ELF MOTIVATIONS AND AUTONOMY IN ENGLISH LEARNING: AN INVESTIGATION OF CHINESE NON-ENGLISH MAJOR UNDERGRADUATES

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Abstract

Taking EFL motivation as one influential variable on autonomy in English learning, this study tries to probe into the relationship between EFL motivations and AEL by conducting The investigation into Non-English major undergraduates. EFL motivations and their autonomy in English learning among 471 non-English majors with quantitative and qualitative approaches. Quantitative and qualitative analysis interpret the correlations between motivations and AEL. In addition, suggestions of cultivating learners' AEL by triggering their various motivations are presented. In the end, the limitations of this study and recommendations for future studies on this topic are pointed out.

Key words

Types of EFL motivations, autonomy in English learning, AEL, correlations

1. Introduction

Over the past 30 years, considerable research has been conducted on learner autonomy. LA henceforth, in the field of English education. The research home and abroad focuses on the definitions, descriptions, and analyses of theoretical bases of LA or strategies of its application. When LA is mentioned as the ability to be cultivated, it is undeniable to take individual differences into consideration, which is playing the vitally influential role in English teaching. Motivation, one of the key factors that influence the rate and success of second foreign language learning, definitely exerts its effects on the fostering of LA in English learning. But less attention has been placed on the relationship between motivation and LA. The current paper attempts to unveil the linkage of these two variables by conducting an exploratory investigation among non-English major undergraduates.

2. Literature review

2.1 Chinese undergraduates' motivation types

and M3 includes M4 M5 and M6

M1 Motivation of learning situation
M2 Instrumental motivation
M3 Cultural motivation
M4 Motivation of intrinsic interest
M5 Motivation of social responsibility
M6 Motivation of going abroad
M7 Motivation of individual development
M8 Motivation of immediate achievement
M9 Motivation of information medium

Figure 1 Chinese undergraduates’ motivation types

2.2 Autonomy in English Learning AEL

Hoelc is considered as the pioneer to bring the concept of LA into foreign language education. He regards LA as the ability to take charge of one’s own learning. Afterwards, many researchers define LA in various ways. As Benson summarized that when LA is defined as an ideal state seldom actually achieved where learners are fully responsible for decisions about their own learning for others. It represents a set of skills that can be learned and for others still autonomy is “an inborn capacity that is suppressed as we go through the processes of institutional education.” Benson 1996 p. 27. In this study taking account of the present college English teaching situations in China, Autonomy in English Learning AEL a working name of LA is defined as the learners’ competence to control their English learning consciously. Autonomous learners are able to consciously formulate their own learning goals and plan their English learning strategies and monitor and evaluate their own learning process.

2.3 Voices of the relationship between motivation and AEL

On the issue of the relationship between motivation and AEL two voices can be heard from different scholars

Voice 1 LA leads to motivation

Decli and Ryan 1985 p. 29 state that “Intrinsic motivation will be operative when action is experienced as autonomous.” They also say that an autonomy supporting learning situation provides conditions for the development of intrinsic motivation.

Dickinson 1995 reviews the link between motivation and autonomy. From intrinsic and extrinsic integrative and instrument and cognitive point of view and comes to the conclusion that autonomous learners become more highly motivated.

D rnyei and Csize 1998 also suggest that motivation is a result of learner autonomy.

Voice 2 Motivation precedes LA

Spratt and Chan 2002 find that in many cases motivation precedes autonomy through a large-scale study of Hong Kong tertiary students’ readiness for learner autonomy in language learning. Based on the data from the questionnaire and interviews they found that the higher motivation the students possess the greater willingness they have to take part in the out-of-class activities autonomously. As they state “In these yes motivation would appear to precede autonomy” Low motivation discouraged
the pursuit of autonomous activities Spratt Chan 2002 356

Cotterall 1999 focuses on self efficacy rendering supports to the idea that motivation can be a precursor of successful autonomous learning. In her point of view self efficacy includes the learners confidence in their overall ability to learn the language as well as their ability to achieve more specific language goals Cotterall 1999 302 Self efficacy and effort both part of a motivational construct would predispose LA

Littlewood considers learners ability and willingness to assume responsibility for their learning to be at the core of the notion of autonomy and that willingness depends both on the motivation and the confidence to take responsibility for the choices required 1996 428 In his view motivation is a necessary precursor of autonomy

Ushioda holds that without motivation there is no autonomy She defines motivation in the context of autonomy as the establishment of principles for developing effective motivational thinking as an integral dimension of learner autonomy 1996 221 In the logic way learner autonomy not only entails a capacity for effective self management of motivation but also presupposes that the learner will bring a degree of motivation to the learning situation since without motivation there is no autonomy 1996 401

