The Effect of Graphic Novels on EFL Learners’ Reading Comprehension

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ABSTRACT

Saudi EFL learners struggle to read English and encounter obstacles that prevent improvement. Recently, graphic novels were introduced as alternative teaching and learning materials in academic settings. Nevertheless, research in this area remains limited. Therefore, this study examines the effect of reading a graphic novel on reading comprehension and investigates the perceptions of EFL teachers and students regarding the deployment of graphic novels in their classrooms. Sixty-six intermediate school students were divided into experimental and control groups. After the reading sessions, both groups completed reading comprehension tests. Results revealed that reading graphic novels positively affects reading comprehension as the experimental group achieved superior results to the control group. Both EFL teachers and students believe that graphic novels help in improving reading skills. The study concludes by discussing related implications.

Key words: Graphic Novel, Reading Comprehension, Teacher Perceptions, Student Perceptions, EFL

INTRODUCTION

Reading is a vital language skill, one that forms the foundation upon which communication in the form of writing, listening, and speaking can be developed (McDonough, Christopher, & Masuhara, 2013). Reading is improved by enabling learners to master critical components of language, including comprehension, vocabulary, grammar, and spelling (Al-Mansour & Al-Shorman, 2011). This research promotes a new teaching method involving graphic novels, an alternative that provides language teachers with an effective teaching tool while providing Saudi EFL learners with an enjoyable opportunity to enrich their language skills, particularly reading. This method also enhances motivation and encourages self-regulated learning. Previous studies have revealed the pivotal role of graphic novels in language teaching and learning, as well as enhancements in student motivation. Additionally, the illustrations in graphic novels broaden the readers’ comprehension of the text. To date, there has been very little research in the field regarding the use of graphic novels to teach EFL. Therefore, this study sheds light on the effect of graphic novels for developing the reading comprehension of Saudi EFL learners. The study offers suggestions for teachers regarding the implementation of this new instructional medium, one that will allow students to benefit considerably; in particular, from the motivational impetus that graphic novels can provide which magnifies students’ desire to increase their reading.

LITERATURE REVIEW

Effect of Graphic Novels and Comics on Reading Comprehension

Reading comprehension is defined as “the process of deriving meaning from text” (Woolley, 2011, p. 15). Due to the large similarity between graphic novels and comics, both of them are considered in reviewing the previous research in this area. Comics may play a crucial role in facilitating teaching and learning and will have a positive effect on reading comprehension, as revealed by several studies (Liu, 2004; Sabbah, Masood, & Iranmanesh, 2013; Merç, 2013). To establish whether comic books could produce positive outcomes for learners’ reading comprehension of narrative text, Setyawan (2018) investigated the effect of comics with junior high school students. Although the participants in this study were weak learners with poor reading comprehension,
the utilisation of comics revealed definite improvement, and the learners sufficiently understood the story. When the participants were asked to rate comics as a teaching tool, the majority described them as being useful and effective (Setyawan, 2018).

The Role of Reading in Vocabulary Development

Vocabulary is a vital part of learning a new language. A rich vocabulary enables the learner to effectively acquire a language (Darsalina, Syamaun, & Sari, 2016). For teaching vocabulary, Williams (2013) suggested using multiple delivery methods. Further, there is a direct relationship between vocabulary development and reading comprehension. A good example is found in a study conducted by Lapp, Wol, and Stahl (2011) where 77% of the participating students found comic strips being read to them on their subconscious learning. The findings revealed incidental improvements in vocabulary acquisition after listening to comic strip stories featuring unfamiliar words. While Darsalina et al. (2017) and Ahmadi et al. (2017) focused on the use of comics to teach new words, Başal, Aytan, and Demir (2016) concentrated on learning idiomatic expressions. The findings of their research showed that teaching idioms using comics was more effective than traditional exercises. In sum, a richer vocabulary could result in improved reading skills.

