English Vocabulary Learning Strategies Used by Chinese Undergraduate Students

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Abstract:

It is important to investigate how individual differences affect the selection of vocabulary acquisition strategies since doing so will enable educators and researchers to select the best methods for each student. To better understand how Chinese college students learning English as a second language choose their vocabulary learning strategies, this study explored the impact of major orientation and academic level inequalities. 338 questionnaires were gathered from a common undergraduate university in China to finish the diversity study. The statistical analysis findings indicated that while a student's major did not significantly influence the choices of vocabulary learning strategies, their academic level significantly impacted the use of memory and determination strategies. It was evident from the results that educating students to employ memory strategy and motivating them to learn with determination will help them perform better in English competency.

Keywords: Vocabulary learning strategies; individual differences; English learning and teaching; second language learning.

1. Introduction

People have realized the importance of vocabulary learning in second language acquisition and actively choose different vocabulary learning strategies according to their situations. Due to the limited opportunities for gaining input, output, and interaction in the second language, it is necessary to investigate effective and positive vocabulary learning strategies to support second language learners' language acquisition progress [1]. The current studies have shown that the most common strategies learners use are dictionary use, guessing, and repetition. However, this cannot be the case for all people, and with the development of technology, more and more new strategies emerge. Learners shall adapt to diverse strategies regarding individual differences. Depending on their learning purpose and environment, they may choose certain learning strategies that are more suitable for them. There are currently many different learning methodologies available. Relevant research has shown that the individual differences of learners—such as their educational background – will influence their vocabulary learning strategies. The features of the choice of vocabulary learning strategies and other individual variables, such as the effect of major and academic level on the usage of vocabulary strategies, make it worthwhile to examine the big learning group of Chinese college students. Accordingly, this study examines the features of Chinese college students' vocabulary learning strategies and validates the theory that students of different majors and academic levels will select distinct learning strategies. This paper selects second language learners from Qufu Normal University as the research targets. It aims to discover what strategies they prefer to use, such as memory and cognitive vocabulary learning strategies. Through quantitative analysis, the features of their selected vocabulary techniques were examined.

2. Literature Review

Vocabulary learning strategies (VLS) are learners' conscious efforts in managing their vocabulary learning. Metacognitive and cognitive learning strategies are significant methods to improve learners' learning efficiency and effectiveness, which can enhance the size and depth of their vocabulary. Meanwhile, VLS assists students in developing the automatic and appropriate use of target words. It deserves to be considered that the selection, usage, and effectiveness of VLS could be affected by people, tasks, actual context, and other factors [2].

According to the revision of the previous literature, many types of vocabulary learning strategies have been explored and tested. With the development of society, fluent

English has become an ability that every citizen should equip [3]. Moreover, vocabulary is an important part of English learning [4]. Although the importance of learning vocabulary has been recognized, Thékes talked about the difficulty of learning (and teaching) vocabulary typically encompasses a wide range of noteworthy characteristics, including word frequency, saliency, learning burden, and learners [5]. Similarly, Ankawi held the same view that several challenges and issues are associated with learning vocabulary, such as proper word meaning selection, grammatical construction, pronunciation, and more. For this phenomenon, different strategies appeared for different learners. Some researchers found that the usage of VLS is related to vocabulary knowledge (VK) and vocabulary size. Fan, N. said that dictionaries, guessing, and repetition are used most in the present EFL context, but some other strategies are employed much less because of low efficiency [6]. However, it must be noted that this conclusion is not applied to all learning groups and will not stay long since different learners have different properties and tools, as well as the development of people's viewpoints and technology. Cheng-Chang Tsai said that in forming a global village, memorizing words through tedious repetition and recitals will reduce students' curiosity and sense of freshness [3]. In particular, pupils who are digital natives can learn vocabulary through multi-technological media rather than paper. Researchers have examined the effectiveness of several vocabulary learning techniques and the best learning group.