The above two voices wake us to the relevant studies are all narrowed down to the elaboration of initial direction of motivation and LA 2 no quantitative studies draw special attention on their linkage and there is no such a study in China Further detailed findings of their relationship can only be achieved when researchers take new perspective and research method In this paper motivation is taken as one variable influencing AEL With the complementary of qualitative method the quantitative approach will be adopted as the major way to investigate into their relationship in depth

Research design

Research questions

This paper attempts to firstly make clear of the question Is there any correlation between non English major undergraduates EFL motivations and their AEL If it receives the positive answer then the following questions will be studied further How does the motivation correlate with AEL on the whole What about the correlations between subject motivations and AEL respectively How to interpret all the correlations

Subjects

This study involves 471 second year non English major undergraduates in all 220 of them major in Management Computer Science and Engineering and Automatic Control from Shenyang Institute of Aeronautical Engineering SIAB and 251 major in Business Administration from Southwest Petroleum Institute SWP In a sense it is more typical to choose samples from the two institutions because they are on the same level in Chinese higher education system while locating in different areas of China SIAB lies in the northeast of China while SWP is located in the southwest of China

Instruments

This study is quantitative focused with the complementary of qualitative approach Therefore questionnaire and interview are selected to be the instruments to elicit data The interview was conducted in semi structured way

The whole anonymously designed questionnaire contains four sections with regard to the introduction of the purposes of this study and instructions for completing the questionnaire background of the respondents such as student number period of English learning major and scores of CET if passed AEL questionnaire 23 items and motivation types questionnaire 25 items The questionnaires of AEL and motivation types came out in the formal study after two rounds of pilot modifications by referring to Xu Jinfen et al LA questionnaire and Gao Yihong et al motivation types questionnaire respectively As Table 1 indicated the two parts obtain higher cronbach alpha coefficients with deleting some items The questionnaires employed Likert five point scale to rate each item
Table 1: Cronbach alpha coefficients of questionnaire

<table>
<thead>
<tr>
<th></th>
<th>AEL</th>
<th>Motivation Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st pilot study</td>
<td>0.851</td>
<td>0.8390</td>
</tr>
<tr>
<td>2nd pilot study</td>
<td>0.743</td>
<td>0.8452</td>
</tr>
<tr>
<td>Formal study</td>
<td>0.792</td>
<td>0.8489</td>
</tr>
</tbody>
</table>

Within the AEL part, the subjects were asked to rate each item ranging from 1 (This is extremely untrue of my situation) to 5 (This is extremely true of my situation) was adopted. The current questionnaire simplified five dimensions of the original by Xu et al. 2004 to three based on the characteristics in part 2 of the literature review. Table 2 outlines the components of AEL section.

Table 2: Distributions of items in AEL part

<table>
<thead>
<tr>
<th>Section</th>
<th>Focus of each section</th>
<th>Distributions of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEL1</td>
<td>Formulate appropriate learning objectives and plans</td>
<td>179</td>
</tr>
<tr>
<td>AEL2</td>
<td>Select and implement learning strategies</td>
<td>69</td>
</tr>
<tr>
<td>AEL3</td>
<td>Monitor and evaluate one's learning</td>
<td>109</td>
</tr>
</tbody>
</table>

In the part of motivation types, marks of each item were given from 1 (I strongly disagree with this statement) to 5 (I strongly agree with this statement). Table 3 unfolds the distributions of items in this part.

Table 3: Distributions of items in motivation part

<table>
<thead>
<tr>
<th>Section</th>
<th>Focus of each section</th>
<th>Distributions of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td>Motivation of learning situation</td>
<td>27 8 9 30</td>
</tr>
<tr>
<td>M2</td>
<td>Instrumental motivation</td>
<td>25 6 1 2 3 4 5 6 0 2 3 4 5 6 47 8</td>
</tr>
<tr>
<td>M3</td>
<td>Cultural motivation</td>
<td>24 7 8 9 0 1 2 3 4 5 45 46</td>
</tr>
<tr>
<td>M4</td>
<td>Motivation of intrinsic interest</td>
<td>24 7 8 9 1</td>
</tr>
<tr>
<td>M5</td>
<td>Motivation of social responsibility</td>
<td>40 42 43</td>
</tr>
<tr>
<td>M6</td>
<td>Motivation of going abroad</td>
<td>44 45 46</td>
</tr>
<tr>
<td>M7</td>
<td>Motivation of individual development</td>
<td>32 3 5 7 8</td>
</tr>
<tr>
<td>M8</td>
<td>Motivation of immediate achievement</td>
<td>25 6 31</td>
</tr>
<tr>
<td>M9</td>
<td>Motivation of information medium</td>
<td>34 6</td>
</tr>
</tbody>
</table>

3.4 Procedures of the study

At the end of November 2004, the formal investigation was conducted after a small group discussion and two pilot studies. In the early two weeks of December 2004, 3 subjects from SIAE and 4 subjects from SWPI were interviewed at their will. Every interview lasted no more than 30 minutes. In the course of which note-taking was used to record interviewee's statements on the questions for the purpose of creating a pleasant atmosphere to decrease the interviewees' anxieties thus obtained more authentic data.

