# A Correlation Study of Non-English Majors' Motivational Regulation Strategies and Their English Achievements

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Abstract: Motivation is considered to be a critical factor in students' English learning, but we know little about learners' use of motivational regulation strategies and its correlation with English achievements. Based on quantitative analysis of questionnaire, this paper conducts an in-depth investigation on the correlation between motivational regulation strategies and English achievements of non-English majors in three Chinese universities. The findings indicate that non-English majors use motivational regulation strategies frequently, and students with higher English achievements use it more frequently. Moreover, there is a positive correlation between non-English majors' motivational regulation strategies and their English achievements, but the correlative degree of different strategies and English achievements is different. This paper provides positive reference for guiding non-English majors to conduct motivational regulation to improve their English achievements.

#### 1. Introduction

In English learning, motivation is a critical factor that affects students' learning achievement. It drives their learning activities to move towards a certain goal. However, learning a foreign language takes great effort and a lot of time. In this process, there will be some interfering factors, such as difficult learning tasks or other influences. At this time, students' learning motivation is easy to fluctuate, or even decline. In this situation, learners need to adopt appropriate regulation strategies to be able to persist.

However, when students' learning motivation begins to fade, few students take effective strategies to adjust their learning motivation. Therefore, it is worth studying the situation of using motivational regulation strategies and the correlation between motivational regulation strategies and English achievement.

# 2. Literature Review

The systematic research on motivational regulation strategies began in the 1990s, and the motivational regulation strategies itself is still evolving, so its relationship with English learning achievement has also gone through a long process of development.

### 2.1. Definition of Motivational Regulation Strategies

In the field of educational psychology, motivational regulation is considered to be an important aspect of self-regulated learning. Wolters<sup>[1]</sup> was the first to systematically study motivation regulation. He believed that motivational regulation refers to the behaviour that individual learners consciously start, maintain or perfect their own will in order to complete a special task. Behaviour and strategies that can maintain and improve study perseverance and effort are called motivational regulation strategies<sup>[2]</sup>. In his opinion, motivational regulation not only involves learners' regulation of their own motivational beliefs, but also involves the regulation of environment, emotion and behaviour<sup>[3]</sup>.

Based on the explanation, motivational regulation strategies can be summarized as a series of methods and strategies for learners to consciously adjust their emotions and behaviour to maintain appropriate motivation level.

# 2.2. Classification of Motivational Regulation Strategies

At present, there is no unified classification of motivational regulation strategies. Wolters[1] first put forward fourteen motivational regulation strategies, including task value, efficacy, mastery goal, interest, etc. On this basis, Li<sup>[4]</sup> launched a more detailed category exploration of motivational regulation strategies. He set up a questionnaire based on the existing data, and verified the existence of eight motivational regulation strategies by using exploratory factor analysis.

This paper is based on Li's classification. The eight motivational regulation strategies are there are eight motivational regulation strategies: Performance Self-talk, Interest Enhancement, Mastery Self-talk, Self-reward, Negative-based Incentive, Volitional Control, Self-efficacy Enhancement and Task Value Enhancement.

# 2.3. Related Studies on Motivational Regulation Strategies

Previous studies have shown that although the motivational regulation strategies are still developing, it does have a connection with the learning process and has a certain influence on the learning achievement.

Oxford<sup>[5]</sup> first pointed out that motivational regulation strategies is a part of learning strategy and is subordinate to affective strategy. Wolters<sup>[6]</sup> studied college students and high school students and summarized five motivational regulation strategies. Pintrich<sup>[7]</sup> concluded that interest enhancement can effectively extend students' learning time, but it has little impact on their English proficiency. Schunk and Zimmerman<sup>[8]</sup> found that adults can control the learning process more effectively by using various motivational regulation strategies than primary school students. Schwinger<sup>[9]</sup> proposed that students with high scores tend to use self-responsibility strategies less frequently than those with low scores.

Fritea and Fritea<sup>[10]</sup> conducted an empirical study on college students and found that students with high English scores are better at using motivational regulation strategies. In addition, the research results of Grunschel et al.<sup>[11]</sup> showed that most students' use of motivational regulation strategies has a positive and indirect impact on learning achievement.

To sum up, the results of current studies are somewhat different. Based on this, the author will study the correlation between motivational regulation strategies and English achievement of non-English majors, hoping to enrich relevant studies.

# 3. Research Design

### 3.1. Research Questions

The following questions are addressed:

- (1) What is the current situation of English learning motivational regulation strategies used by non-English majors?
- (2) What are the differences in motivational regulation strategies used by non-English majors with different English achievements?
- (3) What is the correlation between motivational regulation strategies and English achievement for non-English majors?

# 3.2. Research Participants

The participants of this study were non-English majors who have taken CET-4. They were from three universities in Shanxi, China.

#### 3.3. Research Instruments

The questionnaire is used in the study. Based on The Motivational Regulation Scale developed by Jiao<sup>[12]</sup>, the questionnaire consists of two parts: the former is the personal information of the tested students, which is composed of grade and CET-4 scores; the latter is the main part, including 40 questionnaire items. The author adopted the 5-Point Likert Scale, which represents the frequency of strategy use on a scale of 1 to 5. In addition, Cronbach's Alpha and KMO value of the questionnaire were 0.941 and 0.704, indicating good reliability and validity.

