

THE APPLICATION OF TELEGRAM-BASED SHORT STORY TASKS ON IRAQI INTERMEDIATE EFL LEARNERS' READING COMPREHENSION ABILITY AND THEIR CRITICAL THINKING: A CASE STUDY OF KUFA UNIVERSITY

Ahmed Rahi Alhelal*

Islamic Department, Faculty of Basic Education, University of Kufa/ Najaf/ Iraq

<https://doi.org/10.54922/IJEHSS.2025.0898>

ABSTRACT

This research aims to examine the impact of Telegram-based short story activities on the reading comprehension skills and critical thinking abilities of intermediate EFL learners. This research included 60 Iraqi EFL learners aged 19 to 25 enrolled at Kufa University at an intermediate level. They were randomly allocated into two homogeneous groups: the experimental group and the control group. Five short stories were presented to both groups throughout ten treatment sessions, with the sole distinction being that the experimental group received instruction via Telegram (a public social network), whereas the control group was taught using conventional classroom methods. A researcher-developed reading comprehension assessment comprising 40 multiple-choice questions was administered to both experimental and control groups as a pre-test and post-test, alongside the Watson Glaser critical thinking questionnaire, which was also utilized as a pre-test and post-test. The post-test was conducted immediately after the conclusion of teaching, and subsequently, participants completed a standardized critical thinking questionnaire from Watson Glaser. The mean scores of both groups' pre-and post-tests were ultimately compared using an independent sample t-test. The results demonstrated the substantial impact of Telegram-based short story assignments on learners' reading comprehension skills and critical thinking abilities.

Keywords: Telegram-based short story tasks; Reading Comprehension ability; Critical thinking.

1. INTRODUCTION

Currently, social networks are embedded in almost every facet of individuals' lives, including higher education: assignments are submitted and evaluated on various platforms such as Google, Yahoo, Instagram, and Telegram. Multiple studies (e.g., Cope & Kalantzis, 2000) demonstrate that the incorporation of technology may augment motivation, facilitate learning, and elevate student performance. Nikolai and Pavel Durov founded Telegram in 2013. The instant messaging program Telegram is compatible across several platforms. It allows users to quickly share and receive location data, photos, videos, audio, and text communications among individuals and groups of friends, classmates, teachers, and students. Telegram is compatible with mobile devices (Android, iOS, Windows Phone, Ubuntu Touch) and desktop operating systems (Windows, Mac OS, Linux). In February 2016, Telegram said it had 100 million monthly active users and delivered 15 billion messages daily. Presently, educational learners may interact effortlessly using various messaging systems, such as Telegram, by only hitting a button, enabling them to share their experiences with individuals globally (Tawiah, Nondzor & Alhaji, 2014). The advent of modern technologies has enhanced the teaching and learning of many language skills and subskills.

This study aimed to investigate the effect of Telegram-based short story tasks on Iraqi EFL learners' reading comprehension ability and their critical thinking.

Statement of the Problem

The researcher aims to investigate the effect of Telegram-based short story tasks on Iraqi EFL learners' reading comprehension ability and their critical thinking. Here, the researcher tries to send Telegram-based short stories in order to guide EFL learners in the right direction and encourage them to read, comprehend, and think critically.

Research Questions

To this end, the researcher posed the following research questions:

Q1: Do Telegram-based short story tasks have any significant effects on Iraqi EFL learners' reading comprehension ability?

Q2: Do Telegram-based short story tasks have any significant effects on Iraqi EFL learners' critical thinking?

Research Hypotheses

HO1: Telegram-based short story tasks do not have any significant effects on Iraqi intermediate EFL learners' reading comprehension ability.

HO2: Telegram-based short story tasks do not have any significant effects on Iraqi intermediate EFL learners' critical thinking.

Significance of the Study

Numerous studies (e.g., Cope & Kalantzis, 2000) indicate that the integration of technology can enhance motivation, promote learning, and increase student performance. Young learners can engage in a lively context and create creative presentations by utilizing digital sources, such as Telegram-based stories. Using Telegram-based short story tasks as an interesting method for improving reading comprehension ability can be helpful in society as a whole because we can train understandable and critical thinkers and problem solvers generations. Also, Telegram, as a social network, can be a valuable instrument for instruction, reading comprehension, and the ability to engage in a joyful context for students and teachers in language learning classrooms.

