



Letting Students Choose: How Culture Influences Text Selection in EFL Reading Courses

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Past research has suggested the use of culturally familiar reading texts increases language acquisition and student interest in the EFL classroom. The present study was conducted to investigate whether L2 learners prefer reading culturally familiar texts over culturally unfamiliar ones. A second prong of this study clarified which topics students are most interested in studying. As part of an elective EFL course, 43 Japanese university students were asked to select and read one simplified English newspaper article each week over a 12-week period from six topic categories: environmental issues, pop culture, tourism, sports, crime, and food. Each topic category consisted of 13 culturally familiar and 13 culturally unfamiliar simplified newspaper articles. Results revealed participants preferred culturally familiar texts to a statistically significant degree, and selected “lighter” topics more frequently than “heavier” topics. Further analyses revealed L2 proficiency had a significant effect on the cultural context that learners selected, and gender had a significant effect on the topics they chose. These findings provide important insights to EFL educators and material designers as they show learners strongly prefer culturally familiar materials, and the results further indicate broadly the kinds of cultural topics students find most interesting.

Keywords: culturally familiar materials, culturally unfamiliar materials, choice in EFL reading courses, self-selected topics, EFL material development

Introduction

The use of culturally familiar materials in English Foreign Language (EFL) education has received increasing attention over the past few decades. Recent studies in Japan and across the rest of Asia have shown that the usage of such materials improves vocabulary recall (Sheridan, Tanaka, & Hogg, 2019; Sheridan, Tanaka, & Tang, 2019), vocabulary inference (Demir, 2012), comprehension (Alptekin, 2006; Demir, 2012; Erten & Razi, 2009; Sheridan et al., 2019a; Sheridan et al., 2019b; Tavakoli, Shirinbakhsh, & Reza zadeh, 2013) and interest (Sheridan et al., 2019a; Sheridan et al., 2019b). While such work has demonstrated the efficacy of these materials, whether L2 learners actually prefer culturally familiar reading texts over culturally unfamiliar ones has been under-explored. In previous research with an affiliated group of researchers (Sheridan, Tanaka, & Hogg, 2019; Sheridan, Tanaka, & Tang, 2019), one of the authors of the present study noted that not only did students have significant language gains when reading culturally familiar materials, informal feedback indicated that students seemed to prefer culturally familiar materials and be more motivated to study them. The present study, therefore, was designed to trace one of the lines of

inquiry our preliminary studies tangentially opened and was designed to determine whether students have a preference for culturally familiar over unfamiliar texts when choosing course materials clustered around the topics they are interested in studying.

Literature Review

It has been clearly established that a learner's background knowledge or schema plays an integral role in their engagement and understanding of L2 materials (Anderson, 1994, 2004; Chan, 2003; Grabe, 2009; Pritchard, 1990; Rumelhart, 1984; Weng, 2012) with the majority of this research drawing on schema theory (Carrell, 1984; Carrell & Eisterhold, 1983). In the context of this research, schema theory describes how the prior knowledge and experiences of a learner shapes their approach to given reading materials. It further elucidates how this background knowledge is important to the learner comprehending new information. It posits that written texts alone do not fully convey meaning to the reader; the reader makes sense of them by bringing in their background information, knowledge, emotion, and culture, or *schemata*, that gives the text different meanings (Anderson, 2004; Brown, 2001; Brown & Lee, 2015; Grabe, 2009). *Schema theory* asserts that the degree to which a reader comprehends a text will vary in proportion to the amount of background knowledge they bring to the materials.

L2 readers will draw on their background knowledge when reading foreign language texts in order to understand them, although many scholars argue such attempts will fail in the absence of appropriate schemata (Anderson, 2004; Grabe, 2004). In order to overcome the possibility of failure, Carrell and Eisterhold (1983) make the argument that teachers should seek to “minimize reading difficulties and to maximize comprehension by providing culturally relevant information” (p. 566). Thomas (2014) describes a continuum between language and content that is familiar and that which is unfamiliar, arguing that educators should aim to meet their students halfway in order to maximise comprehensible input. Research has also suggested that reading culturally familiar materials not only increases the quality of comprehension but also the engagement a reader has with a text (Coady, 1979; Demir, 2012; Erten & Razi, 2009; Jalilifar & Assi, 2008; McKay, 2004; Nordin & Eng, 2017; Sheridan et al., 2019a; Sheridan et al., 2019b; Thomas, 2014).

Several studies have tried to measure the benefits of using culturally relevant materials through quantitative analysis. Research conducted in the Middle East and Turkey has shown that L2 readers are likely to score higher in reading comprehension tests and vocabulary tests (Demir, 2012) when the texts being read are culturally familiar. A number of studies have shown that merely nativizing texts, that is, changing proper nouns from the original L2 text to those more familiar to the readers from their native context, will result in improved comprehension (Alptekin, 2006; Erten & Razi, 2009; Jalilifar & Assi, 2008; Tavakoli et al., 2013).

Chihara, Sakurai, and Oller (1989) recorded similar positive results when conducting research with Japanese university students. Their initial study in Japan showed that performances in cloze tests are likely to improve when the names and places in the text were substituted for more culturally familiar terms. Sasaki's (2000) subsequent study supported these findings and also went a step further in showing that participants were likely to recall more information from culturally familiar texts. In more recent studies, Sheridan et al. (2019a, 2019b) reported higher levels of comprehension and vocabulary retention when culturally familiar materials were used. These studies also added a qualitative aspect indicating that Japanese students were more likely to be interested in, and engage with, texts that were culturally familiar.

Finally, Carrell and Eisterhold (1983) argued that students should be allowed to select their own texts for reading activities, suggesting that self-selection increases interest as students are free to choose the content, level of difficulty, and length of the texts. They draw particular attention to the fact that students tend to be more interested in texts that they can relate to personally: “Students who choose their own texts are, in effect, also providing their own appropriate background knowledge for understanding the text” (p. 567). Subsequent studies have shown this self-selected reading approach can improve TOEFL (Mason, 2006) and TOEIC scores (Krashen & Mason, 2015; Mason, 2011, 2013a, 2013b; Mason & Krashen, 2017; Nation, 2014).