Table 4: Summary for the conduction of the questionnaire

<table>
<thead>
<tr>
<th>Affiliation of subjects</th>
<th>Total number of collected questionnaires</th>
<th>Valid number of collected questionnaires</th>
<th>Valid percentage</th>
<th>Total valid percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st pilot study</td>
<td>SIAE</td>
<td>50</td>
<td>46</td>
<td>92%</td>
</tr>
<tr>
<td>2nd pilot study</td>
<td>SWPI</td>
<td>135</td>
<td>120</td>
<td>89%</td>
</tr>
<tr>
<td>Formal study</td>
<td>SIAE</td>
<td>220</td>
<td>200</td>
<td>90%</td>
</tr>
<tr>
<td></td>
<td>SWPI</td>
<td>251</td>
<td>230</td>
<td>91%</td>
</tr>
</tbody>
</table>
4. Results and discussions

With the aid of SPSS11the data were handled and the results as Table 5 demonstrates render an empirical answer to the first research question of the current study that is to say, there do exist correlations between motivation and AEL. In the following parts, the analysis and discussions of the findings will be illustrated in detail.

Table 5 Correlations between motivations and AEL

<table>
<thead>
<tr>
<th>M</th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>M4</th>
<th>M5</th>
<th>M6</th>
<th>M7</th>
<th>M8</th>
<th>M9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>0.95</td>
<td>0.94</td>
<td>0.83</td>
<td>0.79</td>
<td>0.74</td>
<td>0.72</td>
<td>0.71</td>
<td>0.70</td>
<td>0.68</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>N</td>
<td>430</td>
<td>430</td>
<td>430</td>
<td>430</td>
<td>430</td>
<td>430</td>
<td>430</td>
<td>430</td>
<td>430</td>
</tr>
</tbody>
</table>

4.1 On the relationship between motivation and AEL in general

The results of the study show that on the whole, motivation correlates with AEL. At a significant level, (Table 5) which gives us an empirical proof that there really exists a link between motivation and AEL. Knowles 1975, Dickinson 1995, Nole et al. 2001, Wu 2001, Ecclestone 2002, Spratt 2003, Gao 2003, Sun 2003, He 2003, Xu 2004, and Zhan 2004 etc. The positive correlation between motivation and AEL means that the more you are motivated, the more you own or the more autonomously you perform in English learning, the stronger motivation you have. Therefore, we obtain the answer to the question of whether there are correlations between motivation and AEL on the whole. Dickinson 1995, p.65 stated “A common theme in justifications for autonomy, especially in general education, but also in language learning, is that autonomous learners become more highly motivated and that autonomy leads to better more effective work.” Knowles 1975, 144 claims that “there is convincing evidence that people who take the initiative in learning and learn more things and learn better than do people who sit at the feet of teachers, passively waiting to be taught” (activator learners). They enter into learning more purposefully and with greater motivation.” Ecclestone 2002 also contends that motivation is one significant factor among those affective ones and may link to different autonomy.

4.2 On the relationship between motivation of learning situation and AEL

The results tell us that there is no significant correlation see Table 5. Between motivation of learning situation and AEL. This means M1 exerts little influence on AEL.

Motivation is a dynamic one. D nyei 1994 and different motivations play different roles in facilitating autonomous English learning. This investigation was conducted in November 2004. In this period, some students may strive to the preparations for CET6; therefore, instrumental motivation conceptually speaking, motivation of immediate achievement may influence more on the students autonomous English learning. Whose qualitative evidence can be found from the interviews of student A as follows.

Student A female. Do you like learning English? Tell you the truth, I learn English just for the diploma of college study. Why? It is known to us that English plays the most important role in our life. If I cannot pass CET, I lose my graduation certificate. If I fail the CET, I will be in a passive position in the competition of job hunting in near future. I must learn English well. Can you describe your learning English in detail? Ok, I recited the words on the CET vocabulary handbook without being forced by the English teacher. I bought several books on CET and completed the simulated papers by one. I make a plan by myself which regulates how many words I should recite, how many reading comprehensions I should complete and how much time I should spend on the listening comprehension every day. Did you do that according to your plan? Yes, most of the time.
From the statements it is learned that the motivation of immediate achievement contributes more than other motivations to her autonomous English learning.

In addition, does this result mean that motivation of learning situation is an all-important factor on AEL? The answer is NO. From the results, it is found that there is weak correlation between motivation of learning situation and AEL (r = 0.054) see Table 5 which means there is no significant rather than NO correlation between them. Therefore, it is reasonable to say motivation of learning situation have some influence on AEL.

