

THE ROLE OF TOPIC IN EFL LEARNER'S READING COMPREHENSION AND RECALL

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ABSTRACT

English as a Foreign Language reading comprehension and recall can be affected by a large number of discursual factors, including "topic" and "title" as representative of the theme of the text. The present study aimed at examining the effect of text topic on foreign language learners' reading comprehension and recall. To this end, the impact of three kinds of text topics, i.e., major topic, minor topic and unrelated topics was measured on foreign language learners' reading comprehension and recall. The materials of the experiment were piloted in advance on learners (n = 100) of the same proficiency level. 99 EFL learners majoring in English language translation in Mashhad Azad University participated in the main study. The instrumentation included CELT (The comprehensive English Language test) and a tailored reading comprehension test consisting of three reading passages. The Multiple Choice reading comprehension tests were administered to 3 homogenized groups each comprising 32, 30 and 36 subjects. Data were analyzed through one-way analysis of variance and post hoc Scheffe tests. The results showed a significant effect of major topic on the reading comprehension performances and recall of the participants.

KEYWORDS: topic, reading comprehension, recall

INTRODUCTION

Among the four language skills, reading probably plays the most important role in foreign and second language learners' academic achievement. As a result, this skill is worth in-depth investigation from both theoretical and practical perspectives. Researchers have investigated numerous text-related and reader-related factors determining EFL/ESL readers' comprehension.

Readers need to integrate various text-processing skills in order to derive the text overall meaning. Celce-Murcia and Olshain (2000) emphasize the need for ESL/EFL learners to develop both bottom-up and top-down reading approaches. Before the reading takes place, students' background knowledge about the topic of a text should be activated. This can be performed through the choice of titles, subtitles, headings, captions, etc. These cues may provide a good

overview and get the students to activate what they know about the topic and helping them speculate the likely text content (van Dijk, 1977).

Ideas in a text are related to the topic and unified by cohesive devices. Cohesive devices call upon a speaker's background knowledge in a process of comprehension and recall. They enable participant hearers or readers to read between the lines: to make references to preceding discourse, to interpret the relationship of incoming material to the prevailing topic or theme; in short, to follow the links in a chain. As de-Beaugrande and Dressler (1981) state “, we impose coherence by establishing a configuration and our prior knowledge of how the world is organized.” In other words, listeners or readers must know what is being talked or written about in order to be able to understand the text since each text discusses one particular topic which distinguishes it from another text. Moreover, as Van Dijk (1977) points out, the context is involved in the recognition of the entailment relations in terms of which the topic of discourse is defined. That is, the topic representation is entailed by the joint set of propositions expressed by the sentences in the text only given certain items of real-world knowledge. So “topic” is a notion which seems to be essential to the concept of cohesion and coherence since “coherence will be envisioned as the outcome of combining concepts and relation into a network composed of knowledge spaces centered around main topics”. Hence, it is important for EFL teachers to be aware of the role of the “topic” for texts.

LITERATURE REVIEW

Discourse issues have been the center of attention for a long time and every now and then different theories have been put forward by the experts in this field. This importance, however, to a large extent, lies in the crucial role of Discourse Analysis in assigning boundaries for the interpretation of meaning. In this regard, topic can be viewed as one of the most significant discourse boundaries, or to be more explicit, as one of the elements of discourse which constraint the possible interpretations for comprehension of a text. Moreover, a distinction should be made between the topic as the main underlying theme of the text and “the title “as “a way” or “a mode of “representing the topic. (Brown & Yule, 1996). We know that the ultimate goal is the topic, but we have several different possibilities of the title. Since the researchers are going to scrutinize the comprehensibility of journalistic texts therefore the question is what can be chosen as a title for reading comprehension passages which provides both more effective reading comprehension and increase of recalling for the readers. As topic is one point which remains in the mind, the assumption is that the title which is closest to the topic (major topic) might be regarded as the best clue for students' comprehension and recall in authentic issues.