In addition to these studies, a growing body of research has supported the theory that having autonomy to choose materials according to interest levels is likely to positively influence language learning in several ways. Sheridan et al. (2019a, 2019b) and Mahardika (2018) found that students were generally more interested and willing to engage in learning materials that incorporated local culture. Kitzman's (2016) survey results of students across several universities in Japan added support to these findings as students ranked their home country higher than any other foreign cultural group included on the list of topics they would most like to study. Wolf (2013) revealed that allowing students autonomy in their choice of materials fosters an improved willingness to communicate as they had significantly greater interest and more perceived knowledge of the self-selected topics. The students in Xiao's (2005) survey expressed a preference for greater autonomy in the selection of learning materials. Other studies have demonstrated that topics of self-determined interest combined with a high level of student background knowledge lead to superior reading comprehension (Eidswick, 2010) and vocabulary retention (Lee & Pulido, 2016).

Hypotheses

While the literature indicates that the use of culturally familiar materials greatly benefits students, research to date has not sufficiently investigated the questions of whether students have a preference when choosing between materials within the confines of selected topics that are culturally familiar or culturally unfamiliar, and which topics they are most interested in studying. Furthermore, to the researchers' knowledge, there has been no research conducted on the selection of culturally familiar language learning materials that accounts for gender or level bias. The following hypotheses were developed for this study to address these gaps:

1. When given the autonomy to choose their own reading texts, students will select culturally familiar articles over culturally unfamiliar ones.
2. Students will find lighter topics such as pop culture and food easiest to relate to personally, followed by sports and tourism. They will find heavier topics of crime and environmental issues the hardest to comprehend given their existing schema.
3. Student proficiency and gender will have no significant effect on the cultural context that learners select.
4. Student proficiency and gender will have no significant effect on the topics that learners select.

Methodology

Participants

Forty-three third- and fourth-year university students (16 female, 27 male) majoring in agriculture at a private university in western Japan participated in this study. The students belonged to two intact elective EFL classes and ranged in age from 20-22. The two classes were taught by the two researchers.

The course was open to all third- and fourth-year students regardless of level, so the language proficiency of the learners varied. Participants took the New General Service List Test (NGSLT; Stoeckel & Bennett, 2015) to determine their level. The NGSLT was used because of its effective coverage of over 90% of the core language used in general reading passages such as the simplified newspaper articles that were used in this study.

Based on the students test scores, they were divided into three level-groups. A one-way analysis of variance test showed that there was a statistically significant difference in vocabulary knowledge between the three different level-groups, $F(2, 42) = 26.22, p < 0.01$, with mean rank vocabulary scores of 90.38 ($n = 13$) for level 1, 78.67 ($n = 15$) for level 2 and 67.00 ($n = 15$) for level 3. This indicates the groups were considered inequivalent in terms of their vocabulary knowledge. The details of the participants, as well as

the mean scores, standard deviations, standard errors and 95% confidence intervals for the three level groups are shown in Table 1.

TABLE 1
Group Data

| Group | <i>n</i> | <i>M</i> | <i>SD</i> | <i>SEM</i> | 95% CI for mean |
|---------|------------------------|----------|-----------|------------|-----------------|
| Level 1 | 13 (5 female, 8 male) | 90.38 | 4.77 | 1.32 | [87.50, 93.27] |
| Level 2 | 15 (4 female, 11 male) | 78.67 | 2.55 | 0.66 | [77.25, 80.08] |
| Level 3 | 15 (7 female, 8 male) | 67.00 | 13.49 | 3.48 | [59.53, 74.47] |

Materials

Class assignment

As part of a 15-week elective EFL course, participants were required to select and read one simplified English newspaper article per week over a 12-week period. They were given complete autonomy to choose the article from one of six topics: environmental issues, pop culture, tourism, sports, crime, and food. These topics were selected because of the high level of interest students expressed in them in previous research conducted in Japan (Kitzman 2016; Sheridan et al., 2016; 2019a; Sheridan et al., 2019b; Sheridan, Tanaka, & Kobayashi, 2018). After reading the article, students completed a post-reading assignment that consisted of a summary and their opinion of the article. Students were given credit for completing the task, and the researchers responded to students' opinions and provided error correction when appropriate. An example of a Japan-based and a foreign-based food article with the post-reading assignment is shown in the Appendix.

Simplified newspaper articles

This study used 156 simplified newspaper articles that were selected and modified by the researchers. Half of the articles (78) were set in the Japanese cultural context whereas the other half (78) were set outside of Japan. The articles, based on their content, were equally separated into the six aforementioned topics. The original newspaper articles were taken from various online news sites from the beginning of April to the end of July 2018. The articles and their titles were modified so that they were of comparable length and style (Table 2) as well as lexical difficulty (Table 3). Although effort was taken to use articles of similar lengths and lexical difficulties, because the hypothesis was that participants would select culturally familiar articles more often than culturally unfamiliar ones, more often slightly simplified foreign articles were used to reduce bias.

TABLE 2
Linguistic Characteristics of the Texts for Each Topic

| Topic | Japanese context | | | | Foreign context | | | |
|-----------------|------------------|--------------------|---------------|--------------------|-----------------|--------------------|---------------|--------------------|
| | Titles | | Articles | | Titles | | Articles | |
| | Average words | Average characters | Average words | Average characters | Average words | Average characters | Average words | Average characters |
| Environ. issues | 9.62 | 47.85 | 255.23 | 1286.54 | 9.15 | 43.31 | 253.54 | 1243.00 |
| Pop culture | 9.62 | 45.08 | 268.46 | 1291.62 | 8.31 | 44.31 | 257.38 | 1229.62 |
| Food | 9.92 | 44.69 | 271.23 | 1317.00 | 8.85 | 44.23 | 263.62 | 1294.77 |
| Sports | 9.62 | 46.69 | 262.31 | 1270.77 | 9.85 | 48.00 | 261.38 | 1271.85 |
| Crime | 9.69 | 45.54 | 266.92 | 1306.46 | 9.23 | 45.15 | 255.69 | 1230.54 |
| Tourism | 9.38 | 42.23 | 258.46 | 1326.00 | 8.92 | 41.62 | 257.08 | 1267.46 |

Each article was 1.5 spaced and one page in length. The body of the article was typed in Century 12-point font and its title was bolded and typed in 14-point Century font. The lexical text analysis software, *VocabProfile* (Cobb, 2015), was used to simplify the articles to better match student proficiency and to try

to ensure all of the articles were of similar difficulty. The majority of the off-list words that appeared in the titles or body of the articles were either culturally familiar or culturally unfamiliar proper nouns. These proper nouns accounted for the high percentage of the off-list words in the titles of the articles seen in Table 3. The researchers tried to simplify as many as possible off-list words that were not names of people or places; however, those that were important to the meaning of the passage were retained. The students were provided with simple translations of these type of off-list words following the vocabulary item in parentheses. An example of this is given in both of the articles shown in the Appendix.