Therefore, the researcher aimed to investigate the effect of Telegram-based short story tasks on Iraqi EFL learners' reading comprehension ability and their critical thinking. So, the present study was conducted with the hope that using social networks like Telegram can be a valuable instrument for instructing reading comprehension ability through short stories.

2. REVIEW OF LITERATURE

Internet-Based Instructions

The number of pupils interested in internet-based and online courses and instructions is increasing, and a multitude of them are currently in progress (Bryan & Hegelheimer, 2007). Kearsley (1995) discovered that online courses offer several advantages, such as enhanced student satisfaction, improved examination scores, and a greater capacity for critical thinking. User-

friendliness, self-paced learning, and 24-hour access are additional advantages of internet-based instruction that have been mentioned. Other research has demonstrated that computer-assisted instruction enables educators to present the same material in a more condensed timeframe (Jain & Getis, 2003, p. 2). New methods of learning and teaching English as a second/foreign language (ESL/EFL) have been developed as a result of the advancement of the Internet. For example, the Internet is a highly effective instrument for learning and teaching due to its availability of authentic learning resources. Attewelle et al. (2009) contend that several substantial limitations characterize mobile learning. They illustrated that mobile learning is not a solitary solution for facilitating learning. Other technology-pedagogy combinations may be appropriate for this purpose.

Telegram-based

Telegram is a widely used open-source messaging service. It provides a straightforward and efficient interface, as well as a completely free service without any expenditures. Additionally, it is ad-free. Pavel Durov, a Russian-born entrepreneur, founded Telegram in August 2013. However, the "Russian WhatsApp" is currently competing with the industry's leading players, Viber and WhatsApp. Telegram has achieved widespread popularity, and it has become the most downloaded messaging application in the Google Play Store. In over forty countries, including Germany and the United States, Telegram has become the most popular social network among free downloaded apps, surpassing other social network apps such as WhatsApp and Facebook. Hill and Laufer (2003) conducted a study to investigate the impact of computer-based dictionaries on the incidental vocabulary acquisition of EFL learners. The study's findings suggested that using computer-based dictionaries would increase the number of Chinese EFL students participating in accidental learning. Kukulska-Hulm and Shield (2007) state that recent technology has facilitated mobile-assisted vocabulary learning by taking advantage of the distinct properties of mobile phones, such as flexibility, immediacy, content relevance, portability, social interaction, connectivity, and individuality. Some researchers (Crowe and van't Hooft, 2006; Klopfer, Squire, and Jenkins, 2002; Kukulska-Hulm and Shield, 2007) have studied the acquisition of vocabulary in the second language through the use of mobile technology for tasks that are specific to the learned vocabulary. Additionally, they've evaluated several individualized learning methods to increase the vocabulary size of language learners in a short timeframe (Chen and Chung, 2007; Stockwell, 2007).

Reading Comprehension Ability

Reading is the paramount tool for academic environments (Anderson, 1994). According to Celce-Murcia et al. (1995), proficiency in reading a second language is the paramount method for independent language acquisition. Alptekin (2006, p. 494) characterized reading 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 text base of comprehension (to understand what the text says) and the situation model of interpretation (to understand what it is about).

Historically, reading was considered a passive skill, as Chastain (1988) noted, because readers do not generate any output. However, readers are perpetually engaged with the reading passage and

their prior knowledge. The social dimension of reading is not addressed by conventional reading methods, which focus on the meaning of words as isolated concepts. In recent decades, there has been a significant shift in the perspective regarding the instruction of reading comprehension. The following significant perspectives regarding the instruction of reading comprehension were examined by Uso-Juan and Martinez-Flor (2006). During the 1960s, when environmentalist ideologies were prevalent, learners' reading abilities were restricted to comprehending printed words, and decoding skills were prioritized. The creation of Chomskyan theories, which explain the learning of languages on a cognitive level, increased the range of abilities that are read beyond the simple decoding of the alphabet. The study of reading comprehension is centered on the mental process of reading; the reader is assumed to reconstruct the author's intended message. Readers are not considered to be passive participants; instead, they are involved in the interpretation of the author's intended message. However, the interactive perspective not only recognizes the importance of cognition in the understanding of a reading passage but also hypothesizes that readers create the meaning of the texts within a culture. As a result, learners with different socio-cultural perspectives would have different understandings of a written passage. It's commonly understood that reading in a second language is associated with reading in the first language. Reading proficiency acquired in L1 is transferable to L2 (Williams, 2006). However, Williams (2006) observed that the reliance on the first language (L1) for reading can be swiftly disregarded by referencing minority groups or immigrants who are learning an L2 in the first instance. As a result, low reading ability is not necessarily caused by L1 or an inadequate reading regimen. Researchers have identified two critical factors that contribute to the disparity in reading comprehension: the knowledge of how to read methods and second language ability (Guo and Roehring, 2011). Numerous studies have demonstrated the value of vocabulary knowledge in the second language (Qian, 1999; 2002). The claim is that reading comprehension is impaired by the understanding of L2 syntax at two levels: low-level syntax awareness and high-level syntax awareness. Low-level syntactic awareness is the capacity to comprehend the grammatical structures of language within sentences. High-level syntactic awareness is characterized by a specific awareness of syntax, including two specific abilities: (1) the ability to recognize and express the rules of syntax and (2) the capacity to manage the way they are understood (Layton et al., 1998). Research on metacognition and reading comprehension indicates a robust correlation between the two.

