An Inquiry into Foreign Language Reading Anxiety among Japanese EFL Learners

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Abstract

This paper addresses the possibility of anxiety arousal in foreign language (FL) reading among Japanese university learners. In particular, using the Foreign Language Reading Anxiety Scale called FLRAS, this paper investigated the following areas: 1) the degree to which Japanese university learners perceived anxiety specific to the domain of reading, 2) the relation between perception of reading anxiety and reading proficiency, and 3) identification of underlying characteristic factors behind FL Reading Anxiety by means of factor analysis. Results showed significant correlations between the FLCAS (Foreign Language Classroom Anxiety Scale) and the FLRAS, and significant negative correlations between the FLRAS and reading proficiency measures. Furthermore, the low reading proficiency group exhibited a significantly higher degree of reading anxiety than the intermediate reading proficiency group. The low reading proficiency group also showed a significantly less positive attitude toward the motivational components of the FLRAS than the intermediate reading proficiency group did. Based on these findings, this paper concludes with possible suggestions for anxiety reduction techniques to be employed in the instructional setting.

Introduction

In recent years, applied linguists and researchers have attached increasing importance to learners' "affective states," which along with cognitive variables, can be a major determinant of success of second/foreign language learning. They have increasingly recognized that "affect" could even influence the cognitive processing of learning. Summarizing Schumann's acculturation model and social distance hypothesis, Young (1999) went so far as to say that the affect would override the cognitive processing needed for language acquisition or could "short-circuit cognition (the learning process) for certain learners"(p.20). Krashen's (1982) noted
Affective Filter Hypothesis posits affect as a filter, which either allows or screens out the linguistic input entering the brain's processing system. According to this theory, anxiety may function as an affective filter, thus hampering the process of achieving proficiency in a foreign language (FL).

Anxiety, a main construct of "affective variables," has thus become a much-discussed phenomenon in the educational scene, along with other affective variables such as attitude, orientations and motivation. In this educational context, several different types of anxiety have been addressed, including trait anxiety (general propensity toward anxiousness arousal), state anxiety (momentary and transitory type of anxiousness in response to a particular condition) and test anxiety (negative emotional reaction to a test-taking experience). However, Horwitz, Horwitz, and Cope (1986) played a pioneering role in distinguishing FL anxiety as a phenomenon distinct and specific to formal language learning experiences. They established the validity and reliability of a foreign language anxiety scale called FLCAS. Other researchers have also attempted to differentiate foreign language from other types of anxiety (Horwitz, 1986; MacIntyre & Gardner, 1989, 1991a, 1991b). MacIntyre and Gardner (1991a) argue for the distinctive nature of language-related anxiety, which showed near zero correlations with math class anxiety.

In more recent years, there has been an increasing bulk of literature on 'anxiety,' and its relationship to language performance. Although in the past, the relation between anxiety and language performance has been reported to be mixed or inconsistent (Scovel, 1978), Young (1991) attributes this inconsistency in research findings to the difference in definition of anxiety (state versus trait anxiety), participants' variables, and research design including data elicitation methods. MacIntyre (1995) proposed a curvilinear relation between anxiety level and performance outcome. When the task demand placed on the learners is of a low level of difficulty, the more anxious the learners are, the better the learning results are. However, the level of anxiety increases in proportion to the task demands. When demands exceed the learners' cognitive processing ability, the so-called "facilitating anxiety," i.e. helpful anxiety, turns into "debilitating anxiety," which has detrimental effects on language learning outcome. Recent empirical studies have increasingly lent support to the detrimental effects of anxiety on FL performance (Horwitz et al., 1986; MacIntyre & Gardner, 1991a, 1991b, 1991c, 1994), course grades (Horwitz, 1986; Horwitz et al., 1986; MacIntyre & Gardner, 1994), and cognitive processing (Eysenck, 1979; MacIntyre & Gardner, 1994).
The previous studies on anxiety have mainly focused on oral performance. Learners feel anxious when they are called on to respond or speak orally in the target language in front of a class (Young, 1991). Reading, on the other hand, can be considered a personal activity in which pacing is entirely up to the individual reader. Notwithstanding this individual pacing, FL reading can be an anxiety-evoking language activity. Recent studies have examined the relations between FL reading and anxiety arousal. Ganschow and Sparks (1996) found that anxiety arousal has significant negative effects on performance of standardized reading test (NELSON Reading), as well as on other measures of FL proficiency.

