Abstract for thesis entitled:

Morphological Sensitivity, Morphological Awareness and Their Role on Third Grade Chinese Children's Character Reading and Vocabulary Submitted by LIU, Duo For the degree of Doctor of Philosophy

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## Abstract

Morphological processing has primarily been studied from two relatively separate directions: adults' morphological processing during lexical access, and children's morphological awareness in relation to literacy development. In the present study, both children's implicit morphological sensitivity and explicit morphological awareness were tested, in order to comprehensively explore Chinese children's morphological processing and its association with their Chinese character reading and vocabulary knowledge.

A total of 153 third grade Chinese children from northeastern China were recruited (87 boys, and 66 girls, mean age = 9.15, SD = ..43). Morphological sensitivity was tested using a visual priming lexical decision paradigm, and morphological awareness was tested with a set of morphological awareness tasks, including a morphological construction task, a homophone production task, and a newly-designed compounding production task. In relation to morphological sensitivity, on average these third grade Chinese children did not show adult-like morpheme processing during lexical access, possibly because the morpheme priming effect had not yet emerged in this age group. In addition, morphological structure processing was found during the lexical processing of subordinate compounds, but not coordinative compounds, which had an influence on lexical processing only when there was no semantic relation between primes and targets.

Furthermore, structural equation modeling analyses showed that morphological sensitivity had a significant direct effect on morphological awareness and a significant indirect effect on children's Chinese character reading performance and vocabulary knowledge, which was fully mediated by morphological awareness, even after controlling for children's phonological awareness, non-verbal intelligence, age, semantic sensitivity to specific Chinese compound words, and their response speed to these words. In the final model, in which Chinese character reading and vocabulary were combined, similar results were obtained.

The present study was among the first to explore implicit and explicit morphological processing at the same time, their relationship, and the role of morphological processing for children's language and literacy development. Findings not only help us explore children's morphological processing in more detail but also provide potentially useful ideas for designing future literacy intervention programs and teaching / learning materials. Key Words: reading development, morphological processing, compounding

structure, vocabulary

在以往的研究中,研究者主要从两个方面对词法加工进行了探讨:成人在 词汇通达过程中的词法加工,以及儿童的词法意识与阅读发展间的关系。本研 究对儿童的内隐词法敏感性和外显词法意识都进行了考察,以求对中文儿童的 词法加工及其与中文汉字阅读和词汇量的关系进行更加全面地探讨。

153 名来自中国东北的三年级儿童参加了本研究(其中男生 87 名,女生 66 名,平均年龄 9.15 岁, SD=.43)。词法敏感性采用视觉启动词汇决策范式进 行测查,词法意识采用一系列词法意识任务进行测查,包括词法建构任务、同 音字产生任务、以及一个新设计的合成词词法产生任务。

对于词法敏感性,总体来看这些儿童并未表现出与中文成人相类似的对 合成词语素的加工。另外,这些儿童在对偏正式合成词(而非并列式合成词) 的词汇加工过程中表现出了对词法结构的加工,而且该加工会在启动词与目标 词无语义联系的情况下对目标词的词汇加工产生影响。

再者,结构方程建模分析显示,在控制了儿童的语音意识、非言语智力、 年龄、对合成词的语义敏感性以及对词语的反应速度之后,词法敏感性对词法 意识有显著的直接效应,而对儿童的汉字阅读和词汇量有显著的间接效应(词 法意识为完全媒介)。

本研究首次同时探讨了内隐与外显的词法加工,二者的关系,以及词法加 工在儿童语言与语文能力发展上的作用。本研究结果不仅可以帮助我们更为详 尽地探讨儿童的词法加工,而且可以为以后设计语文能力辅导课程和编制教学 材料提供指导。 关键词:阅读发展,词法加工,合成词结构,词汇