

A Study of Emotion Regulation in Learning English for High School Students: Taking the Affiliated High School to Hangzhou Normal University Students as a Case Study

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Abstract: Since the 1970s, the exploration of emotion regulation has gained prominence in the field of second language acquisition. Researchers are increasingly focusing on how English learners' emotional experiences influence their academic success and personal growth. This paper aims to examine and analyze the emotions of high school students during English language learning, along with ways to regulate these emotions. It will offer ideas for improvement based on the findings of the empirical investigation. This research concentrates on students from Affiliated High School to Hangzhou Normal University and randomly selected 105 English learners from three different age groups to conduct a questionnaire survey. The purpose is to explore the connections between emotions, interests, and emotion regulation strategies among Chinese high school students while learning English. To this end, three questions were set up and answered: how do high school students feel when they learn English, what are their strategies for regulating their emotions when they learn English, and whether emotion regulation affects their interest in learning English? Recommendations were provided following the analysis of the results.

Keywords: English learning, Emotional regulation, Descriptive analysis

1. Introduction

1.1. Background

Humanistic thinking has led to a growing acknowledgement that emotional factors play a great role in the process of second language acquisition. Since the 1970s, psychological research has shifted from emphasizing the negative aspects of behavioural and mental disorders to examining positive emotions, the meaning of life, and factors that contribute to positive development and psychological well-being [1]. Consequently, an increasing number of experts around the world are focusing on utilizing pleasant emotions in the context of foreign language acquisition. In China, priority has traditionally been placed on teaching a second language in compulsory education, particularly English. Studies indicate that Chinese English learners experience various emotions when learning English, reflecting the impact of positive and negative emotions on English learning from a psychological standpoint. It is against this background that this paper seeks to investigate the effects of

psychological emotion regulation on high school English learners through a study of the Affiliated High School to Hangzhou Normal University students to explore the role of emotion regulation on English learning.

1.2. Research questions and aims

The main focus of this study revolves around 3 questions:

1. What are high school students' emotions when learning English?
2. What methods do they employ to regulate their emotions while studying English?
3. Whether such emotional regulations affect their interest in learning English?

Therefore, the aim of this article is to explore whether high school students' emotion regulation skills can enhance their enthusiasm for learning English.

2. Literature review

2.1. Positive and negative emotions in psychology

Seligman introduced the notion of "positive psychology" in 1998, leading to increased involvement of psychologists in this subject and the development of a positive psychology movement [1]. Positive psychology applies scientific principles and methods to examine happiness, promotes a positive approach to psychology, and explores the positive psychological attributes of individuals. It emphasizes the well-being, joy, and balanced growth of individuals, establishing itself as a psychological movement. Lake is regarded as the academic who officially introduced positive psychology into the realm of second language learning and provided a concise overview of it [2]. Subsequently, researchers started focusing on the positive emotion approach in psychology.

In 2001, Fredrickson proposed the Extended-Constructive Theory of Positive Emotions, which highlights the significance of positive emotions and posits that happy emotions can significantly influence language learners' motivation, academic performance, and accomplishments [3]. However, the Extended-Constructive Theory does not explore the origins of emotions or investigate the potential bidirectional connection between emotions and their antecedents and outcomes. In turn, the Control-Value Theory has been presented in the field of Educational Psychology [1], which is an analytical framework that helps to comprehend academic emotions by exploring the interactions between such feelings, their causes, and their outcomes in the context of education [4].

Oxford subsequently revised Seligman's PER-MA theory of well-being in 2011, suggesting that negative emotions can also have beneficial impacts and introducing the EMPATHICS model [5]. As a result, an increasing number of experts both nationally and globally are focusing on the influence and application of positive and negative emotions in the process of learning foreign languages. On the basis of the expansion-construction theory, some scholars investigate the integration of foreign language acquisition with positive emotions based on the expansion-construction theory. For example, some scholars have examined college students' academic emotions and their regulation measurement strategies in the learning process using a psychological perspective and control-value theory [6]. Other scholars have studied the factors of teachers that influence college students' foreign language emotions based on the control-value theory [7], and empirical evidence indicates that teachers have a major effect on students' regulation of negative emotions [8]. In addition, scholars have proposed the theory of "flow", defining it as a state where an individual's mental energy is fully focused on a specific activity [9]. Csikszentmihalyi states that, when an individual devotes his or her mental energy to an activity, flow occurs with a high level of excitement and fulfilment. While some studies have shown the application of the mind flow theory in English in higher education [10].

