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КЫТАЙДАГЫ ЧЕТ ЭЛДИК БАШТАЛГЫЧ ЖАНА ОРТО МЕКТЕП ОКУУЧУЛАРЫНЫН КЫТАЙ ТАМГАСЫНЫН ОРФОГРАФИЯЛЫК БИЛҮҮСҮН САЛЫШТЫРУУ

СРАВНЕНИЕ УРОВНЯ ОСВЕДОМЛЕННОСТИ О ПРАВОПИСАНИИ КИТАЙСКИХ ИЕРОГЛИФОВ СРЕДИ ИНОСТРАННЫХ УЧАЩИХСЯ НАЧАЛЬНОЙ И СРЕДНЕЙ ШКОЛЫ В КИТАЕ

THE COMPARISON OF THE DEVELOPMENT OF CHINESE CHARACTER ORTHOGRAPHY AWARENESS AMONG ELEMENTARY AND INTERMEDIATE INTERNATIONAL STUDENTS IN CHINA

Кыскача мүнөздөмө: Бул изилдөөдө Кытайга башталгыч жана орто деңгээлде келген чет элдик студенттердин кытай тамгаларынын орфографиялык аң-сезиминин өнүгүшүнүн ортосундагы окшоштуктар, айырмачылыктар жана мамилелер каралып, каарман эмес чындык-жалган баа берүү тапшырмасы колдонулган.

Аннотация: В этом исследовании изучались сходства, различия и взаимосвязи между развитием орфографической осведомленности о китайских иероглифах у иностранных студентов, приезжающих в Китай на начальном и среднем уровнях, с помощью задания на определение истинности и ложности иероглифов, не относящихся к иероглифам.

Abstract: This study examined the similarities, differences, and associations between the development of orthographic awareness of Chinese characters in international students coming to China at the elementary and intermediate levels through a true-false non-character judgment task.

Негизги сөздөр: кытай тамгаларынын орфографиясын билүү (СОА); башталгыч жана орто деңгээлдеги чет өлкөлүк студенттер; радикалдуу маалымдуулук; радикалдуу позицияны тушунуу.

Ключевые слова: знание орфографии китайских иероглифов (СОА); иностранные учащиеся начального и среднего уровней; радикальная осведомленность; осознание радикальной позиции.

Keywords: Chinese characters orthography awareness (COA); elementary and intermediate level international students; radical awareness; radical position awareness

1. Introduction

Strokes are the writing units of Chinese characters, and components are the direct parts of Chinese characters. In the process of combining Chinese characters, not all arbitrary combinations of strokes and components can constitute acceptable Chinese characters; different strokes or components can constitute familiar Chinese characters only if they are combined according to certain rules (Peng Danling 1997; Liang Yanmin, 2004; Xing Hongbing, 2007).

According to the different subjects, the present studies can be categorized into studies of native Chinese-speaking children (NCS) and studies of second-language Chinese learners (CSL). The Chinese character orthography awareness emergence of native Chinese-speaking children has gone through from pre-school to post-school, with the emergence and development time being pushed forward. The studies about Chinese character orthography awareness of second-language Chinese learners highlight a greater degree of variability. The second-language Chinese learners are significantly influenced by their linguistic background or Chinese character background. Generally speaking, Chinese-speaking students usually has the informal experience of learning Chinese before attending the school, and their family language environment improves their Chinese level. And a portion of the study corroborates this view.

Based on previous studies, this study explores the changes and development of Chinese characters orthography awareness from elementary level to intermediate level international students by means of an experimental method of paper-and-pencil test. It is expected to provide relevant suggestions for Chinese character teaching.

2. Method

2.1. Participants

The participants of the study were 34 international students in China. Among them, 17 were at elementary level who has learned Chinese for about one year and 17 were intermediate level who has learned Chinese for about two years. At the time of data collection, the students‘ age ranges from 20 to 54.

