HIRAGANA

WITH 46 BASE CHARACTERS
IT IS ONE OF THE THREE
ALPHABETS OF THE
JAPANESE LANGUAGE.

Effects of multimedia and traditional studying methods on hiragana memorization in beginner Japanese language learning

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WHILE TYPICALLY TAUGHT ON PEN AND PAPER OR BY TEXTBOOK METHODS, RECENT STUDIES[1] HAVE TESTED THE SUCCESS OF MEDIA-BASED STUDYING METHODS.

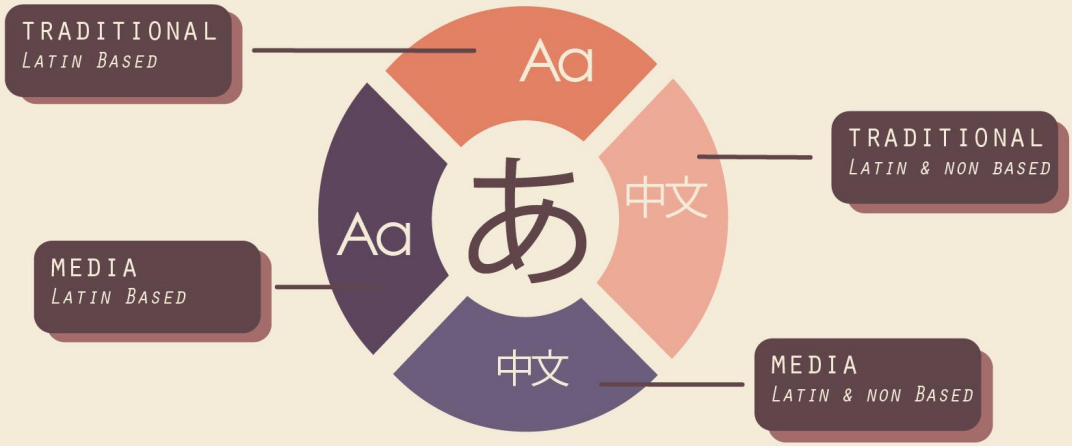
DUE TO ITS ABILITY TO COVER ALL OF THE WORDS IN THE LANGUAGE, HIRAGANA IS TYPICALLY TAUGHT FIRST IN A STRUCTURED ENVIRONMENT.

OUR HYPOTHESIS STATES THAT PARTICIPANTS IN THE MEDIA CATEGORY WILL OUTPREFORM THOSE USING THE TRADITIONAL PEN AND PAPER METHOD.

THE NULL HYPOTHESIS STATES THAT THERE IS NO SIGNIFIGANT DIFFERENCE BETWEEN THE TWO STUDY METHOD GROUPS.

Geraghty, M. (2009). An evaluation of independent learning of the Japanese hiragana system using an interactive CD. ReCALL (Cambridge, England), 21(2), 227–240. https://doi.org/10.1017/S0958344009000226

Shih, L. (2008). Enhancing the effectiveness of Kanji learning for the L1 Chinese -background students through a Sino -Japanese phonological correspondence-based strategy. ProQuest Dissertations Publishing.

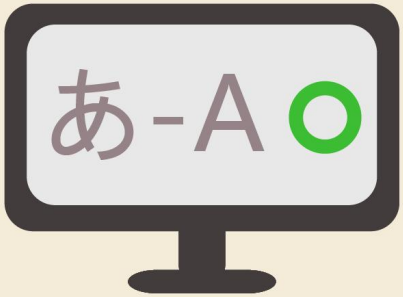


Latin based alphabets include French and English, while non-Latin alphabets include Mandarin and Cantonese

TO TEST THE TWO LEARNING METHODS, 24 PARTICIPANTS WERE DIVIDED INTO 2 METHOD GROUPS: MEDIA LEARNING VIA APP, OR TRADITIONAL PEN AND PAPER. THOSE GROUPS WERE THEN DIVIDED A SECOND TIME INTO BOTH LATIN AND NON-LATIN BASED AND ONLY LATIN BASED LANGUAGE KNOWLEDGE, SO AS NOT TO BIAS OUR DATA.

PARTICIPANTS WERE THEN GIVEN ONE HOUR TO STUDY HIRAGANA WITH THEIR METHOD. FOLLOWING THIS, THEY WERE INSTRUCTED TO TAKE A 20 MINUTE TEST COMPOSED OF CHART AND WORD COMPOSITION RECALL.

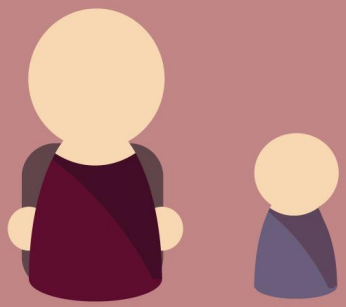
FOLLOWING THE FIRST TESTING PERIOD, PARTICIPANTS THEN TOOK A SECOND TEST 48 HOURS AFTER THEIR INITIAL STUDYING PERIOD.