TABLE 3
Lexical Analysis of the Tiles and Articles for Each Topic

| Topic | Frequency level bands | Japanese context | | Foreign context | |
|-----------------|-----------------------|-------------------|---------------------|-------------------|---------------------|
| | | Token % of titles | Token % of articles | Token % of titles | Token % of articles |
| Environ. issues | NGSL 1 | 69.23% | 80.91% | 68.21% | 81.53% |
| | NGSL 2 | 10.58% | 7.82% | 8.63% | 7.79% |
| | NGSL 3 | 5.77% | 3.31% | 6.32% | 4.29% |
| | NAWL | 0.00% | 1.67% | 2.11% | 1.03% |
| | OFF | 14.42% | 6.29% | 14.74% | 5.37% |
| Pop culture | NGSL 1 | 75.73% | 85.11% | 73.56% | 85.54% |
| | NGSL 2 | 6.80% | 6.38% | 9.20% | 5.94% |
| | NGSL 3 | 3.88% | 2.56% | 3.45% | 2.85% |
| | NAWL | 0.97% | 0.94% | 0.00% | 0.68% |
| | OFF | 12.62% | 5.01% | 13.79% | 4.99% |
| Food | NGSL 1 | 73.33% | 79.21% | 72.24% | 80.68% |
| | NGSL 2 | 1.48% | 6.25% | 10.94% | 6.67% |
| | NGSL 3 | 4.76% | 3.60% | 3.53% | 3.32% |
| | NAWL | 0.00% | 0.89% | 1.18% | 1.10% |
| | OFF | 11.43% | 10.04% | 14.12% | 8.15% |
| Sports | NGSL 1 | 76.92% | 84.41% | 72.00% | 83.13% |
| | NGSL 2 | 8.65% | 6.47% | 9.00% | 6.26% |
| | NGSL 3 | 2.88% | 2.99% | 6.00% | 2.64% |
| | NAWL | 0.10% | 0.86% | 2.00% | 1.30% |
| | OFF | 10.58% | 5.26% | 11.00% | 6.67% |
| Crime | NGSL 1 | 67.75% | 80.47% | 68.42% | 82.04% |
| | NGSL 2 | 11.67% | 9.12% | 12.63% | 7.55% |
| | NGSL 3 | 2.94% | 2.74% | 1.05% | 3.51% |
| | NAWL | 0.00% | 1.13% | 2.11% | 0.95% |
| | OFF | 17.95% | 6.55% | 15.79% | 5.95% |
| Tourism | NGSL 1 | 74.77% | 83.59% | 71.74% | 84.26% |
| | NGSL 2 | 9.35% | 6.93% | 7.61% | 6.94% |
| | NGSL 3 | 4.67% | 2.87% | 9.78% | 3.23% |
| | NAWL | 1.87% | 0.94% | 0.00% | 0.89% |
| | OFF | 9.35% | 5.68% | 10.87% | 4.68% |

Note. NGSL 1 is the first 1,000, NGSL 2 the second 1,000, NGSL 3 the third 1,000 most frequent English words. NAWL represents words from the New Academic Word List and OFF is words not included on the NGSL or NAWL.

Procedure

Prior to commencing the study, three articles set in the Japanese cultural context (Japan-based) and three set outside of Japan (foreign-based) for each of the six topics (36 articles in total) were prepared and uploaded to the online learning management system (LMS) *schoology.com*. The articles were separated into six topic folders. For each subsequent week until the eleventh week of the study, one Japan-based and one foreign-based article were added to each topic folder. By the final week of the study, each topic folder consisted of 26 articles (13 Japan-based and 13 foreign-based) for a total of 156 articles. To control for the ordering effect, the order of the six topic folders and the titles of the articles within each folder were randomized weekly using the randomizing feature in Excel.

To enable the participants to see the cultural contexts of the articles clearly, the countries were listed before the titles of the articles as shown in the example articles in the Appendix. The articles were saved in the same way in the topic folders. When selecting an article, students had to first decide on a topic by opening its folder. After reading the titles in that topic folder, students could then click on the titles to preview the articles. Once the students decided upon an article to read, they would download and print it out along with the post-reading assignment worksheet.

Results

Quantitative Results

A total of 479 articles were selected by the 43 participants over the 12-week period. There was a total of 37 student absences during the study, which accounts for the missing data. Table 4 reports the frequencies and percentages of their selections.

TABLE 4
Frequencies and Percentages of the Articles Selected

| Topic | Overall frequency | Overall percentage | Frequency of Japanese context | Frequency of foreign context | Percentage of Japanese context | Percentage of foreign context |
|-----------------|-------------------|--------------------|-------------------------------|------------------------------|--------------------------------|-------------------------------|
| Environ. issues | 34 | 7.1 | 16 | 18 | 3.3 | 3.8 |
| Crime | 61 | 12.7 | 48 | 13 | 10.0 | 2.7 |
| Tourism | 62 | 12.9 | 41 | 21 | 8.6 | 4.4 |
| Sports | 69 | 14.4 | 57 | 12 | 11.9 | 2.5 |
| Pop culture | 95 | 19.8 | 75 | 20 | 15.7 | 4.1 |
| Food | 158 | 33.0 | 111 | 47 | 23.2 | 9.8 |
| Total | 479 | 100 | 348 | 131 | 72.7 | 27.3 |

In order to answer the first research question of whether the cultural familiarity of the article affects student selection of reading texts, we examined the frequencies and percentages of the contexts selected. Articles based in the culturally familiar context of Japan were selected 348 times or approximately 73% of the time, whereas culturally unfamiliar articles were chosen 131 times, or about 27% of the time. A Cochran test, which evaluates differences among related proportions and frequencies, was significant $\chi^2(1, N = 479) = 98.03, p < .001$. The Kendall coefficient of concordance was .21 indicating a fairly strong difference between the two contexts. This nonparametric test was used because all of the assumptions of a Chi-square test could not be met. Unlike a Chi-square test, a Cochran test allows for the analysis of repeated-measures data. In this study, participants selected between topics that were based either in the Japanese or foreign context over a 12-week period.

