

Reading attitudes in L1 and L2, and their influence on L2 extensive reading

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Abstract

This study examines the relationship between both first language (L1) and second language (L2) reading attitudes, and learners' performance in L2 extensive reading. Four reading attitude variables were identified (Comfort, Anxiety, Value, Self-perception), both in L1 and L2, according to learners' responses to a questionnaire. Results of analyses using these four variables are summarised on two levels. First, the study supports the transfer of the affective domain of reading (attitudes) from L1 to L2. But L2 proficiency does not affect this transfer in the way in which the linguistic threshold hypothesis would predict if this hypothesis were applied to the affective domain. Since this hypothesis explains the transfer of the cognitive domain of reading (i.e., reading abilities and strategies), these findings suggest that cognitive and affective domains of reading relate differently in L1 and L2. Although the transfer of reading attitude is generally supported, there are different degrees of transferability among different attitude variables: what learners think (Value) is more likely to transfer from L1 to L2 than what they feel (Comfort, Anxiety, Self-perception). Second, from a more pedagogical point of view, the positive feeling towards reading, both in L1 and L2, facilitates learners' performance in extensive reading. Merely thinking that reading is beneficial to oneself does not represent a strong enough motivation. The study has thus demonstrated the importance of understanding learners' attitudes (particularly feelings) to reading both in L1 and L2 for encouraging L2 learners' involvement in extensive reading.

Keywords: L1, L2, reading attitude, transfer, extensive reading, linguistic threshold hypothesis

Introduction

The affective domain of reading has received much less attention than the cognitive domain, despite the great amount of research accumulated in the field of second language (L2) reading. The lack of understanding of L2 learners' attitude towards reading is particularly unfortunate in extensive reading programmes. One of the goals of this type of programme is to develop good reading habits and encourage a liking of reading. It is likely that the attitudes towards reading which L2 learners bring into the programme influence their performance or engagement in extensive reading. The present study is motivated by the need to understand L2 learners' attitudes

towards reading and the influence of such affective reactions on the performance of extensive reading.

The present study deals with adult EFL learners. According to Day and Bamford's (1998) model, one of the factors influencing L2 reading attitude is first language (L1) reading attitude. They remark, "Assuming that students are already literate in their first language, one source of attitudes toward second language reading is the attitude that students have toward reading in their native language" (Day and Bamford, 1998: 23). Indeed, this sounds plausible, but evidence is necessary. The present study, therefore, examines the relationships between adult EFL learners' L1 and L2 reading attitudes as well as their performance in L2 extensive reading. Dealing with these three factors, the present study is built upon implications and findings of previous studies in three research fields, namely the relationship between L1 and L2 reading, extensive reading, and reading attitudes. Each field is discussed in detail below.

Relationship between L1 and L2 reading

The relationship between L1 and L2 reading has been investigated drawing on two hypotheses. First, the linguistic interdependence hypothesis, which claims that L1 reading ability transfers to L2 reading, i.e., there is always a relationship, hypothetically a correlational one, between L1 and L2 reading. And second, the linguistic threshold hypothesis, which claims that L1 reading ability transfers to L2 reading when learners' L2 proficiency is higher than the linguistic threshold, i.e., some basic linguistic ability is a prerequisite for the transfer to happen. Researchers, in general, have attempted to find out which hypothesis better explains the relationship between reading in one language and in another.

Two aspects of reading have been examined using this paradigm: the product of reading and the process of reading. The product of reading refers to the level of understanding, which is considered to be achieved by one's reading ability. It is measured by certain kinds of reading comprehension tests, and researchers have examined the relationships between reading abilities in L1 and L2 by using test scores as their data (e.g., Bernhardt and Kamil, 1995; Bossers, 1991; 1992; Brisbois, 1995; Carrell, 1991; Lee and Shallert, 1997; Perkins, Brutten, and Pohlmann, 1989; Schoonen, Hulstijn, and Bossers, 1998; Taillefer, 1996; Yamashita, 2002a). The process of reading refers to various strategies that readers use. Researchers utilized self-report data obtained by such methods as conducting interviews, thinking aloud, or distributing questionnaires in order to examine internal processes of reading (e.g., Davis and Bistodeau, 1993; Sarig, 1987; Taillefer and Pugh, 1998; Yamashita, 2002b; Zwaan and Brown, 1996). Results of these studies have generally supported the linguistic threshold hypothesis, and the importance of acquiring some basic level of L2 proficiency for L2 readers in order to read as well as they do in their L1 has been stressed.