Therefore, reading comics can foster vocabulary acquisition. Wood (2015) asserted that the graphic connections of words and expressions with meaning help learners expand their vocabulary. While reading a comic book, the meanings of many words can be acquired indirectly. To determine the effect of reading comics on incidental vocabulary acquisition, Darsalina et al. (2017) conducted a study on twenty-one high school students. The students read comic strips for four periods, and the results revealed satisfactory improvements in their vocabulary development. Similarly, Ahmadi, Sadighi, and Gorjian (2017) examined the influence of students’ “listening” to comic strips being read to them on their subconscious learning. The findings revealed incidental improvements in vocabulary acquisition after listening to comic strip stories featuring unfamiliar words. While Darsalina et al. (2017) and Ahmadi et al. (2017) focused on the use of comics to teach new words, Başal, Aytan, and Demir (2016) concentrated on learning idiomatic expressions. The findings of their research showed that teaching idioms using comics was more effective than traditional exercises. In sum, a richer vocabulary could result in improved reading comprehension skills.

Graphic Novels and Teacher Perceptions

Reading graphic novels has a significant impact on language learners (Crawford, 2004). James (2016) claimed that if teachers considered 2comics as a worthless teaching aid, they could not reach their expected effectiveness. An excellent example is found in a study conducted by Lapp, Wol, Fisher, and Frey (2011) where 77% of the participating teachers were not interested in reading graphic novels, thus indicating their limited background with the medium. The data of this study were collected using a questionnaire which revealed that the teachers did not use graphic novels in their classrooms even though they held positive perceptions of them. There are similarities between the attitudes expressed by the teachers in this study and those described by James (2016) and McGrail, Rieger, and Doepker (2017).

Although most teachers believe in the benefits of comics in teaching, they do not use them. For those who do, usage is rare. As James (2016) found, many teachers feel insecure about using comics in the classroom, with their reluctance fomented primarily by the pessimism of parents and general society regarding the questionable educational value of graphic novels (Clark, 2013). The main criticisms levelled against graphic novels were their gratuitous use of violence, cruelty, and danger; therefore, perhaps this could be overcome if the teachers were more attentive when choosing suitable works (Hansen, 2012). To circumvent this issue, Block (2013) suggested that “professional organisations and teacher librarians” should collaborate to approve only the most appropriate comic books as pedagogic content (p. 9). Moreover, as the majority of teachers are unfamiliar with how comics can be incorporated in their lesson delivery, specialised training would augment their effectiveness.

METHODOLOGY

Research Questions

This study investigated the effect of reading on the development of EFL learners’ reading comprehension. In this respect, it provides answers to the following research questions:

1. Can the use of graphic novels for teaching EFL learners improve reading comprehension?
2. How do EFL learners and teachers perceive the use of graphic novels for teaching reading comprehension?

Research Design and Methods

This experimental research investigated the effect of teaching graphic novels on EFL learners’ reading comprehension. It also reported the perceptions of English-language teachers regarding the use of graphic novels as an alternative lesson delivery method. One test and two questionnaires were conducted to explore the impact of graphic novels on reading comprehension for intermediate school EFL students and teachers. Two groups were randomly assigned to attempt the reading comprehension test. The experimental group was tested with graphic novel reading, while the control group was tested only with a narrative text format with no illustrative support. The same reading material and reading comprehension questions were given to both groups. After taking the test, only the experimental group was asked to respond to the questionnaire. Lastly, an additional questionnaire was given to the English language teachers to record their points of view regarding the use of graphic novels for teaching English.

Participants

The population for this research consisted of a group of eighth-grade students attending an intermediate public school. The sample included sixty-six female students, all native Arabic speakers with four years of English language studies in a school in Saudi Arabia. Two classes out of
four were used as the sample, with each class consisting of thirty-three female students. The first class was the experimental group, which took the test after reading a chapter of a graphic novel. The other class was treated as the control group. They attempted the same test, however, their material was limited to the same text converted into a narrative format. The age of the participants was between thirteen and fourteen years old. A simple random technique was used to select the sample from the eighth-grade population.