Researchers on L1 and L2 reading have illuminated the complexities of the multi-faceted processes involved in extracting meaning from printed material. Reading processes are mainly divided into the lower level processing such as letter and word recognition, and conceptually-driven, higher level processing. FL learners find it quite laborious and painful to engage in letter and word recognition, which are automatized and effortless processes in L1 reading. For poor readers, lower level processing takes up much of their cognitive processing capacity, and this makes it difficult for them to direct their remaining cognitive resources to higher level processing. As noted by Young (1999), high levels of anxiety take up much of the already limited cognitive processing capacity of poor readers, thus slowing down and making more strenuous the application of lower-level reading processes. As a result, these readers cannot successfully engage in higher levels of processing such as making appropriate decisions in strategy use. MacIntyre and Gardner (1991b, 1994) proved empirically that FL anxiety was correlated with the input and processing stages of reading. Saito, Horwitz, and Garza (1999) suggest that unfamiliarity with phonological, syntactic and lexical systems specific to the target language could be one of the important sources of FL reading anxiety.

Although more recent studies have drawn attention to the importance of reading anxiety in both theoretical and empirical fields, few studies have attempted to probe the "construct" of FL reading anxiety as distinguishable from other domain-specific anxiety constructs or a general FL anxiety. Saito et al. (1999) were the first researchers to establish the construct validity of their anxiety scale specific to reading in a FL and to examine the reading anxiety among university students learning French, Russian and Japanese. They confirmed the existence of FL reading anxiety as "a phenomenon related to, but distinct from, general FL anxiety" (p.211). However, since their subjects were university students enrolled in French, Japanese, Russian courses, their main focus was the difference in the learners' perception of reading difficulties.
with respect to their target language. They found that reading anxiety varied according to the specificity of the target language, and was related to the specific orthographic (writing) system.

In the Japanese EFL context, anxiety has been included as one of the composites of motivational constructs (Kimura & Nakata, 2000). The studies on domain-specific anxiety about reading are still at a peripheral and dawning stage in second/foreign language research. Therefore, this paper addresses the possibility that Japanese university learners may feel anxiety in learning to read in a FL, and explores the relation between FL reading anxiety and FL reading proficiency. Specific research questions are formulated as follows:

1. Is the FLRAS a valid and reliable measure of FL reading anxiety for use with Japanese EFL university-level learners?
2. Are there any significant correlations between anxiety measures and reading proficiency?
3. Does FL reading proficiency have a significant effect on the perception of FL reading anxiety?
4. What are the underlying common characteristics behind FL reading anxiety?
5. Do different levels of FL reading proficiency significantly affect the factors extracted from the factor-analyzed FLRAS measure?

Method

Participants

A total of 75 second-year female university learners participated in the study. They are categorized into intermediate, low-intermediate, and low proficiency groups according to the results of a TOEIC test administered as a placement test. They were grouped into three intact classes and were not randomly selected for the research.