Theoretically speaking, the formation and promotion of AEL need supportive environment rather than happen in isolation. Higgs 1988; Each 1996; Hua 2001; Zhang 2004. Higgs 1988 [41][2] defines autonomous learning within the context of a learning institution as a process in which learners take responsibilities for their own learning, perform learning activities and solve problems associated with the learning task independently see Figure 2. Task, teacher and environment interact together thus the successful outcome of an autonomous learning experience depends on the extent to which each element is consistent with the others.

![Figure 2](image-url)
The interactions among environment, task and teacher in the process of autonomous English learning. Higgs 1988 [42]

In Higgs’s view, learners learn English autonomously within the interaction among task, teacher and environment.

Zhang, 2004 also considers the environment as one component of LA. Learners should be given enough chance to develop the abilities of being responsible for their own learning. Without the environment, such as teachers, teaching equipment and learning materials, it is impossible to cultivate their AEL.

The above arguments all emphasize the importance of learning environment, situation, context. Learners motivated by such a supportive learning situation to some degree may learn English more autonomously.

To sum up, there is no significant correlation between motivation of learning situation and AEL. But in the sense, motivation of learning situation is a factor that can affect student’s English learning. A supportive learning environment bridges the stimulation of motivation of learning situation with AEL. Fostering that environment, the learners’ stimulated motivation of learning situation may trigger their willingness to learn English autonomously.

On the relationship between instrumental motivation and AEL.

From the result of Pearson correlation analysis in Table 5, it is clear to observe the instrumental motivation correlates with AEL at the significant level, which means the more a student is motivated by instrumental motivation, the more she is likely to perform autonomously in her English.
The following researchers' elaborations support the findings:

Lukman 1972 states that instrumental motivation makes itself more important when language learners have less or no chance to use target language to communicate with native speakers.

Dr. Nylander 1990 holds that instrumental motivation contributes more to foreign language learners in a sense than to the second language learners because foreign language learners have insufficient exposure to the target culture and therefore they are uncommitted to integrating with the target community.

Oxford 1996 considers the instrumental motivation to be more meaningful for most foreign language learners.

In the Chinese context, English is learned and taught as a foreign rather than a second language. Hu 2003 considers reconsiderations should be taken as far as the roles of instrumental in the English learning are concerned. Amount of research tends to the view that instrumental motivation is the main variable influencing students in English learning. Gu 1986, Wang 1989, Zhou 1996, Dang 2001 which verifies the conclusions by Dr. Nylander 1990 and Oxford 1996, etc.

Gu 1986 made the earliest quantitative investigation into English majors' social psychology, one result of which indicates that the students hold higher instrumental motivation.

Wang 1989 states that in Mainland China most of the foreign language learners know little about the target community culture and people before they learn the target language. Among those learners, most of them learn a foreign language for the instrumental purposes such as passing various examinations, finding a good job, etc. Thus instrumental motivation has a greater prominence in the process of Chinese students' English learning.

Zhou 1996 concludes that most of subjects in her investigation possesses instrumental motivation and proposes an English learning model for Chinese students taking instrumental motivation as its focus. Instrumental motivation, goal, effort, investment on the non-English activities.

Therefore it is reasonable to say that in the Chinese context, many learners hold the instrumental motivation. It is believed that those students tend to take responsibilities to their own English learning for some instrumental purposes, such as finding a good job and obtaining various useful certificates, etc.

On motivation of individual development and AEL

Results of the data processing gives a picture that M7 and AEL correlate positively with r = 0.264, which means the more you are motivated by motivation of individual development, the stronger AEL you own.

Firstly, as one sub-component of instrumental motivation that shows a positive correlation with AEL at the significant level, M7 has the possibilities to the positive correlation with AEL.

Moreover, the descriptions of M7 imply that learners with M7 consider English as a useful tool for their future developments. So they may be more responsible for their own English learning.

On motivation of intermediate achievement and AEL

Motivation of intermediate achievement correlates with AEL with r = 0.400 at the significant level of 0.000, which leads us to the idea that the more learners are motivated by this type of motivation, the stronger their AEL will be.

Ho 1995 presents us with illustrations on the specific achievement motivation, the cultural emphasis on achievement contributed to the carrying out of actions and the accomplishments of tasks, moving the learners towards autonomy. From another point of view, it may be said that such achievement-motivated actions and tasks actually constituted acts of autonomy. Ho 1995, 241. Nowadays, the pressure from the CET & and CET can specifically the former in a sense, is one criterion to judge the qualities of college English teaching. Some universities or colleges consider the proportion of passing the two national English tests, CET & and CET & at one time as the label of teaching qualities.
and some even connected the CET with the diploma those who failed to pass CET before graduation have no qualifications to get the final diploma. Under such a learning environment some students who experienced various examinations from primary school study show a great desire to pass CET as early as possible in order to obtain the final certificate which is the only objective of the college learning. With this motivation they are likely to learn more autonomously and much harder.

