

The Influence of Interest on Reading

Comprehension in EFL Students

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ABSTRACT

The present study explored the influence of interest on reading comprehension in English as a Foreign Language Students (EFL). Another of this study's concerns was whether individual interest, which is optimal for learning but difficult to control in classroom settings, might be increased by use of situational and topic interest, which are less favorable to learning but more controllable by teachers. A third focus concerned the validity of defining topic interest by text title versus text contents. Results indicated that high interest did not result in improved reading comprehension. Participant reports of individual interest in a topic increased significantly upon reading a text whose contents were endowed with interesting but unrelated elements. The difference between evaluation of topic interest before and after reading a text was found to be significant as well, suggesting that topic interest might be most accurately evaluated by response to text instead of less informative text titles.

Keywords: Interest, ESL/EFL reading, learner motivation

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INTRODUCTION

Interest has a strong influence on learning. Individuals display more persistence, engagement, and positive affect toward tasks that they are interested in (Ainley, Hidi & Berndorff, 2002, Hidi, 1990, 2000; Renninger, 1998, 2000). Interest influences the use of learning strategies and choices for the direction and duration of attention (Hidi, 1990; Scraw & Lehman, 2001; Wade, Scraw, Buxton, & Kelly, 1999). Interested individuals exhibit higher levels of recall (Hidi, 1990). Capacities important to learner autonomy, such as the ability to attend and find meaning, set goals, and use effective learning strategies, are enhanced by interest (Renninger, 2000). Individuals with defined interests are more likely to set goals that are task-specific, and have effective learning behaviors that resemble habits (Lipstein & Renninger, 2006). While interest is well-studied in a range of domains in educational psychology, it remains relatively unexplored in the field of second language acquisition (SLA). This is surprising, given the potential for benefits to second language teaching practice if more were known about the influence of interest on SLA and ways to use interest in classrooms.

Interest is commonly categorized as *situational interest*, *individual interest* and *topic interest*. Situational interest is an emotional state aroused by features of environmental or textual stimuli. Characteristics that have been found to arouse situational interest include textual coherence and comprehensibility, novelty and personal relevance (Hidi & Baird, 1986; Schiefele, 1999). Individual interest is considered to be a stable and enduring inclination to engage with activities or objects (Bergin, 1999; Hidi, 1990; Hidi, Berndorff, & Ainley, 2002; Krapp, Hidi & Renninger, 1992; Schiefele, 1999). Hidi and Renninger (2006) have developed a four-phase model of interest development wherein situational interest, when provided with social support, can develop into increasingly committed levels of individual interest.

The third category, *topic interest*, refers to interest prompted by a certain topic or theme. It appears to share qualities of both situational and individual interest with contributions of either depending on individuals' knowledge, experiences and the perceived value of a topic (Ainley, et al., 2002; Bergin, 1999; Renninger, 2000; Wade, Buxton, and Kelly, 1999).

Topic interest is important to teachers because it is controllable in classroom activities and it constitutes a point of confluence between the more ephemeral situational interest and the more enduring and engaged (hence more valuable to learning) individual interest. The dynamic nature of topic interest highlights the interdependent relationship between situational and independent interest, as well as the contributions of other motivational variables (such as background knowledge, goals, self-efficacy, etc.) that individuals bring to learning situations. Ainley, et al. (2002) illustrate this relationship using student reactions to a text called "Black Holes and Quasars". Individuals uninterested in astronomy might nonetheless find such a topic interesting because of compelling qualities (such as novelty, mystery or danger) embedded in the title. On the other hand, individuals possessing individual interest in astronomy will be interested in the text because of a formed and enduring attraction to it.

A customary approach of studies dealing with topic interest is the correlation of participants' reported interest, frequently in response to a text title, with their subsequent learning (Lepper & Cordova, 1992). A problem with this approach is that it limits the ability to ascertain changes in topic interest as a result of reading the text. Other problems arise from the practice (e.g. Ainley et al., 2002) of defining "topic" as a proposition embedded in a text title. First, a text title can misrepresent the contents of a text. Second, this definition does not take into account responses to the topic as perceived upon actually reading the article in question.