#### 4. Results and Discussion

# 4.1. Overall Patterns in Using Motivational Regulation Strategies

Table 1: Descriptive statistics for the general use of eight types of strategies.

Motivational regulation strategies	N	Min	Max	M	SD
Performance Self-talk	114	2.17	5.00	3.54678	.95475
Interest Enhancement	114	2.57	5.00	3.70301	.80771
Mastery Self-talk	114	2.33	5.00	3.76023	.82953
Self-reward	114	2.20	5.00	3.63509	.83990
Negative-based Incentive	114	2.00	5.00	3.76316	.88657
Volitional Control	114	2.25	5.00	3.79167	.87008
Self-efficacy Enhancement	114	2.25	5.00	3.78728	.85886
Task Value Enhancement	114	2.33	5.00	3.87135	.84178
Total	114	2.15	4.85	3.71540	.83855

To know about how the eight motivational regulation strategies were used by students, the author performed a descriptive statistical analysis of the questionnaire results.

As can be seen from Table 1, the overall mean value of the motivational regulation strategies M=3.71540>3.5. This indicates that non-English majors often use motivational regulation strategies in the process of learning English, and the frequency of use is at a high level. The use frequency of the eight motivational regulation strategies was ranked as follows: task value enhancement, volitional control, self-efficacy enhancement, negative-Based incentive, mastery self-talk, interest

enhancement, self-reward, performance self-talk.

To sum up, non-English majors frequently use motivational regulation strategies in the process of learning English. The most commonly used strategy is task value enhancement, while the least commonly used is performance self-talk.

# **4.2.** Differences in Using Motivational Regulation Strategies in Terms of Non-English major English Achievements

In order to explore the differences of motivational regulation strategies used by students with different English levels, the author divided the students into two groups according to their CET-4 scores.

As shown in Table 2, there are significant differences in the overall use of motivational regulation strategies between t the high-level group and the low-level group. In terms of the overall application of motivational regulation strategies, the mean value of the overall application of motivational regulation strategies in high-level group is M=3.79070, and the mean value of low-level group is M=3.44603, the difference between the two is 0.11167.

Table 2: Descriptive statistics for motivational regulation strategies of two groups.
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Motivational regulation strategies	Achievement	M	SD	P	
Performance Self-talk	Low-level	3.25194	.89923	.00006	
	High-level	3.59302	1.01393		
Interest Enhancement	Low-level	3.39203	.75974	.00000	
	High-level	3.84385	.81852		
Mastery Self-talk	Low-level	3.46512	.77806	.00000	
	High-level	3.85271	.87693		
Self-reward	Low-level	3.41395	.77207	.00096	
	High-level	3.68372	.90089		
Negative-based Incentive	Low-level	3.46512	.86532	.00005	
	High-level	3.85465	.89367		
Volitional Control	Low-level	3.59302	.84051	.02228	
	High-level	3.80814	.89139	.02228	
Self-efficacy Enhancement	Low-level	3.54070	.86507	.00176	
	High-level	3.83721	.87418		
Task Value Enhancement	Low-level	3.62791	.79796	.00277	
	High-level	3.94574	.88318		
Total	Low-level	3.44603	.82751	.00060	
	High-level	3.79070	.90237		

It can be concluded that the higher English proficiency group uses the overall motivational regulation strategies more frequently than the lower English proficiency group. At the use level of each motivational regulation strategy, two groups have obvious differences.

# 4.3. The Correlation between Non-English Majors' Motivational Regulation Strategies and English Achievements

According to the result, the overall and respective usage of motivational regulation strategies of non-English majors are positively correlated with their English achievements (P<0.05), but the correlation degree of each strategy is different. As shown in Table 3, interest enhancement (r=0.25503, p<0.05), volitional control (r=0.20171, P<0.05) reached a medium positive correlation,

performance self-talk (r=0.11575, P <0.05), mastery self-talk (r=0.17031, P<0.05), self-reward (r=0.12012, P<0.05), negative-based incentive (r=0.15562, P<0.05), self-efficacy enhancement (r=0.07525, P<0.05) and task value enhancement (r=0.15972, P<0.05) are weakly correlated.

Table 3: Correlation between motivational regulation strategies and English achievements.

Motivational regulation strategies	r	p
Performance Self-talk	.11575	.00000
Interest Enhancement	.25503	.00000
Mastery Self-talk	.17031	.00000
Self-reward	.12012	.00000
Negative-based Incentive	.15562	.00000
Volitional Control	.20171	.00000
Self-efficacy Enhancement	.07525	.00000
Task Value Enhancement	.15972	.00000
Total	.20377	.00000

In conclusion, the English achievements of non-English majors have the highest correlation with interest enhancement and the self-efficacy enhancement is the weakest. Therefore, the use of motivational regulation strategies will have different influence on the English achievements of non-English majors.

#### 5. Conclusion

In view of the questions raised in this study, the author conducted a questionnaire survey to analyse the situation and differences of using motivational regulation strategies among non-English majors and the correlation with their English achievements. Although the results of this study provide some suggestions for further research in this field, the breadth and comprehensiveness of the research results may be limited to some extent due to the limitation of the research sample. Therefore, in future research, researchers can increase the number of research samples, so as to make the research samples more representative.

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