Frequencies and percentages were also used to answer the second research question of which type of topics learners prefer. As shown in Table 4, the most frequently selected topic category was food (selected 158 times, or 33.0% of the time), followed by pop culture (95 times, or 19.8%), sports (69 times, or 14.4%), tourism (62 times, or 12.9%), crime (61 times, or 12.7%), and finally environmental issues (34 times, or 7.1%). A Cochran test was significant $\chi^2(5, N = 479) = 115.63, p < .001$. The Kendall coefficient of concordance was .05 showing slight differences among the six topics. Follow-up pairwise comparisons were conducted using McNemar's test and controlling for familywise error rate at .05 level using the LSD procedure. The results differed significantly between food and all of the other topics, $p < .001$, between environmental issues and all of the other topics, $p < .001$, between pop culture and tourism, pop culture and crime, and pop culture and sports, $p = .006, p = .005, p = .042$ respectively, but not between tourism and sports, $p = .483$, tourism and crime, $p = .928$, and sport and crime, $p > .428$.

A two-predictor binary logistic model was fitted to the data set shown in Table 5 to test our third research hypothesis that language proficiency and gender did not have a significant effect on the context which learners selected. The dependent variable was the cultural context of the article selected. The independent variables, or predictors, were the participant's gender and level.

TABLE 5

Description of Data Set for Logistic Regression of Variables Predicting Selection of Context

| Context | Total Sample | Male | Female | Level 1 | Level 2 | Level 3 |
|----------|--------------|------|--------|---------|---------|---------|
| Japanese | 348 | 220 | 128 | 99 | 105 | 144 |
| Foreign | 131 | 81 | 50 | 49 | 57 | 25 |
| Total | 479 | 301 | 178 | 148 | 162 | 169 |

As displayed in Table 6, the log of the odds of a student selecting the Japanese context was negatively related to their proficiency level ($p < .001$) as well as gender; however, the results were non-significant for gender ($p = .272$). In other words, proficiency level of the participants significantly predicted the cultural context of the articles that students chose as the model found that the higher the proficiency level, the less likely it is that a student would select the familiar context of Japan. Although non-significant, the model also found that given the same level of language proficiency, male students were less likely to select culturally unfamiliar texts compared to female students.

TABLE 6

Summary of Logistic Regression Analysis for Variables Predicting Selection of the Culturally Familiar Context

| Predictor | <i>b</i> | <i>SE B</i> | Wald's χ^2 | <i>df</i> | <i>p</i> | 95% CI for odds ratio | | |
|---------------------------|----------|-------------|-----------------|-----------|----------|-----------------------|------------|-------|
| | | | | | | Lower | Odds ratio | Upper |
| Constant | 1.87 | 0.25 | 58.19 | 1 | <.01 | | | |
| Level | | | 20.72 | 2 | <.01 | | | |
| Level (1) | -1.07 | 0.28 | 14.62 | 1 | <.01 | 0.20 | 0.34 | 0.59 |
| Level (2) | -1.20 | 0.28 | 18.57 | 1 | <.01 | 0.17 | 0.30 | 0.52 |
| Gender (1=male, 0=female) | -0.24 | 0.22 | 1.21 | 1 | .271 | 0.51 | 0.78 | 1.21 |

Note. $R^2 = .82$ (Hosmer and Lemeshow Test) .05 (Cox and Snell) .07 (Nagelkerke). Model $\chi^2(3) = 23.52, p < .01$.

To answer the fourth research question of whether the factors of proficiency level or gender would moderate the learners' selection of topics, a multinomial logistic regression analysis was conducted. The description of the dependent variables, the six topic categories, and the independent variables, student proficiency levels and gender, are displayed in Table 7. As previously discussed in the results to our second research question, the proportion of students who chose articles based on the topic of food was significantly more than any other topic. Therefore, food was set as the baseline category for this analysis.

TABLE 7

Description of Data Set for Multinomial Logistic Regression of Variables Predicting Selection of Topic

| Topic | Total sample | Male | Female | Level 1 | Level 2 | Level 3 |
|-----------------|--------------|------|--------|---------|---------|---------|
| Environ. issues | 34 | 25 | 9 | 10 | 16 | 8 |
| Crime | 61 | 33 | 28 | 14 | 25 | 22 |
| Tourism | 62 | 27 | 35 | 24 | 21 | 17 |
| Sports | 69 | 52 | 17 | 22 | 16 | 31 |
| Pop culture | 95 | 67 | 28 | 26 | 34 | 35 |
| Food | 158 | 97 | 61 | 52 | 50 | 56 |
| Total | 479 | 301 | 178 | 148 | 162 | 169 |

As displayed in Table 8, the gender of the learner significantly predicted whether they selected the topics of tourism or food, $b = 0.81$, Wald $\chi^2(1) = 6.74$, $p < .009$ as well as sports or food, $b = -0.78$, Wald $\chi^2(1) = 5.56$, $p < .018$. The odds ratio indicates that as gender changes from female (0) to male (1) the change of the odds of selecting an article about tourism compared to selecting one about food is 2.26. In other words, the chances of a female student selecting an article about tourism over food is $1 / 2.26 = 0.44$ more likely than a male student. As for sports, the chances of a female student choosing sports over food is $1 / 0.46 = 2.17$ less likely than a male student. From this data, it can be inferred that, although food is the most popular topic amongst both female and male students, when comparing female and male students' preferences, male students are more likely to select articles about sports whereas female students are more likely to select articles about tourism. This model also predicted that the proficiency level of the learner had no significant effect on their topic selection when comparing it to the most popular topic, food.