Instruments

Three instruments were employed in this research. The first two, a test and questionnaire, were designed for the students, while the third was a questionnaire designed specifically for the teachers. For students, there were two reading comprehension tests. The text for the first was taken from the first chapter of a graphic novel, El Deafo, by Cece Bell (See appendix A). The text in the second test was extracted from the same graphic novel and converted into narrative form with no accompanying pictures or illustrations. The same reading comprehension questions were used for both tests, including multiple-choice, true-false, and fill-in-the-blank formats. Questions were designed to test the students’ ability to identify the central idea, prediction, recognition, and inference. After completion, the students’ scores for the two tests would be compared.

Also, a questionnaire was created to record student perceptions about using graphic novels as a tool to improve their reading comprehension. It consisted of eight true-false and multiple-choice items using Likert scales as well as one open-ended question. The questionnaire sought data regarding specific student attitudes toward the use of graphic novels in language classrooms. For teachers, the questionnaire was designed to measure the perceptions of Saudi female English-language teachers regarding the use of graphic novels for teaching and learning EFL. It consisted of fifteen short and easily answered items divided into two sections: personal questions to collect general demographic information about the teachers, plus questions based on Likert scales to gather teachers’ opinions about the use of graphic novels. In addition to the structured multiple-choice responses, there was one optional open-ended question.

Procedures

Various procedures were followed in this research. The first was the search for appropriate graphic novel reading material, described as a work of medium length that was appropriate for the age and current language level of the young adult English learners. The selection, El Deafo, is a true story and popular graphic novel. Reading comprehension questions were then designed to cover different aspects of reading, such as detecting the main idea, inferences, vocabulary, and identification of specific information. A student questionnaire was designed in addition to the test.

To conduct the study in a school, permission from educational supervisors was required. The head of the intermediate school granted approval, after which it took two days to perform the reading exercise and subsequent test. The first day was reserved for piloting and random selection of participants, and the actual study was conducted on the second day. The graphic novel reading test was first employed on the experimental class followed by the narrative-text reading test taken by the control class. For both classes, instructions were given to the students prior to their attempts. Meanwhile, the teacher questionnaires were distributed among the Saudi teachers of English.

Pilot Study

A pilot study is an essential stage in any research. Before scaling the procedures to a full research project, two pilot studies were undertaken. The first included a reading test attempted by a random sample of seven eighth-grade students. The aim was to ascertain the clarity of the test questions, as well as calculate an appropriate duration for the test. Results of this pilot revealed that the reading itself was clear, but some questions required editing to become more self-evident. It was determined that it would take around thirty minutes for the students to complete the test, and the test was followed by a simple and brief questionnaire. The second pilot study involved two female Saudi English teachers. This questionnaire determined that term definitions were necessary, and two question types needed to be modified to ensure clear responses.

Data Analysis

The research questions were analyses using a popular software application named Statistical Package for Social Sciences (SPSS version 24). Several methods were applied to analyse the data. Initially, descriptive statistics (frequencies, percentages, means, and standard deviations) were calculated to measure the general tendencies of the data. For validity and reliability, Pearson correlation coefficients and Cronbach’s alpha coefficient were utilised. For analysing the responses of the questionnaires, both one-way ANOVA and the Scheffe Test were employed. The first determined the significant differences between the mean of the responses, while the latter was used to adjust for multiple comparisons. In addition, a t-test was used to discover the difference between the means of the control and experimental groups. Moreover, to determine the meaningful effect of the test, Cohen’s d was adapted to measure the two means.

RESULTS

Can Graphic Novel Improve the Reading Comprehension of EFL Learners?

The first research question examined whether reading graphic novels would affect students’ reading comprehension. Therefore, an independent t-test was calculated to identify the statistical differences between the means of the test scores of the experimental and control groups (Table 1). The result was a statistically significant value of 0.02, thus indi-
EFL Learners’ Perceptions Regarding the Use of Graphic Novel for Improving Reading Comprehension

The descriptive statistics of the student questionnaire reveal that students strongly agreed with the benefits of pictures and illustrations to improve their understanding of written works, with a mean of 4.21 and standard deviation of 1.02. For unknown words, 42.4% agreed that reading with graphic novels helped them form more educated guesses of the meanings of new words. The majority of student responses showed that they agreed to use graphic novels and preferred them as a tool for improving their reading comprehension.