In a series of experiments reported by Bransford and Johnson (1972) subjects were pretested with constructed texts to read, comprehend, and recall. The aim of the experiments was to demonstrate that the comprehension of English texts depends not only on knowledge of the language, but also on extra-linguistic knowledge, particularly related to the contexts in which the texts occur. Predictably, the experiments showed that comprehension and recall of passages were significantly better when subjects were provided, before reading, with what Bransford and

Johnson called “The topic of the passage”. Correspondingly, there is for any text, a number of different ways of expressing “the topic”. Each different way of expressing “the topic” will effectively represent a different judgment of what is being written (or talked about) in a text. There will always be a set of expressions of the topic. In the terms used by Tyler (1978), “the topic” can only be “one possible paraphrase “of a sequence of utterances. What is required is a characterization of “topic” which would allow each of the possible expressions, including titles, to be considered (partially correct), thus incorporating all reasonable judgments of “what is being talked about”.

The relationship between topic and comprehension

As Chastain (1988) believes, all readers can become confused if they are suddenly engulfed with a flood of language without any orientation as to the context or topic. Thus readers (listeners) have to activate relevant background knowledge and use it to anticipate the ideas the message may contain. Joiner (2008), in an article entitled “listening from the inside out”, states that establishing a frame of reference enables listeners to develop “frames of expectations “regarding what they are likely to hear, which help them know how to listen and what to listen for.

Understanding is described, according to Brown (1999) as “a process of prediction and sampling rather than a desperate attempt to keep up with the words flashing past.” Likewise, Richards (1998) identifies three interrelated levels of processing that seem to be activated in comprehending language; i.e., identifying propositions, interpreting illocutions, and activating real-world knowledge. One thing people commonly do in comprehension is to draw the obvious implications. In short, comprehension calls on people’s general capacity to think-to use information and solve problems. Indeed, in inferring what is meant, people consider non-linguistic factors that are far removed from the utterance itself (Dabir, 1991). In the same way, Prabhu (1987) maintains that comprehension draws an extra-linguistic resources to the extent necessary. There is a complementary relationship between linguistic resources and extra-linguistic ones. Likewise, comprehension, according to Riverse, (1981), “requires a deep knowledge of the theme of the speaker’s discourse, because much of comprehension is drawing inferences.” So a great deal of what we “comprehend “is not in the linguistic information we are receiving at all, but is the extra-linguistic knowledge which we have acquired through our life in terms of past experiences.

Prior knowledge plays a supportive role in comprehending a written message. The earliest study on the impact of schemata on reading comprehension dates back to the classical research of Bartlett (1932). In his study, English participants were asked to read and recall a story from an unfamiliar culture, and the major finding was that recall was inaccurate. Distortions found in the retellings of the story confirmed to the past experiences of the readers, and additions to and elaborations on the storyline in the retellings caused redundancies. Along the same line, Lee’s study (1986) showed that the participants recalled more from content-unfamiliar texts than content-familiar ones. In a study by Carrell (1984) the nonnative readers found to fail to use background information because they were linguistically bound. The nonnative readers tended to process at the word and sentence levels and did not attend to the top level organizational features and background information since the language itself was demanding. Johnson (1982) conducted

a study to explore the effect of the cultural origin of prose on the reading comprehension level. The results revealed that the cultural origin of the stories had a greater effect on comprehension than the syntactic or semantic complexity of the text. Some other studies have shown similar effects in that participants better comprehended or remembered passages that were more familiar to them (e.g. Ammon, 1987; Carrell, 1983; Johnson, 1982; Langer, Bartolome, Vasquez & Lucas, 1990). The literature supports the position that content schemata have a greater role than language on reading comprehension and recall. (Keshavarz, 2007) Studies conducted by Koh (1985) and Peretz and Shoham (1990) indicate that participants do not necessarily perform their best on texts with familiar content.

Therefore, both listeners and readers have to activate relevant background knowledge and use it to anticipate the ideas the message may contain. According to Clark and Clark, (1977), "people try to attack all the facts they know about single entity to a single memory. "This allows them to see all the facts about that entity at a glance.

In conclusion, topics serve as devices for categorizing and arranging information so that it can be interpreted and retained. Briefly, "topics" activate participants' background information to which the text must be related in order to be comprehended.

RESEARCH QUESTIONS

The purpose of the study is to explore the relationship between text topics and EFL readers' comprehension and recall of texts. Therefore, the following research questions were formulated. Research questions:

1. Does text topic type have any significant effects on EFL learners' reading comprehension?
2. Does text topic type have any significant effects on EFL learners' recall?

