

# The Influence of Affective Factors on Autonomous Learning in English Among Non-English Majors in Independent University

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**Abstract:** The study guided by affective theory, psychology and educational psychology theories, and assisted with questionnaire that investigated 62 non-English majors' affective status in an independent university in eastern China, discovered that affective problems were universal, and that the learners with high English level had little affective problems while those with low English level had serious affective problems. At the same time, it presented the possible countermeasures against non-English major students' affective problems according to the actual affective status. The research and the related teaching practice attempted to prove that paying close attention to the non-English major students' affective factors in English learning, and adopting effective countermeasures of affective cultivation are of great importance in overcoming non-English major students' affective problems, improving their academic grades, and transforming them into the learners of healthy and all-round development.

**Keywords:** Affective factors, Autonomous learning, Non-English majors.

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## 1. Introduction

Individual variations, according to Sawyer and Ranta (2011), have a direct influence on learning outcomes and, ultimately, the availability of a second language. Individual differences are primarily determined by characteristics such as age, gender, personality, language learning methodologies, cognitive and emotional aspects, motivation, attitude, and so on. (Arnold, 2011) Cognitive variables have long been seen as critical in determining success in learning a foreign language. However, it has been shown that emotional elements are as significant as, if not more important than, cognitive aspects. Affective variables such as motivation, anxiety, attitude, and self-esteem, according to educational psychology, have a significant role in foreign language learning efficiency and success. Learner autonomy has been a contentious issue in foreign language teaching and learning since the 1970s. The language learning process, according to researches, involves not only growth in cognition but also development in affect, and learner autonomy is influenced by factors such as motivation, anxiety, self-esteem, and attitude. Most of the researches focus on the investigation of the development of learner autonomy and learner strategy valuing the cognitive factors in English learning and ignore the affective factors. There has been limited study on the relationship between emotional components and learner autonomy. As a result, The paper mainly intends to have an insight into the current state of English major students in the independent university in English autonomous learning and find out the influence of affective factors on the autonomous learning and academic achievements and the relationship between the affective factors and autonomous learning, between affective factors and student's achievements so as to find out effective ways to solve the affective problems in affective factors and help teachers improve teaching methods and qualities and conduct English teaching by using effective affective strategies and meanwhile inspire students to find ways to level up

autonomous learning efficiency and promote a wide range of skills.

## 2. Literature Review

### 2.1. Affect

#### 2.1.1. Concept of Affect

Researchers hold different views of word "affect" in the teaching and learning theories. But the differences are subtle. In other words, the main understanding of affect has received agreement but with slightly different minor details. According to Dulay, Burt and Krashen(1982), when it referred to a particular thing or action or situation or experience, the affect was fitness of that thing or that action or that situation or that experience with one's needs or purposes and its resulting effect on one's emotions. Dickinson(1995) regarded affect as the learner's attitude towards the target language and together with his responses in emotion. In the modern context, affect had a broad definition as the aspects of emotion, mood, feeling or attitude (Arnold, 2018). From Jane Arnold's angle, affect was referred to as "aspects of emotion, feeling, mood or attitude which conduct behavior".

#### 2.1.2. Affective Factors

Researchers have studied a variety of emotional factors that affect learners, such as motivation, attitude, self-confidence, and anxiety, which can fall into two categories in the teaching and learning of foreign languages. Anxiety, inhibition, motivation, and character are examples of personal emotional characteristics. The second category is social emotional variables, which also includes aspects pertaining to students, students and instructors, and students and their surroundings.

In the beginning of the 20th century, some specialists in education like Cai Yuanpei, Tao Xingzhi, Chen Heqin came out with a new idea of education. They stressed the importance of happy learning which was another name of affective education in some degrees. They advocated that the teachers should have to revolutionize the traditional teaching

method and change their minds and focus more on the students and the study of student's personalities. Tao Xingzhi insisted that teachers should pay special attention to the development of students' talent and interest and suggested a combination of the teaching and learning in the class. He came up with a proposal that student's mind should not be shackled at any place and at any time. Chen Heqin proposed the theory of vivid education which had a close tie to affective education. In his teaching, he was in favor of group discussion, competition and contest, imitation, games and competency-based instructing. Among them, game was highly valued for the games could bring students' hatred, distraction and depression to the minimum.

In the early 1980s, many schools, one of which was primary school affiliated to the Shanghai normal school did experiments in happy education, which had something to do with affective education. Geoff (2004) examined the use of learning methods in college English instruction in her study on English learning motivation and tactics.

From then on, researchers and teachers showed more interest and concern in the use of affect variables in language learning and teaching. Affective disturbance in foreign and second language learning has been studied in recent years. Mikkonen (2015) discussed input and affective disturbance in foreign language teaching and acquisition.

Quite a number of Chinese scholars appreciate the function of the affect in foreign language teaching. Kim(2018) put forward a kind of FLT principle, emphasizing the learner's affective factors, and getting rid of psychological barriers. He discussed in the principle that, a good language learner was able to face the challenge and effectively deal with problems they would encounter despite the difficulties and pressure in language. The task could be finished in a positive attitude. Students had the necessary energy to overcome setbacks, keep their efforts. In addition, certain personality and attitude could cause the learners to use appropriate affective technology.