The data was analyzed utilizing a two-way ANOVA test via R for statistical analysis, alongside confirmation testing.

With our data, the null hypothesis is accepted: there was no signifigant difference between the language learning methods' scores.

- posthoc testing
- normality testing
- equal variance

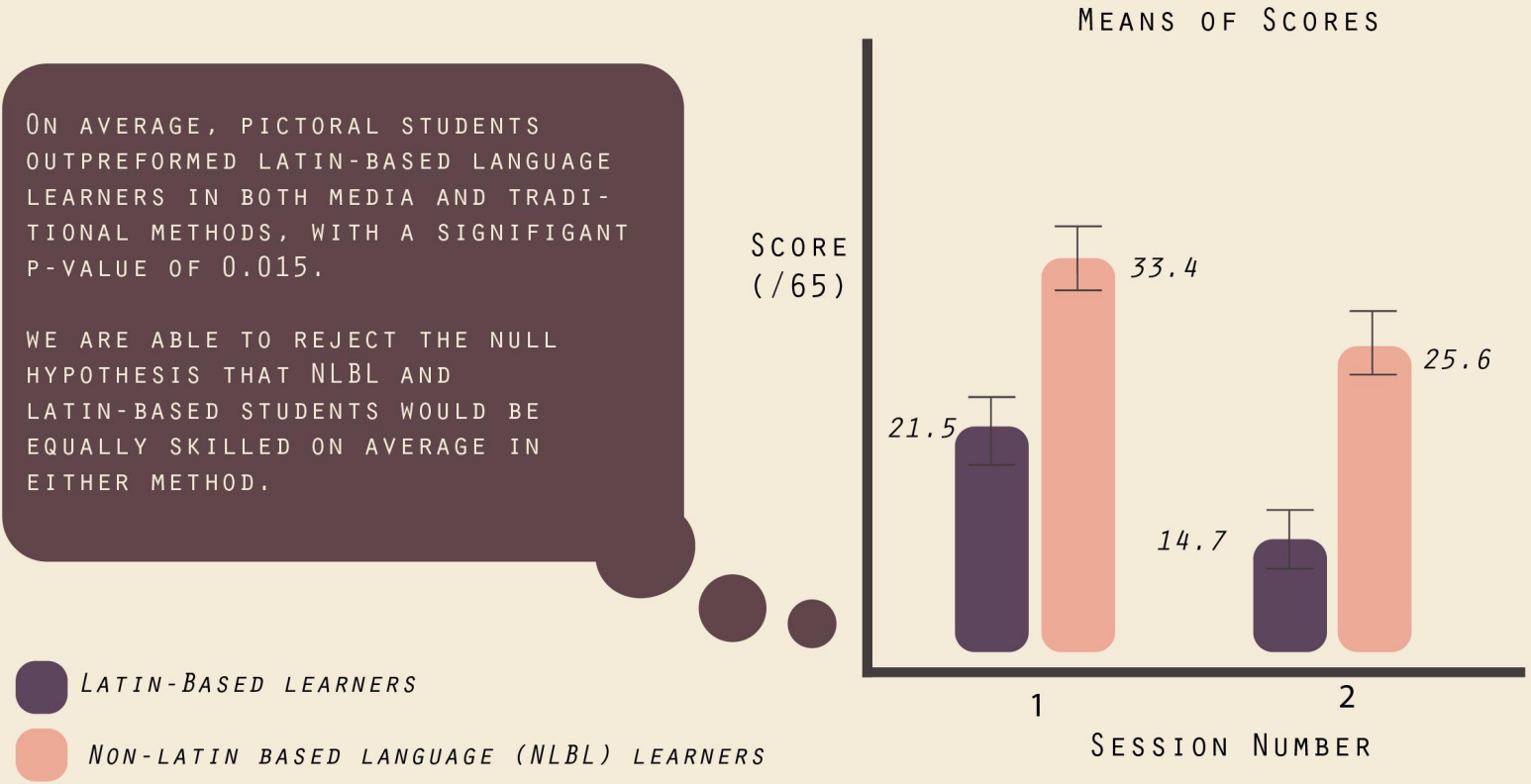


One possible reason for this data contradicting past research such as that done in 2019[2] could be the age difference in participants, as Western students were young adults.

2. Meilia Rasiban, Linna & Sudana, Dadang & Sutedi, Dedi. (2019). Using Mnemonic-Based Applications

On average, pictoral students outpreformed latin-based language learners in both media and traditional methods, with a signifigant p-value of 0.015.