METHODOLOGY

Participants

The subjects of the study were 200 EFL male and female senior students (21-30 years old) in Mashhad Azad University who were majoring in English language translation. In order to ascertain homogeneity of subjects in terms of their general English proficiency at the outset of the study, CELT test (Comprehensive English Language Test) was administered to all of the participants. In order to test the homogeneity of the aforementioned group, a one-way ANOVA was run the results of which attested that study. To answer these questions, the Comprehensive English Language Test (CELT) was administered to the students in order to verify their homogeneity. A one-way analysis of variance (ANOVA) was run to compare the means of the three groups. The descriptive statistics in Tables 1 provides an overall view of the participants' performance on CELT and table 2 shows the results of one-way ANOVA consequently.

Table 1: Descriptive statistics of CELT scores

Group	Mean	Standard Deviation	Variance	N	Min	Max
1	82.56	26.59	101.02	32	20	120
2	85.3	26.15	685.82	30	29	120
3	96.38	27.21	740.38	36	25	150

Table 2: One-way ANOVA CELT by three groups

Source of Variation	Sum of squares	Degree of freedom	Mean Squares	F Observed	F Critical
Between groups	3728.08	2	1864.04	2.61	3.15
Within groups	67671.39	95	712.33		
Total	71399.47	97			

Instrumentation

The instruments were used in this study: one reading comprehension test consisting of three passages. The reading comprehension tests were taken from English journals. The researchers piloted the tests with a sample of learners (n=100) with the same level of English language proficiency at the same university as the participants of the present study. For each of the texts, 10, 8 and 6 MC test items were developed. The tests were piloted and pre-tested with a sample group of participants (n=100).

Concerning the psychometric properties of the reading comprehension tests, the reliability of reading comprehension test, as estimated using Cronbach's alpha, were .69. The test was validated against the reading comprehension sub-test of a TOEFL. The result of concurrent validity of the researcher-made measure on reading comprehension showed an index of 0.73, which is relatively high.

Procedure

Subject grouping procedure

Ninety nine EFL learners were chosen as the subjects of the study and randomly assigned to three groups. The subjects were all seniors majoring in English.

Test Administration Procedure

The participants were asked to read the texts and answer the MC items. Then, the participants were asked to read the texts once more and write down what they could remember on their recall answer-sheets without looking back at the text and the MC questions. Here, the purpose was to measure the participants' recall of what they read rather than their EFL writing ability. Therefore, the researchers asked the participants to write their recalls. The time allocated to each test was 45 minutes, which had been determined to be suitable in the pilot study by.

Scoring Procedure

The MC-test papers were scored based on the number of correctly-answered items. The recall task was scored based on the correct propositions recalled by the participants. For the sake of a consistent scoring procedure, the researchers defined propositions as the relationships between a predicate and its arguments. As G. Brown (1983) maintains, this is the most frequently used

definition in the text analysis literature. Then, the recall tasks were scored by the researchers. Each recall task was scored twice, once by each of the two researchers. A correlation index of .79 was found between the scores given to the recall protocols by the two raters. The average of the two scores was considered as the final score assigned to each recall protocol. The scores from the multiple choice test of reading comprehension and the recall tasks constituted the data for statistical analysis.

Data analysis

SPSS was used for statistical analysis of the data consisting of the participants' reading comprehension scores, their scores on their recall scores. To examine the main effects of the independent variables that is topic on the participants' comprehension and recall of the texts, the researchers ran a one-way analysis of variance (ANOVA) twice: once for the data related to the participants' reading comprehension (i.e., the participants' scores on the MC items) and once for the data related to the participants' recall of the texts.

RESULTS AND DISCUSSION

This study was conducted to answer the following questions: 1. Does topic have any significant effects on EFL learners' reading comprehension? 2. Does text topic have any significant effects on EFL learners' recall?

The study included one independent variable i.e. Text topic including texts with major topics, minor topics and unrelated topics. Text readability of 3 selected reading passages of English journals was computed using Fry formula. Table 3 shows the readability indexes of the passages. According to Fry formula reading passages with readability indexes between 3 and 11 are considered to be intermediate.

