

A Study on Motivational Regulation Strategies in English Acquisition of Junior English Majors

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Abstract. A number of previous studies in second language acquisition research motivational strategies in China, but there are scant experimental studies focusing on the group of English majors. The present study investigates motivational regulation strategies and the connections between English performance and the strategies. Participants were 107 junior English majors in Guangdong province in China. In this study, a questionnaire and a semi-structured interview are used to collect data. The main findings of this research include seven strategies: interest enhancement, performance self-talk, mastery self-talk, self-rewards, negative-based incentive, volitional control, and self-efficacy. From the codes of interview contexts, activation of digital media and multimedia needs to be seen as a useful strategy. What's more, the results show that only negative-based incentives and self-efficacy enhancement have a significant difference in English performance. The findings can provide teachers and students with a deeper understanding of the new use of strategies in learning English as a second language acquisition.

Keywords: Motivational regulation strategies; Junior English majors; Chinese college students.

1. Introduction

Second language acquisition has become more important for the increasing pressure from society and family so it has significant public value and attracts more linguists to pay more attention to this area. Williams found that motivation in second language acquisition will be less when students grow older, and he estimated that motivation is dynamic but not static [1]. In China, Li & Wu also paid attention to the dynamic characteristics of motivation in language acquisition. What's more, most research focuses on non-English majors and lacks empirical evidence. Therefore, in this study, 107 junior English majors in Guangdong province China were participants and they filled in the questionnaire based on Li's questionnaire to explore the usage of motivational regulation strategies and the connections between English performance and strategies used in CET-4 as a standard [2]. In statistical analysis, descriptive analysis, Gen Variable, and Chi-Square are utilized analysis. It is clear to see that seven motivational regulation strategies are extracted compared with the original eight strategies and only negative-based incentive and self-efficacy enhancement have a significant difference in English performance. To access deeper details, semi-structured interviews also show us a new strategy named activation of digital media and multimedia. All the findings will provide students and teachers with a reference.

2. Literature Review

Motivation for improving learning, especially language learning, has interested linguists and psychologists for a long time. Before the 1990s, studies of motivation focused on the framework of integrative motivation and instrumental motivation first propounded by Gardner & Lambert [3]. With the deeper research in motivation, many researchers found that motivation can be affected by more than the two elements. Belmechri & Hummel conducted research in Canada and found that it is confidence but not integrative motivation affects students' scores and there are many kinds of elements in motivation to affect English acquisition [4]. With the wider research into motivation, Williams found that motivation in second language acquisition will be less when students grow older

and he estimated that motivation is dynamic but not static [1]. In China, Li & Wu also paid attention to the dynamic characteristics of motivation in language acquisition and they found that task characteristics have a positive impact on subjects' learning motivation while negative motivation is negatively correlated with task motivation [5]. Under such research, more and more researchers notice the dynamic motivation and the structure and framework behind it.

Crookes & Schmidt put forward that many strategies can be used to motivational regulation to help to choose goals and do regulate evaluation [6]. Wolters did research through questionnaires in a college in America with 115 students and focused on the motivational regulation strategies when the students faced different motivational questions [7]. Later he gave a summary that the strategies can be categorized into mastery self-talk, performance self-talk, interest enhancement, self-consequating, and environmental control and pointed out the relationship between motivational regulation strategies with grades [8]. Dörnyei put forward a framework that includes language, learner and learning situation and a motivational strategies framework [9-10]. But his subject is mainly about teachers and the situation is in class.

Except for the inconsistent opinion about the categories of motivational regulation strategies in western, Chinese researchers also have conducted studies into it and put forward their different opinions. Li did research with questionnaires on 553 Chinese college students about English acquisition and summarized eight strategies: interest enhancement, performance self-talk, mastery self-talk, self-rewards, negative-based incentive, task value enhancement, volitional control and self-efficacy [2]. This category has high value in doing research on foreign language acquisition in China and Chinese students. Chen & Yang pay attention to college students who majors in English by using Li's questionnaire and found that students who had experienced college entrance examination majoring in English had a higher rate of using the eight motivational regulation strategies than students who were recommended for admission to college majoring in Business English [11]. Gao & Liu found that Chinese non-English majors have disappointed with the application of motivation regulation strategies, particularly in Science and Engineering students and males [12]. Schwinger linked the use of strategies with scores and found that they have positive and indirect relationships on students in German [13].