Owing to the substantial time and effort required to personalize learning material, individual interest presents practical difficulties for

classroom application. Topic interest and situational interest offer richer possibilities, particularly since teachers often use topics as guides for tasks, and qualities of situational interest to increase motivation. Understanding better the relationship between these potentially useful interest qualities and learning would be valuable for instructors, in particular in teaching arenas where student motivation is not optimal.

Interest and reading

Empirical findings consistently show that all categories of interest aid reading recall and comprehension (Hidi, 2001). Interest has been shown to influence reading skills in a number of ways. Sentences with high-interest content are more likely to be remembered in cued recall measures than low-interest sentences (Anderson, et al. 1984). Schraw, Bruning, and Svoboda (1995) found situational interest experienced by college students while reading resulted in improved recall. Experiments with reading occurring under a variety of conditions, such as reading silently and aloud and reading with required post-tasks, have exhibited positive influences of interest (Anderson, et al. 1984).

Interest is believed to improve learning by intensifying engagement and automatic allocation of attention (Hidi, 2001; for another viewpoint, see Shirey & Reynolds, 1988). In some cases, this quality of interest can detract from learning, as in the case of readers who are distracted from deep meanings in a text by “seductive details” (Wade, Schraw, Buxton & Hayes, 1993), elements which rivet readers and cause them to ignore more important aspects of what they are reading.

Interest and intrinsic motivation

Interest is sometimes inaccurately equated with intrinsic motivation. Intrinsic motivation is defined chiefly in terms of absence of external control or reward (Deci, 1981; Bergin, 1999); that is to say, rewards from an activity

are drawn solely from the activity itself. Interest, on the other hand, refers to an individual's engaged interaction with a specific object (Krapp, et al. 1992). An interested person is one attracted to an object for reasons rooted in prior experience and knowledge, or in compelling qualities embedded in the object of interest. Bandura (1986) suggested the semantic difference between the words "motivation" and "interest" reflects the difference between the two processes: "there is a major difference between a motive, which is an inner drive to action, and an interest, which is a fascination with something" (pg. 243).

One purpose of this study was to explore whether the benefits of interest to learning found so consistently in educational psychology research, particularly in the area of reading comprehension, are experienced also by second language students. Another of this study's concerns was to compare pre- and post-reading topic interest and to examine the reasons for differences between the two, if they exist. A third concern was to investigate whether individual interest in a certain topic can be influenced positively by reading a text in whose topic a quality of situational interest has been embedded.

METHOD

Participants were students of one intermediate (n=24) and two kinds of advanced classes in an accelerated English program at a private university in Osaka, Japan. Due to the challenging nature of the intermediate course, students can complete their two-year university English requirement in one year. Student selection for the intermediate class is competitive, based on scores of the Test of English as a Foreign Language (TOEFL). Scores of students of the intermediate course generally fall within the range of 475-525. One of the advanced courses (n=10) used in this study has a minimum TOEFL score requirement of 500, while the other was for especially advanced students with a TOEFL score of at least 535 (n=22). In all the measures of this study, no significant differences were found between the three courses, so in

terms of skill level the participants were regarded as one group.

Students were given a survey that asked them to identify via a six-point Likert-scale items (Appendix A) their level of interest in the topic “Animals and Pets”. Participants’ were also requested to report their anticipated interest in an article entitled “Surfing Dog Surprises His Family”. I then distributed said article (Appendix B) and told the students they would have ten minutes to read it. They were permitted to use dictionaries. After ten minutes, the articles were collected and the students were given a comprehension test (Appendix C), followed by a second survey (Appendix D) asking participants to convey once more their level of interest in the article, their interest in “Animals and Pets”, and to give reasons for their post-reading levels of interest.

RESULTS

The seven-item comprehension test had a mean of 4.33 and a standard deviation of 1.40, suggesting that the test was somewhat challenging for the students. Descriptive statistics for the results of the first and second surveys are presented in Table 1.