In 2021, Usmonova and his colleagues launched a large-scale nationwide study to investigate the present state of understanding and employing emotional elements in secondary school teaching. The investigation's findings cannot adequately meet the student's actual demands. As it demonstrated, the pattern of emotive education giving way to cognitive growth and knowledge instilling was still prominent. As a result, cognitive development received more focus than affective development. Furthermore, in the classroom, many teachers lacked advice and practical methods for stimulating students' emotional potential and assisting them in overcoming negative emotions in foreign language acquisition.

What has been mentioned thus far is a succinct overview of the development of affective components. It gives us a crucial foundation for understanding affective education and FLT. However, learner's affect is a highly complex topic, and as additional issues arise, there is still more work for us to do. The influence of affective elements may not be the same across nations and regions. In addition, there aren't many studies in this area that concentrate on FLT and FLL in higher independent universities. This work seeks to improve English teaching and learning by looking at the relationship between affective elements, self-directed learning, and students' academic success as measured by test results in higher independent universities.

## 2.2. Learner Autonomy

Since the 1960s, many Western educators have advocated for autonomous learning as one of the primary goals of educational reform, giving rise to a plethora of experts and scholars who defined, analyzed, summarized, and practiced autonomous learning. The ultimate goal of education, according to McDevitt (1997: 37-45), was to produce independent learners. The purpose of foreign language instruction was not just to assist students learn the target language and communicate effectively, but also to help them attain autonomy (Holec, 1981: 23).

According to the emphasis placed on various parts of the notion, many academics have varying meanings of the term "autonomy," leading to various hypotheses. Here are a few definitions with various order of importance. Holec (1981) emphasized the importance of the learner's capacity to direct his own education, Dickinson (1995) revealed the importance of the learner's surroundings, independent of the environment, and Benson (1997) the complexity of the idea. For Little (2020: 1), language learner autonomy denotes "a teaching/learning dynamic in which learners plan, implement, monitor, and evaluate their own learning."

A large body of related literature (e.g., Little, 2007; Dickinson, 1995; Brown, 2007; Raya, et al., 2020; and many others) recognized learner autonomy to be powerfully related to many other learner variables such as high motivation, willingness to communicate, self-efficacy determining the success of language learning, critical thinking, decision-making, the capacity for detachment, and independent learning. Despite its short history, researchers have made significant efforts in the definition of the concept, categorization and feature, and practical application in order to identify strategies to aid.

Taking these into consideration, the author did an empirical study from September in 2021 to January in 2022 on the affective factors, English autonomous learning and academic achievements targeting at the non-English major students in independent university. The study was done with the expectation that something substantial and significant could be got through the investigation, which could be useful in promoting student's ability in choosing materials, developing effective methods and having a proper assessment of their study.

## 2.3. Affective Factors Influencing Learner Autonomy

Ellis pointed out that no two people study in the same way. Shang Weixia identified five characteristics that impact autonomous learning: age, aptitude, learning motivation, cognitive style, and personality. Individual aspects with particular features in second language acquisition, such as group dynamics, instructor attitude, learning materials, individual learning skills, and so on, make sense in addition to these five components. All of the contributing elements are social, cognitive, and emotional. Individual differences, on the other hand, include the importance of social variables and mother tongue

Generally speaking, there are several elements that can be broadly categorized into two categories that influence autonomous learning. The first are internal factors, and the second are external. Mental and affective elements are examples of internal factors. Memorization, logic, and other mental processes are included. Affective elements include

learning motivation, attitude, interest in learning, and mood, which will stimulate students' initiative to study, explore their potential, and alter their attitude toward learning. Additionally, the growth of metal factors is advantageous to the growth of affective factors. Additionally, affective variables may control the growth of mental components and counteract their disadvantages. The cognitive and affective ones, such as motivation, anxiety, and empathy, are generally considered to be the internal elements in autonomous learning.

### 3. Method

#### 3.1. Introduction to the research

A questionnaire and an in-depth interview were carefully designed and carried out to address the following four questions:

- (1) What general attitudes do non-English major students hold towards English learning in independent university at present?
- (2) What are the factors and to what extent they affect non-English major students' English autonomous learning?
- (3) Are there any correlation between learners' achievement and affective factors?

#### 3.2. Subjects

The experiment began in September 2021 and ended in January 2022. The subjects were 62 sophomores in Zhejiang Yuexiu University of Foreign Languages majoring in Japanese. All of them were non-English major students who have studied English for at least 8 years but most of them were not proficient in English study and had some degrees of affective barriers. There are no big differences in number, gender, and exam scores in the final exam of last term. They used Integrated Skill Course as their textbook. There were four classes each week respectively. The author was responsible for their English teaching so that she could control the element of the research. The experimental group comprised 32 students, and they received affective factor teaching apart from regular English teaching. The control group was the 30-student class in the other setting, which received instruction as usual. Before and after the experiment, each subject is required to complete the questionnaires and tests.

#### 3.3. Instruments

##### 3.3.1. Questionnaire

With a 36-item questionnaire, the data for this study were collected. It was written in Chinese so that subjects could have a better understanding of the questions and give an easier response. The questionnaire was divided into two sections. Section A had 21 items on the influence of affective factors on English learning. The items focused on the learner's anxiety, attitude, motivation, self-esteem, impact of teachers and peers and cooperation. Section B included 15 items about the autonomous learning behavior and the ability to learn autonomously. The items in this section covered the cognitive strategy, meta-cognitive strategy and social affective strategy. The questionnaire was given to the subjects before and after the experiment but put in different orders at the end of the experiment to check whether there were differences of affective factors and autonomous learning behavior. The design of the questionnaire was based on Wen's (1995) and Questionnaire on the English Learning Situation of Chinese

Learners (2004).