Instrumentation

Two kinds of anxiety scales were employed in the study: the FLCAS (Foreign Language Classroom Anxiety Scale), developed by Horwitz, et al. (1986) and the FLRAS (Foreign Language Reading Anxiety Scale), developed by Saito et al. (1999). Both of them were translated into Japanese, so as to avoid any misunderstanding of the meaning of the questionnaire. Both used 7-point Likert scale (1 = strongly disagree, 7 = strongly agree), instead of the original 5-point Likert scale, in order to find out subtle differences in perception.
The 33-item FLCAS was tested on the participants in order to measure the anxiety they entertained toward FL learning in general. The internal consistency coefficient (Cronbach's alpha) was .9179 for the participants described above. The 20-item FLRAS was slightly modified with the exclusion of the two items on 'unfamiliar letters and symbol,' since learners were already familiar with the alphabet. Instead, two items concerning difficulty arising from timed reading and learner propensity toward dependence on a dictionary were added and numbered 19 and 20, respectively. Both are much-cited tendencies commonly observed among university learners and run as follows: #19. I get nervous when I have to read within a time limit. #20. Whenever I encounter unfamiliar words, I am inclined to look them up in a dictionary. As a result, the numbering of several items in the modified version was different from that of the original. The FLRAS was administered with no reading task attached in order to identify the learners' usual reading behavior and attitudes toward FL reading in general. The Cronbach's alpha was .8412 for the participants in this study.

In order to measure FL reading proficiency, two kinds of standardized reading test were used for analysis. One was a reading section of a TOEIC test administered to reconfirm the difference in reading proficiency among the three intact groups described above. The other was a reading section of a SLEP (Secondary Level English Proficiency) test employed to determine the relation between reading proficiency and reading anxiety.

Results

Research question 1

A replication of Saito et al.'s (1999) study was conducted to confirm validity of the FLRAS among the participants in this study. The Pearson-product moment correlation demonstrated a significant correlation between the FLRAS and the FLCAS ($r = .735$, $p < .001$, compared with $r = .64$, $p < .01$ in Saito et al.'s study). This finding indicates that a high level of the FLCAS means a high level of the FLRAS. Thus, concurrent validity of the FLRAS was confirmed for administration on the participants in this study.

Research question 2

The Pearson product-moment correlation was run between anxiety measures (FLCAS, FLRAS) and reading proficiency measures (a 75-item SLEP reading test and a 100-item TOEIC Reading test). Results are shown in Table 1.
Table 1 Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>TOEIC Reading</th>
<th>SLEP Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLRAS</td>
<td>-.262*</td>
<td>-.325**</td>
</tr>
<tr>
<td>FLCAS</td>
<td>-.139</td>
<td>-.345**</td>
</tr>
</tbody>
</table>

*p<.05   **p<.01

The FLRAS was found to have a significant but low inverse correlation with the TOEIC reading test \( r = -.262, p < .05 \) and the SLEP reading test \( r = -.325, p < .01 \). The FLCAS also had a significantly inverse correlation with the SLEP reading test \( r = -.345, p < .01 \).

Research question 3

The reading section of the TOEIC test described above was used to reconfirm the between-group difference among the three intact classes.

Table 2 Descriptive Statistics

<table>
<thead>
<tr>
<th>Group</th>
<th>I (n=24)</th>
<th>LI (n=24)</th>
<th>L (n=27)</th>
<th>Total (n=75)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>181.250</td>
<td>137.500</td>
<td>55.926</td>
<td>122.133</td>
</tr>
<tr>
<td>(SD)</td>
<td>(20.865)</td>
<td>(13.105)</td>
<td>(21.170)</td>
<td>(56.174)</td>
</tr>
<tr>
<td>Range</td>
<td>160-225</td>
<td>115-155</td>
<td>15-95</td>
<td>15-225</td>
</tr>
</tbody>
</table>

I: a group of intermediate proficiency readers  
LI: a group of low-intermediate proficiency readers  
L: a group of low proficiency readers

A one-way analysis of variance (ANOVA), with grouping as an independent variable and TOEIC reading scores as a dependent variable, confirmed the between-group difference among the three groups \( F(2,72) = 292.19, p < .001 \). A post-hoc scheffe test confirmed significant differences between all pairs of groups \( p < .001 \). The three groups of participants are hereafter called the intermediate reading proficiency group, the low-intermediate reading proficiency group, and the low reading proficiency group.