TABLE 8
Summary of Multilogistic Regression Analysis for Variables Predicting Selection of Topic Category

| Topic | | b | SE B | Wald's | | p | 95% CI for odds ratio | | |
|-----------------|--------------|----------------|------|----------|----|----------|-----------------------|------------|-------|
| | | | | χ^2 | df | | Lower | Odds ratio | Upper |
| Environ. issues | Intercept | -1.76 | 0.42 | 17.64 | 1 | <.001*** | | | |
| | (Level = 1) | -0.26 | 0.51 | 0.25 | 1 | 0.615 | 0.47 | 1.30 | 3.55 |
| | (Level = 2) | 0.70 | 0.49 | 2.10 | 1 | 0.148 | 0.78 | 2.02 | 5.23 |
| | (Level = 3) | 0 ^b | . | . | 0 | . | . | . | . |
| | (Gender = 0) | -0.42 | 0.43 | 0.94 | 1 | 0.333 | 0.28 | 0.66 | 1.53 |
| | (Gender = 1) | 0 ^b | . | . | 0 | . | . | . | . |
| Pop culture | Intercept | -0.29 | 0.25 | 1.32 | 1 | .250 | | | |
| | (Level = 1) | -0.26 | 0.33 | 0.65 | 1 | .421 | 0.41 | 0.77 | 1.46 |
| | (Level = 2) | -0.16 | 0.32 | 0.00 | 1 | .960 | 0.53 | 0.98 | 1.83 |
| | (Level = 3) | 0 ^b | . | . | 0 | . | . | . | . |
| | (Gender = 0) | -0.41 | 0.29 | 2.02 | 1 | .155 | 0.38 | 0.67 | 1.17 |
| | (Gender = 1) | 0 ^b | . | . | 0 | . | . | . | . |
| Tourism | Intercept | -1.68 | 0.35 | 23.71 | 1 | <.001*** | | | |
| | (Level = 1) | 0.50 | 0.38 | 1.75 | 1 | .186 | 0.79 | 1.64 | 3.43 |
| | (Level = 2) | 0.55 | 0.39 | 1.97 | 1 | .161 | 0.80 | 1.74 | 3.75 |
| | (Level = 3) | 0 ^b | . | . | 0 | . | . | . | . |
| | (Gender = 0) | 0.81 | 0.31 | 6.74 | 1 | .009** | 1.22 | 2.26 | 4.17 |
| | (Gender = 1) | 0 ^b | . | . | 0 | . | . | . | . |
| Sports | Intercept | -0.27 | 0.26 | 1.14 | 1 | .286 | | | |
| | (Level = 1) | -0.34 | 0.34 | 0.97 | 1 | .324 | 0.36 | 0.71 | 1.40 |
| | (Level = 2) | -0.72 | 0.37 | 3.80 | 1 | .051 | 0.23 | 0.48 | 1.00 |
| | (Level = 3) | 0 ^b | . | . | 0 | . | . | . | . |
| | (Gender = 0) | -0.78 | 0.33 | 5.56 | 1 | .018* | 0.24 | 0.46 | 0.88 |
| | (Gender = 1) | 0 ^b | . | . | 0 | . | . | . | . |
| Crime | Intercept | -1.14 | 0.31 | 13.70 | 1 | <.001*** | | | |
| | (Level = 1) | -0.34 | 0.39 | 0.75 | 1 | .388 | 0.32 | 0.71 | 1.54 |
| | (Level = 2) | 0.35 | 0.36 | 0.92 | 1 | .338 | 0.70 | 1.41 | 2.88 |
| | (Level = 3) | 0 ^b | . | . | 0 | . | . | . | . |
| | (Gender = 0) | 0.39 | 0.32 | 1.51 | 1 | .220 | 0.79 | 1.47 | 2.73 |
| | (Gender = 1) | 0 ^b | . | . | 0 | . | . | . | . |

Note. a. The reference category is food b. This parameter is set to zero because it is redundant. $R^2 = .07$ (Cox and Snell) $.08$ (Nagelkerke). Model $\chi^2(15) = 36.96$, $p < .01$.
* $p < .05$, ** $p < .01$, *** $p < .001$

Discussion

Analysis of Quantitative Results

The results show that when students are given the freedom to choose between culturally familiar and unfamiliar reading texts, they selected culturally familiar texts significantly more frequently than unfamiliar ones at a ratio of almost 3:1. This finding provides support to our first research hypothesis, as well as adding to the evidence that argues for the use of materials that incorporate a learner's background knowledge (Anderson, 1994, 2004; Carrell & Eisterhold, 1983; Carrell, 1984; Chan, 2003; Grabe, 2009; Pritchard, 1990; Rumelhart, 1984; Weng, 2012) such as using culturally relevant materials. This is an important finding as it reveals that not only do students demonstrate increased language acquisition in the areas of vocabulary recall and inference, content comprehension, and interest, but students actually prefer to study the culturally familiar content over the unfamiliar ones by significant margins.

Our results also found that, for the most part, participants gravitated towards lighter topics more frequently than heavier topics. Students selected the lighter topics of food and pop culture the most, followed by tourism and sports, and then the heavier topics of crime and environmental issues the least. They showed a statistically significant preference for the lighter topic of food compared to any of the other five topics as well as having a statistically significant preference to the lighter topic of pop culture over crime and tourism; however, their preference for pop culture over sports was non-significant. Participants did not have a strong preference between the topics of sports, tourism, and crime as their selection frequencies were all grouped closely together and the differences between them were non-significant. Finally, participants showed a statistically significant preference for every other topic compared to the heavier topic of environmental issues. These results support our second hypothesis as well as previous studies done in Japan (Kitzman 2016; Sheridan, Tanaka, & Kobayashi, 2018). In the study by Kitman (2016), students from several universities in western Japan were asked to rank the topics of the textbook *Let's Talk About It* in order of 1-20, food (2nd) and topics relating to pop culture such as music (1st) were ranked highest, followed by travel (4th) and sports (5th). Based on the findings in this current project along with the previous research, it can be argued that EFL educators and material designers in Japan should consider selecting topics related to food and pop culture when developing educational materials.