In summary, motivational regulation strategies have attracted great attention in second language acquisition in the latest ten years, especially since learner autonomy getting more and more important in the Internet age [14]. Some researchers have done empirical research for motivation regulation strategies, such as Wolters, Li, Schwinger, and Ye & Son and they have summarized different kinds of strategies from students in different majors and discovered the relationship between grades and gender [2, 8, 13, 15]. However, it is noticeable that it still lacks further research in college students majoring in English about their motivational regulation strategies and the connections between English performance and the strategies. The data will be different when the research is done in different communities. Therefore, two basic questions will be answered in this study: 1) What specific motivational regulation strategies are employed by junior college English majors? 2) What are the connections between motivational regulation strategies and their English performance?

3. Research Methods

3.1 Participants

The participants in this questionnaire survey are 161 English majors in Grade 3 from 5 colleges in Guangdong, withdrawing 107 copies of effective questionnaires with 9 males and 98 females. The 5 colleges include 1 agricultural college, 1 science and engineering college, 1 normal college and 1 language college, and 1 comprehensive college. In high school, 25 Participants studied science, and 82 of them studied arts. In the college entrance examination, 96 of the participants chose English as their major voluntarily and 11 of them were in the major assignment.

All of the students have experienced the traditional college entrance exam with listening, reading, and writing parts, except students in Guangdong have a speaking part. All of them have learned basic English basic skills in college for at least two years and they have taken CET-4.

In a semi-structures interview, three students were chosen to take the interview. The three students include excellent students, fair students and barely passed students. And the standard based on CET-4 scores that are higher than 600 is excellent, scores between 500-599 are fair, and scores between 425-499 are barely passed.

3.2 Measures

1) Background Information Questionnaire

A 5-item questionnaire was created together personal information, such as phone numbers, gender, high school major, college major assignment, and CET-4 results.

2) Motivational Regulation Strategies Scale

The motivational regulation strategies scale was a 40-item measure adapted from Li's questionnaire for non-English majors in China [2]. Because of the different participants, the questions in the original part named task value enhancement were adjusted according to attainment value which means the importance of carrying out tasks well for individuals [16]. What's more, attainment value is one of the structural dimensions of task value and also matches the original explanation of task value enhancement in Li's paper [17]. All the items will be used a Likert scale to judge. Reliability analysis shows high internal consistency of the scale (Cronbach alpha = 0.97).

3) Semi-structure Interview

The semi-structured interview was designed based on the 8 categories in Li's paper which can have consistent to the questionnaire and instrument control in Hui's research which can follow the tendency of the technology environment [18]. All the interviews lasted about 30 on average. And the interviews were audio-recorded and conducted in Chinese to allow them to offer enough details with less anxiety and the translation was double-checked.

3.3 Data Analysis

SPSS 27.0 was used to analyze the effective data that was gathered to examine the reliability and validity of measures. The data in the motivational regulation strategies scale were analyzed by descriptive analysis to show the specific use of motivational regulation strategies. And the connections between junior English majors' performance and motivational regulation strategies were analysed by Chi-Square analysis.

4. Results and Discussion

4.1 Categories of Motivational Regulation Strategies

The 40-item questionnaire was used to have a factor analysis and the results of KMO are 0.94 and p is nearly 0.00 with significant differences. Using Principal Component Analysis, seven factors with eigenvalues higher than are extracted which are about 18.54, 2.34, 1.83, 1.48, 1.16, 1.08, 1.04 and the seven factors' explanation rate of the total variance are about 46.36%, 5.84%, 4.57%, 3.70%, 2.91%, 2.71%, and 2.59% and the total of them is about 68.68%. According to the reliability test results, the seven factors' reliability is 0.84, 0.80, 0.90, 0.80, 0.74, 0.78, and 0.80 and the total reliability of the questionnaire is 0.94.