4.3 On motivation of information medium and AEL

The study finds out that motivation of information medium correlates with AEL at the significant level of 0.000. Motivation of information medium is a newly found motivation by Gao et al. which means that learners treat English learning as one medium to broaden their eyes on the development of certain subjects. For example, physics outside of China. Nowadays, the bilingual teaching is carried out in most of the colleges/universities on some subjects whose meaning is that not English subject teachers conduct their teaching in English for instance, teachers of mathematics use English to give instructions on mathematics to their students in the class. It is possible for those students in the bilingual teaching classroom to take more responsibilities for their own English learning because their aims are to complete the course in English and to learn more about the development of their majors. Student B is such a kind of student.

Student B: male I am a student of bilingual teaching class of management. We use the authentic textbooks in English in order to learn more about the development on management and immersed the bilingual environment. I spend my spare time looking up new words doing more listening exercises after class. I also make and adjust my learning plan by myself according to the progress of English teaching. I also concentrate more attentions to the information about management by surfing on the internet or searching materials in the libraries where I seldom went before receiving the bilingual teaching.

For those who are not involved in the bilingual teaching environment it is possible for them to learn English more autonomously if they consider English learning can facilitate their understanding more about their majors. Student C is a good example.

Student C: female English is very important. For example, English is one of the most widely used working languages in the international academic conferences. In addition, if you want to learn more developments on certain field outside you have to be able to read materials in English freely because many foreign academic journals on my major are published in English. How did you learn English then? Well, besides attentive listening to the teachers' explanations and careful notes making I autonomously look for the materials in English to read and listen. I watch the videos in order to improve my English in every aspect. I frequently go to the libraries to read the journals in English and look for the materials on the websites. When reading those journals I record the useful words on a notebook and recite them. Meanwhile I do not often look up the new words in the dictionary because I pay more attention to understanding the main ideas of the articles.

4.4 On the relationship between cultural motivation and AEL

Table 5 indicates that cultural motivation correlates with AEL at the significant level of 0.000 which means learners with greater cultural motivation possess higher AEL.

As is mentioned, cultural motivation includes motivation of intrinsic interest motivation of social responsibility and motivation of going abroad and results of the study also show there are positive correlations between those three types of motivations and AEL respectively. Therefore, the illustrations on the correlations between sub-motivations and AEL one by one can facilitate the understanding of the reasons for the positive correlation between cultural motivation and AEL.

4.4 On motivation of intrinsic interest and AEL

Results of the study tell us the correlation between motivation of intrinsic interest and AEL is the highest of all the coefficients which is in line with Noels 2001 that the lower was students' intrinsic motivation the less the students felt they were autonomous agents in the learning
process. This finding proves the logical illustrations by many researchers such as Deci and Ryan (1985) [1], Little (1991) [2], Ushioda (1996) [3] etc. Deci and Ryan (1985) [4] claim that intrinsic motivation leads to more effective learning. Little (1991) [5] claims that if learners' engagement in formal learning is to approach this level of personal involvement and intrinsic motivation, it is clear that they must develop or be encouraged to develop their own reasons for learning, their own agenda, and their own goals. Ushioda (1996) [6] claims that intrinsic learning motivation has a number of positive features, one of which is an expression of the personal control and autonomy in the learning process. [7] Pierson (1996) gives the idea of the deep approach, which means that because of their internal interests or curiosities, learners take part in the learning with full of efforts in various ways, in which they engage passionately and positively. If the students are given opportunities to do language for their own personal reasons of achieving competence and autonomy, surely those learners will have a better chance of success than if they become dependent on external rewards for their motivation. Brown 2000 [8] [9]

The above arguments stress the importance of motivation of intrinsic interest and AEL, which is supported by the interview of student D as follows:

Student D: female. Do you like learning English? Yes, of course. Why? I have loved English very much since I started to learn it because I want to learn more about cultures of English-speaking countries. Can you describe your English learning in detail? Oh, I listened to the teacher attentively in the class and make a plan by myself. In my spare time, I read several concise English novels and magazines for example, Gone with the Wind, English World etc. I also often listen to the Special English of VOA or BBC. I can understand the teaching aims and can adjust my plan according to the progress of my learning. I can make use of every chance to practice my English for example, I have free talks in the English Corner with interests because I can learn something more about the target culture. Although I passed CET 6, I will stick to my English learning like before because I love it.

On motivation of social responsibility and AEL

Table 5 indicates that there exists a positive correlation between motivation of social responsibility and AEL at the significant level of .000.

