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# A Study on the Correlation between English vocabulary size and vocabulary learning strategies of Xizang College Students

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## Abstract

Based on the theory of learning strategy, this paper collected data by means of questionnaires, vocabulary tests as well as in-depth interviews, and explored the correlation relationship exists between English vocabulary size and vocabulary learning strategies among Xizang university students through Pearson correlation analysis and two-stage least squares regression analysis method. The study found that there was a significant positive correlation between vocabulary size and vocabulary learning strategies as a whole, with vocabulary size = 20.084 + 3.491 vocabulary learning strategies. The study concludes that the research on the correlation between vocabulary size and vocabulary learning strategies for Xizang college students is a reflection on the teaching of English in ethnic areas.

## Keywords

vocabulary; vocabulary learning strategy; relevance

## Introduction

On April 25, 2020, the inistry of Education issued the Teaching Guide for Foreign Language and Literature ajors in Regular Institutions of Higher Learning (hereinafter referred to as the Guide) clearly stated that with the "student-centered, output-oriented and continuous improvement" as the educational concept, to cultivate students' thinking ability, reflection ability and transferability (2020; 8).

In order to make this concept practical, in fact, in recent years, domestic scholars have been engaged in "student-centered" research (Shu Dingfang, 1998; Xia Jimei, 2002; Chen Jianlin, 2006), and the study of language learning strategy just reflects the transformation from "teacher-centered" to "student-centered" development. Foreign scholar Oxford (1989:292) believes that there are many factors related to the choice of language learning strategies, including: the level and ability of language learning; degree of metacognitive awareness; gender; ethnic origin (national origin) and so on. A large number of learning strategies at home and abroad show that vocabulary learning strategies and vocabulary size are closely related, and there is a significant correlation between vocabulary learning strategies and vocabulary (Cater & cCarthy, 1988; Wu Xia, Wang Qiang, 1998; Gu Yongqi, Hu Guangwei, 1998; Yang Xiao, 2006). However, these studies did not explore the correlation between vocabulary and vocabulary learning strategy, and most of the above students is the han object, the Xizang students by its national origin, national consciousness, psychological characteristics, religious belief, cultural background and the influence of speculative ability, vocabulary and vocabu-

lary learning strategy, whether there is a relationship is unknown. Therefore, the correlation between English vocabulary and vocabulary learning strategies is worth our thinking and exploration.

## Research design

In this study, questionnaires, tests and interviews investigated the English vocabulary learning strategies and vocabulary size of Xizang college students.

### Research object

A random sample of 134 Xizang students, aged 17-24 years old, were selected from the first year of study at Xizang Agricultural and Animal Husbandry College. The subjects had studied English for an average of 9.12 years and scored an average of 44.40 out of 150 in English in the entrance examination.

### Research problems

This study mainly attempts to answer the following questions:
(1) Is there a correlation between vocabulary size and vocabulary learning strategies among Xizang university students?
(2) What kind of correlation exists between them?

### Research tools

(1) The English Vocabulary Learning Questionnaire
The study was based on O'Malley & Chamot's (1990) learning strategy theory and was developed based on Gu & Johnson's (1996) English vocabulary learning strategies. The questionnaire covers three dimensions of vocabulary learning strategies: metacognitive strategies, cognitive strategies and social/emotional strategies. The questionnaire has good reliability and validity (Zhang, 2008: 30)[8] . The questionnaire took a five-point Richter scale, ranging from "totally disagree" (1) to "totally agree" (5). After counting the scores of all subjects, the mean value was taken.
(2) Vocabulary test form
Paul Nation's (1990) Vocabulary Levels Test (VS) was used to test participants' vocabulary breadth [9]. The vocabulary of the test consists of five different word frequency levels (2000, 3000, 5000, academic and 10000 words) to measure the subjects' receptive vocabulary in English. In view of the actual English proficiency of the participants, the academic vocabulary (over 5000) and 10, 000 vocabulary levels were omitted from the test, and the remaining three levels had the same number, with 5 groups of 15 words, 1 point for each word, and the full score was 45 points.