Compared with the original questionnaire and its results, as mentioned before, three questions in task value enhancement were adjusted [2]. "I tell myself that this subject is relatively useful and important so I pay effort to learn it well" was adjusted to "I use qualification and competing to improve my English quality". "I tell myself that English is a necessary skill for future communication and study so I must learn it well" was adjusted to, "I tell myself that English major is the key advantage in my future job so I must learn it well". "I think about the importance of English in my development" was adjusted to "Compared with professional elective courses that are more relevant

to my future work, I would prefer to choose professional elective courses that are easy to get high scores". According to the eigenvalues, the original eight strategies were extracted into seven strategies. And based on the keywords in the adjusted questions, the first and third questions were categorized into performance self-talk and the second question was categorized into mastery self-talk so that the task value enhancement was excluded in this study.

For the different results, here are some reasons. The first one is that the context is different. Based on the adjusted questions mentioned above, the characteristics of these three questions show English majors' special expectations and tasks that match the item explanation in Li's paper so that the adjustment and results are reasonable [2]. The second one is that the identity of the participants is different from the participants in Li's paper [2]. In this study, the participants are English majors and they may have familiar with this English subject so they don't have relatively strong idea of using English as useful tool to help them to develop in the future. As for the first and third adjusted questions, they have an upper-middle level of factors belonging to performance self-talk which means that these two tasks are also important items affect their use of strategies but they also have relative words about scores so that they are categorized into performance self-talk.

4.2 Analysis of the Use of Motivational Regulation Strategies

Table 1. Descriptive Statistical Results of the Use of Motivational Regulation Strategies

	Minimum	Maximum	Average	Standard deviation
performance self-talk	1.000	5.000	3.25	1.05
mastery self-talk	1.000	5.000	3.34	0.97
self-rewards	1.000	5.000	3.49	1.03
negative-based incentive	1.000	5.000	3.41	1.01
volitional control	1.000	5.000	3.67	0.99
self-efficacy enhancement	1.000	5.000	3.42	0.95
interest enhancement	1.000	5.000	3.31	1.02

According to the results shown in Table1, the average value of the seven motivational regulation strategies from high to low is volitional control (M=3.67), self-rewards (M=3.49), self-efficacy enhancement (M=3.42), negative-based incentive (M=3.42), mastery self-talk (M=3.34), interest enhancement (M=3.31) and performance self-talk (M=3.25). Based on Oxford's frequency table, all seven strategies are on the middle to relatively high level. Only volitional control is on the high level and the other six strategies are at the upper-middle level.

It is clear to see from the data above that English majors use motivational regulation strategies frequently and have different focuses to adjust their motivations. Here are two reasons for this result. The first one is that English acquisition is sustainable deep learning so learners need to keep lasting and deep motivations in English acquisition [19]. The second one is that demotivation plays an important part in affecting our English acquisition and it is a joint result of both internal and external factors [20]. Therefore, to have a lasting relatively high motivation learners need to use different strategies to keep it.

Then, the average values of the seven strategies are on upper-middle and relatively high levels which means that learners have a relatively high passion to use different strategies to keep learning as English majors. Here are the explanations for three outstanding strategies: 1) The highest average value of volitional control can be explained by the development of modern society in China. For one thing, electronic equipment takes up a lot of time for college students, so they need to have strong volitional control to focus on their English acquisition. Another factor is that college students have more freedom to pursue their interests and spare time, which may require them to withdraw from some activities and provide them room to concentrate on their English language learning. 2) Self-reward also has a relatively high average value approximating to high level. Relating to volitional control, self-reward can be seen as a measure for a better volitional control and a reflection in college time to external rewards from parents and teacher at younger time. For the large attraction from electronic equipment, learners normally use volitional control to force them to learn and usually they