In addition, it was hypothesized that gender and level would not have an effect on the context of the article learners select. Although we found this to be true in the case of gender, our assumption about levels was disproven. Higher level language students did in fact demonstrate interest in learning foreign culture in addition to language, and more frequently selected foreign contexts compared to lower level learners. This is an intriguing finding that might be explained, at least partially, with reference to motivation theory. Research conducted by Gardner and his colleagues (Gardner & Lambert 1972; Gardner 1985, Gardner & Macintyre, 1993) indicated that a learner's attitude towards and willingness to integrate with the L2 community would be an indicator of their success at learning the language of that community. Dornyei (2001) argues that because a language is bound to its culture, effective study of the former requires an open disposition towards the latter. Higher level learners, then, are likely interested in the study of culture as well as language.

Finally, it was hypothesized that gender and proficiency would not have an effect on the topic selections of participants. As expected, the results show that proficiency did not have an effect on topic selection; however, female participants were more likely to choose topics about tourism compared to male participants, and male participants were more likely to select topics about sports compared to female participants. Taken together, these results suggest that male EFL learners would have a greater preference for teaching materials related to sports and female learners would have a greater preference for materials related to tourism regardless of proficiency level.

Analysis of Qualitative Results

After the quantitative analysis of the data was complete, we also used a qualitative approach to gain a deeper insight into students' selections. In this follow-up phase of the study, participants were asked to complete a questionnaire that consisted of two open-ended questions. The first question asked their reasons for selecting either Japan-based or foreign texts, while the second question sought to determine why they selected certain topics more than others. Each questionnaire was slightly altered to match the individual student's selection tendencies.

In order to identify why culturally familiar contexts were chosen more frequently than unfamiliar ones, the participants were asked "Why did you mainly (only) choose articles that happened in Japan (foreign countries)?" Answers to this question revealed two main trends. First, students who predominately read articles set in the culturally familiar setting of Japan commonly wrote that they found the content easier to understand and relate to their lives. As one student wrote, "I chose the articles that happened in Japan because it's easier to imagine than the events of other countries. That leads to deep understanding of the contents." Another student answered, "We are Japanese. So Japanese news articles easy to hit me. Because it is familiar." Several other students simply responded with statements such as "Because, Japanese articles are familiar and easy to read for me" and "Because I thought that Japanese articles are easier to understand than foreign articles."

Another common trend that arose was that students who selected articles based in Japan were already familiar with the topics, having previously heard them discussed in Japanese in the news media. One student commented, "I can understand Japanese articles easier because I often have already read the articles in Japanese text." Another student added "I often use news application. It contains many Japanese news ... when I choosing article and find the article what I know, I want to read." Other students echoed these statements, stating "I thought Japanese news was easier to understand than foreign news. Because it is seen as Japanese as TV news and internet news," and "Because Japan's news is familiar for me. I can know the news naturally in my life by TV or internet." One student even wrote that they used this activity as a way to keep up with local news. "Because Japanese articles are more friendly. Normally, I don't see much TV news programs. I update in real time... It was a lot helped me to know the news from articles I read in this lesson."

On the other hand, the students who chose foreign articles more often than the ones based in Japan were in general of a higher English proficiency level, and they expressed a greater interest in foreign contexts, or in learning about the culture as well as the language; a desire to achieve global competence explored in Jeon and Lee (2012). For example, one student wrote, "To know situations in another country, I chose articles that happened in foreign countries," while another added, "I was more interested foreign countries more than Japan because I don't know much them."

As mentioned above, the second question sought to obtain further insight into the reasons behind learners' topic selections. Here students were asked why they chose certain topics rather than others. Once again, student answers clustered around two parallel themes: relevancy to their own lives, and the reading and writing tasks were perceived as easier.

Students generally indicated that they chose lighter topics such as food and pop culture because it was easier for them to write their own opinions on these topics, and also because they aligned with their personal interests. Student answers included, "Because I like eating food. I wanted to know about domestic and international news of foods," and "I am interested in "Food" and "Pop Culture" better... I like to watch Japanese Anime!," or "I am most interested in food. So, I selected food, pop culture, tourism and sport that was a current affair problem that I often see, so I selected it."

Other students connected their interests to their area of study: "Because I am affiliated with the Department of Food and Nutrition. I'm interested in food so, I read a lot of articles on food culture in Japan. "Food" is an academic field where I major, so it is easy to write comments," with a second student echoing these thoughts: "Because I major in nutrition, I have greatest interest for food. I have a little interest for other things people may choose articles in each major or each hobby." Still others connected the topics to

future goals. One student wrote, “I chose the topic food because in the future I would like to work in the food industry. I was interested in learning about food in both Japan and foreign countries. I wasn’t interested in the other topics but I was much more interested in food. Food was easy for me and probably the other people in my department to read.”

Students who wrote about the selection of articles in tourism, sports, and even crime gave similar reasons, such as they were interested in the subject or it was easy to write comments. One student wrote, “Sports news impresses people and makes it easy to write comments. I chose the Tourism because I was interested in wanting to go.” A second student wrote about tourism: “Since there are many tourists in my hometown Osaka, I thought I should know and think about tourism.” Finally, one student noted that their interest in suspense dramas spurred them to choose articles about crime: “And, there are also reasons why I read suspense dramas that I read many articles about crime. Because it was a story and interesting.”

Students also wrote the reasons why they avoided particular topics in their responses. One student revealed they were deterred by the perceived difficulty of the topics: “There are many difficult and unknown words for me in “Environmental Issues” and “Crime”, so I need much time to read the article.” In fact, the articles were all lexically equivalent so this reveals that the topic created bias in the selection process. Bias is also implicit in the reasons students gave for their avoidance of particular topics in other cases as well: ““Crime” topic have negative images so I didn’t chose,” one student wrote. The idea of the topic that students had and its role in selection is highlighted by other comments as well: “The articles about “crime” and “environment” make my feelings bad... I want to enjoy my life easier.”

Finally, in addition to perceived difficulty and the emotional response to the topic, other students were simply not as interested in particular themes. One student wrote: “I did not choose other themes (Crime and Environmental Issues) because I was not interested and it was hard to write my thoughts.” A second student gave a similar response, writing that “Environmental issues were easy to understand because I am a student of agriculture, and I chose food because I was a little interested. Other things were chosen for a change.”

Overall, this feedback reveals that student interest, background knowledge and cultural relevance were both of importance when students selected the texts they read. In addition, students’ perceptions of how difficult an article would be based on its cultural context or its topic was sometimes given as a reason for avoidance.