##### 3.3.2. Interview

After conducting the questionnaire study, the author spoke with 20 students from Zhejiang Yuexiu University of Foreign Languages who had also taken part in order to explain any hazy concepts that had come out of the questionnaire. 10 male and ten female students with various levels of language proficiency were present. The students were given free rein to express themselves during the 50-minute interviews, which were conducted in their native Chinese and later transcribed..

##### 3.3.3. Tests

The volunteers were required to record their test results from the previous term's final exam on the questionnaire sheets before to the experiment. In order to provide greater evidence of the impact of affective elements on academic achievement, the data were analyzed. After the experiment, the same subjects took another exam at the end of the semester. Writing accounted for 20% of each test paper, word and grammar for 15%, reading comprehension for 30%, clozes for 10%, translation for 15%, and blank filling for 10%. The results were utilized to determine whether there had been any improvement in the subjects' English autonomous learning after the experiment. The following section will explain the variations between the two groups before and after the experiment.

#### 3.4. Procedures

All the subjects were asked to give the response to the questionnaire before and after the experiment and take part in the final test. They were encouraged to choose the suitable answers from the given choices based on the personal preference to reveal their true affective states without any disturbance. The questionnaires were conducted with the company of the teachers within 20 minutes. There were no big differences between the two groups. After they finished the first questionnaire, the experimental group received the following special training. The training included: (1) building learning profiles; (2) establishing team work; (3) assigning weekly autonomous work on Dingtalk; (4) marking and commenting; (5) asking students to present oral work on regular basis; (6) encouraging students to join in the online chatting frequently.

#### 3.5. Data Analysis

To examine the differences in affective components and autonomous actions between the two groups following the experiment, a thorough analysis of the questionnaire responses and the two test scores was provided.

The answers provided by the subjects on the questionnaires and their scores were manually entered into the computer. Independent samples T-Tests had been conducted to determine whether there had been any changes since the experiment in order to provide a comprehensive assessment of the study's findings. The purpose of the correlation analysis was to ascertain any potential connections between the growth of learner affect, learner autonomy, and academic success in English. It sought to determine whether there was a connection between the growth of affective components and learner autonomy as well as between affective factors and academic success.

## 4. Results

### 4.1. Affective Factors and Learner Autonomy

In order to compare the questionnaires more fairly, the five-scale questionnaire sheets were provided to respondents—A, B, C, D, and E— coded with the values of 1 point, 2 points, 3 points, 4 points, and 5 points. To determine the connection between affective components and learner autonomy, each item was examined separately. To determine how the two groups differed in terms of affective variables and autonomous learning behaviors, the means and standard

deviations were computed. The significance level was set at 0.05. The difference between the two groups is statistically significant and vice versa if the value in the sig (2-tailed) column is less than 0.05,

#### 4.1.1. Pre-experiment Assessment

The findings and a description of the students' affective components and autonomous learning habits prior to the experiment are presented in this section. A questionnaire sheet has to be filled out and returned by each individual. Table 1, Table 2, and Table 3 display the results from the sheet once the replies have been gathered.

**Table 1.** Mean and Independent Sample t-test of All Items

Experiment Group 32(N)		Control Group 30(N)		t	Sig.(2-tailed)
Mean	SD	Mean	SD		
3.365	0.413	3.341	0.535	0.32	0.747

Viewed from the summary of all items in Table 1, although the mean of all items in the experimental group is much higher than that in the control group, the independent sample t-test result shows that

there are no significant differences between the two groups ( $p=0.747>0.05$ ).

**Table 2.** Independent Sample T-test of Affective Factors Section

Aspect	Item	Experiment Group 32(N)		Control Group 30(N)		t	Sig.(2-tailed)
		Mean	SD	Mean	SD		
Attitude	1	2.83	0.795	2.96	0.931	0.50	0.621
	2	3.18	0.886	3.24	0.847	0.27	0.830
	3	3.12	1.304	3.20	0.877	0.33	0.675
	4	2.98	0.875	2.88	0.839	0.87	0.393
Motivation	5	3.12	0.714	2.88	1.231	0.41	0.620
	6	4.26	0.999	4.15	1.316	0.95	0.356
	7	4.23	0.648	4.06	0.978	1.19	0.765
	8	3.23	0.894	3.21	0.876	0.26	0.794
Anxiety	9	2.85	0.764	2.88	1.305	1.31	0.11
	10	3.01	0.875	3.05	1.12	1.15	0.22
	11	3.12	0.876	3.34	1.378	1.37	0.47
Self-esteem	12	4.42	0.522	4.15	0.901	1.03	0.275
	13	2.93	0.865	2.88	0.815	0.87	0.386
	14	3.13	0.815	3.09	1.089	0.36	0.756
Impact of teachers and peers	15	3.58	0.699	3.75	0.642	0.75	0.463
	16	4.07	0.893	4.05	0.778	0.18	0.893
	17	4.19	0.667	4.15	0.988	1.29	0.865
	18	3.28	0.846	3.34	0.754	2.45	0.011
Cooperation	19	3.45	0.97	3.53	0.839	0.29	0.778
	20	3.37	0.578	3.61	0.824	0.55	0.646
	21	3.58	0.626	3.46	0.717	2.44	0.014