TABLE 1
Descriptive Statistics for Survey Results

Survey	Individual interest		Article (topic) interest	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
1	2.30	.781	2.50	.700
2	2.62	.631	2.56	.574

To examine the relationship between interest and reading comprehension, a one-way between-subjects analysis of variance (ANOVA) was conducted using the reading comprehension test scores as the dependent variable. The post-reading individual interest scores were divided into two groups, *high interest* and *not high interest*. Students with *high interest* were defined as those that chose “5” or “6” on the Likert scale, and those rating their interest as lower were designated as *not high interest*. The post-reading individual interest scores were used to represent “interest” for two reasons. First, because the post-reading individual interest rating was done in response to the whole text as opposed to the text title, it was believed to more accurately reflect interest in the topic. Second, individual interest, being a more enduring and engaged form of interest, was considered to most accurately represent the concept of interest as it might pertain to actual teaching.

The results of the ANOVA were insignificant, $F(1, 52) = .265, p = .61$, indicating that high interest was unrelated to test scores.

To investigate changes in pre- and post-reading topic and individual interest ratings, a one-way repeated-measures ANOVA was conducted, with the factor being “interest”, and the dependent variable being four ratings of interest: pre- and post-reading individual interest in “Animals and Pets” and pre- and post-reading interest in the article, designated as two kinds of “topic interest”. The results of the ANOVA showed a significant main effect, Wilks’s lambda = .002, $F(3, 49) = 5.75, p < .05$, multivariate partial eta squared = .26. Pairwise comparisons were conducted for all possible pairings of the four interest ratings. Controlling for familywise error using Holm’s sequential Bonferroni procedure, the means of three of the pairs were statistically significantly different. These pairs were the two measures of individual interest (before and after reading), topic interest (before and after reading), and the pairing of pre-reading individual interest and pre-reading topic interest.

Results showed no statistically significant relationship between test scores and the two levels of interest.

The difference between pre- and post-reading individual interest was especially high. It would however have been even higher if students were not constrained by the limits of the Likert scale. Some students who had defined their individual interest in “Animals and Pets” as a “6” (“very high”) said their interest in the topic became even higher after reading the article, but they had no higher number to circle to reflect this change.

The reasons given for this leap in topic interest were almost all connected to qualities of situational interest in the text, specifically those of surprise, novelty and sentimentality.

DISCUSSION

The results of the reading recall test indicate that high interest among second language learners’ might not result in improved reading comprehension. This is an intriguing finding, given that interest has been demonstrated in a large number of studies to be closely related to improved learning, including better comprehension of text. That interest has also been shown to have a positive influence on text learning irrespective of the influence of reading ability (Schiefele, 1999) makes this result even more peculiar. It seems that second language readers have some quality that interferes with the benefits to learning that are enjoyed by first language readers, even when the latter have low reading abilities. A reasonable speculation is that the increased cognitive load carried by individuals reading in a second language may undermine or negate the benefits of increased attention when reading a text that is interesting. It would be worthwhile to pursue a strand of research that addresses the question of interest and reading using texts modified for second language learners, such as graded readers with simplified or elaborated contents.

It should be noted that these results do not necessarily mean that

second language learners cannot comprehend interesting, unmodified texts better than uninteresting ones. This study limited the definition of text interest to a holistic value; that is, students reported whether the entire text was (or was anticipated to be) interesting. No exploration was done regarding which details in the article students might have found more interesting than others, nor was any measurement attempted to evaluate if interesting details in the text were associated with the textual information targeted by the comprehension test. More research is required to investigate the relationship between interest, comprehension and various levels of text difficulty, reading time, background knowledge, affect and other qualities shaping the reading experience of second language students.

The significant difference between the two topic interest ratings indicates that the convention of defining topic interest as participant response to a text title is not always equivalent to an alternative conception of topic interest as a response to reading an entire text about a topic. Further exploration is needed to understand how and why individuals possess different “topic interest” depending on which parts of a “topic” they are experiencing. The differing evaluations highlight another aspect of this type of interest: the ambiguity of the concept of “topic”. Indeed, “topic” requires more definitional consideration, in order to reach a more standardized approach to topic interest research.