reward themselves a short time to play the telephone or computer after long-time learning. The other reason can be explained that students always got rewards at a young when they perform well. Therefore, the external reward gradually becomes an internal reward when they grow up and they have the ability to afford some basic rewards for themselves. 3) self-efficacy enhancement plays the most important role in affecting individuals [21]. During English acquisition, learners will experience many problems and difficulties, especially their self-confidence and teachers' influence [22-23]. As a result, learners need to use self-efficacy enhancement to encourage themselves to continue their English acquisition. 4) Performance self-talk has the lowest average value and highest standard deviation (1.05). However, in Chen et al.'s study, he found that Chinese students tend to be concerned much about their scores but they don't want to show it in the questionnaire [24]. Therefore, this can be used to explain why English majors use a high rate of volitional control but the data give the lowest rate of performance self-talk. And this is used to explain and why the standard deviation is the highest that some didn't want to show their concern about scores.

4.3 English Performance and Motivational Regulation Strategies

Language performance is a significant aspect to the test the efficiency of the motivational regulation strategies so that in this study English performance is linked to motivational regulation strategies extracted from the collected data. In this questionnaire, participants filled their scores in CET-4 and then based on the valuable questionnaires the performance is categorized into three levels: above 600 (excellent), 500-599 (fair), and 425-499 (barely passed). Then the questions behind each category were processed by Gen Variable to produce a variant. In Chi-Square analysis, each strategy was placed in y and the English performance was placed in x to test the differences in strategies among English performance to find out some regulations.

Table 2. Chi Square Analysis between English Performance and Motivational Regulation Strategies

	p		p
interest enhancement	.408	negative-based incentive	.003
performance self-talk	.359	volitional control	.224
mastery self-talk	.081	self-efficacy enhancement	.036
self-rewards	.068		

Table 2 shows that the significant difference in the relationship between the seven motivational regulation strategies and English performance from high to low is a negative-based incentive ($p=.003$), self-efficacy enhancement ($p=.036$), self-rewards ($p=.068$), mastery self-talk ($p=.081$), volitional control ($p=.224$), performance self-talk ($p=.359$) and interest enhancement ($p=.408$). Compared with the standard of significant difference ($p<0.05$), only negative-based incentive and self-efficacy enhancement have a significant difference in English performance which shows that motivational regulation strategies have a direct but weak influence on English performance [25].

The most significant difference between negative-based incentives and English performance can be explained by the background of society and families in China. First, involution now is becoming more and more common in China and falling behind gives English majors great stress which may have become an internal and habitual motivation for participants. The next one is that the decreasing rate of employment and increasing rate of continuous study press a stress of high status from the peers. Then, meeting parents' and relatives' expectations is very important in the Chinese mind so most of them worry about disappointment and falling short of expectations from the people around them. Under the stress from peers, parents, relatives, society, employment and expectations for themselves and the ingrained assumptions of high scores represent anything, students try their best to get a good performance to achieve a little bit relax.

Self-efficacy enhancement also has a significant difference in English performance which can be explained by the features of language acquisition. Second language acquisition is not only to learn and accept a new language system but also to challenge language ego in the originally mother-

language system [26]. And during the learning of a new language system and challenging of the mother-language system, it is easy for students to make mistakes in classes [27]. Both of the above theories play significant roles in English majors' classes and daily conscious or unconscious acquisition. What's more, the standard of adjusting English performance is ECT-4 which is an examination used in all students in China and a test for students to realize their English ability so that before the test students always use some skills to strengthen their ability in the new language system and to overcome the mistakes they often make.

The two external strategies have outlined effects on English performance, especially on examination scores because in examination-oriented education in China, even in English majors, external motivational strategies have short-term effects on scores.

