

Introduction Decades of research using offline methods support the claim that L2-English articles are difficult to acquire for learners whose L1 does not have articles (e.g., Chrabaszcz & Jiang, 2014; Huebner, 1983; Ionin et al., 2004). Recent studies using online methods, however, have provided new insights: While offline measures do indicate a lack of explicit knowledge of English articles, sensitivity to article misuse in online tasks demonstrates implicit knowledge. The current study continues in this psycholinguistic direction by exploring offline vs. online sensitivity of L2-English article misuse in referential and partitive indefinite contexts by speakers of Chinese, a language which does not have articles.

In this project, definiteness (with singular NPs) is operationalized in terms of uniqueness (Heim, 1991) and follows Ionin et al.'s (2004) informal definition: *If an article + NP sequence is [+definite], then the speaker and hearer presuppose the existence of a unique individual in the set denoted by the NP.* Thus, the absence of uniqueness occurs when (1) the hearer is unaware of the unique individual or (2) the individual is not unique. In these cases, *a* must be used. Two studies have combined online and offline tasks to assess L2-English knowledge of these concepts by testing article misuse in referential (Ionin et al., 2021: L1-Mandarin L2-English) and partitive (Cho, 2022: L1-Korean L2-English) indefinite contexts. In referential contexts (see column 1 in Table 1), the hearer is unaware of the unique individual known to the speaker, whereas in partitive contexts (see 2 in Table 1), the individual is not unique. In both studies, SPRT slowdowns after *the* in contexts which require *a* suggest implicit knowledge. However, Cho (2022) recorded no sensitivity in their offline AJT while Ionin et al. (2021) detected differences only when their task was simplified.

The current experiment builds on these two studies by assessing L1-Chinese L2-English learners' knowledge of indefinite articles in both indefinite contexts. Specifically, it is asked (RQ1) whether this L2er group is sensitive to article misuse in both referential and partitive indefinite contexts, (RQ2) whether sensitivity to article misuse is stronger in the online task, and (RQ3) whether proficiency plays a role in implicit or explicit knowledge of articles.

Methods L1-English (n=22) and L1-Chinese L2-English (n=43) participants completed a non-cumulative word-by-word SPRT and untimed 7-point AJT. Both tasks used items which crossed the factors of Context (Referential vs. Partitive) and Article (*a* vs. *#the*) to create four conditions (Table 1). Four counter-balanced lists ensured that participants did not see the same items in both tasks. L2ers also completed a portion of the grammar section of the Oxford Placement Test (Allan, 2002) as an independent proficiency measure.

Results SPRT Results (Figures 1&2): Generalized linear mixed models were run separately on the two L1 groups on each region of interest. NS: No effects were found in the critical region (r8), but a main effect of Article ($p = .01$) was found in the post-critical region (r9). Thus, sensitivity to article misuse was detected by NSs in the spillover region. L2: Main effects of Context ($p = .03$) and Article ($p = .003$) were found in the critical region (r8) while only a main effect of Context ($p = .02$) was detected in the post-critical region (r9). Proficiency was never found to have an effect. Therefore, L2ers were sensitive to article misuse and were slower at reading the Referential conditions compared to the Partitive ones in the critical region; this latter effect was detected in the spillover region as well. AJT Results (Figure 3): Two separate linear mixed effects models were run on the z-score transformed ratings by the two L1 groups. NS: An interaction between Context and Article ($p = .005$) shows that while ratings were higher for *a* than *the* in both contexts, the difference was greater in the Referential context. L2: No significant effects were detected.

Conclusion L2ers were sensitive to article misuse only in the SPRT. This supports the claim by Orfitelli and Polinsky (2017) that using explicit knowledge may be more cognitively demanding than relying on implicit knowledge. The results also pattern after the findings from Ionin et al. (2021) and Cho (2022) where the presence of online sensitivity did not guarantee similar sensitivity offline. Furthermore, proficiency did not have an effect. This study adds to the current literature and demonstrates that online methods are vital in the continuing investigation of L2-English article knowledge.

Table 1: Example SPRT/AJT Token Set

	(1) Referential a/#the	(2) Partitive a/#the
Context Sentence	Barbara flew for 17 hours to get from Chicago to India last week.	Amanda put two novels in her backpack to read on her trip to India.
Target Sentence	During her international flight, she read a/#the novel to keep from getting bored.	During her international flight, she read a/#the novel to keep from getting bored.
Comprehension Question (SPRT only)	Is Barbara traveling from India?	Did Amanda travel to Ireland?

Figure 1: NS Mean RTs by Condition

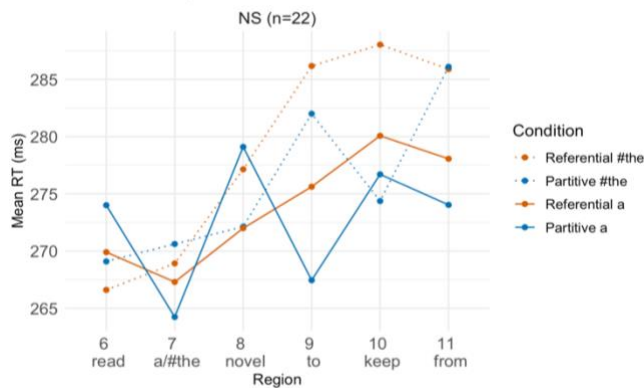


Figure 2: L2 Mean RTs by Condition

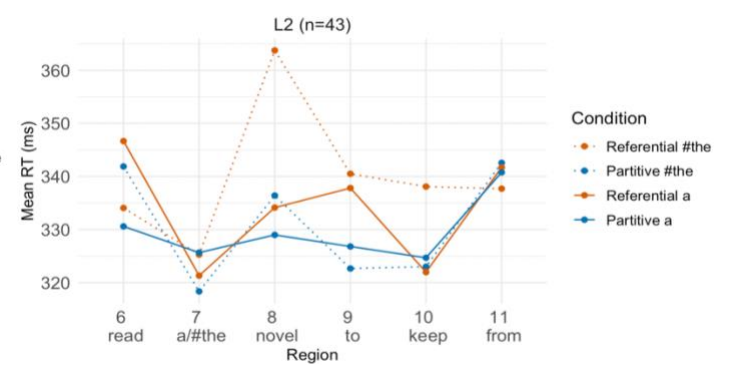
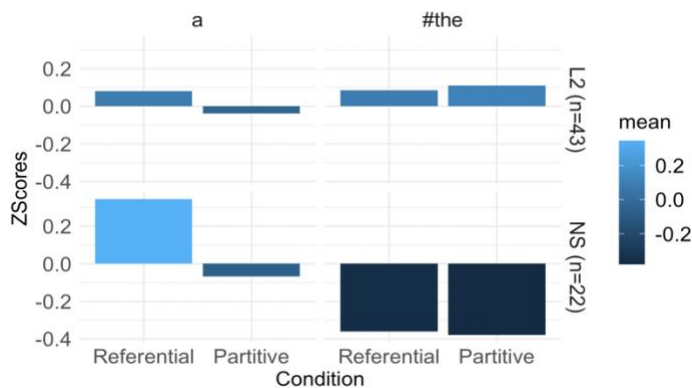


Figure 3: Z-Score Transformed AJT Ratings by L1 Group and Condition



Select References:

- Cho, J. (2022). Online processing and offline judgments of L2-English articles. *Linguistic Approaches to Bilingualism*, 12(3), 280-309.
- Ionin, T., Choi, S-H, & Liu, Q. (2021). Knowledge of indefinite articles in L2-English: Online vs. offline performance. *Second Language Research*, 37(1), 121-160.