors of knowledge. Meanwhile, knowledge is obtained through individual participants and contact with the information rather than by imitation or repetition, as in traditional didactic memory-based models. According to Akdeniz et al (2016) the cognitive learning processes can be classified into the following points:

- **Attention:** it is the power that concentrates on certain stimuli and it constitutes the focal point of the conscious. It is a kind of heading in order to respond to stimuli, limitations about perceptional processes and producing answers. Stimuli coming from outside reach the sensory record first and is sent to the short term memory and kept without making any changes. Attention determines which information will pass to the short time memory and which will not. Selective attention is under the control of the individual and efficient learning depends on the selective ability of the individual.
- **Perception:** it is the process of describing the stimuli received through sensory organs or the process of turning sensory signals into meaningful experiences. Perception of the signals differs from one another. For example, self-organized the learners can perceive among the environmental stimuli coming into the sensory memory.
- **Repetition:** it is kept in short term memory longer. Coding is carried out and information is not lost before being sent to the long-term memory. Stimuli should head towards reaction. Perception has an active and selective quality, and an individual's perception of certain stimuli's situations is based on efficient preparation and directions.

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- **Coding:** it is the transfer of information by means of relating the information in long-term memory to the information in short-term memory. Each learner carries out coding in the most meaningful way. Four basic elements are included in enriching coding by means of increasing the meaningfulness of information: Efficiency, organization, articulation, and memory supporting clues.
- **Storing:** it involves the idea that information is established on verbal units including structures of subject and verb. Information is stored in long-term memory. During the process of storing, information is stored in the appropriate part among episodic, semantic, and procedural memories. Thus, the process of retrieving is carried out correctly.
- **Retrieving:** it is the way for finding and activating the information stored in the long-term memory to uncover the clues that will retrieve the stored information in this process.

METHODOLOGY

Design of the Study

The currents study adopts the Quasi-experimental group (one group pre-post-test) that measures the effect of the independent variable which is (Cognitive Learning-Centered Approach) on the dependent variables which are (reading comprehension skills and metacognitive awareness) among Faculties of Specific Education students, Zagazig University.

Participants

Participants of the study included 40 EFL prospective teachers enrolled in the Faculty of Specific Education, Zagazig University during the Academic year 2022/2023. The present study followed the one-group pre-posttest design (paired sample).

Instruments

The researcher prepared and used the following instruments and materials to fulfill the aim of the present study:

1. An EFL reading comprehension checklist.
2. An EFL reading comprehension test.
3. A metacognitive awareness scale.

RESULTS

It was hypothesized that “There is a statistically significant difference between the mean scores of the treatment group in the pre and the post-reading comprehension skills test administration, in favor of the post-reading comprehension skills test administration. A paired samples t-test was used as shown in Table 1.

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Table 1: t- test results of comparing of the pre- and post-measurements of reading comprehension Skills Test.

Skills	Test	N	Mean	Standard deviation	t.value	def.	Sig
Literal aspect	Pre	40	7.25	0.94	13.7	39	0.05
	Post	40	10.5	1.1			
Inferential aspect	Pre	40	8.5	1.09	14	39	0.05
	Post	40	11.8	0.78			
Critical aspect	Pre	40	4.8	0.89	8.9	39	0.05
	Post	40	6.7	1.04			
Creative aspect	Pre	40	5	0.95	9.4	39	0.05
	Post	40	7.5	1.1			
Total	Pre	40	24.38	1.45	25	39	0.05
	Post	40	34.48	2.26			

Note. Significant at (0.05)

Table 1 indicates that there is a statistically significant difference between the pre and the post of the treatment group in favor of the latter in reading comprehension skills test, t-value being (25). It is significant at (0,05) level. So, the first hypothesis was validated.