The present study focuses on the affective domain, unlike the previous studies focusing on the cognitive domain (either the product or the process of reading). However, the importance of L2 proficiency is taken into consideration, and whether the linguistic threshold hypothesis applies to the affective domain of reading is examined.

Extensive reading

Extensive reading is one of the ways of teaching reading. According to Richards and Schmidt (2002: 193), "extensive reading means reading in quantity and in order to gain a general understanding of what is read." Thus, although there are variations in the ways in which an extensive reading programme is administered, extensive reading programmes share the basic tenet that students read a relatively large amount of texts compared with what is called intensive reading, which usually involves a slower reading of a relatively small amount of materials and often with translation exercises, particularly in a foreign language situation. In extensive reading programmes, students read relatively simpler materials than in intensive reading programmes, and they are not usually required to demonstrate understanding to a degree as detailed as they would in intensive reading programmes. Instead, students are expected to read a large amount of texts while enjoying reading. Extensive reading, as partly mentioned above, "is intended to develop good reading habits, to build up knowledge of vocabulary and structure, and to encourage a liking for reading" (Richards and Schmidt, 2002: 193-194).

A considerable amount of research has been undertaken to examine whether extensive reading has beneficial results. Gains in various aspects of learners' abilities, such as general linguistic proficiency, reading, writing, vocabulary, and spelling, have been investigated (e.g., Cho and Krashen, 1994; Elley and Mangubhai, 1983; Grabe and Stoller, 1997; Hafiz and Tudor, 1989; Hafiz and Tudor, 1990; Hayashi, 1999; Hedgcock and Atkinson, 1993; Janopolous, 1986; Mason and Krashen, 1997; Pitts, White, and Krashen, 1989; Polak and Krashen, 1988; Robb and Susser, 1989; Tsang, 1996). Positive effects of extensive reading on learners' affects, such as motivation and attitude, have been reported (e.g., Cho and Krashen, 1994; Constantino, 1994; Hayashi, 1999). Although there have been some criticisms of research methodology (e.g., Coady, 1997; Waring, in preparation), and the results concerning the effect on learners' development have not always been clear-cut, researchers and educators involved in L2 instruction have become increasingly aware of the importance of extensive reading (see, for example, a special edition on extensive reading, *The Language Teacher* 1997, 21. no. 5).

The previous studies on extensive reading were mainly interested in its effects on learners' development. The present study takes a different approach in terms of the cause-effect relationship of included variables. Previous studies treated extensive reading as a possible cause and other factors as the effects. In the current study, learners' performance in extensive reading is treated as the effect, and learners' attitudes towards reading in L1 and L2 are treated as possible causes.

Reading attitude

Reading attitude is a complex theoretical construct. It is defined in various ways, for example, "a system of feelings related to reading which causes the learner to approach or avoid a reading situation" (Alexander and Filler, 1976: 1) or "a state of mind, accompanied by feelings and emotions, that make reading more or less probable" (Smith, 1990: 215). According to an extensive and in-depth review of literature by Reeves (2002), there is considerable agreement among contemporary researchers that reading attitude is defined by three components: cognitive (personal, evaluative beliefs), affective (feelings and emotions), and conative (action readiness

and behavioral intentions). This tri-component view is most explicitly stated by Mathewson (1994), and these components can also be identified in other major models dealing with reading attitude, such as those of McKenna (1994) and Ruddell and Unrau (1994). Attempts to understand students' reactions to reading by using this tri-component model have now been reported (e.g., Mizokawa and Hansen-Krening, 2000).

The present study focuses on two of the three components of reading attitude: cognitive and affective. The reason for not including the conative component is due to the difficulty of operationalising it in the context in which the study was conducted, where, even if L2 (English) books and texts have become widely available, their availability cannot compete with L1 (Japanese) books and texts. The conative component pertains to actions and behaviors which may promote or hinder reading. For example, "going to a library frequently", which is one of the possible statements representing the conative component, would represent the L1 conative component, but it would not represent the L2 component, because not all libraries have English books, or even if some do, the collection is likely to be relatively small. As mentioned above, the present study intends to investigate both L1 and L2 reading attitudes, and for this purpose, it attempts to construct an instrument that measures both L1 and L2 reading attitudes in a similar manner. Due to this constraint, the study focuses on cognitive and affective components, two of the components that are regarded as constituting reading attitude.

