

RELATIVE SELF-MONITORING AND ABSOLUTE MOTIVATORS IN EFL

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Abstract

The first part of the present study describes how a group of 445 EFL learners judged the degree of their English vocabulary knowledge. The correspondence analysis of the learners' answering patterns revealed a particular configuration of semantic expandability for said vocabulary. Secondly, the present study reports what words in the passages were difficult for another group of 141 EFL learners. Their vote counts correlated with neither the frequencies of the appearance of those words, the semantic ranges, nor the degrees of semantic concreteness. Rather, among highly ranked words were some short words with low familiarity in EFL and some long words of Latin origin. Next, according to the investigation into the learner's self-evaluation, a more active commitment to the inquiry, a motivator, led to higher points in both the final achievement test and the self-evaluation of their own understanding of the passages containing the words that were voted on. In the course of time, the students' self-evaluation scores went down. Such tendencies suggest the effects of accumulating difficult words and the relativity of score distributions around the center of the scale with the increased opportunities for self-monitoring.

1 Backgrounds

Vocabulary building is an important facet of second language learning. A great deal of research has demonstrated, people are more familiar with more frequently appearing words (Coady et al., 1993; Kibby, 1977; Graves et al., 1980; Perkins & Brutten, 1983). However, it may not be so easy to increase learners' opportunities for contact with new words within a classroom context with limited hours, and to know about the size and depth of the vocabulary that the learners have already acquired (Asai, 2008a; Laufer, 1998; Laufer & Goldstein, 2004; Nation, 2001). The relationship between a word's frequency of appearance provided by the general-purpose monitor corpora, the recognition of the word by a learner, and his or her understanding of that word all or partly depend on learning materials and situations. Thus, the present study aimed to investigate a facet of the meta-conception of English vocabulary and reading held by college students in Japan.

2 Methods and results

2.1 Participants and procedure

The participants were 445 undergraduates at three universities majoring in various fields. Those EFL learners whose first language was Japanese undertook judgment tasks, which consisted of a visual familiarity rating and a semantic familiarity rating, for 20 individual words on a 5-point scale base without any reward, and a following comprehension task,

whose sentences contained the above-mentioned target words as formatted in a previous study (Asai, 2009).

2.2 Vocabulary judgments

In the judgment tasks, the difficulty level of each word referred to its frequency of appearance (Breland, 1996). For the convenience of removing fluctuating factors in data size in the course of time and of making comparisons in the future, the present study applied normalized relative word frequency (Asai, 2009).

The Quantification Theory analysis produced a placement of the answer patterns of the judgment tasks performed by the participants (Hayashi, 1952). In Figure 1, the larger diameter of a plot shows the higher frequency of appearance of a word in the data of the Corpus of Contemporary American English (Davies, 2008). The configural relationship must be interpreted by readers, and, in the present case, the lower right-hand plots could indicate the words with multiple semantic definitions, some of which were highly understandable to the learners while some others resulted in low-scoring interpretations on the part of the learners because of the word's participation in separate semantic domains.

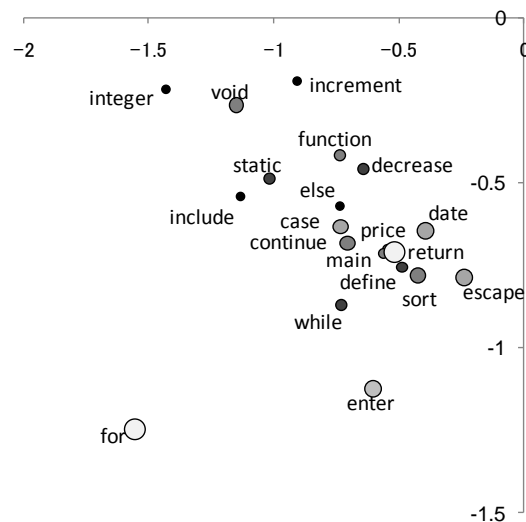


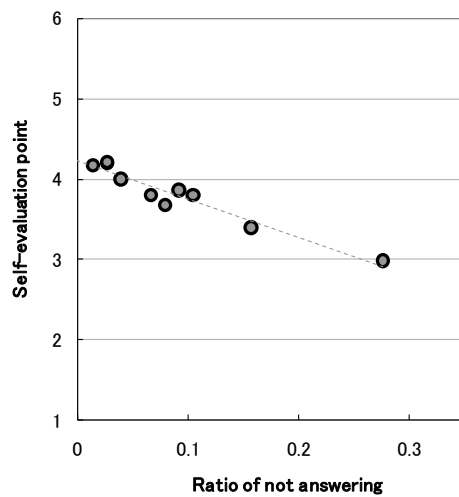
Fig. 1. Placement of words by answer pattern

As a representative example, “escape” is an expression technique in computer contexts. The involvement of inanimateness separates its meaning from the word’s general meanings, and this semantic distance decreased the learners’ comprehension. However, the uncommon word “void” appears frequently in the fields of law and computer science. Its particular semantic domain was predictable by schematic association with its core meaning, “invalid”.