Sen (2009) conducted a study in Turkey that demonstrated that pupils who employed metacognitive strategies experienced a more significant improvement in their reading abilities than those who did not. Metacognition, as defined by Sen (2009), is "awareness in the individual of his/her systemic thinking about his/her learning process" (p. 2301). Metacognitive awareness is transferable from L1 to L2 reading, as per Bernhardt and Kamil (1995). Metacognitive strategies, as noted by Pressley et al. (1995), allow readers to focus on the control, monitoring, and evaluation of the reading process. Cubukco (2008) cited a variety of studies that illustrated the utilization of metacognitive strategies by expert readers. The metacognitive strategy appears to be a critical component of successful comprehension.

Theoretical Background of Critical Thinking

The literature on critical thinking originates from two major academic fields: philosophy and psychology (Lewis & Smith, 1993). Sternberg (1986) identified a third essential strand of critical thinking in the realm of education. Many academic disciplines have developed methodologies for defining critical thinking, each reflecting their interests. Each of these methodologies is examined in further detail below.

The philosophical approach.

The works of ancient thinkers like Socrates, Plato, and Aristotle as well as modern thinkers like Matthew Lipman and Richard Paul illustrate this philosophical perspective. This approach is more concerned with the hypothetical than with the actual, outlining the characteristics of a critical thinker instead of their abilities (Lewis & Smith, 1993; Thayer-Bacon, 2000). According to Sternberg (1986), this school of thought holds that the important thinker is a perfect example of human potential under ideal conditions. So, "perfections of thought" provide the theoretical framework within which Richard Paul (1992) discusses critical thinking (p. 9). As an example of this fixation on the perfect critical thinker, consider the following: the American Philosophical Association's consensus picture of the ideal critical thinker (Facione, 1990): someone who is curious, open-minded, flexible, fair-minded, wants to be well-informed, understands different points of view, and is prepared to step back and look at things from different angles. Philosophers and those who work within the philosophical tradition place a premium on certain traits and principles of thinking. For example, according to Bailin (2002), critical thinking is defined as a distinct way of thinking that follows certain rules or standards of correctness and sufficiency. Furthermore, according to Sternberg (1986) and Lewis and Smith (1993), the philosophical method has traditionally placed a premium on the application of principles of formal logic. There is a problem with this technique of describing critical thinking as it is not necessarily grounded in reality (Sternberg, 1986). This perspective may not add much to conversations on human thought processes as it places too much emphasis on the perfect critical thinker and their abilities.

The cognitive psychological approach.

Two significant points distinguish the philosophical stance from the cognitive psychological one. Instead of focussing on ideal beliefs or circumstances, cognitive psychologists—particularly those who belong to the behaviorist school and use an experimental research paradigm—mainly study how people think (Sternberg, 1986). A second point is that cognitive psychologists usually characterize critical thinking in terms of the behaviors and acts that vital thinkers are capable of rather than the qualities of an ideal critical thinker or a set of criteria for "good" reasoning. A critical thinker's skill set or process flow is often included in this approach to defining critical thinking (Lewis & Smith, 1993). The second part of the cognitive psychological method has been characterized by its detractors as reductionist because, according to Sternberg (1986), it breaks down the intricate relationship between information and competence into a set of separate processes. Because behaviorism requires observable definitions of notions, Bailin (2002) argues that seeing critical thinking as a set of discrete stages or abilities is a fundamental misconception. Cognitive psychologists, according to this line of reasoning, have focused on the outward manifestations of cognition—behaviors and skills like analysis, interpretation, and question formulation—because the thought process itself is invisible. Several philosophers have cautioned against equating critical thinking with its component abilities, arguing that the latter do not

constitute essential thinking in and of itself (Van Gelder, 2005; Faccione, 1990). It is possible to "go through the motions" or "follow the steps" of critical thinking without really thinking critically, according to certain proponents of the philosophical tradition (Bailin, 2002).