Another one-way ANOVA was conducted with the group as an independent variable and mean scores of the FLRAS as a dependent variable. Table 3 shows descriptive statistics.
Table 3 Descriptive Statistics

<table>
<thead>
<tr>
<th>Group</th>
<th>I (n=24)</th>
<th>LI (n=24)</th>
<th>L (n=27)</th>
<th>Total (n=75)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>4.366</td>
<td>4.657</td>
<td>4.844</td>
<td>4.631</td>
</tr>
<tr>
<td>(SD)</td>
<td>(.710)</td>
<td>(.560)</td>
<td>(.704)</td>
<td>(.684)</td>
</tr>
</tbody>
</table>

Results showed a significant between-group difference (F(2,72) = 3.323, p < .05). A post-hoc scheffe test confirmed only one significant pair-wise difference between the intermediate reading proficiency group and the low reading proficiency group at p < .05. The intermediate reading proficiency group was not significantly different from the low-intermediate reading proficiency group, who was not significantly different from the low reading proficiency group. The anxiety rating of the low proficiency readers was significantly higher than that of the intermediate proficiency readers. This finding means that the low reading proficiency group was significantly more anxious in reading than was the intermediate reading proficiency group.

Research question 4

An exploratory factor analysis using Principal Component Analysis with a Varimax rotation was run to identify the underlying common factors behind the FLRAS. Judging from the screeplot and the percentage of variance explained, a four-factor solution was extracted. Results showed 63.22% as the cumulative variance of the four factors extracted. This indicates that the four factors explained more than half of the variability of the 20 items. Table 4 is a matrix of Factor Analysis, showing only appreciable loadings greater than .40.

Factor 1 can be labeled "the anxiety toward the unfamiliar and the incomprehensible." The following six items showed appreciable loadings. Learners expressed anxiety most when they were not sure whether they understood the material, as exemplified by #1 I get upset when I'm not sure whether I understand what I am reading in English. They were also uncomfortable when they encountered unfamiliar words, grammar, and topics. The examples are as follows:

#8 It bothers me to encounter words I can't pronounce while reading.

#7 When reading English, I get nervous and confused when I don't understand every word.

#6 I get upset whenever I encounter unknown grammar when reading English.

#5 I am nervous when I am reading a passage in English when I am
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not familiar with the topic.

Not being sure if they understood the material, they got into a habit of translating word by word (#9).

### Table 4 Factor Analysis Matrix

<table>
<thead>
<tr>
<th>#</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Communalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.739</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>.730</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>.659</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>.617</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>.601</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>.597</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>19*</td>
<td></td>
<td>.760</td>
<td></td>
<td></td>
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<td>4</td>
<td></td>
<td>.748</td>
<td></td>
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<tr>
<td>2</td>
<td></td>
<td>.673</td>
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<tr>
<td>20*</td>
<td></td>
<td>.487</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>.468</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10(r)</td>
<td></td>
<td></td>
<td>.891</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12(r)</td>
<td></td>
<td></td>
<td>.782</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11(r)</td>
<td></td>
<td></td>
<td>.713</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18*</td>
<td></td>
<td></td>
<td></td>
<td>.929</td>
<td></td>
</tr>
<tr>
<td>17*</td>
<td></td>
<td></td>
<td></td>
<td>.805</td>
<td></td>
</tr>
<tr>
<td>alpha</td>
<td>.819</td>
<td>.719</td>
<td>.821</td>
<td>.777</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>5.641</td>
<td>1.731</td>
<td>1.581</td>
<td>1.162</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>35.255</td>
<td>10.820</td>
<td>9.880</td>
<td>7.265</td>
<td></td>
</tr>
<tr>
<td>CV</td>
<td>35.255</td>
<td>46.075</td>
<td>55.955</td>
<td>63.22</td>
<td></td>
</tr>
</tbody>
</table>

