Summary: Previous studies showed that children learning a language with an obligatory singular/plural distinction (Russian and English) learn the meaning of the number word for one earlier than children learning Japanese, a language without obligatory number morphology. This can be explained by differences in number morphology, but it can also be explained by many other differences between the languages and the environments of the children who were compared. The present study tests the hypothesis that the morphological singular/plural distinction supports the early acquisition of the meaning of the number word for one by comparing young English learners to age and SES matched young Mandarin Chinese learners. Mandarin does not have obligatory number morphology but is more similar to English than Japanese in many crucial respects. Corpus analyses show that, compared to English learners, Mandarin learners hear number words more frequently, are more likely to hear number words followed by a noun, and are more likely to hear number words in contexts where they denote a cardinal value. Two tasks show that, despite these advantages, Mandarin learners learn the meaning of the number word for one three to six months later than do English learners. These results provide the strongest evidence to date that prior knowledge of the numerical meaning of the distinction between singular and plural supports the acquisition of the meaning of the number word for one.

Classification: F21 C51 C31

Keywords: number words; cardinality; language acquisition

doi:10.1016/j.cogpsych.2016.06.003