Table 1. Independent sample t-test results of the two groups

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>df</th>
<th>Sig.</th>
</tr>
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<tbody>
<tr>
<td>Experimental</td>
<td>33</td>
<td>5.24</td>
<td>2.00</td>
<td>2.38*</td>
<td>64</td>
<td>0.02</td>
</tr>
<tr>
<td>Control</td>
<td>33</td>
<td>4.30</td>
<td>1.07</td>
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Table 2. Results of Cohen’s d

<table>
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<tr>
<th>Group</th>
<th>N</th>
<th>T</th>
<th>Effect size Independent</th>
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<tbody>
<tr>
<td>Experimental</td>
<td>33</td>
<td>2.38</td>
<td>Medium</td>
</tr>
<tr>
<td>Control</td>
<td>33</td>
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They enjoyed reading graphic novels and wished that their teacher would use them in their classroom. The students clearly welcomed the use of graphic novels as reading material; however, the means of statements 1 and 8 were ranked the lowest. These responses suggest that students were unfamiliar with reading graphic novels. Overall, the results of the mean (3.75) and standard deviation (1.09) of the student perception questionnaire revealed general agreement that learning English by reading graphic novels was enjoyable.

In relation to the teacher’s questionnaire, the descriptive statistics suggest that the highest mean scores were found for the statement that teachers believed that one positive impact of graphic novels was increased vocabulary acquisition, while the lowest mean scores were recorded for the teachers’ actual use of graphic novels in the classroom. In addition, teachers witnessed the effectiveness of graphic novels for both learning and strengthening the students’ motivation to read. More importantly, teachers agreed with the viability of graphic novels as a new teaching media. Results show that teachers clearly believed that graphic novels could be an effective tool for teaching reading skills, expanding vocabulary, and motivating students. Overall, the total mean scores of 4.07 and standard deviation of 0.68 suggest that English-language teachers approve of the use of graphic novels to teach English.

The results revealed no significant differences between the means of the item responses of the study sample according to age, teaching experience, student level currently taught, student levels during career, the number of graphic novels read for pleasure, and how frequently the teacher used graphic novels with her students. From the one-way ANOVA, the statement “As a child, how often did you read graphic novels?” resulted in a significant F-statistic of 3.40 when the Scheffe Test was used.

DISCUSSION

The Effect of Graphic Novels on Reading Comprehension

According to the main findings of this study, the intermediate students’ reading comprehension scores in the experimental group were higher than those in the control group, thus reflecting the effectiveness of using graphic novels as EFL reading materials as well as the added benefits of including pictures alongside words to improve reading comprehension. These results are consistent with most previous studies that revealed similar positive impacts (e.g., Cook, 2017; Kamil, Komariah, & Yuliana, 2017). In addition, Jaffe and Hurwich (2019) and other studies have reported that learners can acquire considerably more supplemental information when the text is supported by pictures, compared to unaccompanied text. In the experimental group, visual content clearly facilitated students’ comprehension as demonstrated by their correct responses to the test questions.

In the experimental group, the pictures helped students understand the text with ease and diminished their anxiety. Noticeably, the students in the control group struggled to read an excerpt consisting of more than 600 words, and
they complained that they could not read such a lengthy text. In contrast, the students in the experimental group read the text smoothly without objections. This indicates that reading graphic novels improves the students’ focus and attention to detail compared to text-only works, thus leading to continued engagement with the reading material. The students in the experimental group also read the text faster than those in the control group, and they finished reading in only ten minutes, long before the control group who took much more time.

Pictures and illustrations are valuable components in new vocabulary acquisition. When faced with unknown words, students in the experimental group effortlessly attempted to guess the meaning of words based on the context-related images. By contrast, those in the control group could only guess based on the context of the story. These findings concur with Cohen and Cowen (2008) who claimed that images can clarify the meaning of unfamiliar words.