As is mentioned in part two, it is a specific motivation which shares the elements of instrumental motivation and cultural motivation. Those with motivation of social responsibility learn English either for their parents' or they live up to their parents' expectations and care for their English learning, or for the contributions to the cultural communication between China and western world. In a word, motivated by this type of motivation, learners have a sense of social responsibility. But is it a controversial issue that learning English autonomously and being responsible for society? Definitely NO. Chickering (1969) states that individual must accept interdependence, recognizing that one cannot receive benefits from a social structure without contributing to it. That personal rights have a corollary social responsibility is cited from Boud 1997 [9]. Boud (1987) contends that the aim of autonomous learning is normally for students simply to become learners who are individualistic or work on their own.

Autonomous approaches do not imply treating learners in isolation from one another. What is usually sought is that students become interdependent learners working with and helping each other. Interdependence is therefore an essential component of autonomy in action. The shift to interdependence is often portrayed as a process starting from dependency and moving progressively through counterdependence and independence to interdependence. See Figure 3. In this view, independence meaning independence to interdependence from a teacher or authority figure is a stage through which learners need to pass in any given context to reach a more mature form of relationship which places them in the world and interrelating to it rather than being apart from it.

![Interdependence Diagram](image-url)

Figure 3: Stages of development in learning. Boud 1987 [29]
The interview of student D provides the supportive evidence.

Student E: female My parents are both workers. Since I was born, they contributed all themselves to my growth. They bought the pens, pencils, erasers and notebooks for me. They are thrifty and make savings to my English learning for example, sending me to the bukeban even when they were laid off work when I was a second-year senior high school student. So when I recall the efforts and investments my parents gave me, I can't help studying English hard. Would you please give me some details. I mean, I get up early every day and read English before breakfast. I listen to teachers in class and have detailed revisions by going through the notes and doing extra exercises actively. I can also find ways to solve the problems for example, I ask help from teachers and classmates. When encountering difficulties, the idea occurs to me that I have to insist on and live up to my parents. Although I passed CET last term, I still hold on the habits.

Student D learns English autonomously for repaying her parents' investments both on spirits and on materials. Although in our interview there is no such a student who wants to be the actor of culture communication. It is possible for the students motivated with such purpose to learn English autonomously because in their opinions, they are burdened the heavy and honorable tasks and they are willing to contribute themselves to the career of culture communication.

4.3 On motivation of going abroad and AEL

The correlation between motivation of going abroad and AEL tends to be positive r = 0.187. It tells us that the more this type of motivation learners possess, the stronger their AEL will be. It is comprehensible that motivation of going abroad itself shares the elements of both instrumental motivation when learners take going abroad as one way to find a good job and cultural motivation when they desire to learn more about the foreign cultures by stepping abroad. The above statements have indicated that those with instrumental or cultural motivation are more willing to take responsibility to their own English learning and conduct autonomous English learning. Therefore, it is natural for the learners with motivation of going abroad to perform autonomously when they learn English.

5. Conclusions

Generally speaking, the findings of this study provide the quantitative supports to the issue that there really exist correlations between motivation and AEL. For one thing, compared with instrumental motivation and motivation of learning situation, cultural motivation correlates with AEL more closely. Moreover, motivation of intrinsic interest shows much more close relationship with AEL compared with other sub-motivations. Finally, there is no significant correlation between motivation of learning situation and AEL which is a new finding mentioned by nobody before. Based on the findings, it is implied that teachers should attach more importance to triggering students' various motivations to promote their autonomy in English learning as follows:

Firstly, English teachers should enhance students' AEL by stimulating their motivation of intrinsic interest. Results of the study indicate that there is a significant correlation between motivation of intrinsic interest and autonomy. Interview of student E also proves that this type of motivation will lead him to high AEL within a long period. English teachers are entitled with new roles as facilitators and helpers for students' English learning nowadays. Therefore, they should take some measures to stimulate the students' motivation of intrinsic interest for example, providing the knowledge concerning the target culture when having classes as much as possible which can absorb the students' attentions to the learning English because they can learn much more about the western world.

In the second place, teachers should pay due attentions to facilitating the transfer from the instrumental motivation to the motivation of intrinsic interest. The study tells us that most of students possess high instrumental motivation which can in a sense exert high influence on the AEL. Many researchers have proved that instrumental motivation is a prominent motivation in the Chinese context but the instrumental motivation can not sustain the learners' drive to learn English in a long run. When the instrumental goals for instance, passing the examination disappeared, learners with this kind of motivation may perform less autonomously than before. Therefore, it is necessary for the teachers to lead
the transfer from the instrumental motivation to the motivation of intrinsic interest for the promotion of their AEL. For instance teachers can help students build their own intrinsic reward system by emphasizing mastery of specific goals not comparison with other students.