Table 3: Readability Index

Passages	Index
A	6.86
B	4.72
C	4.41

The first research question asked whether there is a significant difference between major topic, minor topic group and unrelated topic group on reading comprehension MC tests performance. Table 4 summarizes the results of the one-way ANOVA.

Table 4: One-way ANOVA of MC Reading Comprehension Test

Source of Variation	Sum of squares	Degree of freedom	Mean Squares	F Observed	F Critical
Between groups	772.72	2	386.36	26.80	3.15
Within groups	1369.51	95	14.41		
Total	2142.24	97			

As the table 4 suggests, there is a significant difference between major topic group, minor topic and unrelated topic groups across MC reading comprehension test ($F = 26.80, p < .05$)

To further determine where the difference among the effects of text topic types on MC reading comprehension test performance lies, a post hoc Scheffe was run the results of which follow in Table 5.

Table 5: The summary result of the Scheffe test on the reading comprehension MC test

Comparisons	Mean Differences	Minimum significant difference 5%	df
Major topic G Vs Minor topic G	6.26*	2.40	60
Major topic G Vs Unrelated topic G	5.71*	2.30	66
Minor topic G Vs Unrelated topic G	0.55 ^{ns}	2.34	64

Table 5 and figure 1 suggest major topic group (Mean= 12.46) has dramatically outperformed the other two groups (minor topic mean =6.20 and unrelated topic mean = 6.75) on the reading comprehension MC test. According to Table 5, , at the level of 0.05, there was no significant difference between minor topic group mean scores and the unrelated topic group mean scores.

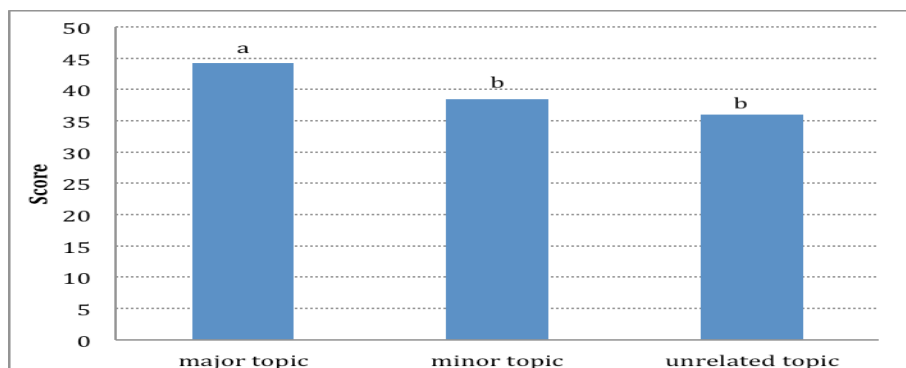


Figure 1: major topic group

The second question in the study addresses the difference in the effect of text topic including major topic, minor topic, unrelated topic) on recall test. Table 4 demonstrates the results of one way analysis of variance to this end.

Table 6 : One-way ANOVA of Recall Scores

Source of Variation	Sum of squares	Degree of freedom	Mean Squares	F Observed	F Critical
Between groups	1206.8	2	603.4	18.6	3.15
Within groups	3079.02	95	32.4		
Total	4285.8	97			

According to Table 6, there is a significant difference among text topic types in the recall test (F

= 18.6, $p < .05$) Since the one-way ANOVA demonstrated a significant difference among the effect of the 3 text topic types on recall test performance, a post hoc Scheffe test was carried out to see where exactly the difference lies. Table 7 summarizes the results of the Scheffe.

Table 7: The summary result of the Scheffe test on recall test

Comparisons	Mean Differences	Minimum significant difference 5%	df
Major topic G Vs Minor topic G	5.80*	3.60	60
Major topic G Vs Unrelated topic G	8.29*	3.44	66
Minor topic G Vs Unrelated topic G	2.49 ^{ns}	3.50	64

In the recall test too, as depicted by Table 7 and figure 2, performance of the major topic group (major topic group mean = 44.22) has been dramatically superior to those of minor topic and unrelated topic groups (minor topic group = 38.42 and unrelated topic group = 35.93).