From Table 2, Section A contains 21 questions intended to test the individuals' emotional characteristics. 15 items in Section B of Table 3 are meant to test the subject's autonomy. The author compares the mean scores and determines that 3.348 is the expected value for the mean parameter. A mean score over 3.348 is used by the author to denote strong positive emotional components and high autonomy, whereas a mean score below 3.348 denotes low affective factors and poor autonomy. The respondents' levels of positive affect and autonomy are correlated with the mean score (See Table 2 and Table 3). This conclusion could have methodological

ramifications for the best ways to teach in a classroom and how well students learn. Activities like teaching and learning are interrelated. A teacher will undoubtedly get along better with his pupils and may anticipate better or more acceptable learning outcomes from the students if he can pay close attention to affective elements and fully utilize them. For scholars and language teachers, this is an important field.

Items 1–4 in Table 2 are related to attitude, and their mean scores in both groups are under 3.348. The mean score for item 1 is 2.83(EG) and 2.96 (CG), which indicates that the majority of them take a passive approach to learning English.

These three questions have P-values greater than 0.05, indicating that there is no significant difference between the two groups.

Item 5(assimilating into English-speaking society) is low (3.12), which indicates that instrumental motivation is stronger than integrative motivation, and extrinsic motivation is stronger than intrinsic motivation. It also implies that learners' motivation in English learning is complicated. In other words, learners are extremely driven to study English because numerous powerful motivators are at work. Most circumstances contain a mix of these motivations. The two forms of motivation do not have to be mutually incompatible (Brown 2001: 154). According to the evidence presented above, integrative motivation is substantially associated to second language performance. In formal circumstances, it interacts with instrumental incentive to serve as a powerful predictor of success. It advises that teachers recognize both the kind and mix of motivation in a given learning setting in

order to facilitate successful second language acquisition.

In terms of anxiety, item 9 (when asked to answer questions, I'm never frightened) had a mean score of 2.85 (EG) and 2.88(CG). This demonstrates that when questioned by their English teacher, both groups seem a little anxious. Both groups have strong self-esteem and feel that if they study hard enough, they can study English well (item 12), but they have no much confident in their learning, since the mean score of item 13 is 2.93 and 2.88. Meanwhile, kids require and value their teacher's encouragement and appreciation, with a mean score of 3.13 and 3.09.

The mean score of the remaining items in both groups is more than 3.348. Both sets of participants feel that English learning is affected by the relationship between teachers and peers. Group discussion and cooperation are important though differences exist between the subjects in item 21(P=0.014<0.05).

**Table 3.** Independent Sample T- test in Learner Autonomy Section

Section B Aspect	Item	Experiment Group 32(N)		Control Group 30(N)		t	Sig.(2-tailed)
		Mean	SD	Mean	SD		
Metacognitive Strategy	22	3.28	0.801	3.16	0.940	1.23	0.203
	23	2.95	0.908	2.25	1.101	0.14	0.998
	24	3.18	0.788	3.44	0.69	2.05	0.039
	25	2.88	0.859	2.86	0.743	0.34	0.759
	26	3.45	0.978	3.24	0.672	1.52	0.130
Cognitive strategy	27	2.53	0.860	2.41	1.086	0.57	0.576
	28	3.31	0.950	3.39	0.903	0.12	0.917
	29	3.51	0.871	3.42	0.869	0.82	0.412
	30	3.48	0.904	3.28	1.088	0.88	0.378
	31	3.78	0.745	3.89	0.871	0.26	0.798
Social affective strategy	32	3.35	0.990	3.21	1.121	0.45	0.642
	33	3.82	0.783	3.73	0.805	0.73	0.445
	34	3.74	0.851	3.31	0.875	0.31	0.754
	35	3.33	1.022	3.01	0.783	2.38	0.018
	36	3.94	0.722	3.56	0.760	0.74	0.462

Except for item 24 (I can finish my task brilliantly), the results of Items 22-26 suggest that there are few differences between the two groups, and the low averages imply that students are lacking in metacognitive techniques. They can not make learning plans based on their individual circumstances, and do not evaluate and preview the lesson on a regular basis.

From item 27 to Item 31, there is no significant difference between the two groups because the P-value is greater than 0.05. With The mean scores of items 29 -31 in both groups getting close to 3.348, it indicates that the two groups are aware of certain English learning tactics but do not practice for an extended period of time. It is demonstrated by item 27 (the mean score is 2.53 and 2.41. In terms of social interaction technique, the mean scores of the two groups indicate that they understand the value of communication and that there is no significant difference between them (P>0.05). The experimental and control groups both had identical mean

scores in emotional components and autonomous learning behaviors, according to the data. Based on the questionnaire analysis, it is possible to conclude that there are little variations in emotional components and autonomous learning patterns between the participants in EG and CG prior to the experiment.

#### 4.1.2. Post-experiment Assessment

In this part, relationship between students' affective factors and autonomous learning behaviors after the experiment is presented. At the end of the term, the same subjects were asked to finish questionnaire sheet with the same questions but placed in a different order. The purpose was to find out whether there were significant differences in the state of affect and autonomous learning behaviors after the experiment. The following Table 4 explains the differences mean score for both groups with the independent sample t-test of affective factors and autonomous learning behaviors after experiment.