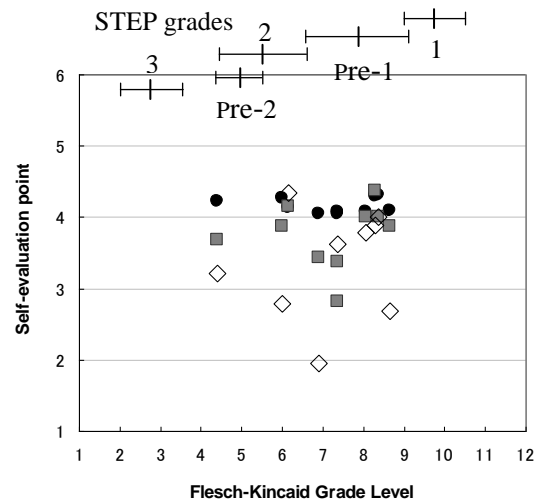
2.3. Reading comprehension judgments

Next, the present study took a detailed look at a difficulty indicator. Another group of 147 students who were enrolled at one of the aforementioned three universities worked on the reading comprehension judgment tasks for each of 10 lesson units on a 6-point scale for two

semesters. Those participants answered the self-judgment questions on their own. With this voluntary action one can avoid insincere, irresponsible answers (Asai, 2008b). As a result, the self-evaluation points by inquiry decreased as a smaller number of participants responded to the inquiry, as shown in Figure 2. This suggests that the learners more likely hesitated to self-judge themselves with respect to more difficult passages ($p < 0.01$). In a phenomenological sense, a degree of involvement or commitment can be an indicator of the difficulty of a lesson (Asai, 2012).



[Left] **Fig. 2. Self-evaluation points and ratios of answering by lesson unit**
(Each dot indicates the average point of the participants in a lesson unit.)



[Right] **Fig. 3. Self-evaluation and FKGL**

(Closed circle: all responses; dark square: 9 responses; open diamond: 8 or fewer responses.)

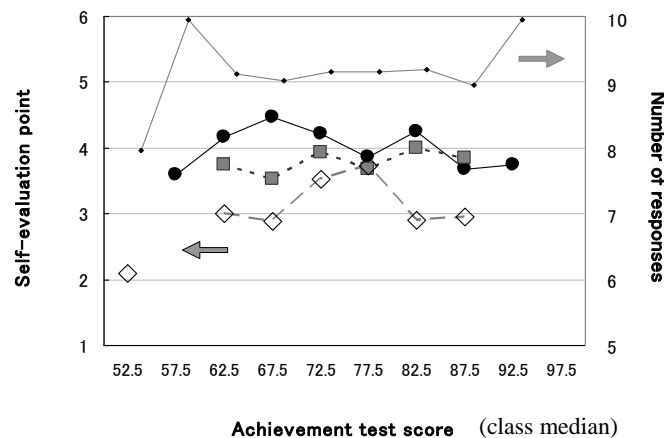


Fig. 4. Self-evaluation and achievement test score

(Closed circle: all responses, $M(SD)=4.16(0.10)$; dark square: 9 responses, $3.76(0.43)$; open diamond: 8 or fewer responses, $3.12(1.00)$, to the left axis; dots: number of responses to the right axis, $9.1(1.2)$.)

The participants were divided into three groups according to their commitment to the activities. One group answered all the inquiries. Another group responded nine times, and the other eight times or fewer. Their self-evaluation points by times of inquiry were plotted in

Figure 3 as a function of the Flesch-Kincaid Grade Level (FKGL hereinafter), which could be an indicator of the difficulty of an English passage. The FKGL for the present materials was 7.4 on average and 1.4 for standard deviation. This indicates a little higher level than the STEP 2nd grade test (STEP, 2012), which approximately corresponds to B1 in English in the CEFR scale (Council of Europe, 2011). For reference, the FKGLs of *The Adventure of Tom Sawyer* by Mark Twain and *Of Human Bondage* by William Somerset Maugham are 6.2 and 5.6, respectively.

Figure 4 shows the dependence of self-evaluation points on the participants' achievement test scores. Their self-judgment displayed a weak correlation, $r=0.25^{**}$, with the objective achievement measurement. Remarkably, the learners with fewer responses to the inquiry significantly showed lower points in self-judgment ($p<0.01$, $F=6.16$, $df=29$)(Asai, 2012).