There are still many other studies aiming to discover certain strategies and their effects, like spelling, using dictionaries, making word lists, and some multimedia technology such as captions in video, WeChat-based English-language vocabulary learning, word-knowledge e-books, and so on. Different groups consider different learning strategies, Preeti Samudra investigated the effects of a group of preschoolers watching instructional media regularly in low-income homes [7]. The result shows that repetition and media tools can help kids promote interest and efficiency in learning words. Moreover, Al-Khresheh and Al-Ruwaili explored strategies used by Saudi English learners precisely. They stated that the most popular memory strategies among the participants were determined by social and metacognitive strategies [8]. A relevant study further clarified that individuals with various degrees employ notably diverse vocabulary acquisition techniques, particularly between undergraduate and graduate students [5]. However, these studies focus on strategies only or the relationship between learners and strategies in certain regions. The best ways to select vocabulary learning techniques and the specific qualities of vocabulary learning strategies still need to be investigated for English language learners with varying properties.

3. Methodology

338 sophomore Qufu Normal University undergraduates with various majors participated in the study. The majors of the participants are separated into two groups: those majoring in science and engineering include mathematics, chemistry, biological engineering, and so forth; those majoring in humanities and social sciences include Chinese language and literature, history, and ideological and political education. Chinese undergraduate students must take English classes. They must also pass the relevant English proficiency exam (CET) to graduate on time. Consequently, all undergraduates regularly study English as a second language.

This study collects data in the form of a questionnaire. Students majoring in history, literature, mathematics, chemistry, and other related fields receive questionnaires via the Star platform, and they are asked to fill them out voluntarily. There are two primary sections to the questionnaire. The first section contains student data gathered with their permission, including gender, major, and CET-4 results. The second section uses the "Schitt vocabulary acquisition strategy questionnaire" as its basis [9]. Based on this, several questions have changed their terminology, and some have been removed to maintain the integrity of the variable analysis while making it easier for students to grasp and for researchers to perform statistical analysis.

This study used the Schmitt Vocabulary Learning Strategies Questionnaire (VLSQ) [9]. The five strategies examined a total of forty questions: the determination strategy, social strategy, memory strategy, cognitive strategy, and metacognitive strategy. Each technique in this questionnaire has a reliability coefficient greater than 0.7 [9]. The students provided useful replies and used a five-point Likert scale to provide their answers. Information that is more insightful and in-depth can be obtained. Additionally, questionnaires have been tested. Even though it took roughly thirty to thirty-five minutes to finish the questionnaire, participants were informed by the researchers that there was no set time limit.

4. Results

Previous studies have found that learners with different educational backgrounds have different choices of vocabulary strategies. This research compared the second-year undergraduates with different majors and academic levels. The results are shown below.

4.1 The Characteristics of Vocabulary Learning Strategies Used by Chinese Learners

Table 1 demonstrates that participants use social strategies

the least when it comes to vocabulary learning strategies, which suggests that learners are not proficient at learning vocabulary through social communication and cooperation. Determination, social, memory, cognitive, and meta-cognitive strategies are effectively divided into these categories. The learners rely more on the other four strategies, with metacognitive, memory, and determination strategies being the most frequently employed ones. The educational background of Chinese students is directly associated with their significant usage of metacognitive strategies, cognitive strategies, memory strategies, and determination methods because teachers will implement structured vocabulary acquisition strategies during the compulsory education period, which students must complete as homework after class. Conversely, social tactics are used infrequently, meaning that students are still not proficient in their use, even at the university level.

Table 1. Descriptive Analysis on the five vocabulary-learning strategies

		determination	social	memory	cognitive	metacognitive
N	Valid	338	338	338	338	338
	Missing	0	0	0	0	0
Mean		3.1382	2.0959	3.1259	2.9985	3.3245
Std. Deviation		65565	71028	61391	73022	79330
Variance		430	504	377	533	629
Minimum		1.00	1.00	1.00	1.00	1.00
Maximum		5.00	5.00	5.00	5.00	5.00

4.2 The Factors Influencing and Influenced by Diverse Learning Strategies

The results of the ANOVA analysis, as presented in Table 2, indicated that different English academic levels had significantly different effects on memory strategies (F=2.711, p=0.030) and determination strategies (F=4.269, p=4.002) among the learners who scored below 550 in CET4 (the average level or below). The spectrum of high-level learners did not significantly differ.