**Table 4.** Independent Sample T-test of Affective Factors Section

Aspect	Item	Experiment Group 32(N)		Control Group 30(N)		t	Sig.(2-tailed)
		Mean	SD	Mean	SD		
Attitude	1	3.61	1.027	3.19	0.952	3.46	0.014
	2	3.46	0.776	3.55	0.826	0.65	0.524
	3	3.88	1.137	3.33	1.012	3.06	0.004
	4	3.51	1.011	3.14	1.239	2.02	0.045
Motivation	5	3.35	0.873	2.97	1.073	2.44	0.014
	6	3.76	0.735	4.13	1.055	2.51	0.012
	7	3.84	0.885	3.56	1.117	1.70	0.088
	8	3.75	0.688	3.44	0.898	2.55	0.012
Anxiety	9	3.17	0.893	2.84	1.087	2.11	0.037
	10	3.51	1.011	3.15	1.239	2.02	0.045
	11	3.51	0.901	3.34	1.091	1.04	0.295
Self-esteem	12	4.22	0.708	4.28	0.802	0.39	0.682
	13	3.31	0.761	3.01	0.954	2.20	0.026
	14	3.43	0.910	3.03	0.951	2.50	0.012
Impact of teachers and peers	15	4.02	0.887	3.63	0.914	2.18	0.027
	16	4.23	0.709	4.08	0.756	2.07	0.036
	17	4.08	0.648	4.21	0.790	0.85	0.395
	18	3.75	0.688	3.43	0.898	2.55	0.012
Cooperation	19	3.96	0.784	3.56	0.868	3.12	0.002
	20	3.71	0.850	3.39	0.900	2.11	0.030
	21	3.81	0.709	3.52	0.813	2.21	0.021

Table 4 shows the differences of mean score related to affective factors and independent sample t-test between the two groups. The mean scores of the subjects in the control group are lower than those of the experimental group. The P-value in most of the items is less than 0.05, which means that differences between the two groups do exist. The mean score for item 1 in the experimental class is 3.61, which means that the learners in the experimental class have a more positive attitude in speaking English. They think the participation of speaking English is very important. After the experiment, the mean score of item 3 goes up to 3.88 with the implication that the learners in the experimental group have made some progress in English learning and they get a sense of satisfaction from it although they have not caught up with others. The first four items about the attitude show that there is a change for experimental class students and they take a more active and positive attitude while there is a minor change for the students in the control group.

The mean scores in items 5 and 7 grow to 3.35 and 3.84 respectively and the mean score of item 6 in the experimental group still remain high but with a slight decline. The change implies that the subjects in the control group become more interested in western cultures and enjoy the English music and movies more. They take more liking to the English study, which is good to the shift from the instrumental motivation to high integrative motivation. For item 6, the mean score of the control group is as high as 3.76 and it is mainly due to the belief that English learning is a tool for hunting a job. They learn English mainly for the sake of the job in the future.

The mean scores of items 9, 10, and 11 in the experimental group are 3.17, 3.51 and 3.51 respectively, which are a little bit higher than they were before the experiment. After the experiment, the subjects in experimental group are not so anxious than before in class. They suffer less pressure in learning English. Instead, they have a happier time and enjoy more freedom in English learning. In the opposition of it, the mean scores of the subjects in the control group are much lower with 2.84, 3.15 and 3.35. Subjects suffer the pressure

and anxiety as usual. The mean score of item 8 indicates the stressful state of mind in English learning for the subjects in control group.

The mean scores of the subjects in the experimental group for items 13 and 14 increase to 3.31 and 3.43 respectively. The change means that the subjects gain more self-confidence in class performance and the teacher's praise and approval for their well-done jobs will help them establish a great sense of pride and encourage their motives in achieving more. The paramount importance of the teacher's comments in student's self-esteem building is seen here. By contrast, the mean score of the subjects in the control group is a bit higher than 3 with few changes, which shows subjects do not have much confidence.

From item 16 to 18, the mean scores of the subjects in the experimental group climbed up to 4.23, 4.08 and 3.75 respectively. The mean score of item 16 is especially high, which shows student's approval in the great importance of the equal and friendly relationship between teachers and students. Item 17 shows the role of competition in acting as a drive in English learning. Item 18 shows that anxiety could be lessened with the peers' help during their learning.

There is a little increase in the mean scores of items 19, 20, and 21 for the subjects in the experimental group, which are 3.96, 3.76 and 3.85 after the experiment. The change shows that the more group work they do, the more cooperative they will become. Through the cooperation with the classmates, students have less anxiety and become more motivated in English learning. To be more active in the participation in the team work, a lively and relaxing environment is important, which stimulates student's strong desire in participating. The figure shows that working in a more relaxing atmosphere, most subjects from the experimental group demonstrate more positive attitudes. As for the mean score of the subjects in control group, there is no significant change in the influence of social affective factors. From this part, it can be seen that teachers, class atmosphere and classmates have a great impact on the learner's affective factors.