4.4 English Performance and Motivational Regulation Strategies

In this section, the results were used in quantitative analysis and topic-based analysis to summarize whether there are extra strategies except for the seven strategies. According to the codes in the contexts, media, video, song, film, and clock app are outstanding. As a result, the activation of digital media and multimedia is introduced in motivational regulation strategies. When the three interviewees did the interview and give some details to the seven strategies, they all mentioned the use of modern technologies to help them among more than one strategy. Here are the contexts about the interviews from three level students:

Transcript 1:

Interviewer: How do you motivate and enhance your interest in English learning?

Student A: I usually watch TV series and films and listen to songs in English to be more sensitive. Actually, I force myself to watch some TV series in English at a particular time to insist in learning but not focus on relax and entertainment.

Student B: In fact, I'm not interested in English. In my daily life, I prefer to have a plan and do something I want regularly so I usually use clock apps to complete my tasks and to push me to learn English. That gives me a sense of accomplishment.

Student C: English dubbing. I am interested in voice and imitation, so I chose some characters I have interests in in some films and then imitate characters' lines to train my English speaking and listening. It is useful to motivate and last my English learning. I watch some English films and most of the time my interest is in priority of choosing which one to watch but not search a film just for concentrating on English learning. But during the watching process, foreign cultures affect me significantly and then the grammar and local expressions hit me. And I will watch some interesting sections repeatedly and I retell the classic sentences and use them in my daily life. Then, after a period of time, I can transfer and use the grammar in the retold sentences in other expressions.

In CET-4, student A got an excellent score, student B is fair and student C barely passed. Extracted topics from interest enhancement strategies, three students use films, TV series, app and video is used to help to arise their interest in English learning which are different from traditional interests like reading English novels, writing with pen friends, or giving English speech. This category is called "activation of digital media and multimedia." The relative common use of digital media and multimedia is for the reason that they give a combination of sound, image, word and animation so that they can stimulate sensory to make our English learning visualization and vividness [28]. And digital media and multimedia offer an opportunity for students to achieve more foreign cultures, and local expressions and practice with native speakers without being limited in college classes. They also offer effective and rich use and environment of foreign languages [28].

5. Conclusion

This study utilized questionnaires and interviews to investigate motivational regulation strategies in English Acquisition of Junior English Majors, which is a further study of Li's questionnaire rooted in China. These two studies have the same seven strategies, but this study improves the task value that Li's study lacks. Among the seven strategies, only Self-efficacy enhancement and negative-based incentives have significant differences with English performance. Based on the semi-structured interviews, a new strategy of activation of digital media and multimedia is extracted from the contexts.

The results of recent research on motivational techniques will provide teachers more reasons to focus on updating their lesson plans for increased effectiveness. The findings also help students understand more about their own language learning processes and make them more aware of how to modify their tactics to fit various assignments and learning phases. More comparison analysis comparing English majors and non-majors is needed in this study to gain a greater knowledge of the various tactics being used. Additionally, the innovative method discovered in this study falls short when compared to its use rate. Further research and study are required for all the insufficient data.