The educational approach

Lastly, educators have also engaged in discourse regarding critical thinking. This category encompasses Benjamin Bloom and his colleagues. One of the most frequently cited sources for educational practitioners when it comes to teaching and assessing higher-order thinking skills is their taxonomy for information processing skills (1956). Bloom's taxonomy is hierarchical, with "comprehension" at the base and "evaluation" at the uppermost level. Kennedy et al. (1991) frequently refer to the three most outstanding levels (analysis, synthesis, and evaluation) as critical thinking. The educational approach is distinguished from the philosophical and psychological traditions in that it is founded on years of classroom experience and observations of student learning (Sternberg, 1986).

On the other hand, some have observed that the educational approach is restricted by its lack of specificity. The taxonomy's concepts are not sufficiently defined to provide the necessary guidance for instruction and assessment (Ennis, 1985; Sternberg, 1986). Furthermore, the frameworks that have been developed in education have not been subjected to the same level of rigorous testing as those that have been developed in either philosophy or psychology (Sternberg, 1986).

3. METHODOLOGY

Participants and Setting

To test the hypothesis of this research, 60 (60 out of 70-75) females and males between the ages of 19 and 25 studied English at Kufa University in Iraq. The participants were selected according to their intermediate language proficiency level. The Oxford Placement Test (OPT henceforth) (2010) was applied to specify the extent to which the groups are homogenous. The participants were divided into two homogenous groups of 30: control and experimental groups. The target Telegram-based short story tasks appeared in the pre-test one before the treatment was done in 15 sessions (about two - months) for approximately 30 minutes in each session. A post-test was administered after treatment to examine the learners' reading comprehension ability. To explore the learners' critical thinking before and after the treatment, the researcher used the Questionnaire of Watson Glaser (1925).

Instrumentation

To conduct the study, the following instrumentations and materials were employed:

3.3.1 Oxford Placement Test (OPT). The Oxford Placement Test (www.oxfordenglishtesting.com 2010) is designed to measure a test taker's ability to understand a range of grammatical forms and the meanings they convey in a wide range of contexts. (see Appendix A). The test was shown to be valid and reliable in terms of the examined criteria. It assessed students' overall language proficiency through 50 items. Since the participants should have met the requirements met by intermediate learners, only those who obtained the minimum score to meet the intermediate criteria of the test were selected. The researcher used this test to verify the homogeneity of subjects.

Researcher – made Reading Comprehension Test as pre and post-test.

A researcher-made Reading Comprehension test was used as a pre-test and post-test. The researcher designed it. The test encompassed 40 True, False, and multiple-choice items. The entire test involved 5 Telegram-based short stories to measure the participants' comprehension skills before the instructions to activate schemata and give hints or background knowledge to learners. Two experts measured the content validity of the test. Koronbakh's Alpha measured the reliability.

The Standard Questionnaire of Watson Glaser Critical Thinking

The Watson Glaser Critical Thinking test questions look at the individual's ability in 5 parts: to make correct inferences, to recognize assumptions, to make deductions, to come to conclusions, and to interpret and evaluate argument. The questionnaire of Watson Glaser Critical Thinking included 80 items in 5 parts. In each part, there was a guide hint that participants should study carefully before answering the test. In this study, the meaning of critical thinking was the grade that participants gave for each part. The entire grade of the questionnaire is 80, and the maximum grade in each part is 16. For each correct answer, one grade was given to the participant, and as a result, the whole grade of the test was estimated by the summing of correct answers. If the total grade on the test was lower than 54, it means the ability of critical thinking of the participant was weak; between 54-59 means intermediate, and more than 60 means strong.