Research questions

On the basis of considerations of all related areas mentioned above, the present study addresses the following research questions.

- 1) What is the relationship between attitudes in L1 and L2 reading?
- 2) What is the relationship between learners' L1 and L2 reading attitudes and their L2 proficiency?
- 3) What is the relationship between learners' L1 and L2 reading attitudes and their performance in L2 extensive reading?

Method

Participants

The participants were 59 Japanese university students who enrolled in the author's two EFL extensive reading classes (male: 44, female: 15, ages: 19 to 23 with the mode 19).¹ The students' academic backgrounds were engineering (n=34), agriculture (n=21), education (n=3), and literature (n=1). The majority of them were in their second year (n=56), with three students being either in the third or fourth year. They were all native speakers of Japanese and had studied EFL through formal instruction at school for at least seven years. Three students had had the experience of living abroad for about a year. Such an experience may have influenced their attitude to English in comparison with students who had never been abroad. However, the overseas experiences of these students occurred either at preschool or elementary school age. Their responses to a reading attitude questionnaire and results on an L2 proficiency test did not

seem to have been affected by their experience abroad at such early ages.² Therefore, data from these three students were included in the analysis.

Instruments

Attitude questionnaire. A five-point Likert scale questionnaire was developed. The students were asked to answer each item by choosing a number from 1 (The statement does not match what I feel/think) to 5 (The statement matches what I feel/think). There were two sections: one asking about their L1 reading and the other about their L2 reading. Each section contained two parts (A and B). Part A probed affective reactions to reading, and part B cognitive reactions. There were seven and eight items in parts A and B respectively. The wording of each questionnaire item, written in Japanese, was identical in the L1 and L2 sections, except that the word "English" was inserted into the L2 section (e.g., "Reading is enjoyable." in the L1 section became "Reading in English is enjoyable." in the L2 section). The items were constructed on the basis of the author's survey of literature dealing with the affective domain of reading. The preliminary list of items was examined by several graduate students studying applied linguistics. Modification was made incorporating their feedback.³ The questionnaire contained another short section before the L1 and L2 sections, intended to obtain demographic information such as sex, age, academic year, and living experience abroad.

L2 proficiency test. In order to measure L2 proficiency, the reading section of a practice TOEIC (Test of English for International Communication) was used (100 items).⁴ The TOEIC is a standardized multiple-choice test, and it has been used internationally as a test of English proficiency (particularly communicative ability) of non-native speakers of English. The reading section consists of grammar, vocabulary, and reading comprehension subsections. Reliability of the test (Cronbach's alpha), based on the data from the participants, was 0.83.

Performance in extensive reading classes. The performance in extensive reading was operationally defined as the average number of pages read per week. Reading one book per week was recommended in the extensive reading classes. This pace of reading made the requirement 13 books per semester (for one class) and 14 books per semester (for the other). The number of pages that each student read was recorded weekly, and the average number of pages per week was calculated when the semester was finished. It must be said that this method of recording the amount read provides us with a rather rough estimation of the amount of reading completed by each student: the ideal estimation would be a calculation of the number of words that each student read. However, it is difficult to know the number of words contained in each book. As will be explained below, there were about 420 books from which students freely chose their reading. None of the books listed the total number of words contained. In this situation, in which different students read different books every week, it was practically impossible to count the number of words in each book. Although somewhat less accurate, the number of pages seems to provide a fairly adequate estimate of the amount of reading, according to the author's observation.

Procedure

The data for the present study were collected in the extensive reading classes. In the first class, the questionnaire was given, and in the second class, the practice TOEIC was administered. After that, the extensive reading programme started and continued for the 13 or 14 weeks. This one week difference was simply due to the academic calendar of the university and has no significant meaning for the study.