References

- [1] Williams, M., Burden, R., & Lanvers, U. (2002). 'French is the language of love and stuff': Student perceptions of issues related to motivation in learning a foreign language. *British educational research journal*, 28(4), 503-528.
- [2] Li, K. (2009). A study on motivational regulation strategies of Chinese EFL college students. *Modern Foreign Languages*, 32(3), 305-313.
- [3] Gardner, R. C., & Lambert, W. E. (1959). Motivational variables in second-language acquisition. *Canadian Journal of Psychology/Revue canadienne de psychologie*, 13(4), 266.
- [4] Belmechri, F., & Hummel, K. (1998). Orientations and motivation in the acquisition of English as a second language among high school students in Quebec City. *Language learning*, 48(2), 219-244.
- [5] Li, N., & Wu, Y. (2007). Task features and language learning motivation. *Foreign Language Education* (02), 43-47. doi:10.16362/j.cnki.cn61-1023/h.2007.02.019.
- [6] Crookes, G., & Schmidt, R. W. (1991). Motivation: Reopening the research agenda. *Language learning*, 41(4), 469-512.
- [7] Wolters, C. A. (1998). Self-regulated learning and college students' regulation of motivation. *Journal of educational psychology*, 90(2), 224.
- [8] Wolters, C. A. (1999). The relation between high school students' motivational regulation and their use of learning strategies, effort, and classroom performance. *Learning and individual differences*, 11(3), 281-299.
- [9] Dörnyei, Z., & Ottó, I. (1998). Motivation in action: A process model of L2 motivation.
- [10] Dörnyei, Z. (2001). *Motivational strategies in the language classroom* (Vol. 10). Cambridge: Cambridge University Press.
- [11] Chen, J., & Yang, M. (2017). Investigating English major's motivational regulation strategy use. (eds.) *Second Language Learning Research Issue 2, 2017* (pp.45-56+116). Second Language Learning Research's editorial department and East China Normal University Press.
- [12] Gao, Y., & Liu, H. (2014). An empirical study on the second language of motivational regulation strategies for non-English majors. *Journal of PLA University of Foreign Language* (02), 33-42.
- [13] Schwinger, M., Steinmayr, R., & Spinath, B. (2009). How do motivational regulation strategies affect achievement: Mediated by effort management and moderated by intelligence. *Learning and individual differences*, 19(4), 621-627.
- [14] Teng, L. S., Yuan, R. E., & Sun, P. P. (2020). A mixed-methods approach to investigating motivational regulation strategies and writing proficiency in English as a foreign language contexts. *System*, 88, 102182.
- [15] Yu, Y., & Song, Y. (2022). Empirical study on the influence of motivational regulation strategies on autonomous learning ability of college students major in medicine [J]. *Chinese Medicine Modern Distance of China* (13), 169-171.

- [16] Wigfield, A., & Eccles, J. S. (1992). The development of achievement task values: A theoretical analysis. *Developmental review*, 12(3), 265-310.
- [17] Qi, F., & Fang, P. (2005). Task value studies in retrospect and prospect. *Journal of Psychological Science* (02),2005, 488-490. doi:10.16719/j.cnki.1671-6981.2005.02.063.
- [18] Hui, L., Zhang, Y., & Li, X. (2019). A survey of motivation regulation for college students' English study in mobile-assisted language learning environment. *Foreign Language Education*, 1, 59-65.
- [19] Schumann, J. H. (1998). The neurobiology of affect in language. *Language learning*, 48.
- [20] Li, C., & Sun, H. (2017). EFL learners' demotivation in college English learning. *Foreign Language and Literature*,2017,33(05):123-128.
- [21] Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of social and clinical psychology* (05), 123-128.
- [22] Rudnai, Z. (1996). Demotivation in learning English among secondary school students in Budapest. *Unpublished MS thesis, Eötvös Loránd University, Budapest, Hungary.*
- [23] Dörnyei, Z. (2001). *Teaching and Researching Motivation*[M]. Harlow, England: Longman
- [24] Chen, J. F., Warden, C. A., & CHANG, H. T. (2005). Motivators that do not motivate: The case of Chinese EFL learners and the influence of culture on motivation. *TESOL quarterly*, 39(4), 609-633.
- [25] Wang, Y. (2018). An investigation of the Effects of English Learning Motivational Beliefs on Non-English Majors' Use of Motivational Regulation Strategies by Structural Equation Model. *Journal of Xihua University Philosophy & Social Science* (01), 92-101. doi:10.19642/j.issn.1672-8505.2018.01.014.
- [26] Williams, M., & R. L. Burden. (2000). *Psychology for Language Teachers* [M]. Beijing: Foreign Language Teaching and Research Press.
- [27] Tsui, A. B. (1996). Reticence and Anxiety in Second Language Learning. *Voices From the Language Classroom*.
- [28] Jigang, C., & Shixing, W. (2003). The introduction of multimedia technology into the reform of the traditional methodology [J]. *Foreign Language World*, 6(001).