**Table 5.** Independent Sample T-test for Learner Autonomy Section

Section B Aspect	Item	Experiment Group 62(N)		Control Group 58(N)		t	Sig.(2-tailed)
		Mean	SD	Mean	SD		
Meta Cognitive Strategy	22	3.56	0.921	3.27	1.022	1.49	0.129
	23	3.28	0.867	3.06	0.943	1.54	0.133
	24	3.52	0.585	3.71	0.823	2.75	0.006
	25	3.18	0.778	2.75	0.999	2.23	0.022
	26	3.68	0.723	3.40	0.865	2.15	0.028
Cognitive strategy	27	2.81	0.861	2.41	1.072	2.69	0.006
	28	3.38	0.948	3.33	0.911	0.07	0.943
	29	3.47	0.859	3.39	0.856	0.88	0.347
	30	3.48	0.911	3.23	1.075	1.32	0.171
	31	3.79	0.722	3.81	0.869	0.71	0.444
Social Affective strategy	32	3.31	0.978	3.18	1.119	0.83	0.380
	33	3.78	0.773	3.65	0.804	0.58	0.531
	34	3.72	0.839	3.29	0.871	3.22	0.012
	35	3.29	1.011	3.00	0.778	2.24	0.022
	36	3.91	0.718	3.51	0.759	3.11	0.002

From the Table 5, the mean scores in the items of metacognitive strategy of the subjects in the experimental group are 3.56, 3.28, 3.52, 3.18 and 3.68, which have a minor increase compared with those before the experiment. The change in item 22 shows that the subjects are able to set and adjust their goals in line with their study process, and they have clear goals for improvement of English abilities. Item 23 shows that after setting their goals, the subjects take a positive attitude and show more enthusiasm in preview and review of their lessons in the expectations that they could be well prepared for the lesson and achieve more. The mean score of item 24 reveals that subjects have more confidence in English learning and show more capability in the tasks because the author often gives comments on the assignments and show more encouragement and appreciation for what they have done. Item 25 reveals that students have difficulty in assessing their studies, recognizing problems and looking for solutions. Most of the students don't get into the habit of the self-assessment. It is still hard for them to take responsibility for the study on their own. In the author's opinion, it is partly due to the limited time of the experiment and the lack of the awareness. It will turn out to be better if the experiment will continue for a longer time. The mean score in item 26 ascends to 3.68, which means the progress in the class performance after the experiment. Students have more confidence in class and find it easy to keep pace with the teachers. The P-value in 24, 25 and 26 is less than 0.05, indicating certain differences between the two groups. The subjects in the experimental group show more efforts in adopting metacognitive strategies after the experiment.

As for items 28-31, the mean scores do not show many changes after the experiment and the scores in the experimental group and control group are closer without many differences. It shows that most of the subjects in the two groups have an understanding of some cognitive learning strategies and are familiar with the use of the strategies. The mean score in item 29 in experimental group is less than that in control group, which remains doubtful. More subjects in the experiment group are involved in the practice of listening more than half an hour each day. The reason is that they are more self-reliant and know the goals and the strategy to achieve it.

As for the social affective strategies mentioned in items 30-34, the mean scores of the experimental group are marginally higher than those in control group despite the fact that there are not many differences after the experiment. Both Item 32 and 33 suggest that subjects open their views and expand the sources of materials to acquire more and desire more to share the materials with others. As the items 34 and 35 show, The subjects have got a cooperative spirit and like to learn with peers, communicate more with each other in learning strategies and methods. This change is derived from the frequent teamwork in the class and the encouragement of the participation in the English corner. In comparison, the subjects in the control group still had low average results in English studies due to their lack of cooperation and communication skills. Items 34 to 36 had P-values of 0.012, 0.022, and 0.002, respectively, all of which are less than 0.05. It demonstrates that there are some social-affective approach variations between the two groups following the trial.

It can be seen from the table that there are differences for the subjects in the experimental group after experiments in terms of affective state and autonomous learning. They take more positive attitude towards learning, show more self-confidence and suffer less anxiety, which contribute to the progress in autonomous learning. Subjects in the control group don't show many changes. It proves one of the hypotheses: affective factors have an influence on learner autonomy.

## 4.2. Affective Factors and English Academic Achievements

### 4.2.1. Pre-experiment Assessment

The mean and standard deviation of test results, as well as the independent sample T-test, were used to determine if the means of the two groups were substantially different. If Sig.(2-tailed)>0.05, there is no significant difference in academic success between the experimental and control groups.

This part is about the comparison of the test score between the two groups before the experiment. Table 7 shows the results of independent sample t-value on the test scores.

**Table 6.** Independent T-test of the Test Scores Before Experiment

Group	Number	Min	Max	Mean	Std. Deviation	t	Sig. (2-tailed)
EG	32	49	88	78	6.2	1.73	0.07
CG	30	51	88	75	7.9		

The Sig.(2-tailed)=0.07 which is above 0.05 means that there is no significant difference in the academic achievement between experimental group and control group. From the figure, we can see before the experiment, students in the two groups have similar proficiency of The mean scores and standard deviations are shown in Table 6 between the experimental group and control group. The mean score of experimental group before experiment was 78 and the standard deviation was 6.2 while the mean score of control group was 75 with the standard deviation of 7.9. English as the test scores show no many differences.