A variety of graded readers series (Cambridge, Heineman, Oxford, and Penguin) was used. There were about 420 books altogether, at various levels. The students were able to borrow books that they wanted to read from this pool. Graded readers with levels ranging from "i-1" to "i+1", with "i" being the students' current L2 proficiency, were recommended as the adequate level for extensive reading.⁵ Students were required to write a short book report for each book they read. The recommended pace of extensive reading was at least one book per week. Of course, students who could or wanted to read more were encouraged to do so, but reading more than two books per week was not particularly stressed in order not to put students under pressure, particularly weaker ones. The students were required to finish reading at least 13 or 14 books per semester in order to complete the course. The constant pace of one book a week was emphasised, and the students generally kept this pace throughout the semester.

Results⁶

Reading attitude variables

Factor analysis was applied to determine how many factors were involved in students' responses to the questionnaire. The unweighted least-squares method was used to extract the factors, which was followed by varimax rotation. The eigenvalue-more-than-one criterion was adopted to determine the number of factors. Tables 1 and 2 list factor loadings with absolute values greater than 0.30, according to languages (L1 and L2) and sections of the questionnaire (A and B).

Table 1: Factor loadings of Part A (Affective reactions)

Item	Japanese section			English section		
	1	2	Communality	1	2	Communality
1. I feel anxious if I don't know all the words.		0.632	0.455	-0.534	0.405	0.450
4. I feel anxious if I'm not sure whether I understood what I read.		0.601	0.401	-0.466		0.234
6. Even if I cannot understand what I read completely, I don't care.		-0.510	0.261	0.881		0.800
2. If it is not necessary, I prefer to avoid reading as much as possible.	0.902		0.900		0.598	0.448
3. Reading is enjoyable.	-0.869		0.805		-0.549	0.376
5. Reading is my hobby.	-0.818		0.677		-0.515	0.303
7. I feel tired when I am presented with a long text.	0.802		0.690		0.612	0.375
% variance explained	42.554	17.300		24.12	21.465	
Interpretation	Comfort	Anxiety		Anxiety	Comfort	

Table 2: Factor loadings of Part B (Cognitive reactions)

Item	Japanese section			English section		
	1	2	Communality	1	2	Communality
2. I think reading many books is advantageous to getting a job.	0.817		0.675	0.763		0.621
3. I think reading many books is advantageous to the study of my major.	0.668		0.511	0.640		0.416
5. I think reading many books is advantageous to getting qualifications.	0.789		0.639	0.714		0.536
6. I think reading many books enables us to acquire depth of knowledge and sophistication.	0.550		0.306	0.895		0.818
8. I think reading is useful to shape personality.	0.350		0.134	0.410		0.200
1. I think I can read quickly.		0.824	0.724		0.790	0.624
4. I think my reading ability is advanced.		0.725	0.536		0.907	0.822
7. I think I read a lot.		0.583	0.349		0.629	0.399
% variance explained	27.823	20.617		30.922	24.53	
Interpretation	Value	Self-perception		Value	Self-perception	

The affective questions (Part A) resulted in two factors in both the L1 and L2 sections. These two factors were given the same interpretation in the two sections, because nearly identical patterns of loadings were observed. Factor 1 (the L1 section) and Factor 2 (the L2 section) were both labeled "Comfort" because items here were concerned with positive or negative feelings. Factor 2 (the L1 section) and Factor 1 (the L2 section) were named "Anxiety", because items on these factors were related to anxiety. There was an ambiguous item, Item 1 in the L2 section, that loaded on both factors, but this item was treated as an item representing Factor 1 (Anxiety) in the following analyses, because the loading was greater on this factor than the other one.

The cognitive questions (Part B) in L1 and L2 also resulted in two factors. Five items on Factor 1 (both L1 and L2 sections) pertained to various values which students ascribed to reading (therefore: Value). Lastly, the three items under Factor 2 (both L1 and L2 sections) related to how students thought of themselves as a reader (therefore: Self-perception). Internal consistency (Cronbach's alpha) of the items representing each factor varied from 0.62 to 0.92. These figures were considered satisfactory in consideration of the relatively small number of items and participants. To convert the four factors into attitude variables, items loaded on each factor were totaled. Care was taken to reverse scores on negatively loaded items so that a higher score on each variable indicates a higher degree of feelings or beliefs represented by each factor. Table 3 shows descriptive statistics of each variable with possible ranges of each variable listed underneath.