Students with 500–550 scores used determination strategies significantly more than those with 425–500 scores, and those with 425–500 scores were significantly better than those with below 425 scores, according to the Bonferroni multiple mean comparisons results. Students with scores above 550 showed no significant difference from other scores. Hence, there are variations in vocabulary learning strategy selection not only between students with different academic backgrounds but also between students with similar educational backgrounds but differing listening, speaking, reading, and writing skills. To support their learning, it is advised that students with a weak English foundation or those who perform below averagely in the language learn to become more conscious of the use of memory and decision-making processes and adequately reinforce social strategies.

Table 2. The significant difference in vocabulary learning strategies at different academic levels

		Sum of Squares	df	Mean Square	F	Sig.
Determination	Between Groups	7.067	4	1.767	4.269	002
	Within Groups	137.803	333	414		
	Total	144.870	337			
Social	Between Groups	2.955	4	739	1.473	210
	Within Groups	167.059	333	502		
	Total	170.014	337			
Memory	Between Groups	4.006	4	1.001	2.711	030
	Within Groups	123.006	333	369		
	Total	127.011	337			

Cognitive	Between Groups	2.062	4	516	967	426
	Within Groups	177.631	333	533		
	Total	179.694	337			
Metacognitive	Between Groups	4.742	4	1.185	1.904	109
	Within Groups	207.343	333	623		
	Total	212.084	337			

According to Table 3, the findings indicated no statistically significant difference (p>0.05) between the learners' majors and the vocabulary learning strategies they selected. To clarify, there was no discernible variation in the vocabulary acquisition approaches selected by individuals from different majors.

Table 3. The significant difference in vocabulary learning strategies among different majors

		Sum of Squares	df	Mean Square	F	Sig.
Determination	Between Groups	147	3	049	113	953
	Within Groups	144.724	334	433		
	Total	144.870	337			
Social	Between Groups	1.942	3	647	1.286	279
	Within Groups	168.072	334	503		
	Total	170.014	337			
Memory	Between Groups	796	3	265	702	551
	Within Groups	126.215	334	378		
	Total	127.011	337			
Cognitive	Between Groups	1.863	3	621	1.166	323
	Within Groups	177.831	334	532		
	Total	179.694	337			
Metacognitive	Between Groups	262	3	087	138	937
	Within Groups	211.822	334	634		
	Total	212.084	337			

5. Conclusion

There are numerous strategies to acquire vocabulary. Nonetheless, Chinese college students are becoming increasingly aware of the value of studying vocabulary. Second language learners must select the most appropriate strategy based on individual characteristics to achieve an efficient and successful vocabulary learning process. This study demonstrates, using a questionnaire survey and quantitative analysis, that the varied academic levels of Chinese college students impact the techniques they choose to acquire language. Chinese college students choose the metacognitive strategy above the others. It is possible that learners gradually obtain more confidence in their capacity to acquire vocabulary at this age in college students. Learners attempt to explore new vocabulary learning routines according to their current situation and assist them in gathering vocabulary according to their comprehension rather than depending solely on rote memorization. In addition, applying determination, memory, and cognitive strategies is more common. The traditional Chinese system of compulsory schooling impacts the adoption of memory strategies. Because they have become accustomed to obeying their teachers' instructions and viewing vocabulary study as a required assignment, students have developed the habit of memorizing new terms as soon as they are seen. The fact that students have developed a conscious awareness of purposefully learning vocabulary and have given sufficient attention to acquiring and accumulating vocabulary under modern education may account for the frequent usage of determination strategies. When acquiring language, cognitive strategies

are behavioral tactics that are progressively developed subliminally. Learners typically employ cognitive methods to aid in the acquisition and retention of language. In contrast, the frequency of participants adopting social strategies is significantly lower than other strategies, indicating that Chinese college students are not used to completing vocabulary learning in the communication process through group cooperation and other forms.

After thorough analysis, this study concludes that differences in academic level have a greater impact on Chinese college students' choice of vocabulary acquisition methods than differences in professional characteristics. The use of memory and determination strategies varies significantly across different levels of English proficiency, with higher academic levels being associated with an increased likelihood of using these strategies. In other words, students are likelier to achieve high scores on English competency exams if they possess exceptional memory skills and a strong sense of commitment. It is advised that teachers keep encouraging and motivating their students throughout the educational process and work to enhance their memory and vocabulary acquisition skills based on the survey's findings. Students are advised to become more committed to learning vocabulary and improve their memory skills, as these skills might help them do better on English tests.

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