#### 4.2.2. Post-experiment assessment

This is the section of the results and discussion section of

the comparison of the test scores between the two groups after the experiment. At the end of the term, a test paper with the same exercises was handed out to the same subjects in two groups. The scores were gathered and inserted into computer to get the result of the mean and standard deviation to see if there were some differences between the two groups by means of Independent sample T-test. The higher the mean score is, the more academic achievement one has. If Sig. (2-tailed)=0.001<0.05, that means the subjects in the experimental group achieve higher scores than the subjects in the control group after the experiment. The comparison of independent sample T-test of the test scores between two groups after the experiment and the paired sample T-test of the test scores are shown in Table 7.

**Table 7:** Independent Sample T-test of the Test Scores After Experiment and Paired Sample T-test of the Test Scores

Group	Num	Min	Max	Mean	Std. Deviation	t	Sig. (2-tailed)
EG	32	57	93	83	5.92	3.35	0.001
CG	30	48	88	78	6.42		
Group	Num	Min	Max	Mean	Std. Deviation	t	Sig. (2-tailed)
EG before experiment	32	47	89	76	6.28	10.612	0.000
EG after experiment	30	56	90	81	5.95		

The significant difference between the two groups was shown in Table 7. EG bears the mean score of 83 together with the standard deviation of 5.92 while the mean score of CG is 78 with the standard deviation of 6.42. The Sig. (2-tailed) is 0.001 which is lower than 0.05 with the implication that there are great differences in academic achievements between EG and CG after the experiment. Next is the comparison of the mean score and standard deviation of EG and CG before and after the experiment by means of the Paired sample T-test. The mean scores of the experimental group increase after the experiment. And the Sig.(2-tailed)=0.000<0.05, which means there are significant differences in the achievement of EG before and after the experiment; 5.95, the Std. Deviation of EG after the experiment is smaller than 6.28 before the experiment. It shows that there are fewer differences between subjects in EG after the experiment.

The results support that there are significant differences in academic achievements between the experimental and control groups. Compared with the control group, the experimental group do better after the experiment and subjects show fewer

differences in academic achievements after the affective training, which approve of the great role of affective factors on the academic improvements.

#### 4.3. Affective factors on academic achievements and learner autonomy

The role of emotional elements in learner autonomy and academic accomplishment may be plainly observed from what has been stated and studied above. Following the experiment, the three emotional aspects, learner autonomy, and academic outcomes will be examined.

The next correlation analysis aims at seeking the answer to the questions that whether there is a significant relationship among autonomous learning, affective factors, and academic achievements, and whether there is a positive correlation among them. To teachers, this insight into the possible correlation means a lot in teaching. If the correlation does exist, it could be used in the improvement in the teaching and extend more in this research.

**Table 8.** Correlation between affective factors and learner autonomy

Variables Test		score	Affective factors	Learner autonomy
Test score	Pearson Correlation1	1	.346(**).236(*)	.235(*)
	Sig.(2-tailed)		.001	.035
	N	62	62	62
Affective factors	Pearson Correlation	.345(**)	1	.715(**)
	Sig.(2-tailed)	.001		.000
	N	62	62	62
Learner autonomy	Pearson Correlation.	.235(*)	.715(**)	1
	Sig.(2-tailed)	.035	.000	
	N	62	62	62

\*\*Correlation is significant at the 0.01 level(2-tailed).

\*Correlation is significant at the 0.05 level(2-tailed).

Table 8 introduces the positive correlation between students' affect and autonomous learning at the 0.01 level, which has significance since Sig. is .000, which is less than 0.05. It indicates that emotive elements impact autonomous conduct positively. Learners with stronger emotional components exhibit more learner independent activities. Because the level is 0.01 ( $r=.345$ ), there is also a positive link between emotional components and academic success. and the significance level is .001 less than 0.05. The association that emotional elements positively influence academic success is significant. The more emotional elements learners have, the greater their academic results. The link between learner autonomy and academic success is significant at the 0.05 level ( $r=.235$ ). This association has gained statistical significance. Based on what has been shown, the other hypothesis, that there is a link between affective variables and academic successes, and that affective elements have a significant and positive impact on academic achievements, might find its response here.

## 5. Discussion

Two hypotheses have been approved and some research questions have been answered from the experiment. There are some major findings in the next part. This study aims to explore affective factors affecting college students' autonomous learning and the findings of the study can be concluded as follows:

First, Chinese college students express their approval of learner autonomy, but they don't think Chinese students are good autonomous learners. Some affective factors do have an influence on autonomous learning.

Second, among the internal factors, learning strategies and styles, self-monitoring and self-evaluating should be paid more attention to and among the external factors, teachers influence a lot.

Third, it is clear for us to see the different influences of affective factors, namely, learning strategies and styles, self-monitoring and self-evaluating, teachers and learning environment on proficient and less proficient learners. Generally speaking, less proficient learners' autonomous learning is more influenced by external factors.

Fourth, the three factors which are learning strategies and styles, self-monitoring and self-evaluating and teachers are significantly correlated to learners' language proficiency.

Fifth, affective factors positively influence the

development of student's learner autonomy. To promote learner autonomy, there are many efforts to make, such as establishing learner profiles to keep record of what they have done and the next goal to achieve, encouraging students to play a more active part in class performance and English corner, creating a more relaxing environment for study. These efforts can help students have more confidence and take a more positive attitude towards English autonomous learning.