Conclusion

The quantitative and qualitative results provide strong support to the first research hypothesis that students would select culturally familiar articles over unfamiliar ones. This significant finding supports previous research that effectively established that not only do students demonstrate increased vocabulary recall, content comprehension, and interest, but they strongly prefer culturally familiar content, likely because it draws on well-established schemata and allows students to focus more exclusively on language acquisition. Indeed, this hypothesis is supported by the fact that students for the most part gravitated towards “lighter” topics, with some explicitly saying “difficult” topics and the language therein deterred them. At the same time, this study revealed several trends that have been largely overlooked in previous research. English language levels impacted student selection as higher-level students demonstrated interest in learning culture in addition to language, and more frequently selected foreign contexts. Gender was an additional factor that was significant in this study, and has been previously largely overlooked. For example, although food was the most popular topic for both genders, more female learners than male chose tourism, and male learners showed more interest than females towards sports. These findings are intriguing, especially for educators and curriculum planners, and suggest avenues for further research in the multiple factors that impact self-selected reading, culture, and English language education.

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References

- Alptekin, C. (2006). Cultural familiarity in inferential and literal comprehension in L2 reading. *System*, 34(4), 494-508. <http://dx.doi.org/10.1016/j.system.2006.05.003>
- Anderson, R. (1994). Role of the reader's schema in comprehension, learning, and memory. In R. Ruddell, M. Ruddell, & H. Singer (Eds.), *Theoretical models and process of reading* (pp. 469-482). Newark, DE: International Reading Association.
- Anderson, N. J. (2004). Metacognitive reading strategy awareness of ESL and EFL learners. *The CATESOL Journal*, 16(1), 11-27.

- Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy* (2nd ed.). New York: Pearson
- Brown, H. D., & Lee, H. (2015). *Teaching by principles: An interactive approach to language pedagogy*. Upper Saddle River, NJ: Pearson.
- Carrell, P. L. (1984). Schema theory and ESL reading: Classroom implications and applications. *The Modern Language Journal*, 68, 332–342.
- Carrell, P. L., & Eisterhold, J. C. (1983). Schema theory and ESL reading pedagogy. *TESOL Quarterly*, 17(4), 553-573. <http://dx.doi.org/10.2307/3586613>
- Chan, C. Y. H. (2003). Cultural content and reading proficiency: A comparison of Mainland Chinese and Hong Kong learners of English. *Language, Culture and Curriculum*, 16(1), 60–69.
- Chihara, T., Sakurai, T., & Oller, J. W., Jr. (1989). Background and culture as factors in EFL reading comprehension. *Language Testing*, 6(2), 143–149. <http://dx.doi.org/10.1177/026553228900600202>
- Coady, J. (1979). A psycholinguistic model of the ESL reader. In R. Mackay, B. Barkman, & R. R. Jordan (Eds.), *Reading in a second language: Hypotheses, organization and practice* (pp. 5–12). Rowley, Massachusetts: Newbury House Publishers.
- Cobb, T. (n.d.). Compleat web VP! [computer program]. Accessed at <http://www.lex tutor.ca/vp/comp/>
- Demir, Y. (2012). The effect of background knowledge and cultural nativization on reading comprehension and vocabulary inference. *Journal of Educational and Instructional Studies in the World*, 2(4), 188–198. Retrieved from <https://pdfs.semanticscholar.org/3c70/7f9ffa6974c63a3a3113c2b3123492e1ab49.pdf?ga=2.45690854.338179249.1540106622-1001756139.1540106622>
- Dörnyei, Z. (2001). *Motivational strategies in the language classroom*. Cambridge: CUP.
- Erten, I., & Razi, S. (2009). The effects of cultural familiarity on reading comprehension. *Reading in a Foreign Language*, 21, 60–77. Retrieved from <http://nflrc.hawaii.edu/rfl/April2009/articles/erten.pdf>
- Eidswick, J. (2010). Interest and prior knowledge in second language reading comprehension. *JALT Journal*, 32(2), 149–168.
- Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. London: Edward Arnold
- Gardner, R. C., & Lambert, W. E. (1972). *Attitudes and motivation in second language learning*. Rowley, MA: Newbury House
- Gardner, R. C., & MacIntyre, P. D. (1993). A student's contributions to second-language learning. Part II: Affective variables. *Language teaching*, 26(1), 1–11.
- Grabe, W. (2004). Research on teaching reading. *Annual Review of Applied Linguistics*, 24, 44-69. DOI: 10.1017/S0267190504000030
- Grabe, W. (2009). *Reading in a second language: Moving from theory to practice*. New York: Cambridge University Press.
- Jalilifar, A., & Assi, R. (2008). The role of cultural nativization in comprehension of short stories in EFL reading contexts. *Language, Society and Culture Journal*, 26, 62-79. <http://www.aaref.com.au/en/publications/journal/journal-articles/issue-26-2008/>
- Jeon, J., & Lee, Y. (2012). The relationship between university students' exposure to foreign culture and global competency. *The Journal of Asia TEFL*, 9(3), 157-187.
- Krashen, S., & Mason, B. (2015). Can second language acquirers reach high levels of proficiency through self-selected reading? An attempt to confirm Nation's (2014) results. *The International Journal of Foreign Language Teaching*, 10(2), 10–19.
- Kitzman, A. (2016). Working to meet students' needs with optimal topics. *OnCUE Journal*, 9(3), 239–260.
- Mahardika, G. (2017). Incorporating local culture in English teaching material for undergraduate students. *SHS Web of Conferences*, 42. https://www.shs-conferences.org/articles/shsconf/pdf/2018/03/shsconf_gctale2018_00080.pdf