Table 3: Descriptive statistics of attitude variables in L1 and L2

	n	Min	Max	Mean	sd.
Anxiety J	59	3	14	7.85	2.59
Anxiety E	59	3	15	9.51	3.00
Comfort J	59	4	20	13.85	4.91
Comfort E	59	4	20	10.71	3.27
Value J	59	9	25	17.88	3.82
Value E	59	5	25	17.64	4.42
Self-perception J	59	3	12	6.71	2.78
Self-perception E	59	3	15	5.76	2.81

Possible ranges: Anxiety 3 to 15, Comfort 4 to 20, Value 5 to 25, Self-perception 3 to 15.
J: Japanese (L1), E: English (L2)

The relationship between L1 and L2 reading attitudes (Research Question 1)

The first research question bears on the relationship between L1 and L2 reading attitudes. For this purpose, Pearson correlation coefficients were computed among the eight variables (four attitude variables in each language). Table 4 shows significant correlations. Some interesting results appeared. Comfort (positive feeling) and Anxiety (negative feeling) were correlated negatively in both languages. Self-perception correlated with Comfort in each language. This suggests that, although Self-perception was thought to be an aspect of the cognitive component and Comfort an aspect of the affective component of reading attitude, these two are actually related. A weak but significant negative correlation between Self-perception and Anxiety in L1 also seems to support this interpretation. This point will be discussed further below.

Table 4: Correlations of attitude variables in L1 and L2

	Anxiety J	Anxiety E	Comfort J	Comfort E	Value J	Value E	Self J	Self E
Anxiety J	1.000	0.469**	-0.365**			0.261*	-0.262*	
Anxiety E		1.000	-0.300*	-0.454**				
Comfort J			1.000	0.317*			0.594**	
Comfort E				1.000				0.616**
Value J					1.000	0.629**		
Value E						1.000		
Self J							1.000	0.380**
Self E								1.000

** p < .01

* p < .05

J: Japanese (L1), E: English (L2)

The most important results relating to Research Question 1 are correlations between the same L1 and L2 attitude variables. Moderate but significant correlations were obtained for all the

variables (from 0.317 to 0.629). The results, therefore, suggest that L1 and L2 reading attitudes are related. Since the students are all EFL learners who had acquired L1 literacy before they started learning English and their exposure to L1 texts is much greater than L2 texts in their daily life, this correlational relationship can be interpreted as indicating transfer of reading attitudes from L1 to L2 reading. The result also suggests that different types of reading attitudes tend to transfer to a different degree. The correlation coefficient of Value was the highest. Therefore, the value that students attach to reading is the one most likely to be transferred and shared in both languages of all four attitude variables investigated.

Next, differences in attitude variables between L1 and L2 were examined by a matched t-test.⁷ Since the test was repeated four times, the critical level was adjusted to 0.012 according to Bonferroni's correction. There were significant differences, except in the case of Value (Table 5).

Table 5: Differences of attitude variables between L1 and L2

	t	p
Anxiety	-4.393	0.000
Comfort	4.852	0.000
Value	0.507	0.614
Self-perception	2.653	0.010

This result, together with the descriptive statistics in Table 3, indicates: (1) anxiety in reading is higher in L2 than in L1, (2) comfort in reading is higher in L1 than in L2, (3) the value that the students attached to reading does not differ between L1 and L2, and (4) self-perception as a reader is more positive in L1 than in L2.

All these results suggest that, although reading attitudes transfer from L1 to L2, students have, not surprisingly, more positive attitudes in L1 reading than in L2. Only the degree of values that was ascribed to reading is similar across the two languages.

The relationship of L1 and L2 reading attitudes and L2 proficiency (Research Question 2)

The primary concern of the second research question is the linguistic threshold hypothesis. To answer this question, the students were divided into two groups on the basis of their TOEIC scores. Some students did not take the test, so the total number of subjects was 54. The students whose z-scores on the TOEIC were higher than zero were regarded as members of the Advanced group (N=27) and those whose z-scores were lower than zero were regarded as the Lower group (N=27). The mean scores of the TOEIC were 53.11 (sd = 7.86) for the Advanced group, and 35.93 (sd =4.71) for the Lower group.