2.4 Word difficulty judgments

Next, the participants were asked to list, voluntarily, difficult words from the reading lesson passages at the final meeting of the academic year. As a result, Figure 5 plots some chosen words as a function of the logarithmic relative frequency of word occurrence. The vertical axis shows the vote counts, whose minus sign symbolizes passivity accompanied by a feeling of difficulty. For example, the word "optimize" was selected by four participants and the normalized relative frequency of its appearance was 0.00006 in the corpus data. Here, words used in daily life, such as "haze," "shrub" as in the Figure 5, "bulk," "burp," and "trek," may not frequently appear in EFL materials. Some other voted-on words were "circulation," "conventional," "deteriorate," "interference," and "unventilated." Those ESP terms are typically long words of Latin origin.

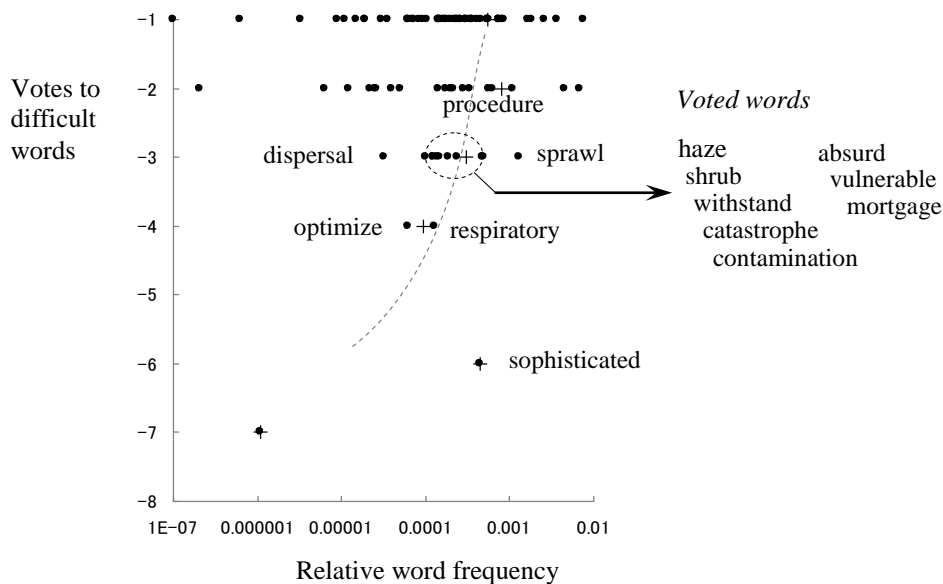


Fig. 5. Number of difficulty votes and word frequency

(+: mean value by cumulative number of responses; dot: frequency of appearance of the word. -3 means three responses. The minus quantity symbolizes the negative feeling of difficulty.)

3 Discussion

3.1 Relativity in judgment

The above analyses suggested a moderation effect in judgment (Asai & Ishikawa, 2010). The frequency and the number of semantic definitions of a word, $r=0.65^{***}$ and 0.30, respectively, with the semantic judgment scores, were contributors, but may not yet solely determine the subjective difficulty of a word or a passage for second-language learners. Figures 3 and 4 show that self-judgment by learners was subject neither to passage difficulty nor to their achievement under the present conditions and in some previous research (Asai, 2008b, 2014).

On the other hand, as shown in Figure 2, self-judgment depended significantly on the learners' commitment to the learning activity (Asai, 2012). This de-correlation of psychology with performance, in other words self-criterion relativity, suggests the importance of learner psychology and context making. Active participation in hands-on activities and can-do checks can be independent motivators in learning. Currently, controversial topics in classroom psychology include the realization of the learners' self-esteem and efficacy, and the appreciation of static individual tasks under a relaxed education system. Those can solely or synthetically produce relativity in self-monitoring.

3.2 Pedagogical implications

The moderated relativity of self-evaluation was observed in vocabulary checks and reading activities, as mentioned above. What teachers still should be concerned with in some educational settings is activating their students' self-awareness. A low degree of self-regulation might be an issue in a mature society today. Ample opportunities for self-checking and conceptualization help the learner develop semantic entrenchment and meta-cognitive skills (Asai, 2008a, 2009; Chi et al., 1989; Flavell, 1976, 1979).

In intermediate-or-higher proficiency-level classes, for instance, a merging of various modes of tasks from word definition matching and grammar exercises to reading comprehension questions for a text actually used in the real world, and technical explanation writing on key concepts in the text can expand and consolidate the semantic network of the key word. One effective task verified in four-year trial practices for the present study is to title each paragraph of a passage and then to draw a tree diagram about the relationship between the paragraphs. This holistic task can permit the reader to develop a meta-conception of the text.

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