In addition teachers should ignore the creation of supportive environments to stimulate learners' motivations of learning situation for the further promotion of their AEL. After all there is insignificant correlation between motivation of learning situation and AEL which means the former exert some influence on AEL. For example student A in fact creating a harmonious democratic environment can stimulate motivation of learning situation thus to promote AEL which is a win-win strategy for AEL enhancements. As is mentioned in part three the learning environment at least contains three elements teacher-learning task and students. So teachers should firstly improve their own qualities such as being caring patient tolerant empathic open and not judgmental etc. Holec 1985 [84] [85]. At the same time rich and appropriate learning tasks should be carefully designed and teachers should pay attention to the operations of those tasks in the classroom teaching adjusting the tasks according to the feedback of students which renders the possibilities to create the better learning environment.

Although this paper makes an exploratory study on the links between motivation and AEL here still exists some weakness. Firstly the scope of sampling is confined to two universities and the subjects are mostly students of science as well as the number of the subjects is limited to 471. The results of this present study remain to be tested by a largescale research. Secondly only seven subjects were interviewed none of them possesses motivation of going abroad. For the future study it is recommended that considering the complexity of the relationship between motivation and AEL more deep research for example on self-motivation and AEL or on the effect of AEL on the motivation should be conducted in future. In addition how to design a more appropriate instrument to test AEL and motivation is still an issue to be further discussed.

Acknowledgements

This paper is based my MA thesis completed at Southwest Petroleum University in 2005. Sincere thanks will be firstly given to my supervisor Prof. Zhuo Xinxiang. The same appreciations will be extended to the following scholars Prof. Gao Yihong at Peking University and Prof. Xu Jinfen at Huazhong University of Science and Technology for their unselished presents the questionnaires on motivation types and on LA Dr. Ema Ushioda at the University of Warwick Prof. Virginia Yip at Chinese University of Hong Kong Prof. Bian Yongwei at University of International Relations Prof. Huang Yueyuan at the Baptist University of Hong Kong for their timely sending me the materials on LA and motivation Prof. Qin Xiaoging at Huazhong University of Science and Technology for his helps on data processing Dr. Cao Rongping and Ms. Gao Yue for their constant care and helps on my academic studies. Special thanks will be given to the anonymous reviewer. In the end I will give my thanks to teachers and students from SIAE and SWPU for their cooperations of the investigation.

Notes

1. The relevant articles in English were retrieved from the hardcopies of Applied Linguistics Language Learning System TESOL and those in Chinese were browsed from CNKI the largest academic database in China.
2. In Spratt and Chang (article) they state that motivation was not the main focus of this study but its constant occurrence in the results led to it. 2002 [471]
3. Although the studies by Catteral 1999 and Spratt and Chan 2002 are quantitative yet they don't take the link between motivation and LA as their focus. As Spratt and Chan state the study did not focus mainly on the relationship between autonomy and motivation. The relationship needs further direct investigation using other methodologies. 2002 [62] Dickinson 1995 and Ushioda 1996 argue the link between motivation and LA in a logical not an empirical way.
4. The item number of AEL part is 23 which comes from the 32 items by Xu Jinfen et al while the number of items in motivation part is 25 with 5 being deleted.
5. The italic and underlined words in the bracket stand for the questions proposed by the author in the process of the interview.
6. Pierson 1996 proposes Learning approach theory which means that three distinct processes that could go on when an individual approaches learning tasks. The approaches are surface deep and achieving. These
approaches are determined by learner motivation and orientation and the tactics and strategies the learner uses when dealing with learning tasks."

It is a kind of profitable class organized by non-official education organization where students make up what they lost in school-learning or extend the knowledge.

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ELF Motivations and Autonomy in English Learning

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Foreign Language Teaching and Research 4[3]:2

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An investigation into the students of science
Foreign Language Teaching 1[3]:4

Wang Munting Peverly 1986 The self-instructive process in classroom learning context
Contemporary Educational Psychology 11[3]:104

Wen Qiufang Wang Haixiao 1996 On the relationship between learner variables and scores of CET
Foreign Language Teaching and Research 4[3]:39

Wen Qiufang 2004 On Regulations and features of learner's motivations beliefs and strategies
Foreign Language Teaching and Research 2[3]:101

Wu Yunchun Liu Runqin 1993 An investigation into the Chinese undergraduates' English learning
Foreign Language Teaching and Research 1[3]:16

Xu Jinfen Wu Weiping Peng Renzong 2004 A survey and analysis of non-English major undergraduates' autonomous English learning competence
Foreign Language Teaching and Research 1[6]:68

Xu Jinfen Zhan Xiaohai 2004 A survey of researches on learner autonomy home and abroad
Foreign Language World 4[3]:3

Zhang Yanjun 2004 Cultivating learner autonomy by English learning strategies training
Foreign Language World 1[3]:11


Appendix 1

Questionnaire on Non-English Major Undergraduates' ELF Motivations and Their Autonomy in English Learning

The following questionnaire is designed for the research on the relationship between non-English majors and their autonomous English learning in the Chinese context. It's sincerely hoped that you can answer each item honestly and frankly according to your own opinion of learning experiences. There are no "correct" answers. All the data collected will be highly confidential and will be used for the research only.