Procedure

At first, an Oxford Placement test was administered among 75 Kufa universities, of whom 60 participants were chosen to ensure the homogeneity of the population. They were randomly divided into two groups; the Experimental group consisted of 30, and the control group included 30 students. The participants in both groups took a researcher-made reading comprehension test as a pre-test consisting of 40 multiple choice, True/ False questions in the first week of the study to ensure that their prior knowledge does not affect the result. At the beginning of the research sessions, the participants were trained by the researcher in Telegram-based short stories. In this study, the researcher was responsible for teaching materials to learners. Also, a questionnaire of Watson Glaser's critical thinking was conducted in this study. The W-GCTA measures the essential skills that are necessary for presenting a particular point of view in a clear, structured, well-reasoned way and convincing others of your argument. The test questions look at the individual's ability to make correct inferences, recognize assumptions, make deductions, come to conclusions, and interpret and evaluate arguments. At the end of the period, the immediate post-test, consisting of 40 true/false and multiple-choice reading comprehension tests, was used to examine whether learners had any improvements in reading comprehension ability and critical thinking. It was conducted immediately after the treatment and under the same conditions as the pre-test. The test was for investigating the effect of the teaching method (employing Telegram-based short story tasks) on reading comprehension ability and critical thinking in the experimental group. The participants were not informed about the post-test.

4. RESULTS AND DISCUSSION

Test of normality

Before conducting statistical tests, the researcher used the Kolmogorov-Smirnov statistic, which is a test of normality that works with a small sample to decide about the normal distribution of data. If the level of significance is more significant than 0.05, then the data is standard.

Table1

: Normality statistic test for experimental and control groups

	Test	Kolmogrove- Smirnov		Shapiro-Wilk	
		Statistic	Sig	Statistic	Sig
Experimental	Pre-test	0.440	0.200	0.320	0.198
	Posttest	0.046	0.097	0.054	0.101
Group	Pre-test	0.210	0.200	0.410	0.200
	Post-test	0.034	0.068	0.285	0.201

4.3 Descriptive Statistics

In this section, the researcher presented data with descriptive statistics tables. The mean and standard deviation of the test results of both the experimental and control groups are presented in tables. To demonstrate differences between groups to answer the research question, the researcher used descriptive statistics for pre-tests, post-tests, and delayed post-tests of experimental and control groups.

First hypothesis: Telegram-based short story tasks don't have any significant effects on Iraqi EFL learners' reading comprehension ability.

Table2

Descriptive for pre-test of two groups on reading comprehension ability

	N	Mean	Std. Deviation	5% Confidence Interval for Mean		Minimum	Maximum
				Lower Bound	Upper Bound		
Experimental group	30	8.240	.34976	5.5443	0.1057	6.00	0.00
Control group	30	7.830	.60817	5.3473	0.6527	5.00	1.00

Table3

Descriptive for post-test of two groups on reading comprehension ability

	N	Mean	Std. Deviation	95% Confidence Interval for Mean		Minimum	Maximum
				Lower Bound	Upper Bound		
Experimental group	30	35.530	3.91345	31.2536	39.6214	32.00	39.00
Control group	30	28.620	4.28227	25.5715	31.2785	26.00	32.00

To prove the hypothesis, the researcher first conducted two groups randomly: an experimental (30) and a control group(30). Before treatment, the researcher showed that the two groups were homogenous and at the same level. For this reason, the researcher used a two-sample independent t-test; the following table shows the results:

Table 4

Independent Samples t-Test of pre-test of two groups on reading comprehension ability

Mean Difference	T	df	Sig.(2-tailed)	95% Confidence Interval of Difference	
				Lower	Upper
0.5900	0.270	28	0.788	-2.59480	5.03558

As is demonstrated in the descriptive statistics of groups in the pre-test, there was no significant difference in the scores for the experimental (M= 9.25, SD= 2.14) and control (M= 8.95, SD= 2.36) groups. As a result, the two groups are homogenous before conducting treatment.

According to the statistics, $P < 0.05$, so as a result, the mean in the control group and experimental group are different. The below table shows that the mean in the experimental group (M= 35.5, SD= 3.91) is more than the mean in the control group (M= 28.6, SD= 4.28).

Table5

Independent Samples t-Test of post-test of two groups on reading comprehension ability

Mean Difference	t	df	Sig.(2-tailed)	95% Confidence Interval of Difference	
				Lower	Upper
6.9100	6.849	28	0.000	4.36183	9.23817

As explained in the previous chapter, there was a significant difference in the scores for the experimental group after treatment (M= 35.5, SD= 3.91), while there was no significant difference in the scores for the control group (M= 28.6, SD= 4.28). For this reason, the researcher used a paired sample t-test. The following table showed that there was no significant difference between the scores for the control group and $p > 0.05$.