2.2. Emotion regulation research

Emotion research has been categorized into three main phases. The first phase commenced around 1985, with a primary focus on foreign language anxiety, and was predominantly shaped by the affective filtering hypothesis proposed by Krashen [11]. This hypothesis implies that negative emotions like anxiety and lack of self-confidence hinder the acquisition of a second language. It represents a departure from the cognitive approach, but it does not consider positive emotions or detail the emotional mechanisms involved [12]. Since Horwitz et al. introduced the concept of foreign language anxiety, an emotion-oriented approach to second language acquisition centred on "anxiety" has been initiated [13].

The second phase, starting in 2012, marked a favourable change in the exploration of emotions in second language acquisition, motivated by positive psychology. This phase acknowledged the significance of emotions in terms of their frequency, diversity, and importance [14]. Emotions other than anxiety, especially positive emotions, began to receive attention [15], and a number of empirical studies emerged, with the research buzz continuing to climb [16].

The third phase started around 2018, identifying the beginning of a multidisciplinary convergence in the area, leading to an increased interest in bilingualism.

3. Methodology

3.1. Research design

This study will adopt a quantitative technique to examine how emotion management affects high school students' interest in studying English. Questionnaires will be randomly distributed at the Affiliated High School to Hangzhou Normal University. To ensure the sample's representativeness, questionnaires were handed out to a diverse group of high school English classes, with students from various grades. The questionnaires were designed to be voluntary, anonymous, and completed within twenty minutes. The questionnaire was ethically approved as it just included the gender, grade, and emotional state of the kids, without any personal information.

3.2. Research tool: the questionnaire

The questionnaire is divided into three parts. The first part focuses on studying positive learning emotions in English among high school students. Its major objective is to determine if these learners are engaged in English and if they derive pleasure from learning the language. The second section analyzes negative emotions in English to provide a contrasting perspective that bolsters the experiment's trustworthiness. The third section focuses on high school students' methods for managing and overseeing their emotions and cognitive abilities, aiding in comprehending the evolution of emotion regulation during English study. In addition to the three sections, the study included a subjective question to gather information on the individuals' most effective learning strategies during the process of learning English.

Prior to the questionnaire's release, its reliability was examined. The reliability of the questionnaire was analyzed using SPSS 21, yielding a coefficient of 0.932, indicating a significant level of reliability to support the investigation. A total of 105 questionnaires were distributed randomly in three grades of high school, and 105 questionnaires were returned. The validity rate of the questionnaires was 100%, and the total reliability of the questionnaires was 0.712, which was judged as valid data (Table 1.).

Table 1: Questionnaire reliability (α value).

Reliability of questionnaire			
Part 1	Part 2	Part 3	Overall reliability
0.851	0.832	0.876	0.712

Out of the total, 42 questions were completed by first-year students, representing 40%; 45 questionnaires were completed by second-year students, representing 43%; and 18 questionnaires were completed by third-year students, representing 17%. Among the 105 respondents, 53 were male, accounting for 50.4%, and 52 were female, accounting for 49.6%, which demonstrates that the gender distribution is balanced, and it proves to a certain extent that the data source of this study is representative (Table 2.).

Table 2: Information on the study's subject.

Variables		Quantities	Proportions
School	The Affiliated High School to Hangzhou Normal University	105	100%
Gender	Male	53	50.40%
	Female	52	50%
Grade	Year 1	42	40%
	Year 2	45	43%
	Year 3	18	17%

Once the questionnaire is gathered, the data collected in this study will be analysed by the SPSS.21 tool for descriptive statistics, with the Likert Scale employed to categorize the mean value of the data. In this criterion, a higher mean value indicates greater conformity. The Likert Scale consists of five levels: Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree, which align with the average value of the collected data. $1 < m \leq 1.8$, $1.8 < M \leq 2.6$, $2.6 < M \leq 3.4$, $3.4 < M < 4.2$, and $M \geq 4.2$ [17]).