One characteristic of using graphic novels for teaching and learning how to read is that it encourages reluctant students to read. However, a study by Rajab and Al-Sadi (2015) revealed that Saudi students have low motivation and are generally not interested in reading. The major cause may be a dearth of reading skills that might otherwise motivate students to try to read more often. Also, Al Nooh and Mosson-McPherson (2013) noted that the ability to read and understand is the pillar of successful English learners. Once reluctant readers can fully understand text, their confidence gradually grows, and this in turn triggers additional reading. Additionally, Schwertner (2008) affirmed that unwilling readers could be convinced to read comic books because they are supported with meaningful visuals. During the reading tests, students in the experimental group asked fewer questions than those in the control group, thereby indicating that their comprehension improved by reading graphic novels compared to the text-only format.

Accompanying illustrations and images provide graphic novels with the power to facilitate reading comprehension for EFL learners. Graphic novels are capable of helping students acquire reading skills. They effectively motivate them to read more and apply themselves until they fully understand the text. Therefore, graphic novels can benefit EFL learners by helping them improve their reading skills as the cornerstone for developing their overall language proficiency.

**Student Perceptions**

In this study, the students held favorable perceptions of reading graphic novels. As the results of the questionnaire show, those in the experimental group welcomed the idea of using graphic novels to improve their reading comprehension, and their perceptions of reading graphic novels were generally positive. This supports the results of Jaffe and Hurwich (2019), who stated that visual media is a key element for understanding any written material. Clearly, the illustrative nature of graphic novels is more appropriate for visual learners than for any other learning style. Nevertheless, a few students commented that, even though graphic novels were fine, they do not prefer them because they classify themselves as auditory learners. In building vocabulary, graphic novels images gave learners the ability to make informed guesses or, in many cases, to understand the meaning of unfamiliar words.

A study conducted by Öz and Efecoğlu (2015) investigated the effectiveness of graphic novels for teaching foreign languages. Their results indicated a positive impact, especially for vocabulary enrichment. On the basis of the findings, students enjoy reading texts presented in graphic novel format. As a consequence, intermediate school students accept the adaptation of graphic novels for reading lessons. In addition, they view graphic novels as a preferable method for improving their reading skills and wish that their teacher would utilise graphic novels in their classrooms. These findings are supported by the results of a study conducted by Monnin (2010) who also concluded that graphic novels offered a successful alternative teaching method. By focusing on motivation, students confirmed that graphic novels could enhance their enthusiasm to read more English texts both in and out of school. Several researchers have confirmed that reading comics can increase students’ motivation to read (Edward, 2009).

The results of this study demonstrate the students’ willingness to use graphic novels to improve their reading. In fact, their acceptance of this new learning tool is an indication of its success. Moreover, students seemed eager to use graphic novels to develop their reading abilities.

**Teacher Perceptions**

On the basis of the aforementioned results, a majority of teachers acknowledged the positive effect of graphic novels for teaching English. Nevertheless, although most language teachers recognise the effectiveness of graphic novels, they rarely use them in their own classes. This finding is similar to the study by Callahan (2009) who investigated English language teachers’ attitudes and deployment of graphic novels. Her results showed that most teachers did not incorporate graphic novels into their lessons despite being fully aware of their benefits. Since graphic novels are not a part of Saudi or even Arab culture, teachers are not thoroughly versed in methods to adapt graphic novels for educational purposes.

To ensure effective outcomes using graphic novels, more effort by teachers is required. Graphic novels must be carefully selected, and they need to find content and materials that fully support the objectives of their lessons. Many graphic novels might be unsuitable for educational settings as they may include inappropriate images or words. During lesson preparation, teachers should read all materials before using them in the class in order to have a general overview of the content, to prepare supplemental materials if needed, and to predetermine their desired learning outcomes. Because of the humorous nature of some graphic novels, teachers can also use them as icebreakers or warm-up exercises to energise the students. In addition, the deployment of graphic novels in EFL classes can vary. They can be used as individual reading material, as class or group activities, and they can be introduced in game form to reinforce previous learning or serve as fun fillers.
According to this study’s findings, teachers perceive graphic novels as a beneficial tool for increasing vocabulary acquisition and for developing better reading skills. Through these types of visual content, students encounter a variety of new words that expand their vocabulary beyond the actual text, and this gradual growth is an essential component of reading comprehension (Rokhayani & Utari, 2014). Reading comprehension skills will increase by reading graphic novels, and graphic novel readers have been found to read the same quantity of material as those who prefer to read different book genres (Krashen, 2004).