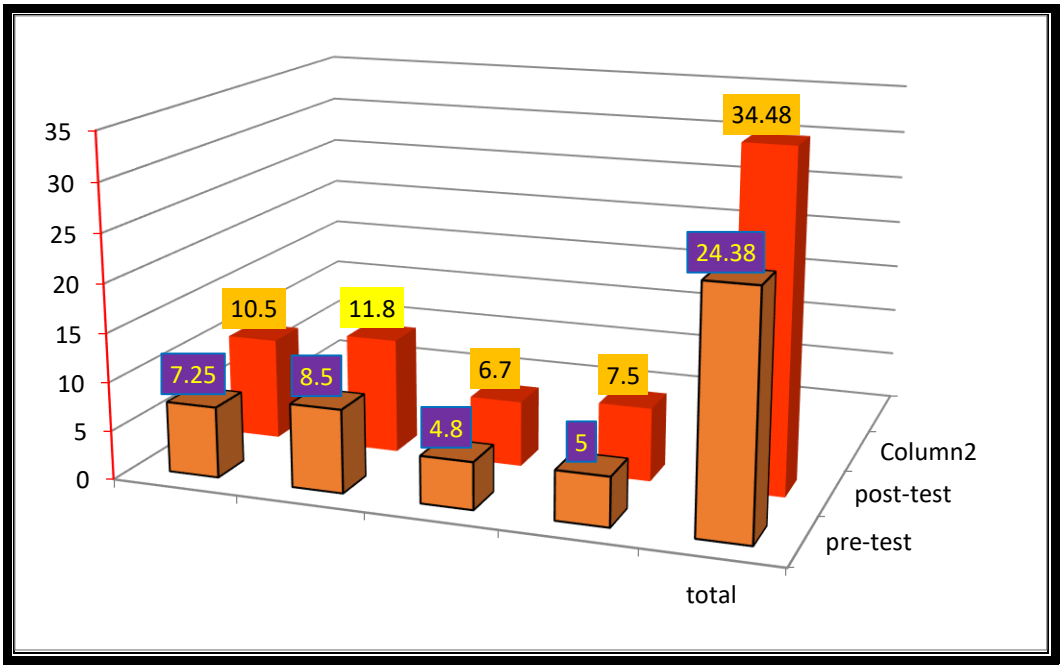

Figure 1: The mean scores of the pre- and post-measurements of reading comprehension skills test.

Figure 1 above shows the mean scores of the pre and post test of the treatment group measurements in reading comprehension skills test as well as a comparison between them. As shown, the mean score of the pre measurement is higher than the mean score of the post measurement in reading comprehension skills test. Such findings have proved that the proposed

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cognitive learning-centered approach has a positive effect on developing the students' reading comprehension skills.

It was hypothesized that" There is a statistically significant difference between the mean scores of the treatment group in the pre- post metacognitive awareness scale results, in favor of the post scale administration. A paired samples t-test was used to verify this hypothesis as shown in Table 2.

Table 2: t- test results of comparing the pre -post administration of the treatment group Metacognitive Awareness scale.

Skills	Test	N	Mean	Standard deviation	Df	t. value	Sig
Metacognitive Awareness	Pre	40	62.3	13.2	39	12.5	**0.05**
	Post	40	102.4	19.1			

Note. Significant at (0.05)

From table 2, it can be inferred that the obtained t value is (12.5) significant at,(0,05). So, the third hypothesis was validated.

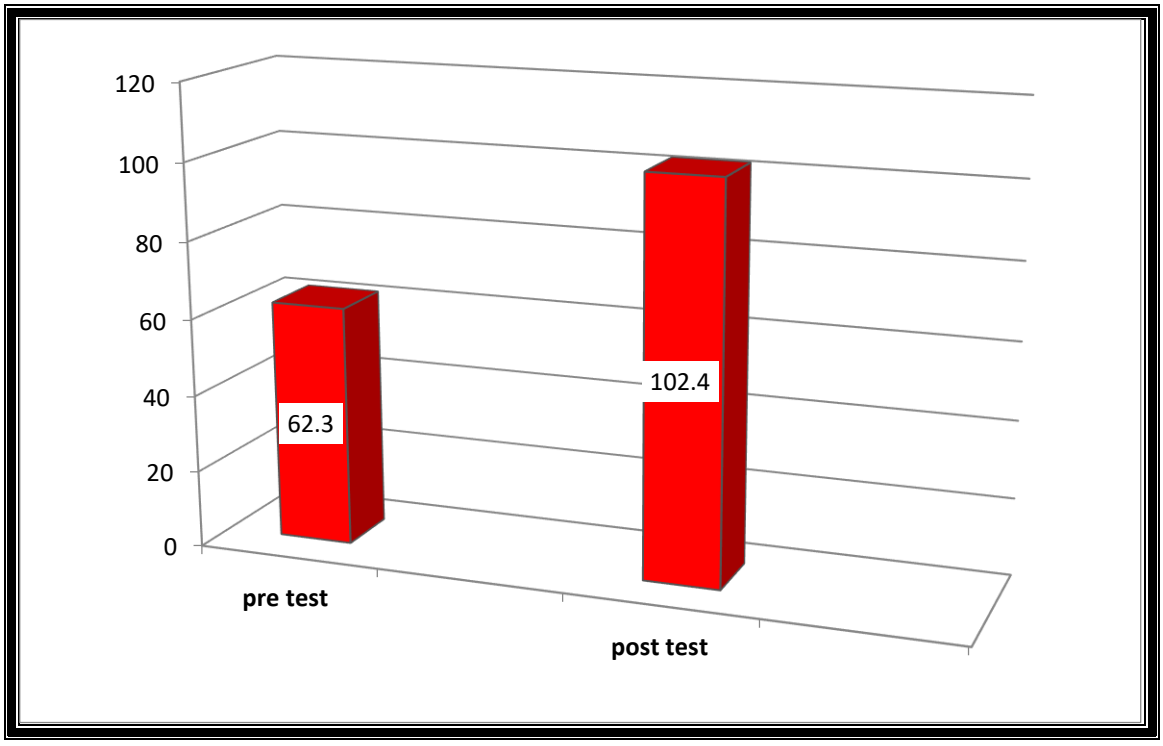

Figure 2: The mean scores of the pre- and post-measurement for Metacognitive Awareness scale

It was hypothesized that" cognitive learning centered approach has a positive effect on reading comprehension Skills". Cohen's (1988) equation was used to verify this hypothesis as shown in Table 3.

