## Revisiting Extensive Reading in the Digital Age: An Exploratory Mixed Methods Study on Japanese University Students' Affective Responses

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Over the past three decades, extensive reading (ER) has been well-documented as a robust tool for developing L2 skills both in Japan and abroad. For a large portion of that time, ER has relied heavily on paper-based materials; however, in today's digital era, students tend to be more comfortable and confident using technology both inside and outside of the classroom. Nevertheless, appropriate extensive reading materials for students studying EFL at Japanese universities are often limited. Thus, this research project focused on giving Japanese EFL students access to a digital library (Xreading), which allowed them to read books that were appropriate for their level and interest, using a device of their choice. This report discusses the methodology of the quantitative and qualitative data collection as well as the initial analyses that informed the rest of the study.

During the academic year of 2020, 136 advanced Japanese EFL students were given a one-year license to Xreading and were surveyed about their affective responses to the system in order to get a better understanding of their perceptions of reading content through technological means. A mixed-methods approach to data collection and analysis was employed using both quantitative and qualitative data through a pretest-posttest design. During both the pre-test (first phase) in the spring and post-test (second phase) in the fall, the quantitative data was collected using a modified version of Yamashita's (2013) Reading Attitudes Inventory and Xreading's analytics, while the qualitative data was gathered using an open-ended questionnaire.

After the first phase of data collection in the spring, the initial analysis from the pre-test provided demographic information which was used to determine the selection of participants and guide the study. Using a lower-end CASEC score of 500, a convenience sample of 114 participants was selected. Overall, the participants in this study had an average CASEC score of 639 and a reading placement test (ERF) level of 6.3 out of 14. To allow the students flexibility whilst keeping books suitable for a mature audience, the Xreading library was then constrained to levels 3 - 14, omitting books under 2000 words. This yielded a total of 763 accessible eBooks for students to choose from. However, the researchers advised the participants not to read eBooks more than two levels above or below their ERF scores in order to ensure that their digital books were chosen properly.

All participants of this study were asked to read a total of 12 eBooks throughout the year, divided into six books each semester in 2-week interval assignments. After the students read a book, they then took a 5-minute follow-up quiz about the content of the eBook. In order to receive credit in the Xreading system, participants had to achieve higher than 60%

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on the quiz with a reading speed lower than 300 words per minute. This setting was modified in the Xreading system to ensure the quality and efficacy of their extensive reading habits. If students could not complete an eBook within the constraints, they were allowed to read more during each 2-week assignment until they had successfully passed a quiz. This means that students were not constrained by the number of books for each deadline; they were allowed to read as many books as they liked throughout the academic year. The average number of eBooks completed by the participants was 8.8 out of 12 during this study.

After the completion of the quantitative analysis of the pre-test data in the spring, the initial findings from the five categories of Yamashita's Reading Attitudes Inventory (comfort, anxiety, intellectual value, practical value, and linguistic value) were presented at the YoJalt Technology MyShare in June of 2020. The analysis of the pre-test inventory demonstrated that while students valued the intellectual and practical aspects of extensive reading, they had a mid to low comfort level and a mid to high anxiety level when it came to approaching books written in English. Nonetheless, the data of both the intellectual and practical value categories were skewed, possibly making it difficult to run inferential statistics in future analysis.

The second phase of the data collection has now been completed, and the post-test data is being processed to analyze the quantitative data first and refine the sample size. Nonetheless, initial analysis of both the spring and fall semesters together has made it clear that more criteria is required to effectively analyze all the data sources through a mixed-methods approach. This means that in order to be considered part of the sample, the participants must have completed a) the ERF, b) Yamashita's Reading Attitudes Inventory, c) the open-ended questionnaire, and d) at least one eBook each semester. After the sample has been adjusted and the quantitative data is processed for the spring and fall again, categorical analysis of the qualitative data (the open-ended questionnaires) will be conducted to further explore students' feelings toward reading digital books.

During the interpretation phase of this mixed-methods research project, the data will converge on the five categories from Yamashita's Reading Attitudes Inventory. Using predetermined thematic categories, the feedback from the open-ended questionnaires will be coded. This coded data will then be mapped to the categories of the inventory which saw changes after the completion of the study. Finally, although all the variables cannot be accounted for, the researchers will briefly interpret the ERF and CASEC scores, noting any significant occurrences or changes. This interpretation cannot be used to make generalizations

about the population that the sample was derived from; nevertheless, it may help guide future studies that use experimental designs.

## References

Yamashita, J. (2013). Effects of extensive reading on reading attitudes in a foreign language. *Reading in a Foreign Language*, 25(2), 248–263.

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