2.2. Materials and procedure

2.2.1. Materials

All the materials are selected from student textbook. First, selecting 48 Chinese characters with the following criteria: the characters with high frequency, the number of strokes range from 5 to 11, and half of the characters had been studied. Second, 48 pseudo-characters and 48 non-characters were created for each of the selected characters according to the purpose of the experiment. There are two types of pseudo-characters, including familiar parts and unfamiliar components both with correctly positioned components pseudo-characters. Non-characters are also divided into two categories: wrong component with correct component position non-characters, and familiar component with wrong component position non-characters.

2.2.2. Procedure

This experiment is a paper-and-pencil test which is conducted in a group practical test. The 144 characters were randomly printed on A4 paper, and each character was followed by a space to fill in the judgment results. All the participants need determine whether the ―character‖ is a real Chinese character. If it is, tick ―√‖. If not, tick ―×‖.

3. Results

3.1 The COA development situation of elementary level CSL

Based on the correct rate of pseudo- and non-phonetic characters. If the correct rate of pseudo-characters is significantly higher than non-characters, which means the orthography awareness of Chinese characters is developed. If the correct rate of non-characters is significantly higher than pseudo-characters, which means the orthography awareness of Chinese characters is not developed.

The results shows that the main effect of the type of Chinese character at the elementary level is not significant ($F=1.231$, $p>.05$), indicating that the correct rate between pseudo- and non-characters is no significant, and that the awareness of Chinese character orthography had not yet been formed among international students at the elementary level.

There is a significant difference in the main effect of Chinese character structure ($F=3.626$, $p<.05$), which indicating that the correct rate of three Chinese character structure types, namely up-down, left-right, and encircling have a significant difference. With the encircling structure having a greater amount of correctness than the up-down structure, followed by the left-right structure.

The interaction effect of character type and structure was significant ($F=4.103$, $p<.05$). Through the simple effect analysis, it shows that the correct rate of pseudo-characters was higher than that of non-characters for the up-down and left-right structure structures, but the difference was not significant ($p>.05$); and the amount of correct non-characters was higher than that of pseudo-characters for the encircling structure, and the difference was also not significant ($p>.05$), which suggesting that the awareness of Chinese characters' orthographies has already sprung up in the encircling structure, probably because encircling This indicates that the awareness of the orthography of Chinese characters has sprouted in the enclosing structure, probably because the enclosing structure of non-characters has changed the shape of Chinese characters, which is more different from the real characters and easier to recognize.

The main effect of Chinese character type at the intermediate level is insignificant ($F=.903$, $p>.05$), and the main effect of structure shows a significant difference ($F=3.386$, $p=.048$). From the data analysis, the correct rate of up-down structure and the enclosing structure about **non-characters** is higher than pseudo-characters. The interaction effect of character type and structure is not significant ($F=2.246$, $p>.05$), which means that the trend of change on pseudo- character and non-character about the three structures is the same and each of them is independent and without influence. The Chinese character orthography awareness develops unevenly at intermediate level international students, which only reflects on the enclosing structure and the up-down structure, not on the left-right structure.

3.2 The Development of Chinese Character Component and Component Position Awareness

The results reveals that the main effect of Chinese character type is highly significant ($F=22.047$, $p=.000$), indicating that there is a significant difference in the correct rate of different types of Chinese characters, suggesting that the type of Chinese characters affects the correct rate. The main effect of Chinese language level was highly significant ($F=137.345$, $p=.000$), indicating that there is an abnormally significant difference in the rate of Chinese characters recognition with different levels of Chinese language proficiency.

The correct rate of wrong component with correct component position non-characters and familiar component with wrong component position non-characters explores a significant difference for international students at the intermediate level ($P = .001$). The difference is narrower than that of

primary level, suggesting that the development of component awareness and component position awareness at the intermediate level remains asynchronous. The correct rate of the wrong component position non-characters is significantly higher than familiar components pseudo-characters($p=.036$) and unfamiliar components pseudo-characters, but there is no significant difference between the two ($p>.05$). And the P-value is closer to .05 than in the elementary stage, which suggests that intermediate level international students' awareness of component position is significantly promoted, but is still not fully developed. Thus, that the intermediate stage is in a state of continuous development while the pace is relatively slow.