Table 6

paired Samples t-test of the control group on reading comprehension ability

Mean Difference	t	df	Sig.(2-tailed)	95% Confidence Interval of Difference	
				Lower	Upper

0.7900	0.662	29	0.513	-1.06510	3.09368
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The following tables demonstrated the results of the experimental group's scores before and after treatment, as well as the significant difference; the researcher observed that the pre-test and post-test scores of the experimental group were different. Additionally, because of the difference in mean, it's possible to deduce that Telegram-based short story assignments have a positive effect on reading comprehension and critical thinking in EFL students.

Table 7

Paired Samples t- Test of Experimental group on reading comprehension ability

Mean Difference	t	df	Sig.(2-tailed)	95% Confidence Interval of Difference	
				Lower	Upper
-3.617	-5.4231	29	0.000	-8.214	0.980

The results of the pre-test and post-test of the control group were investigated through paired t-tests. In Table 9, the results were demonstrated. There was a significant difference in the score of the pre-test (M= 27.8, SD= 4.60) and post-test (M= 28.62 SD=4.28)

Second hypothesis:

Telegram-based short story tasks don't have any significant effects on Iraqi EFL learners' critical thinking.

Table 8

Descriptives for a pre-test of two groups on critical thinking

	N	Mean	Std. Deviation	95% Confidence Interval for Mean		Minimum	Maximum
				Lower Bound	Upper Bound		
Experimental group	30	40.72	5.12576	34.2531	44.2586	33.00	45.00
Control group	39	41.39	4.87596	35.2584	44.8547	34.00	44.00

Table 9

Descriptives for post-test of two groups on critical thinking

	N	Mean	Std. Deviation	95% Confidence Interval for Mean		Minimum	Maximum
				Lower Bound	Upper Bound		
Experimental group	30	56.258	4.86593	52.6589	59.5748	51.00	60.00
Control group	30	42.247	4.72589	34.2577	43.9584	34.00	43.00

As explained in the previous chapter, to prove the hypothesis, the researcher first conducted two groups randomly: an experimental group (30) and a control group(30).

Before conducting statistical tests, the researcher used the Kolmogorov-Smirnov statistic, which is a test of normality that works with a small sample to decide about the normal distribution of data. If the level of significance is more significant than 0.05, then the data is standard.

Table 10

Table of normality

Test	Kolmogorov-Smirnov		Shapiro-Wilk		
	Statistic	Sig.	Statistic	Sig.	
Experimental	Pre-test	0.087	0.083	0.066	0.198
	Posttest	0.065	0.200	0.076	0.200
Group	Pre-test	0.091	0.058	0.073	0.200
	Posttest	0.083	0.077	0.265	0.247

Before treatment, the researcher showed that the two groups were homogenous and at the same level. For this reason, the researcher used a two-sample independent t-test; the following table shows the results:

As demonstrated in the descriptive statistics of groups in the pre-test, there was no significant difference in the scores for experimental ($P > 0.05$) and control groups. As a result, the two groups are homogenous before conducting treatment.

Table11

Independent Sample t- Test of pre-tests of experimental and control groups on critical thinking

Mean Difference	t	df	Sig.(2-tailed)	95% Confidence Interval of Difference	
				Lower	Upper

-0.666 -0.172 28 0.864 -3.401 2.069

The descriptive statistics in the post-test demonstrated a significant difference in the scores of the experimental (M= 56.2, SD= 4.86) and control (M= 46.2, SD= 4.72) groups.

The statistics indicate that $P < 0.05$. As a result, the average in the control group and experimental group is different. The descriptive table demonstrated that the average in the experimental group (M= 56.2, SD= 4.86) is greater than the average in the control group (M= 42.2, SD= 4.72).

Table 12

Independent Samples t- Test of post-tests of experimental and control groups on critical thinking

Mean Difference	t	df	Sig.(2-tailed)	95% Confidence Interval of Difference	
				Lower	Upper
14.011	4.158	28	0.000	9.358	18.663

As previously mentioned, the experimental group's scores were significantly different after treatment (M=56.2, SD=4.86), whereas the control group's scores were unchanged (M=46.2, SD=4.72). Because of this, the researcher employed a paired sample t-test. The following table demonstrated that the scores for the control group and the $p > 0.05$ group were not significantly different.