### Data collection

The pilot test was conducted in 42 Xizang students with the same learning background and the same level of English proficiency as the subjects. The questionnaire reliability coefficient of the pilot test was 0.872 and

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the validity coefficient was 0.626. Thereafter, invalid questions were removed from the questionnaire. At thesame time, the time required to complete the questionnaire and test scales was re-evaluated and adjusted according to the results of the pilot test.

The formal data collection was completed independently by the subjects. The collected data were analyzed-again for reliability. The overall internal reliability of the questionnaire, Cronbach's a coefficient, reached 0.900, and the results of the structural validity analysis showed a KMO value of 0.842, with a good overall consistency of the questionnaire.

The interview data was collected mainly through audio-recorded, transcribed texts. These qualitative data will be triangulated with the quantitative data to form a validation and supplemented with the quantitative study.

## Research findings and analysis

In order to examine the relationship between English vocabulary size and vocabulary learning strategies of Xizang college students, this study used SPSS 21.0 statistical software to conduct Pearson correlation analysis and fitted regression analysis on scores.

### The Correlation relationship

The study conducted a questionnaire survey on the dimensions of vocabulary learning strategies, and vocabulary size was scored on Paul Nation's Vocabulary Levels Test (VS). Among the 134 participants, the highest score was 45 and the lowest score was 15. The findings of the person correlation analysis study are shown in

*Table 1 Table of the correlation coefficient between vocabulary size and vocabulary learning strategies*

| | | vocabulary | metacognitionstrategy | cognitive strategy | Socio-emotional strategies |
|---|---|---|---|---|---|
| vocabulary | r | 1 | | | |
| | p | | | | |
| | n | 134 | | | |
| metacognitive strategy | r | .427** | 1 | | |
| | p | .000 | | | |
| | n | 134 | | | |
| cognitive strategy | r | .226** | .683** | 1 | |
| | p | .004 | .000 | | |
| | n | 134 | | | |
| Socio-emotional strategies | r | .201* | .561** | .706** | 1 |
| | p | .011 | .000 | .000 | |
| | n | 134 | | | |
| **. Significantly correlated at the 0.01 level (two-sided). | | | | | |
| *. Significantly correlated at the 0.05 level (two-sided). | | | | | |

Table 1 shows the correlations between participants' vocabulary size and the three dimensions of vocabulary learning strategies: significant correlations with metacognitive strategies at the 0.01 level (r=.427**, p=.000), significant correlations with cognitive strategies at the 0.01 level (r=.226**, p=.000), and significant correlations with socioemotional strategies at the 0.05 level (r=. 201*, p=.011). The findings indicate that the correlation between the subjects' vocabulary size and the use of vocabulary learning strategies was significant and showed an overall positive correlation. This is consistent with previous research (Chen Shaoying, 2019).

### (2) The regression relationship

Given that vocabulary size and the cognitive strategies among the three dimensions of vocabulary learning strategies were mutually dependent variables, the regression analysis was conducted using two-stage least squares method and ANOVA tests. The fitted regression analysis was carried out with vocabulary quantity as the dependent variable, vocabulary learning strategy as the explanatory variable and cognitive strategy as the instrumental variable. The results of the analysis were obtained as shown in Table 2:

*Table 2 Table of regression equation coefficients for vocabulary size and vocabulary learning strategies*

| | B | standard error | Beta | t | Sig. |
|---|---|---|---|---|---|
| (Constant) | 20.084 | 2.271 | | 9.396 | .000 |
| Vocabulary learning strategy | 3.491 | .232 | .253 | 2.981 | .003 |

The regression results obtained above can be expressed as the equation:

*Vocabulary= 20.084+3.491 vocabulary learning strategy*

Firstly, the results of the regression analysis showed that R2 = 0.190 and adjusted R2 = 0.174, indicating that the model fit was good. Secondly, the ANOVA showed that the significance indicator of the test, Sig (0.000) < 0.05, indicating that the regression effect is very significant and the regression equation is valid. Thirdly, the test for the coefficient of the explanatory variable, significance index Sig (0.003) < 0.05, indicates that the explanatory variable (vocabulary learning strategy) has a significant effect on the dependent variable (vocabulary size). This finding was also corroborated in the later in-depth interview survery.