4. Summary

After one semester of study, the international students have already formed a certain degree of Chinese characters orthography awareness. For different research subjects, the period of Chinese characters orthography awareness‘ emergence and development time reflects a great deal of variability. Zhang et al. (2020) found that Thai primary and secondary school students had developed a relatively clear sense of orthography awareness and component position at the primary and intermediate 1 levels of Chinese language proficiency, and that component awareness was not formed until the intermediate 2 level. Jiang (2001) indicates that after five months of Chinese language learning, the international students in short-term classes have clearly formed Chinese characters orthography awareness but it‘s limited to up-down structure characters. Zhang (2008) concluded that after 0.5-1 year of formal Chinese classroom learning, Indonesian Chinese international students could form Chinese character orthography awareness. Zhang (2017) showed that Southeast Asian international students have basically formed the Chinese characters orthography awareness after 0.5 years of formal Chinese classroom learning. However, Lu (2002) and Wang (2003) showed that international students whose native language is alphabetic language take about 2 years from initial Chinese characters to the emergence of Chinese character orthography awareness. In summary, the time for Chinese characters orthography awareness emergence and formation among different second language learners range from 0.5 to 2 years, with an overall gradual development trend. The reasons for this may as follows: the learners strongly influenced by individual factors, such as external native language background, lesson format, and even teacher's style, which may affect the effectiveness of teaching and learning, and internal factors, such as the individual's intrinsic motivation and purpose of learning, and so on.

In terms of component position awareness and component awareness, the research results are relatively convergent. Namely, component position awareness develops better or earlier than component awareness (Li et al. 2006; Hao 2007; Liu 2013; Zhang 2016, 2017), which is similar to the developmental sequence of native-speaking children. Zhang (2017) found that the overall development of component awareness and component position awareness tended to be synchronized among Southeast Asian students, but the differences in the development of each indicator of orthographic awareness gradually appeared with the development of Chinese language proficiency. In the upper elementary stage, the influence of Chinese character structure is not prominent, and the development of component awareness and component position awareness is synchronized; in the lower elementary to upper intermediate stage, the differences gradually become clearer, with the orthographic awareness of left and right structure Chinese characters being better than that of the enclosing structure, and the development of component position awareness being better than that of component awareness. Here are some reasons: first, the number of Chinese character components is large, which increases the difficulty of learning. While the component

position is relatively fixed and easier to master (Zhang, 2017). Therefore, with the improvement of Chinese language proficiency, the advantage of component position development is more significant. Second, there are a large number of similar components in Chinese character system (Zhang, 2016), with the similar components, which restricts the development of the components awareness to a certain extent. The number of components are limited and most of components will recur many times in the same position in different Chinese characters. Therefore, to master Chinese character components and their positional relationships can help reduce the difficulty of memorizing and writing Chinese characters (Liu, 2011).

5. Conclusion

The development of Chinese characters orthography awareness is still unclear after half a year of study at the primary level, and the development of component awareness is slow, which is contrary to the findings of previous studies. The development of component position awareness and component awareness is imbalance, with the former developing better than the latter, which is consistent with the findings of previous studies.

There are still some issues that can be further investigated in this study. First, the number of experimental subjects is small, which could only account for a small part of the problem. Second, the subjects were not strictly controlled, for example the nationality and age backgrounds of the subjects in the primary group are not uniform, and the individual differences in learners are greater than those in the intermediate group. This factor is not strictly controlled may affect the results of the experiment. Finally, the research dynamics only involves elementary and international students, and it would have been more complete if there were students with advanced Chinese proficiency.

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