4. Results

4.1. Emotional status

Through the result data of Part 1 and Part 2 of the questionnaire, i.e. the positive and negative emotions of high school students when learning English, combined with the results of data analysis of 105 questionnaires by SPSS.21 tool, the final statistical table is shown as follows (Table 3.).

Table 3: Positive emotions descriptive statistics.

	Quantities	Minimum value	Maximum value	Average value	Standard deviation
I don't hate learning English	105	1	5	3.51	1.035
I enjoy learning English	105	1	5	3.2	1.065
I learnt a lot of interesting things when I learnt English	105	1	5	3.48	1.112
I'm proud of my English grades.	105	1	5	2.2	1.313
There is a good environment for learning English around	105	1	5	3.5	1.083
Teachers always encourage us.	105	1	5	3.8	1.025

The average value, also known as the mean value, of the six dimensions stated is displayed.

Referring to the criteria of the Likert Scale, it can be found that the majority of positive feelings fall between 2.6 and 4.2, indicating that high school students in the survey generally experience positive emotions at a moderate to high level while learning English. As for their grades, the statistics reveal that their grades fall within the range of $1.8 < M \leq 2.6$, which is unsatisfactory. Additionally, the positive emotions obtained from teachers' encouragement are the most prominent, reaching the neutral agree level. The data points out that high school English learners benefit from increased encouragement and support from teachers, resulting in a more engaging learning experience. This indicates the importance of further research and attention to enhancing the interest of high school English learners.

In contrast to the positive emotions, the negative emotions of high school students while learning English are shown in the table below (Table 4.).

Table 4: Negative emotions descriptive statistics.

	Quantities	Minimum value	Maximum value	Average value	Standard deviation
English lesson is boring.	105	1	5	2.21	1.231
I was distracted in English class.	105	1	5	2.91	1.097

Table 4: (continued).

I find English exercises boring	105	1	5	3.45	1.234
I get irritated when I think about my English homework and I don't want to do it.	105	1	5	2.34	1.268
Learning (not just English learning) is a boring thing	105	1	5	1.9	1.326

It could be noticed that most of the high school English learners do not have considerable negative emotions with their overall sentiment ranging from 1.8 to 2.6. This indicates that they are generally not bored with English learning, whereas the negative emotions during the learning process typically stem from dull exercises and uninteresting teaching material. Specifically, the higher the mean value, the more boredom high school English learners experience in English practice. However, higher education English learners do not find English learning boring. They rarely feel sleepy in English classes and do not find completing English homework very tiresome. These facets of boredom are subject to investigation.

4.2. Emotional regulation strategies

After the conclusion of the emotional state of high school students in the process of English learning, the next step is to understand the emotional regulation strategies they funded. This study is based on questionnaire data analyzing the overall use of emotional regulation strategies by English learners in colleges and universities, as depicted in Table 5.

Table 5: Emotion regulation strategies for high school English language learners.

	Quantities	Minimum value	Maximum value	Average value	Standard deviation
I am good at dealing with all kinds of frustrations in the process of learning English	105	1	5	2.35	1.366
When I feel stressed about learning English, I know how to reduce that stress	105	1	5	2.91	1.074
I won't let a bad English test score affect my confidence	105	1	5	2.86	0.936

Table 5: (continued).

I have special skills to achieve my English learning goals	105	1	5	2.98	1.268
When the novelty of learning English wears off, I can easily become impatient	105	1	5	3.15	1.232

Upon comparing the Likert Scale, it was discovered that high school ELL students' reactions to the stress of learning English were on average, indicating a lack of effective self-regulation mechanisms. The majority of effective coping methods for overcoming English learning challenges were rated below 3.4, indicating a moderately poor level. Many individuals acknowledge that they grow impatient as the initial excitement of learning English diminishes, leading to a loss of interest in the language. To this end, future research should address these elements and investigate suitable stress management measures from a psychological standpoint.

5. Discussion

The study discovered that high school pupils experience larger levels of pleasant emotions compared to negative emotions. They are pleased with the increased positive emotions resulting from teachers' encouragement but feel bored due to the lack of variety in teaching resources, leading to negative emotions prevailing. High school students' self-emotional control strategies during English learning are average, and they struggle to manage their emotions effectively. This study proposes that enhancing the impact of high school English education can be achieved by focusing on emotion management and self-efficacy.