- Mason, B. (2006). Free voluntary reading and autonomy in second language acquisition: Improving TOEFL scores from reading alone. *The International Journal of Foreign Language Teaching*, 2(1), 2–5.
- Mason, B. (2011). Impressive gains on the TOEIC after one year of comprehensible input with no output or grammar study. *The International Journal of Foreign Language Teaching*, 7(1), 1-5.
- Mason, B. (2013a). Impressive language acquisition (primarily) through comprehensible input: Two cases. *The International Journal of Foreign Language Teaching*, 8(1), 25–27.
- Mason, B. (2013b). The case of Mr. Kashihara: Another case of substantial gains in reading and listening without output or grammar study, *Shitennoji University (IBU) Journal*, 56, 417–428.
- Mason, B., & Krashen, S. (2017). Self-selected reading and TOEIC performance: Evidence from case histories. *Shitennoji University Bulletin*, 63, 469–475.
- McKay, S. L. (2004). Teaching English as an international language: The role of culture in Asian contexts. *The Journal of Asia TEFL*, 1(1), 1-22
- Nation, I. S. P. (2014). How much input do you need to learn the most frequent 9,000 words? *Reading in a Foreign Language*, 26(2), 1–16.
- Nordin, R., & Eng, L. S. (2017). Text-selection for teaching reading to ESL tertiary students: A study on genre and content preferences. *International Journal of Instruction*, 10(1), 71–84.
- Rumelhart, D. E. (1984). Understanding understanding. In J. Flood (Ed.), *Understanding reading comprehension* (pp. 1–20). Newark, DE: International Reading Association.
- Sasaki, M. (2000). Effects of cultural schemata on students' test-taking processes for cloze tests: A multiple data source approach. *Language Testing*, 17(1), 85–114.
- Sheridan, R., Tanaka, K., & Hogg, N. (2016). English through culturally familiar contexts: A pilot study in Japan. *Language Education in Asia Journal*, 7(2), 88–99.
- Sheridan, R., Tanaka, K., & Hogg, N. (2019a). Foreign language, local culture: How familiar contexts impact learning and engagement. *TESL-EJ*, 23(1). Retrieved from <http://www.tesl-ej.org/wordpress/issue/volume23/ej89/ej89a6/>
- Sheridan, R., Tanaka, K. M., & Kobayashi, J. M. (2018). Culture and constructivism: A new approach to student-centered English language education in Japan. *Kindai University Center for Liberal Arts and Foreign Language Education Journal (Foreign Language Edition)*, 9(2), 33–56.
- Sheridan, R., Tanaka, K., & Tang, D. (2019b). The benefits and use of culturally familiar materials in Japanese university EFL classrooms. *Osaka JALT Journal*, 6, 5-33.
- Stoeckel, T., & Bennett, P. (2015). A test of the new General Service List. *Vocabulary Learning and Instruction*, 4(1), 1–8. <http://dx.doi.org/10.7820/vli.v04.1.stoeckel.bennett>
- Tavakoli, M., Shirinbakhsh, S., & Rezazadeh, M. (2013). Effect of cultural adaptation on EFL reading comprehension: The role of narrative nativization and foreign language attitude. *World Applied Sciences Journal*, 21, 1587–1596.
- Thomas, C. (2014). Meeting EFL learners halfway by using locally relevant authentic materials. *English Teaching Forum*, 52(3), 14–23.
- Weng, P. S. (2012). The effect of background knowledge on EFL learners' reading comprehension. *Sino-US English Teaching*, 9(9). Retrieved from <http://siopformisd.pbworks.com/>
- Wolf, J. P. (2013). Exploring and contrasting EFL learners' perceptions of textbook-assigned and self-selected discussion topics. *Language Teaching Research*, 17(1), 49–66.
- Xiao, L. (2005). Do we reliably know what EFL students like in English classrooms at university level? *The Journal of Asia TEFL*, 2(3), 67-94.

Appendix

An Example of a Japan-based and a Foreign-based Food Article with the Post-Reading Assignment

Japan - More Japanese eating alone in an aging society

A growing number of Japanese throughout the country are eating alone for more than half of the week, reflecting a rise in the number of single-person households due to a falling birthrate and an aging society, according to a government report.

The report on *shokuiku* (dietary education) said 11 percent of the surveyed 1,786 respondents were having meals on their own almost every day, and another 4.3 percent said they were eating alone four to five days a week.

Noting that people who eat with others tend to have a better nutritional balance, the government called for holding dining occasions among local communities, as it expects more older people to be living on their own in the coming years.

Of those surveyed who eat alone, 35.5 percent said they do not want to eat alone but are forced to as their schedules do not fit with others', and 31.1 percent said they have no choice as they do not have someone to eat with. A total of 27.3 percent said they do not mind eating alone and find it convenient, according to the report.

When interviewed for this article, Mr. Masanori Yamada (72) said that when he eats alone he typically has instant ramen and *shochu*. With a group, however, he noted that not only did he drink less but he also had more vegetables and a better diet. "When I go to my community's monthly dinner gathering, I eat *sushi*, *miso* soup, and lots of *tsukemono* (pickled vegetables)," he said. "I always feel better the next day. It's the food and the company."

USA- Researchers discover seaweed that tastes like bacon

Researchers at Oregon State University have created a new type of *seaweed* that tastes like bacon when it's cooked. The seaweed (*kaisourui*), a form of red algae (*kaisou*), looks like red lettuce. It is also twice as healthy as kale (*ke-ru*) and grows very quickly.

According to Oregon State University researcher Chris Langdon, his team started growing the new strain while trying to find a good food source for sea creatures such as abalone, a very popular food in many parts of Asia. The strain is a new type of red algae that normally grows along the Pacific and Atlantic coasts.

Some red algae is sold in the US now, but it is a different strain from the one harvested at Oregon State University. Langdon says he is growing about 20 to 30 pounds of the stuff a week, but he plans to more than triple the production.

"This stuff is pretty amazing," Langdon said. "When you fry it, which I have done, it tastes like bacon, not seaweed. And it's a pretty strong bacon flavor."

Though no analysis has been done yet to find out whether selling the bacon-seaweed would be practical, the team thinks the vegetarian market may be interested. Indeed, Langdon says that with global warming increasingly threatening food supplies, more people should become vegetarian and diets should change.

"There is no reason for people to eat meat any longer; ethical, vegetarian eating is essential in the future and this seaweed will be a key part in modifying our diets and changing our food chain to be more sustainable," Langdon said.

Name: _____

Title of the newspaper article: _____

Summarize the main points of the article in your own words. What is most important about the article?

After reading, how interesting did you find this newspaper article?

この新聞記事を読んだ後にこの記事にどれぐらい興味を持つようになりましたか:

| | | | | | |
|----------|--------|----------|---------|-------|---------|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 全く興味なかった | 興味なかった | やや興味なかった | やや興味あった | 興味あった | ても興味あった |

Why did you think so? Please explain your answer.