* = newly-added item  (r) = reverse-coded item
alpha = Cronbach's alpha for internal consistency
E = Eigenvalue
V = Percentage of variance explained
CV = Cumulative percentage of variance explained
Factor 2 can be described as "anxiety arising from unfamiliarity with reading under constraints." For example, they felt nervous when they have to read within a time limit (#19 I get nervous when I have to read within a time limit). They could not wean themselves from dependence on a dictionary and felt anxious when they could not look up unfamiliar words (#20 Whenever I encounter unfamiliar words, I am inclined to look them up in a dictionary). They expressed anxiety when they were exposed to a long passage (#4 I feel intimidated whenever I see a whole page of English in front of me). They complained of a lack of memory (#3 When I'm reading English, I get so confused I can't remember what I'm reading).

Factor 3 can be labeled "the lack of confidence and positive attitudes toward reading." All variables loaded on this factor were reversely-coded items concerning motivational and attitudinal variables. Learners expressed lack of confidence in reading (#11 I feel confident when I am reading in English. #12 Once you get used to it, reading English is not so difficult), and lack of pleasure in reading (#10 I enjoy reading in English).

Factor 4 can be termed "anxiety arising from lack of prior knowledge about the topic", shown by examples (#18 If the topic is unfamiliar, I get nervous and #17 If I have to know so much about the topic of the material, I don't feel confident).

**Research question 5**

A one-way multivariate analysis of variance (MANOVA) was performed, using the reading proficiency-based groups as an independent variable and the factors extracted from the factor analysis as dependent variables. Table 5 shows descriptive statistics.

<table>
<thead>
<tr>
<th>Table 5 Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>1 Mean</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>3 Mean</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Results of MANOVA showed significant difference in Roy's Largest Root at p < .05. Subsequent univariate F-tests showed a significant difference only in Factor 3 (F(2,72)=5.478 p < .01). A post-hoc scheffe test showed a significant difference only between the intermediate reading proficiency group and the low reading proficiency group (p < .05). The mean score indicated in bold in Table 5 showed the highest ratings in each of the proficiency group categories (the low and the intermediate groups). This is a reverse-coded motivational construct and the results indicate that the low reading proficiency group was less motivated to read in a FL.

Discussion

FL reading anxiety had a low, but significant negative correlation with the FL reading proficiency. Since reading proficiency is explained by a number of factors including low-level processing skills to high-level conceptually driven processing skills, it may be supposed that anxiety plays only a marginal role in the overall comprehension processes. Nevertheless, FL reading anxiety does have a negative relation with reading proficiency, to the extent that the more anxious the readers are, the lower their reading test scores are, and vice versa. Despite this, no causal relations have yet been confirmed between FL reading anxiety and FL reading proficiency. Of the two scales, the FLRAS had a slightly higher correlation with the SLEP test than with the TOEIC reading test. This may be attributed to the nature of the TOEIC reading test. The reading section of the TOEIC involves not only comprehension of reading passages (Part VII) but also understanding of words and syntactic structures at a sentence level (Part V and VI). Indeed, syntactic processing and semantic processing are both involved in processing information from the text. However, the SLEP test, which allows readers to use pictorial or contextual clues to construct meaning from the text, is purported to measure, to a greater degree, semantic aspects of information-processing abilities. Therefore, its higher correlation with the reading specific anxiety measure seemed quite plausible.

The levels of reading proficiency showed a significant difference in the perception of reading anxiety across the three groups. The low proficiency readers reported higher levels of anxiety than their intermediate proficiency counterparts. But there were no significant differences between the low reading proficiency group and the low-intermediate reading proficiency group. This was understandable and predictable because there were no vast differences in the
mean scores of the reading anxiety measure: 4.366 with the intermediate reading proficiency group, 4.657 with the low-intermediate reading proficiency group and 4.844 with the low reading proficiency group. In this study, a 7-point Likert scale was employed; therefore, the mean scores were clustered around 4 points, which indicated "neither-agree-nor-disagree" type non-committal answers. It might have been desirable to use a 6-point Likert scale, so that anxious readers (indicated by 4, 5 or 6 points) could be clearly differentiated from non-anxious readers (1, 2, and 3 points). Still, even with a 7-point Likert scale, the intermediate proficiency readers were statistically confirmed to be less anxious readers and the low proficiency readers to be more anxious readers.