Initially, there is the mobilisation of positive emotions and coping with negative emotions at the level of emotion regulation.

Positive emotions can be an effective way to increase motivation and interest in learning English in high school, and proficiency in motivational techniques can facilitate the activation of positive emotions in students. Positive emotions aid pupils in unlocking their complete language capabilities, establishing a comforting environment for learning in a foreign language and culture, and enhancing focus and cognitive abilities. The strategies may involve: exploring personal interests and deriving enjoyment from learning English; concentrating on development and advancement in the learning process and reacting positively to obstacles; establishing a favourable learning atmosphere and exchanging knowledge with others.

When faced with negative emotions, high school English language learners have to manage their emotions to preserve their psychological well-being when dealing with negative emotions. Research has shown that frustrations encountered by students during the learning process inevitably cause negative emotions. Nevertheless, by tapping into their positive personality qualities, students can effectively manage their emotions and resume problem-solving activities. Controlling negative emotions is crucial for improving well-being and attaining achievement [15]. Specific methods involve: altering the perception of a problem to view it from a new angle; developing problem-solving skills to address issues effectively; and expressing emotions to release negative feelings and prevent mental blockages.

The literature illustrates that emotion regulation is mostly seen via a psychological lens. High school students can better their English learning outcomes by boosting their self-efficacy.

Self-efficacy refers to the belief and expectation a person has in their own capabilities. High school pupils need to cultivate sufficient self-assurance when learning English, having faith in their ability to conquer the challenges of the learning process. Specific methods could be: setting achievable learning goals; planning the English learning process in stages, completing tasks; building confidence by answering easy test questions; and seeking external support for encouragement and recognition from others to boost self-confidence in English learning.

This research displayed that teachers significantly influence high school students' emotional regulation during English learning, which may be attributed to the nature that English is a communicative language, and the personality traits and guidance style of the lecturer (teacher) can easily affect the students' learning emotions [18]. Hence, it is feasible to emphasize the teacher's significance in the ways outlined in the preceding section. In high school English education, teachers should prioritize student-centeredness, foster emotional awareness in students, monitor emotional fluctuations, and help pupils cultivate strong drive. Meanwhile, when setting teaching goals, teachers can establish achievable small goals to help students experience a sense of accomplishment from completing tasks. By increasing students' sense of achievement, their overall well-being can be improved originating in a stronger belief in their ability to succeed and reducing resistance to learning English. Furthermore, teachers may enhance their comprehension of students by employing various methods such as classroom questioning, homework correction, and classroom communication. They ought to provide encouragement during setbacks and offer prompt positive feedback to foster positive character traits and support students' healthy development.

6. Conclusion

This study descriptively analysed the questionnaire data by using the SPSS.21 tool and observed that high school students often experience higher levels of happy emotions than negative emotions when learning English. Teacher's encouragement boosts positive feelings, whereas relying solely on one teaching method can result in monotony. The results indicated that English language learners in higher education demonstrate a deficiency in self-regulation methods and seem to struggle with managing stress during English language learning. At the same time, this paper proposes that high school students can enhance their English learning by concentrating on self-efficacy, positive emotions, and emotion management, as these tactics can impact their interest. Teachers are vital in regulating emotions by helping learners manage their emotions and aiding in English acquisition.

This study investigated the emotional status and self-regulation strategies of high school students in English learning. The findings have theoretical and practical significance and can be applied to college and junior high school students studying English. This study's findings will assist English teachers in implementing efficient strategies to address learners' emotions, enhancing their English learning skills and overall growth. Moreover, it will contribute to advancing the psychological perspective within English and second language learning. However, there are still certain aspects in which this study can be enhanced due to a range of subjective and objective criteria. The study only included students from the Affiliated High School to Hangzhou Normal University, leading to a limited sample that may not be representative of all high school English learners. Apart from that, the sample size was not deemed enough and the investigation concentrated on severe positive and negative emotions, excluding the role of neutral emotions. In the future, it is important to expand the sample selection channels, increase the sample size, and diversify research perspectives to enhance the accuracy and persuasiveness of the experiment. In addition, utilizing only one quantitative method in this study may not be adequate, and incorporating appropriate qualitative methods in future research could improve the experiment's trustworthiness.

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