The differences between the Advanced and Lower groups in the attitude variables were examined by a t-test.⁸ Since the test was repeated eight times, the significance level was adjusted to 0.006. The result summarized in Table 6 shows that there were no significant differences. This indicates that L2 proficiency does not have a strong influence on reading attitudes.

Table 6: Differences of attitude variables between Advanced and Lower groups

	t	p
Anxiety J	-0.774	0.789
Anxiety E	-0.221	0.520
Comfort J	1.893	0.041
Comfort E	1.738	0.156
Value J	0.109	0.151
Value E	-0.532	0.116
Self J	1.572	0.692
Self E	1.608	0.622

J: Japanese (L1), E: English (L2)

Next, Pearson correlations of each variable were computed for each group. Table 7 lists the correlations of the corresponding L1 and L2 variables according to groups. Nearly significant coefficients ($p < .055$) are also listed.

Table 7: Correlations between corresponding variables in L1 and L2

	n	Anxiety	Comfort	Value	Self-perception
Advanced	27	n.s.	n.s.	0.670**	0.377+
Lower	27	0.704**	0.376+	0.613**	0.380+

** $p < .010$

+ $p < .055$

For the linguistic threshold hypothesis to be supported, higher correlations should be observed for the Advanced group than the Lower group. However, such a pattern was not observed, as there was virtually no difference in terms of Value and Self-perception. Regarding Anxiety and Comfort, the Advanced group did not show any significant correlation. Observation of a scattergram suggested that correlations were probably lost due to a few students who had different affective reactions in L1 and L2. There were a few students who had high anxiety in L2 reading but low anxiety in L1 and who, rather interestingly, had relatively high comfort in L2 but low in L1. It is not known whether such discrepancy in the attitudes across two languages is a characteristic of students with relatively high proficiency. We would need further research on this point with larger samples. Although this question has not been answered, the present data at least suggest that the linguistic threshold hypothesis does not apply to the transfer of reading attitudes included in the present study.

L1 and L2 reading attitudes and L2 extensive reading (Research Question 3)

The last question addresses the relationship between learners' L1 and L2 reading attitudes and their performances in L2 extensive reading. Correlations between the average number of pages read in a week and attitude variables were computed (Table 8). Only Comfort and Self-perception showed significant correlations. This suggests that not all attitude variables affect

students' performance in extensive reading. Interestingly, when correlations were significant, both L1 and L2 correlations were significant, and when correlations were not significant (Anxiety and Value), both L1 and L2 correlations were not significant. This suggests that, although different attitude variables have different effects, the way in which the variables influence the performance in extensive reading is similar in both L1 and L2. This lends further support to the interrelationship between reading attitudes in L1 and L2.

Table 8: Correlations between the average number of pages/week and attitude variables

	n	Anxiety	Comfort	Value	Self-perception
Japanese	59	n.s.	0.415**	n.s.	0.405**
English	59	n.s.	0.340**	n.s.	0.263*

** $p < .01$

* $p < .05$

The contrasting results with regard to Anxiety and Comfort, both of which were hypothesized as variables in the affective component of attitude, suggest that, while the negative affective variable had no effect on the performance in extensive reading, the positive affective variable facilitated extensive reading. It seems that experiencing a positive feeling is more motivational than not experiencing a negative feeling. For example, although students may not feel anxiety in reading, they may not feel comfortable or happy about reading, either. This kind of affective status is not likely to motivate students to read a larger amount due probably to their lack of enjoyment. It is experiencing a positive feeling that facilitates extensive reading. The result concerning Value suggests that attaching a high value to reading does not necessarily motivate students. It is possible that students rationally think that reading is beneficial in various ways, but they end up not reading, simply because they do not find any pleasure in it. The result in relation to Self-perception indicates that good self-perception has a relationship to the performance in extensive reading. It seems that, although we treated this variable as one of the cognitive variables (because this involves personal evaluation of oneself), this may actually fall in between the cognitive and affective components. This is because self-perception is related to self-confidence, and feeling confident is likely to be related to comfort in reading. Significant correlations, both in L1 and L2, between Self-perception and Comfort (Table 4) seem to support this interpretation. Thus, self-perception, interpreted as self-confidence, may reflect an aspect of positive feelings. This result seems to demonstrate complexity in the concept of reading attitude. We can think of attitude more analytically by positing different components, but these components are not independent of each other, and it is not always easy to clearly separate different components.

