

Title: Awareness of morph-syntactic structures in Chinese compound words among school-aged children

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Keywords: Morphology, language development

Abstract

Introduction

Plenty of studies have reported the importance of morphological awareness, the abilities to reflect on and manipulate the smallest meaningful units as well as the syntactic structures of words, in early vocabulary development and later reading development in Chinese. While most of these studies investigated Chinese children's awareness of morphemes as basic meaningful units in words, very few were conducted to study the awareness of different syntactic structures in compound words. The aim of the current study is to investigate school-aged children's awareness of different syntactic structures in compound words.

Method

Participants. A total of 300 grade 4 children (mean age = 9;03, gender balanced) studying in six different mainstream schools in Shenzhen were recruited. All students were reported by their school teachers to have no significant speech/language or academic problems.

Stimuli. A total of 40 target pseudo-compound words containing three different morphemes were created. All the pseudo-compound words are created using modifier-noun structure in

the first level syntactic analysis. Half of them are having the first two characters being the modifiers and the last characters being the head nouns, e.g. 长嘴树 [long-beak-tree], 声轻人 [voice-soft-man], while half of them are having the first character being the modifier and the last two characters being the head nouns, e.g. 土饭碗 [muddy-rice-bowl], 强沙降 [heavy-sand-fall]. In the second level syntactic structure analysis, half of the two character compounds are constructed using modifier-noun structures, e.g. 长嘴, 饭碗, while half of them are constructed using subject-predicate structures, e.g. 声轻, 沙降.

Task. In each trial, each participant is prompted to create the target pseudo-compound words upon verbal descriptions of the meanings of the target words, e.g. “强烈的泥沙降落下来”，我們叫它甚麼? (what do we call the heavy fall of sand?). Two examples with suggested answers were given as instructions to familiar the participants with the task requirement.

Results and Discussion

Results of the 2 (first level syntactic structure) X 2 (2nd level syntactic structure) ANOVA reveal significant main effect of first level syntactic structure and main effect of second level syntactic structure are both significant ($p < .01$). Post-hoc analysis shows that participants performed significantly better in compounds with monosyllabic word as head nouns compared to compounds with bisyllabic words as head nouns in the first level syntactic structure. They also performed better in compounds with modifier-noun structures than compounds with subject-predicate structures ($p < .01$). Interaction effect is also significant. Post-hoc analysis reveals that participants performed significantly worse when the head nouns are bisyllabic words containing subject-predicate structures. Compatibility of the results with the usage-based account and the rule-based account of language development will be discussed.