The low reading proficiency group showed a significant difference from the intermediate reading proficiency group not only in the mean scores of the FLRAS, but also in the mean scores of the Third Factor termed "Lack of confidence and positive attitudes toward reading." In other words, less proficient readers have less positive attitudes toward and less confidence in FL reading. Thus, a significant difference in motivational components of FL reading anxiety draws a line between proficient and less proficient readers. However, the participants involved were the intermediate, low-intermediate and low reading proficiency groups. Therefore, it would be of much research interest if high proficiency readers were included in the study.

The absence of significant differences in the remaining factors could be related to the fact that this questionnaire was administered not immediately before or after a reading task. Reading anxiety may vary with respect to the complexity of specific reading tasks and the conditions under which anxiety is measured. If learners had been forced to read a difficult text in a test condition, they may have felt differently toward the reading task in hand and may have reported different levels of anxiety. This possibility suggests the direction of future studies: the comparison of anxiety arousal between groups asked to perform a reading task and groups not asked to do so, and between groups in test conditions and groups in normal classroom reading conditions.

**Pedagogical Implications**

FL anxiety is by no means an uncommon phenomenon and teachers should provide a low-anxiety learning atmosphere as much as possible. However, anxiety is a complex, multifaceted construct of a learner's psychological state. Therefore, I used factor analysis in order to pick out some important characteristics of FL reading anxiety commonly seen among a
particular sample of participants. Factor analysis reduces data with numerous items into several variables that cluster, which helped identify "patterns of relationships and influences common to several variables" (MacIntyre, 1999, p.29). By examining these clusters, I could identify the characteristic features of anxiety which are of particular relevance to the participants in this study. Thus, to learn about each of these factors could serve as a first step toward helping classroom teachers understand the sources of FL anxiety and work out ways to alleviate that anxiety.

Factor 1 indicated that learners' level of anxiety heightened when they were faced with something unfamiliar and beyond their understanding. This echoes Saito et al.'s (1999) study, which reported that learners were uncomfortable with something unfamiliar, and if they did not understand every word, they felt anxious. Therefore, implications drawn from Factor 1 were that teachers should teach students "strategies" such as inferencing and guessing at meanings of words or syntactic structures in order to cope with the uncertainty inherent in a FL learning process.

As noted by MacIntyre (1999), the development of FL anxiety is partly based on the personality of the individual student. The degree to which they attempt to guess at meanings depends on the willingness to take risks and to tolerate ambiguity in FL learning. Brown (1994) regards risk-taking as an important feature of successful second language learning. Oxford (1996) recommends that learners take "moderate but intelligent risks" (p. 63). Ely (1986) confirmed language class risk-taking to be a strong predictive variable of a student's class participation, which in turn predicted proficiency. When called upon in class, learners would avoid taking risks for fear of making errors and feeling embarrassed in front of the class. Therefore, a teacher should create a learner-friendly learning environment, in which learners can take risks without being interrupted or worrying about making errors or wrong guesses at the meaning while reading.


