This study presents a comparison of 82 Japanese EFL learners’ knowledge of 180 lexical items in written-receptive and spoken-receptive (aural) modalities, improving on the methodology of previous studies. First, participants were tested on their meaning-recall lexical knowledge (L2-to-L1 translation), which correlates more highly with L2 reading scores and listening scores (McLean et al., 2020; Zhang & Zhang, 2020) than meaning recognition tests (e.g., multiple choice or matching) and yes/no tests. Second, a counter-balanced testing approach was used to measure the participants’ knowledge of the same word items in written and aural modalities.

The difference between mean written-receptive (131.50, *SD* = 23.23) and aural vocabulary scores (106.56, *SD* = 27.11) was significant (*p* < .001, *r* = .84). When data were analyzed by 500-word frequency bands, significant differences were found at all six 500-word bands, with effect sizes (*d*) of *d* = 1.21, 1.30, 1.83, 1.00, 1.08, 0.93, at the 500, 1000, 1500, 2000, 2500, and 3000-word band frequencies, respectively. Data yielded significant differences when learners were separated into three proficiency groups at all 500-word bands. The item difficulty logits produced for each item through the Rasch analysis were also examined to determine how well words were to be known comparatively between their written and aural forms. Among the items, 80 were significantly better known in writing than aurally. Additionally, two items were significantly better known aurally. This indicated that nearly half of the words were significantly better known in one modality than the other, with the large majority better known in writing.

In conclusion, when measuring aural lexical knowledge it is not appropriate to use a written-receptive vocabulary test (and vice versa), and a strong correlation between aural and written-receptive lexical knowledge cannot be used to argue otherwise.