In sum, we can say that the motivating factor for extensive reading is not a negative feeling, nor is it rational thinking about a value. Instead, it is a positive feeling towards reading. The mere absence of negative feeling is not motivating enough for extensive reading, either. Both L1 and L2 reading attitudes affect L2 extensive reading performance in a similar way.

Discussion

The results of the analyses aiming to answer the three research questions can be summarized from two points of view: the relationship between L1 and L2 reading attitudes, and the influence of such attitudes on the performance in L2 extensive reading.

Firstly, this study has provided evidence supporting the transfer of reading attitudes from L1 to L2. This result lends support to part of Day and Bamford's (1998) model of the acquisition and development of L2 reading attitudes in that L1 reading attitude is one of the factors forming L2 attitude. The finding that transfer from L1 to L2 reading happens not only in the cognitive domain (reading abilities and strategies), as was found by previous studies, but also in the affective domain, such as in attitude, will mark an important step for the advancement of research into the relationship between L1 and L2 reading.

Another important finding pertaining to this transfer issue is that, unlike in previous studies, L2 proficiency did not turn out to be an important factor in the transfer of reading attitudes, at least as far as the present data were concerned. This suggests that the cognitive domain and the affective domain of reading relate differently in L1 and L2. The transfer of the affective domain of reading is less likely to be influenced by L2 proficiency. This means that if students have a positive attitude towards L1 reading, they are more or less likely to keep it in L2 even if they are, at a certain point of their development, not very successful learners. Such students have the potential to improve in L2 in the future, because their positive reading attitude is likely to encourage them to obtain input from reading. On the other hand, if students have a negative attitude in L1 reading, they may not continue to read in L2 once requirements such as class assignments or exams are over. Such learners may not develop their potential to the fullest, even if they are successful learners at a certain point of their development, because they are not willing to get further input. Day and Bamford (1998: 24) express a similar point in the following way: "Interestingly, and perhaps contrary to common sense, these negative attitudes cut across reading proficiency, and can be held by students who are considered successes in terms of learning to read."

In the present study, four attitude variables were identified. Several differences in the results from these four variables suggest that there are different degrees of transferability among different attitude variables. In general, what students think or believe (e.g., values learners attach to reading) is more likely to transfer from L1 to L2 than what they feel (e.g., anxiety and comfort). This point was clearly shown by the significant differences between L1 and L2 variables (Table 5). Although the transfer is generally supported, the data showed that, while the students felt more anxious, less comfortable, and less confident in their L2 reading than in their L1 reading, the degree of value they ascribed to reading was not different in L1 or L2.

Secondly, the present study found that positive feelings, whether in L1 or L2, motivate students to read more in an extensive reading programme. Merely thinking that reading is good for oneself does not constitute a sufficiently strong motivation. It is important to point out that the extensive reading classes in which the present study was conducted were compulsory foreign language classes. In such classes, it is possible that students will perform well for the purpose of simply obtaining a good grade even if they have negative attitudes. If such instrumental

motivation had overridden the positive attitudes, the present study may not have found the relationship between positive feelings and performance in extensive reading. The fact that this was not the case indicates the importance of positive feelings that students may have towards reading. It is likely that the facilitating effect of positive feelings appears more strongly in a situation where no obligation is exercised, such as in personal pleasure reading or in an extracurricular (i.e., non-obligatory, free-participation) extensive reading programme outside the classroom. Crawford Camiciottoli (2001) examined self-reports from Italian university EFL learners on leisure time reading and found that the amount of L1 reading was one of the predictors of the amount of L2 reading and of L2 reading attitude (willingness to find time for L2 reading). If the amount of L1 reading reflects L1 reading attitude, which is plausible, this study would also indicate the effect of L1 reading attitude on performance and attitude towards L2 reading. An important pedagogical implication is, therefore, that teachers should attempt to understand learners' internal affective reactions to reading not only in L2 but also in L1. If the attitudes are negative, they should attempt to nurture positive attitudes to reading as much as possible.