## Discussion

Based on the theory of language learning strategy, this paper explored the correlation between vocabulary size and vocabulary learning strategies of Xizang college students. It was found that among the three dimensions of vocabulary learning strategies correlated with vocabulary size, metacognitive strategies had the strongest predictive power and the closest relationship with the vocabulary size of Xizang college students (r=.427>.226>.201); from the results of the regression, when vocabulary learning strategies improved, vocabulary size scores also increased accordingly.

On the one hand, vocabulary learning requires the use of metacognitive strategies to monitor, manage or engage in self-directed learning. On the other hand, consciously improving students' reflective skills in turn has a facilitating effect on the use of cognitive strategies. As the author interviewed some students, the students said: "Nowadays, the teacher's lectures on vocabulary do not arouse our interest in learning, so our vocabulary naturally cannot be improved. I hope that teachers will talk about strategies along with content that is highly relevant to our life and add content that reflects the people and events of our nation to inspire us to think, so that we can remember words easily."

Vocabulary learning, like foreign language learning, is a cyclical process of 'input - internalization - output - feedback' (Yang Gang, 2019:27). In this process, it is urgent for students to judge the effectiveness of vocabulary learning according to the strategies used and to make timely adjustments. Therefore, students' ability to reflect and compare is particularly important. This ability to reflect is not only needed in the process of students' English vocabulary learning, but can further be transferred to the process of learning national cultures.

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## Reflections on teaching

The study of the correlation between vocabulary size and vocabulary learning strategies is further evidence of the important role of learning strategies in the process of second language acquisition, a reflection on the study of learning strategies and, to some extent, an evaluation of English language teaching. As the Guidelines call for ELT to be student-centered, output-oriented and continuously improved, the students' learning experience and learning outcomes in the curriculum should be continuously enhanced. In view of this, this study reflects on the English language teaching in the schools studied, with a view to providing lessons for ELT in schools in ethnic areas.

First, changing the traditional language skills-driven philosophy and improving students' old knowledge structures. Teachers may integrate language knowledge with national culture, transforms students' traditional language skills through familiar national stories, uses classical themes to perspective the national history and culture, enhance students' humanistic vision while expanding their English vocabulary, closely combine the cultivation of language learning strategies with the teaching of humanistic knowledge, highlight the humanistic features during English class-teaching, and in the process of teaching language knowledge and skills, the humanistic approach to ethnic students is implicitly realised.

Secondly, teachers may help students to understand the development of Xizang civilization and to enhance their logical thinking skills. In the teaching process, teachers may use popular vocabulary and hot topics to introduce ethnic cultural values throughout the whole teaching progress, so that students can understand the historical development of Xizang civilization, use the strategies they have learnt to analyze their own civilization rationally, compare and discern it with other ethnic civilizations and Western civilization, and form their own unique opinions, thus developing their critical thinking.

Thirdly, students will be guided to pass on their national culture and promote it. As we all know, without a high degree of cultural confidence, there can be no cultural prosperity. Teachers should pay attention to combining students' vocabulary "national talents" and vocabulary "international vision", further promote local culture on the basis of learning, familiarity and mastery of vocabulary learning strategies. At the same time, teachers may help students to reflect on their local vocabulary expressions from an intercultural perspective, so that they can rethink foreign cultures from the standpoint of their own, and ultimately cultivate students who are with a Chinese heart, Chinese feelings and Chinese taste.

## Conclusion

The study analyzed the correlation relationship between vocabulary size and vocabulary learning strategies among Xizang students by measuring their vocabulary. The results of the quantitative and qualitative analyses showed that there was a significant positive correlation between vocabulary learning strategies and vocabulary size among Xizang university students, among which metacognitive strategy is the most significant correlation. The interviews revealed that the correlations also have a reflective effect on teaching: firstly, they help to improve students' old knowledge structures. Secondly, they can help to improve students' logicalthinking skills. Finally, they can contribute to the development and realization of 'whole-person education'.

Limited by space, the vocabulary measurement in this study is limited to the level of receptive vocabulary. Future studies may examine the relationship between the participants' output vocabulary and their vocabulary learning strategies, with a view to further exploring the correlation between the two.

## Funding

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[2]Improvement Project of Teacher Professional Practice Ability in Xizang Agricultural and Animal Husbandry College in 2022"Improvement of College English Education and Teaching Ability" (No: 710070011)

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