The gap between individual interest ratings in this study suggests that manipulation of topic interest by use of elements of situational interest in texts can prompt increased individual interest. This is good news for teachers who want to increase student interest. Instructors might consider using or creating material that possesses qualities of situational interest (novelty, danger, etc.) in order to increase interest in the topics of lesson material. A reasonable assumption is that increases of individual interest in the materials used in an EFL classroom will heighten the possibility of learners experiencing increased individual interest in learning English.

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APPENDIX A

My name is _____

Please circle the number that shows your opinion best (“1” means “a little or none” and “6 means “a lot”).

How interested are you in animals and pets?

1 2 3 4 5 6

If you see an article with the title, “Surfing Dog Surprises his Family”, do you think the article will be interesting?

1 2 3 4 5 6

APPENDIX B

Surfing Dog Surprises his Family

YOU can’t teach an old dog new tricks but young ones seem to teach themselves.

Loyal labrador Harvey follows his owner Scott Pearson everywhere . . . even out to sea. The three-year-old dog has spent much of his life on Tynemouth beach in North Tyneside watching Scott and son James, 16, pursue their passion for surfing.

But, unexpectedly, three weeks ago Harvey decided that anything his owners could do he could do better.

Scott, 43, a worker at a shoe company, said: “We are all surfers in the family. My father, myself and my son all surf and now the dog does too. The dog always just comes with us to the beach.

“He was only about six months old when he started going into the water but he never showed any signs of wanting to jump on a board. He has always loved being in the water and has no fear of the sea.

“A few weeks ago, there was quite a fierce swell but he managed to somehow get out between the breaks and was in deep water with us. My son James put him on a board and he rode it all the way to shore, we just can’t stop him now.

“My wife was watching from the shore, and she was shocked to see Harvey riding up in the water with us. She is scared to go into the water and never has surfed, so she was a little jealous.”

Although surfing dogs are not unheard of, Scott says it is rare for a breed as large as a labrador to surf. Smaller dogs fit on surfboards more easily.

Harvey has taken to surfing so well that he now even has his own board, which he drags in and out of the sea between his jaws.

Scott, of Gosforth, Newcastle, said: “He has his own board which has been donated by the Tynemouth Surf Company.

“We are down the beach all of the time. People who see him surfing are really impressed. The other day he attracted a crowd of around 30 spectators who almost couldn’t believe what they were seeing.”

The surfing dog has become so popular that an advertisement company has offered to hire Harvey to appear in some television commercials for dog food. However, although they have been offered a large amount of money, the family has rejected the offer, saying they think such work would be stressful for their dog. Harvey would prefer just to have fun playing in the waves.

APPENDIX C

My name is _____

Please answer circle the correct items concerning the article “Surfing Dog Surprises his Family”.

1. How old is the dog?
 - a. A few weeks old
 - b. Six months old
 - c. Three years old
 - d. Thirty weeks old

2. What is the dog's name?
 - a. Scott
 - b. James
 - c. Harvey
 - d. Pearson

3. Who are the only surfers in the family (besides the dog)?
 - a. The father and the son

- b. The son
- c. The father, the mother and the son
- d. The grandfather, the father and the son

4. Why is it especially rare for a labrador to be able to surf?

- a. There are not many labradors
- b. Labradors usually don't like water
- c. Labradors are too big
- d. It is unheard of for labradors to roam the beach

5. What does the dog have now to help him surf?

- a. a board b. large swells c. a family d. deep water

6. According to the article, how do people feel when they see the surfing dog?

- a. amazed b. shocked c. impressed d. amused

7. What kind of company wants to hire the dog?

- a. A dog food company.
- b. A surfing company.
- c. An advertising company
- d. A shoe company

APPENDIX D

Post-reading survey

My Name _____

Please answer the following items.

How interesting was the article “Surfing Dog Surprises his Family”?

1 2 3 4 5 6

After reading the article, how interested are you in “Animals and Pets” to you?

1 2 3 4 5 6

If your interest in “Animals and Pets” has changed, please explain why:

After reading this article, I think the topic “Animals and Pets” is

___ More interesting

___ Less interesting

___ Similarly interesting
than before I read the article.