Factor 2 suggests that readers should be able to cope with a long string of ideas within a time limit. In other words, they should develop reading fluency. This means that learners
should engage in efficient lower level processing, or bottom-up decoding processing such as discrimination among the distinctive graphemes and orthographic patterns of English (Brown, 1994, p.291-292). Furthermore, readers should develop optimal strategies\(^3\), some of which are exemplified in "Microskills for Reading Comprehension" (Brown, 1994):

- Process writing at an efficient rate of speed to suit the purpose.
- Recognize the rhetorical forms of written discourse and their significance for interpretation.
- From events, ideas, etc. described, infer links and connections between events, deduce causes and effects, and detect such relations as main idea, supporting idea, new information, given information, generalization, and exemplification.
- Develop and use a battery of reading strategies, such as scanning and skimming, detecting discourse markers, guessing the meaning of words from context, and activating schemata for the interpretation of texts (p.291).

The development of these strategies would wean readers from taking in and translating information on a word-by-word basis and would help them make appropriate decisions in approaching a text.

Factor 3 relates to motivational factors. Motivation is a multi-faceted construct of individual variables, among which "intrinsic motivation" is what Brown (1994) claims "a powerful incentive for learning" (p.187). Many researchers share their views on ways to increase intrinsic motivation in the formulation of teaching principles. Although their terminology differs somewhat, their proposed principles are summarized as follows.

1. Appeal to the genuine interests of learners.

   Teachers should provide learners with texts and teaching techniques designed to arouse interest and positive attitudes toward reading. In this respect, needs analysis should be conducted to tap learners' preference for and interest in the topic and genre of materials.

2. Development of reader autonomy.

   Teachers should let learners make some choices with regard to topics, texts and tasks (Guthrie & Alao, 1997). Learners should have leeway in making some decisions on their own that meet their needs and interests. Teachers should also enable learners to assume responsibility in making choices and formulating realistic goals.

3. Social collaboration.

   Learners should work in collaborative settings by reporting what they have read and by
sharing ideas on the text through peer interaction. Koch and Terrell (1991) suggest that FL anxiety can be reduced when students work in pair or group work.

4. Support for strategy learning

Guthrie and Alao (1997) underscore the importance of teacher support for strategy learning. They summarized previous studies, stating that strategy instruction enhanced motivation for reading. They also indicated the relationship between strategy use and intrinsic motivation for reading (p. 101).

In this regard, the use of Internet is now attracting attention as a burgeoning but innovative method of enhancing intrinsic motivation in a FL reading class. Learners can choose materials on their own via net surfing or browsing on the net. They are instructed to keep a log of what they have read by writing brief summaries. Thus, they can be taught to assume responsibility for their own reading activities. If their teachers have them report and exchange their views on their reading with their peers, an individual reading activity can turn into a collaborative classroom activity.

Factor 4 reminds us of the importance of equipping learners with prior knowledge about the topic and content of the text. Carrell (1988) suggests a variety of pre-reading activities designed to build and activate schema, which could possibly enhance learners' readiness to approaching a text.

Conclusion

This study confirmed the significantly negative correlations between reading anxiety and reading performance among a specific group of Japanese university learners. Furthermore, the study confirmed that readers' proficiency levels are significantly related to reading anxiety: the relatively more proficient readers were less anxious than the less proficient readers, and the relatively more proficient readers were perceived to have more positive attitudes toward reading in a FL. The implications drawn from the factor-analyzed FLRAS helped us identify the potential causes of anxiety, thus suggesting possible solutions: Some of them include teaching the importance of risk-taking and ambiguity tolerance, the skills needed to guess at the meanings of a text, and a strategic approach to the text, with a view to enhancing intrinsic motivation. Although the causal link between FL anxiety and proficiency level among Japanese learners awaits further research, we should be attentive to FL classroom anxiety among our
particular learners. Our close observation may provide the key to working out ways to help anxiety-prone readers bring their anxiety within manageable levels.

Notes:

1. Factor analysis requires a large sample size. Future replication studies should meet this assumption.
2. Sometimes skills and strategies are used interchangeably by many researchers, with the difference being a conscious/unconscious distinction. For example, Paris, Wasik, and Turner (1991) state as follows: "An emerging skill can become a strategy when it is used intentionally. Likewise, a strategy can 'go underground' and become a skill" (p. 611).

References