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Table 3: Results of Cohen's Equation comparing the pre to post administrations of the experimental group in reading comprehension skills test

Skills	Test	N	Mean	Standard deviation	t.value	def.	sig	Effect size
Literal aspect	Pre	**40**	**7.25**	**0.94**	13.7	39	**0.05**	**0.77**
	Post	**40**	**10.5**	**1.1**				
Inferential aspect	Pre	**40**	**8.5**	**1.09**	14	39	0.05	**0.79**
	Post	**40**	**11.8**	**0.78**				
Critical aspect	Pre	**40**	**4.8**	**0.89**	8.9	39	**0.05**	**0.78**
	Post	**40**	**6.7**	**1.04**				
Creative aspect	Pre	40	5	0.95	9.4	39	0.05	0.8
	Post	40	7.5	1.1				
Total	Pre	40	24.38	1.45	25	39	0.05	0.83
	Post	40	34.48	2.26				

Note. Significant at (0.05)

The impact is measured through Cohen's equation.

As indicated in Table 3 the final value of Cohen's equation for the treatment group, comparing its pre to the post administrations in reading comprehension skills Test is (0.86). Based on that, it has been concluded that there are impacts of cognitive learning-centered approach on the students' reading comprehension skills.

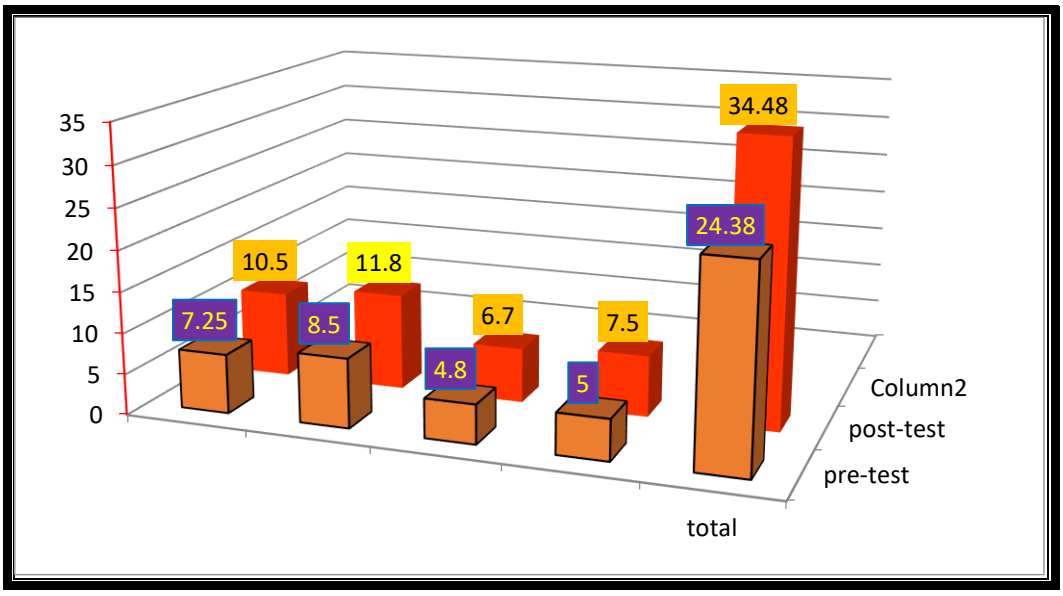

Figure 3: The mean scores of the pre- and post- measurements of reading comprehension skills Test.

Figure 3 above shows the mean scores of the pre and post test of the treatment group measurements in reading comprehension skills test as well as a comparison between them. As shown, the mean score of the pre measurement is higher than the mean score of the post measurement in the reading Skills Test. Such findings have proved that cognitive learning-

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centered approach has a positive effect on developing the pupils' reading comprehension skills. It was hypothesized that cognitive learning-centered approach has a positive effect on metacognitive awareness". Cohen's equation was used to verify this hypothesis as shown in Table 4.

Table 4: Results of Cohen's equation comparing the pre to post administrations of the treatment group in metacognitive awareness scale.