In this study, only two of fifty-six teachers rejected graphic novels outright as a new language teaching resource. Conversely, the other fifty-four language teachers confirmed the positive benefits of employing graphic novels as a teaching aid. Therefore, Rokhayani and Utari (2014) suggested the incorporation of comics as a part of a new pedagogical method, particularly in teaching English, to support language teaching and maintain the concentration and interest of students. Kamil et al. (2017) examined the suitability of comics as alternative learning media for developing reading comprehension skills. The results of their study also showed that comics could be successfully implemented for teaching and learning. Consequently, once learners develop an interest in learning with comics, all aspects of language including grammar, spelling, and vocabulary tend to be acquired instinctively (Rokhayani & Utari, 2014). The results also showed that related factors, including age, teaching experience, graphic novel reading as a child, and previous reading of graphic novels with students, had no effect on language teachers’ willingness to employ graphic novels for teaching English.

LIMITATIONS OF THE STUDY
There are limitations associated with this study that relate to the effect of graphic novels on reading, students, and language teachers. The following are acknowledged: Firstly, limited time duration. Time permitting, it would have been better if the students were first introduced to graphic novels to familiarise themselves with this type of reading material before attempting reading comprehension tests. Secondly, the effect of reading graphic novels. In this study, students read only one chapter of the graphic novel; however, they should read more varied content in order to maximise the effect of reading graphic novels.

RECOMMENDATIONS AND SUGGESTIONS
There are still multiple areas for further inquiry within the framework of this study. The main recommendation is to replicate this work with a larger sample of EFL learners over a longer period, perhaps a complete semester or an entire school year. Also recommended is an expansion of the investigation to include students from different age groups, both younger and older. Further studies may shed additional light on the effect of reading graphic novels in private schools where the students are expected to have higher than average baseline language proficiency for their age groups.

In an EFL context, graphic novels remain uncommon. For the implementation of graphic novels to be effective, both language teachers and students need to possess basic knowledge of graphic novels. Language teachers should be sufficiently trained on the incorporation of graphic novels and related materials to achieve intended pedagogical results, particularly the training of methods to use these tools to improve reading skills. It would also be more effective if the contents of syllabi supported the use of graphic novels for language teaching. Also recommended are studies to determine whether the varied learning styles of EFL students play an important role that might affect the success rates of graphic novel reading for educational purposes. Further research is suggested to identify other skills or aspects of language that might also be influenced by graphic novels reading practices. It would also be interesting to examine the effect of reading graphic novels for those with reading disabilities like dyslexia, constructing advanced or enhanced reading habits, or methods to improve speed reading.

CONCLUSION
Overall, the findings are directly in line with previous studies that analysed the effect of graphic novels reading for teaching and learning English. They showed that the experimental group outperformed the control group and achieved better reading test scores, thereby suggesting that reading appropriate graphic novels may have a significant positive effect on intermediate school students’ reading comprehension. The perceptions of students about graphic novels were positive, and they viewed graphic novels as an effective tool for improving their reading comprehension. Similarly, the perceptions of language teachers confirmed the effectiveness of employing alternative materials like graphic novels in the classroom. Although they believe in the potential of graphic novels for developing language proficiency, most remain hesitant to incorporate them into their lesson plans.

REFERENCES


Reading Comprehension Text for the Experimental Group

I was a regular little kid. I played with my mom’s stuff.

I watched TV with my big brother, Ashley, and my big sister, Sarah.

I rode on the back of my father’s bicycle.

WHEEEEEE!!!!

I found caterpillars with my friend Emma.

And I sang. **WE ALL LIVE IN A YELLOW SUBMARINE, A YELLOW SUBMARINE—**