Although some interesting and important findings were obtained in the present study, they should be taken as suggestive rather than definitive because of the following limitations. First, this is a small-scale study. The study should be replicated, with necessary modifications, with a larger population of learners. The number of questionnaire items should also be increased. Part of the reason that the present study did not find a negative relationship between anxiety and learners' performance, which would not have been surprising considering implications from previous research (e.g., Onwuegbuzie, Bailey, and Daily, 2001; Saito, Garza, and Horwitz, 1999), might be due to the small number of items representing reading anxiety. Second, the present study attempted to examine reading attitudes which can be equally identified in L1 and L2. However, reading attitudes may exist that are specific to L1 and L2. The scope of reading attitude might be expanded in future investigations. Third, as mentioned already, the estimate of performance of extensive reading may not be precise enough. Indeed it would be interesting, and would also make a great contribution to research in extensive reading, to examine whether the number of pages can be as good an estimate as the number of words when we try to assess the amount of reading in extensive reading programmes. Fourth, reading attitude is a theoretically complex construct. How we accurately measure it is an important question that should continue to be addressed by researchers who attempt to investigate this aspect of reading. The present study demonstrates one of the possible methods, but different types of questionnaires or other methods such as interviews should be tried. Fifth, in relation to the second point, this kind of research may be context dependent, because reading attitudes are socially formulated. The present study was conducted in an EFL context, but other contexts, such as ESL in which availability of L1 and L2 books and texts is different, may have different results. Finally, this study did not make distinctions among the different types of reading, for example, pleasure reading versus study reading. The transfer of reading attitudes might be affected by the types of reading that learners are involved in, and this is also an area for future research.

Despite all these limitations, the present study presented data supporting transfer of the affective domain of reading from L1 to L2, and demonstrated how L2 learners' affect relates to performance in extensive reading.

Conclusion

It could be said that the contribution of the present study is two-fold. It has expanded the scope of investigation of the relationship of L1 and L2 reading to the affective domain of reading. It has also connected L1 and L2 reading attitudes with learners' performance in extensive reading.

The L1 and L2 relationship of the affective domain of reading is in some respect similar to that of the cognitive domain (i.e., the transfer was supported), but somewhat different (i.e., the importance of L2 proficiency for the transfer was not supported). As for the more pedagogical implication, the study found that a positive affective status facilitates performance in extensive reading. Since there is transfer of reading attitudes, EFL learners' positive feeling towards L2 reading is likely to originate, at least to some extent, from their positive attitude towards L1 reading. Teachers should try to understand learners' reading attitudes in L1 as well as in L2. The present study has made a further step towards understanding L1 and L2 reading attitudes, and performance in L2 reading, and we now need to accumulate more data to confirm or modify its implications.

Acknowledgements

The present study was funded by a Grant-in-aid for Scientific Research (C/2) (No. 14580280) from the Japan Society for the Promotion of Science and the Ministry of Education, Science, Sports and Culture. The author thanks anonymous reviewers for their constructive comments.

Notes

1. The potential bias of researchers using their own students as participants must be kept in mind. Since many researchers use their own students in pedagogical settings, this is an important question to be carefully considered in such studies. In this study, the questionnaire was given in the very first class when there was almost no developed psychological relationship between the teacher and students, and the students were told that the questionnaire was not related to their grade. These conditions may have minimized any possible bias.
2. The author did not see any outstanding tendencies in these three students' test scores (e.g., higher scores than other students) and in their responses to the questionnaire (e.g., extremely positive or negative reactions).
3. The majority of feedback was on the clarity of expression.
4. The TOEIC has a listening section as well, but due to time constraints, the listening section was not administered.
5. Day and Bamford (1998) recommend “i-1” level, but considering Krashen (1982)'s hypothesis regarding “i+1” level input as the condition of L2 acquisition, the author thought it would not do

any harm even if “i+1” level was mentioned. Some competent and confident students often seek challenges. Mentioning “i+1” level was thought to encourage such students.

6. Statistical analyses were performed using SPSS version 11.5J.

7. The author also tried a non-parametric test (Wilcoxon’s signed-ranks test), because the continuity of ordinal data is sometimes questioned. The result was the same as that of the t-test.

8. The author tried a non-parametric test of independent groups (Wilcoxon ranks sum test) as well (see note 7), but there was no difference in the results.

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