Table 13

paired Samples Test for the control group on critical thinking

Mean Difference	t	df	Sig.(2-tailed)	95% Confidence Interval of Difference	
				Lower	Upper
0.856	1.202	29	0.124	-2.358	4.070

The following tables demonstrated the results of the experimental group's scores before and after treatment, as well as the significant difference, and the researcher observed that the pre-test and post-test scores of the experimental group were different. Additionally, because of the mean difference, it's possible to deduce that Telegram-based short story assignments have a positive effect on critical thinking in EFL students.

Table 14***paired Samples Test for the experimental group on critical thinking***

Mean Difference	t	df	Sig.(2-tailed)	95% Confidence Interval of Difference	
				Lower	Upper
15.533	6.915	29	0.000	9.256	22.809

According to the results, the researcher observed that the treatment (Telegram-based short stories tasks) had a positive impact on EFL learner's critical thinking and increased their ability.

Results of Research Questions

Results of the first research question.

Q1. What are the significant effects of Telegram-based short story tasks on the reading comprehension ability of Iraqi EFL learners? To address the initial research question, the researcher randomly assigned participants into two groups: the experimental group (30) and the control group (30). Before treatment, the researcher demonstrated that the two groups were homogeneous and at an equivalent level. Consequently, the researcher employed two-sample independent t-tests (refer to Tables 4 and 5). The descriptive statistics for the pre-test groups (table 4) indicate no significant difference in scores between the experimental group (M= 9.25, SD= 2.14) and the control group (M= 8.95, SD= 2.36). The two groups are homogenous before treatment implementation.

The statistics indicate that $P < 0.05$ suggests a significant difference between the means of the control and experimental groups. Table 5 indicates that the mean for the experimental group (M= 35.5, SD= 3.91) exceeds that of the control group (M= 28.6, SD= 4.28). Tables 6 and 7 present the scores of the experimental group before and following treatment. The researcher noted a significant difference between the pre-test and post-test scores in the experimental group. The analysis of the mean differences indicates that Telegram-based short story tasks positively influence reading comprehension and critical thinking skills among EFL learners.

Results of the second research question.

Q2. Do Telegram-based short story tasks significantly impact the critical thinking of Iraqi EFL learners? To address the second research question, the researcher initially formed two randomly assigned groups: an experimental group consisting of 30 participants and a control group comprising 30 participants. Before conducting statistical tests, the researcher employed the Kolmogorov-Smirnov statistic, a normality test suitable for small samples, to assess the normal distribution of the data. If the level of significance exceeds 0.05, the data is considered standard. Refer to Table 10. Before treatment, the researcher demonstrated that the two groups were homogeneous and at an equivalent level. Consequently, the researcher employed a two-sample independent t-test, with the results presented in Table 11.

The descriptive statistics of the pre-test groups indicated no significant difference in scores between the experimental and control groups ($P > 0.05$). The two groups are homogeneous before treatment implementation. The descriptive statistics from the post-test indicate a significant difference in scores between the experimental group ($M= 56.2$, $SD= 4.86$) and the control group ($M= 46.2$, $SD= 4.72$). The statistics indicate that $P < 0.05$ suggests a significant difference between the means of the control and experimental groups. Table 12 indicates that the mean of the experimental group ($M= 56.2$, $SD= 4.86$) exceeds that of the control group ($M= 42.2$, $SD= 4.72$). As detailed in the preceding chapter, the experimental group exhibited a notable difference in scores post-treatment ($M=56.2$, $SD=4.86$), whereas the control group showed no significant difference in scores ($M=46.2$, $SD=4.72$). The researcher employed a paired sample t-test for this purpose. Table 13 indicates that there was no significant difference between the scores of the control group, with $p > 0.05$. Table 14 presents the scores of the experimental group before and following treatment. The researcher noted a significant difference between the pre-test and post-test scores in the experimental group. The analysis of mean differences indicates that Telegram-based short story tasks positively influence critical thinking among EFL learners.