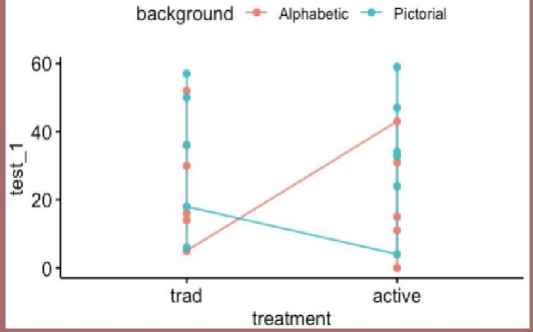
We are able to reject the null hypothesis that NLBL and latin-based students would be equally skilled on average in either method.

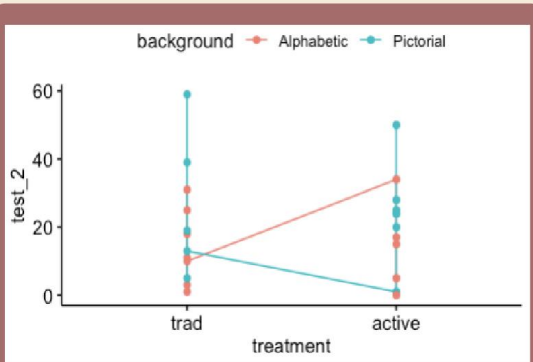


While the data was not considered statistically signifigant, it is worth noting the trends within the two groups.

NLBLs* on average outpreformed LBLs in the traditional method in both testing sessions. LBLs on average outpreformed NLBLs in active media treatment, with a slight trend in overall retention, as they tended to have higher hiragana retention ability than NLBL learners, despite the score Difference.

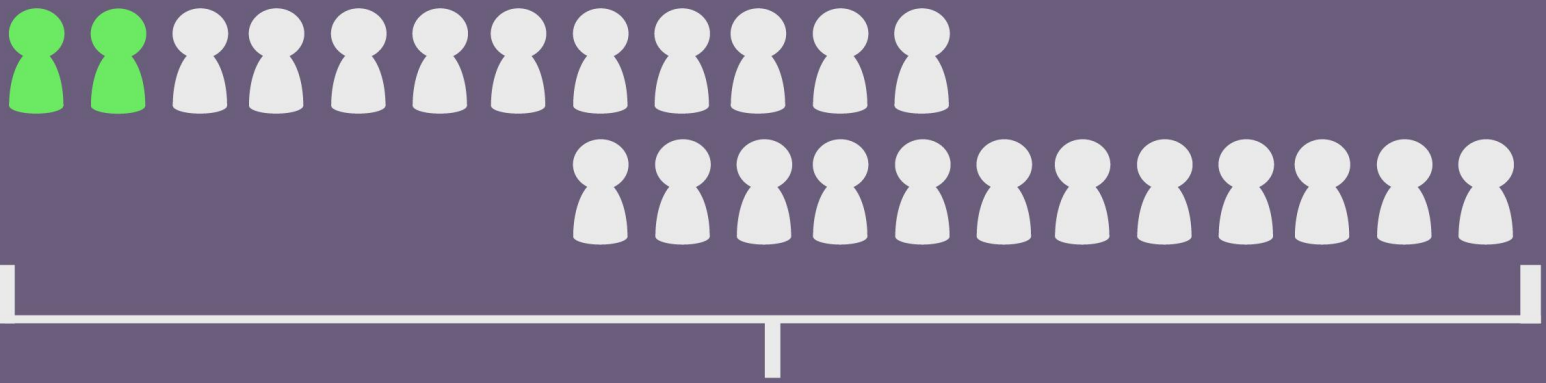
*On images right: NLBL is equal to pictoral learners





AT A GLANCE,

THE MOST DIFFICULT HIRAGANA TO MEMORIZE WERE ふ,や,AND れ



WITH A SUCCESS RATE OF 8%*

IT'S GOOD TO NOTE FOR BEGINNERS THAT HIRAGANA LIKE THIS MAY PRESENT THE MOST DIFFICULTY, AND TO PAY EXTRA MIND!

*AS OF STUDY 2

THE CURRENT TEACHING STYLE IS EFFECTIVE AMONG STUDENTS AND PRODUCES FAST ENOUGH RESULTS TO KEEP CURRICULUM PACING. FUTURE STEPS MAY INCLUDE LARGER TESTING SIZES TO FURTHER EXPLORE POSSIBILITY OF LBL AND NLBL DIFFERENCES BETWEEN STUDYING METHODS. AS WE NAVIGATE TO A DIGITAL LEARNING ENVIRONMENT, TRENDS SUCH AS THIS BECOME IMPORTANT FOR STUDENT SUCCESS.