Sixth, there is a positive influence of autonomous learning on students' academic achievement. After the experiment, students in the experimental group do better than the students in the control group and make more progress in the academic achievements by making study plan, keeping record of the progress, participating the group work and English corner, practicing more with classmates, and evaluate the tasks.

A conclusion could be drawn on the basis of the collected data that the teachers in college of vocational education have not relinquished his "authority" objectively and subjectively, however, there is a lack of satisfaction. A teacher needs to devote himself to providing the learners with great opportunities to master the target language and learn how to learn in their own, individual and holistic way. Here are some suggestions for teachers in college of vocational education.

### (1) Establishing a good relationship with learners

To enhance English learning, teachers should help students rule out anxiety and worry by creating a humanistic, relaxing, harmonious and motivating atmosphere. A good relationship between teachers and learners can help teachers know more about individual differences and learners' needs. It can also help students become more confident and more active.

### (2) Paying attention to individual differences

Students have different levels of English and different ways of learning. What's more, students in the same class do have many differences even if they are taught by the same teacher with the same learning materials. There are many examples to show the differences. Some students are naturally extrovert learners, and active in participating in various activities, while others are quite reserved. Some students are easily affected by the learning context and distracted by the irrelevant matters; others are naturally independent to those factors and tend to be efficient learners. Some are active in speaking and listening and hence have good communication skills; others are particularly strong and intelligent in reading and writing. Some have a positive attitude toward the FL culture and thus would like to integrate themselves into the foreign language society; others just don't like the FL at all. In order to cater for the individual differences, a teacher needs to design his teaching plan in a flexible way--different kinds of activities to

meet the demands of different learners. For example, he may create more opportunities for the weak ones and encourage them to participate more; he may set different levels of requirements for different students in the same activity; for the extroverts, he may allow them to have more oral practice, but for the introverts, he may encourage them to spend relatively more time on reading and writing, etc. "focus on learner" means a teacher's planning, teaching and assessment should be based on the learners' needs and individual differences. In real teaching practice, we have to adopt a "learner centered" style rather than "teacher centered". According to their individual differences -cognitive, affective and personality traits, and their corresponding needs, a teacher should design various activities and learning tasks, and set up different aims for different learners.

#### Implications for students

As for the students in college of vocational education, in order to get a better mastery of English, students should take a positive and active part in learning and commit themselves more to the autonomous learning. Autonomy, unfortunately, does not come easily to teachers or learners. It's seen from the questionnaire and interview that for learners, students rely on the teachers to a great extent and cannot easily free themselves from the dependence on the teachers. And they still don't show much responsibility in English learning on their own.

#### (1) Enhancing awareness and willingness

In order to be a student with more autonomous ability, he has to get a better understanding of the affective factors relating and influencing language learning. A lack of such awareness will pose a habitually and traditionally rooted pattern of beliefs and behaviors for learners and it is less likely for them to develop into a full autonomous learner.

#### (2) Using learning strategies

As the analysis of the data and the interview shows, it comes clear that students have realized that they should do more for their own study but they have the faintest idea about effective learning or how to develop the learning strategies which best suit them. From the view of Holec(1998), the process of learning is a management process. That is to say, learners have to design the whole process of plan and the ways to carry it out. As a result, it is necessary for learners to be in charge of the learning process and make a suitable manager and designer in their learning.

Getting students to learn the best learning strategy is not the sole task for teachers. More importantly, students have to been taught clearly about the use of the strategies in an active and appropriate way so as to help them acquire the target language. Teachers have to create certain environment to facilitate the use of the strategies frequently. Only by means of constant practice can these skills be internalized and automatized by students.

#### (3) Developing self-assessment

Self-assessment can benefit learners greatly. It is the keystone of autonomous learning. Due to the self-assessment with the help of certain standard and criteria, students can have an understanding of the learning process. Learners are informed whether his performance is good or not, whether there is any scope for him to make headway or whether he has made some progress. In other words, self-assessment helps learners become more aware of the learning process. What's more, in order to achieve goals in language learning, they will be stirred to look for a better way to take control of their own learning so as to get a faster and easier access to the goals thus

exerting an influence on the classroom activities. In addition, assessment criteria will be updated and the range will be expanded to other areas such as the evaluation of their own needs and affective dimensions of the learning process.

#### (4) Becoming autonomous and active learners both in and outside of class

It is essential for English language learners in college of vocational education to take autonomous and active learning style. It is not restricted to the in-class learning. Moreover, the development of learner autonomy should be extended outside of the class. Although learner autonomy is crucial for language learning, we now emphasize learner-oriented language learning, which requires active self-direction on the part of learners; they cannot be spoon-fed if they desire and expect to reach an acceptable level of communicative competence. They are now, more than ever, sharing the responsibility for successful language learning.

The progress in English autonomous learning entails a lot of time and efforts on skill practicing including all the aspects of English, such as listening, speaking, reading and writing, which can never be practiced enough in limited classroom time, so it is very important for them to take every opportunity to learn by themselves outside class.

Insufficient language input results in less efficient comprehension abilities. Input received from English teachers only is far from enough to develop satisfactory language skills. It is generally believed that language learning calls for learners' perseverance. Most students have known that English is important with China's frequent communications with foreign countries. The need for good English speakers is ever increasing. However, to speak fluent English requires a lot of practice. English learners should not be afraid of making mistakes and losing face, do not miss a chance to speak English both in class and outside class, especially after class by their own.

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