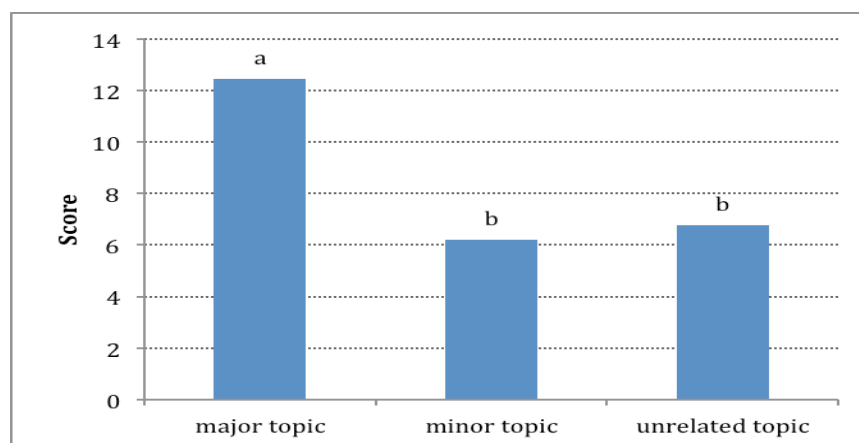


Figure 2: performance of the major topic group

CONCLUSION

This study aimed at investigating the usefulness of text topic type for improving EFL learners' reading comprehension and recall. The EFL learners were provided with the same texts with different topics (major i.e. the closest to the main idea, minor i.e. the closest to the supporting idea and unrelated) both to draw the learners' attention to the text and help them comprehend and recall the text more effectively.

The findings of the study provided strong evidence in support of major text topic type in general since major text topic group significantly outperformed both the minor text topic and unrelated text topic groups in the reading comprehension test. In this sense, therefore, the results strongly corroborated those, among others, Johnson (1982), Carrell (1983), Ammon(1987), Vasqueze and Lucas(1990), Keshavarz (2007) which advocated the use of content familiar texts for reading

comprehension. There are several factors that can account for this effectiveness: The provision of major topic arouses learners' noticing to the main idea of text (Schmidt,1992). Major text topic successfully draws learners' attention, activates EFL learners' relevant background knowledge, orients them toward the text and helps them to anticipate the ideas in the text. Possible, moreover, major topics can assist learners to immediately connect the text main idea to its supporting ideas and, thereby, comprehend it more effectively but it contradicts with Studies by Koh (1985) and Peretz and Shoham (1990) who concluded that participants do not necessarily perform their best on texts with familiar content. The results of the study further indicated that there was no significant difference between minor text type and unrelated text type groups. This is compatible with Carrell (1984) and Johnson (1982). One possible reason is that all readers can become confused if they are suddenly engulfed with a flood of language without any or the right orientation as to the context or topic (Chastain, 1988).

Another finding of the current study was major text topic group significantly outperformed both the minor text topic and unrelated text topic groups in the recall task. In this sense, the study is in line with Bartlett (1932) who concluded content- unfamiliar texts were recalled inaccurately but it contradicts with Lee(1986) who found that the participants recalled more from content-unfamiliar texts than content-familiar ones

The findings of the present study are compatible with those of Bransford and Johnson (1972) indicating that comprehension and recall of passages were significantly better when subjects were provided, before reading, with "the topic of the passage". One reason for the effectiveness of major text types on the recall task could be that it facilitates the main idea connection. According to research in human memory, it is the depth of the process of reading comprehension which determines the chance for the text to be recalled, i.e. Mental Effort Hypothesis. Learners retain meaning if they are engaged in deep processing which involves exploitation of contextual clues and their previous knowledge (Hulstijn & Laufer, 2001).

Overall, the results of the study support the use of major text topics in general and imply that teachers, materials developers and text designers can take advantage of them particularly when the goal is for them to trigger and promote reading comprehension and recall. Major topics should be available to foreign language learners while they are engaged in reading tasks. The presence of major topics can arouse learners' consciousness towards text, activate the relevant background knowledge and avoid learners from making wrong inferences

However, the findings of this study need to be verified against future research involving texts with other genres or different text readability.

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