Skills	Test	N	Mean	Standard deviation	df	t. value	Sig	Effect size
Metacognitive Awareness	Pre	40	62.3	13.2	39	12.5	0.05	0.78
	Post	40	102.4	19.1				

Note. Significant at (0.05)

Cohen's equation was used to verify the impact of the strategies. The impact was measured through the Cohen's equation:

As indicated in table 4, it is obvious that the final value of Cohen's equation for the treatment group, comparing its pre to the post administrations in metacognitive awareness scale is (0.87) significant at (0.05). Based on that, it has been concluded that there is a positive effect of cognitive learning-centered approach on pupils' metacognitive awareness.

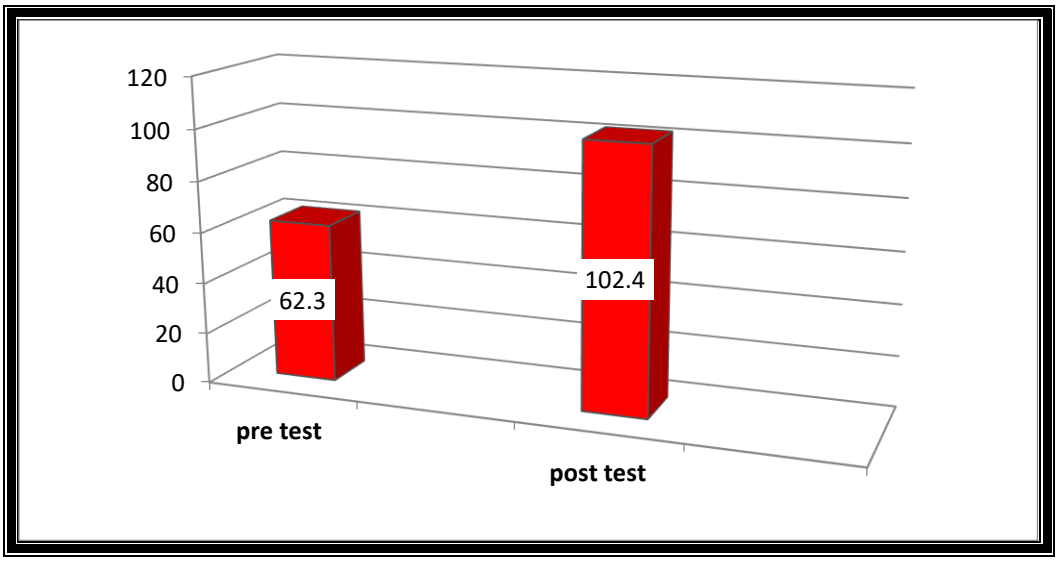

Figure 4: The mean scores of the pre- and post-measurement for metacognitive awareness scale

Figure 4 above shows the mean scores of the pre and post test of the treatment group measurements in metacognitive awareness scale as well as a comparison between them. As shown, the mean score of the pre measurement is higher than the mean score of the post measurement in metacognitive awareness scale measurement. Such findings have proved that cognitive learning-centered approach has a positive effect on developing learners' metacognitive awareness.

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DISCUSSION

The main objective of the present study is to develop English reading comprehension skills and metacognitive awareness for EFL prospective teachers at the Faculties of Specific Education, Zagazig University by using the cognitive learning-centered approach. The results of the present study showed that the cognitive learning-centered approach improved the treatment group's reading comprehension skills and their metacognitive awareness. These improvements can be due to the usefulness of using the cognitive learning-centered approach as an effective approach for developing reading comprehension skills and metacognitive awareness for EFL prospective teachers at Faculties of Specific Education, Zagazig University.

Recommendations

In the light of the current study's results and conclusion, the following recommendations could be provided:

1. EFL instructors should pay more attention to using cognitive learning strategies to enhance students' performance and cognition towards English language skills.
2. EFL instructors should realize the importance of utilizing cognitive activities in enhancing EFL student-teachers reading comprehension skills and metacognitive awareness.
3. EFL textbooks should place more emphasis on improving reading comprehension skills and metacognitive awareness skills.
4. EFL in-service teachers should get more training on teaching reading comprehension and how to utilize a cognitive learning-centered approach in the teaching of reading comprehension and metacognitive awareness.
5. Practicing reading comprehension and metacognitive awareness should include cognitive learning activities and strategies to enable learners to read interactively.
6. Extracurricular activities based on a cognitive learning-centered approach should be used in order to attract learners' attention to the different tasks of reading comprehension skills.
7. Learners should be familiarized with the use of innovative reading strategies and techniques in their classrooms.
8. Reading comprehension course books taught in schools and universities should include interesting topics that are relevant to young and adults' lives and their rapidly changing world.
9. EFL teachers should continuously encourage learners to employ successful strategies of coping whenever they face a problem in understanding a challenging text.
10. EFL teachers should be trained on the different techniques of employing a cognitive learning-centered approach within their EFL classrooms.

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Research

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