5. DISCUSSION

Based on the findings of this study, the results showed that using Telegram-based short story tasks increases the reading comprehension ability of EFL learners and their critical thinking. Also, using Telegram as an educational network increases external motivation, willingness to learn, and the ability to concentrate and positively affect the achievement of the students. The findings of the study hypotheses can be summarized as follows:

The use of brief stories based on Telegram is of great importance because it enables learners to contribute more effectively to the attainment of their learning objectives and caters to the needs and abilities of all students. Furthermore, the utilization of Telegram educational groups in the context of education can facilitate the resolution of intricate tasks. Also, the researcher can observe that a relatively significant quantity of achievement has occurred in various areas of the three levels of reading skills, as evidenced by the statistical data, analysis of the student's performance, and research hypotheses. The results of the application of the Telegram-based short story approach in reading class suggest that students made more significant progress at the literal level than in the other two levels. This progress was demonstrated in the following areas: comprehension of the text, interpretation of its meanings, identification of the primary idea, sequencing of ideas following the context, handling of facts, data, traits, and setting, and the recognition of why, when, and where questions. In addition to these, it is crucial to ensure that the progress and teaching and practice of the Telegram-based short stories approach cannot be the sole cause of the improvement in students' reading comprehension skills at various levels. It is possible that the researcher's distribution of worksheets and her request for students to work in pairs and groups was the cause of the social environment and atmosphere.

Additionally, the lesson's well-organized stages, which include a progression from one to the next, may contribute to its effectiveness. Additionally, it may be the consequence of the researcher's explicit instructions and guidance, which are accompanied by a diverse array of techniques that cater to the unique needs of each pupil. This demonstrates the superiority of the

Telegram-based approach over the conventional approach. All of these studies confirmed that the utilization of Telegram-based short story assignments is an effective method for the enhancement of reading comprehension abilities. Hence, the researcher is sure that this experiment has achieved its primary objective, which is developing students' reading skills since it deals with the most preferable and enjoyable part of technology for all students, which is a popular social network (Telegram-based short story tasks). This part is delightful and engaging for students. Students have benefited a lot from this strategy in that they learn many lessons and values that are necessary for them in their lives due to their critical thinking.

On the other hand, the researcher faced some problems while applying this experiment. One of these problems is the students' shortage of vocabulary to express their opinions, but the researcher encouraged them to speak either in Farsi or English. In short, the researcher can conclude that Telegram-based short story tasks are practical as an educational strategy because they are believable, memorable, and entertaining.

6. CONCLUSION

The result of this study indicated that social networks such as Telegram could significantly affect EFL reading comprehension ability and critical thinking.

It can be summarized as follows: Using Telegram-based short story tasks is of great significance because it meets the needs and levels of all students and can contribute to achieving their learning objectives more effectively than the ordinary method. In addition to that, complicated tasks can be resolved by using this popular social network (Telegram) strategy in teaching. To have more creative and motivated students, we can use Telegram effectively and positively. Furthermore, by revisiting the research assumptions of the study, statistical data, and evaluating student performance, the researcher may indicate that a significant degree of success has transpired throughout several domains of the three levels of reading skills. The implementation of the CALL approach in reading classes has yielded results indicating that students demonstrated more significant progress at the literal comprehension level compared to the other two levels. They improved in understanding the text, deriving meanings, identifying the main idea, organizing ideas sequentially based on context, and addressing factual information, data, characteristics, setting, and responding to questions regarding the why, when, and where. It is essential to clarify that advancements in students' performance across all levels of reading comprehension abilities cannot be only ascribed to the instruction and use of the Telegram strategy. The social context and mood established by the researcher during the distribution of worksheets and the assignment of pair and group work may be a contributing factor. The effect may also stem from the meticulously structured phases of the lecture, with each phase seamlessly transitioning to the next. This may also stem from the many methodologies that accommodate individual variances among students, along with explicit instructions and assistance from the researcher, therefore fostering critical thinking. This proves the good impact of the Telegram approach over the ordinary approach. All these studies have assured that using Telegram-based short story tasks is an effective way to develop reading comprehension skills and critical thinking. Hence, the researcher is sure that this experiment has achieved its primary objective, which is developing students' reading skills since it deals with the most preferable and enjoyable part of technology for all students. This part is pleasant for students. Students have benefited a lot from this strategy in that they learn many

lessons and values that are necessary for them in their lives. In this way, they can discuss in Telegram groups, they can respect each other's views, and they can accept a reasonable analysis and interpretation. They can be a critical person, not a neutral one.

In short, the researcher can conclude that using Telegram as an educational strategy is effective because it is believable, memorable, and entertaining.

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