Part One Background Information

1. Please fill in the blanks or tick only one choice according to your own experiences.
2. Sex □ Male □ Female
3. Name of institute □ college □ university
4. Number on the name list
5. Major
6. Period of English learning □ A 8 years □ B 10 years □ C more than 10 years
7. Have you passed CET □ A Yes □ B No
8. If you have passed CET □ its scores are

Part Two

Below there are 23 items concerning this research. There are no right or wrong answers. We are simply interested in your opinions. Please tick the number which best indicates your opinion in the bracket at the end of each statement. The numbers stand for the following responses:

1. □ I strongly disagree with this statement
2. □ I disagree with this statement
3. □ I neither agree nor disagree with this statement
4. □ I agree with this statement
5. □ I strongly agree with this statement

94
<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
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<tbody>
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<td>1</td>
<td>1 2 3 4 5</td>
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<td>19</td>
<td>1 2 3 4 5</td>
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### Part Three

Below there are 25 items concerning this research. There are no right or wrong answers. We are simply interested in your opinions based on your learning experiences. Please tick the number which best indicates your opinion in the bracket at the end of each statement. The numbers stand for the following responses:

1. This statement is extremely untrue with my situation
2. This statement is untrue with my situation
3. I am not sure whether this statement is true or not with my situation
4. This statement is true with my situation
5. This statement is extremely true with my situation

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>I can make use of every kind of way to improve my English such as exchanging English learning experience, keeping diaries in English, listening to English broadcasting actively, reading English newspapers and selecting the proper environment to learn English etc.</td>
<td>1 2 3 4 5</td>
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<tr>
<td>21</td>
<td>When doing a certain linguistic task, I often check and correct the comprehension of previous knowledge.</td>
<td>1 2 3 4 5</td>
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<tr>
<td>22</td>
<td>Considering the practical learning progress, I can adjust my plan on English learning.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>I can plan and adjust my learning schedule.</td>
<td>1 2 3 4 5</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>Extremely Untrue</th>
<th>Extremely True</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>I fell in love with English at first sight; therefore, I like learning English for no reasons.</td>
<td>1 2 3 4 5</td>
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<tr>
<td>25</td>
<td>I learn English just because my parents force me to learn.</td>
<td>1 2 3 4 5</td>
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<td>26</td>
<td>After entering university, my English learning is highly affected by test scores.</td>
<td>1 2 3 4 5</td>
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<tr>
<td>27</td>
<td>After entering university, my English learning depends on whether I love my English teacher or not.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>28</td>
<td>After entering university, my English learning is highly influenced by the quality of English teaching.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>29</td>
<td>After entering university, my English learning is highly affected by the textbooks.</td>
<td>1 2 3 4 5</td>
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<tr>
<td>30</td>
<td>The motivation of my college English learning depends mostly on whether I love the class that I belong to, whether I am involved in an active atmosphere of English learning.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>To obtain the diploma of college study is one of the most important motivations of my English learning.</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>32</td>
<td>It is important to learn English well because it is a very useful tool for social communication.</td>
<td>1 2 3 4 5</td>
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<tr>
<td>33</td>
<td>To learn English well will give me a sense of achievement.</td>
<td>1 2 3 4 5</td>
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<tr>
<td>Question</td>
<td>Extremely Untrue</td>
<td>Extremely True</td>
<td></td>
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<td>-------------------------------------------------------------------------</td>
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<tr>
<td>34 The aim of my English learning is to learn other subjects better</td>
<td>1 2 3 4 5</td>
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<tr>
<td>35 Only by learning English well can I find a good job in future</td>
<td>1 2 3 4 5</td>
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<tr>
<td>36 I learn English for the sake of learning more about the development</td>
<td>1 2 3 4 5</td>
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<tr>
<td>37 My English learning is affected by the interests in the cultures of</td>
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<tr>
<td>English-speaking countries</td>
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<tr>
<td>38 I have special interests in learning languages especially English</td>
<td>1 2 3 4 5</td>
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<tr>
<td>39 I love to learn English which is driven by the interests in English</td>
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<tr>
<td>40 I learn English aiming at letting the world know more about China</td>
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<tr>
<td>41 Great interests in English literatures drive me to learn English</td>
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<tr>
<td>42 Only by learning English well can I contribute more to the</td>
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<tr>
<td>prosperity of China</td>
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<tr>
<td>43 Only by learning English well can I live up to my parents expectations</td>
<td>1 2 3 4 5</td>
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<tr>
<td>44 I learn English because it can help me to find good jobs and receive</td>
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<td>better education abroad</td>
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<tr>
<td>45 I learn English with the aim of experiencing the cultures of</td>
<td>1 2 3 4 5</td>
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<tr>
<td>English-speaking countries</td>
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<tr>
<td>46 The final goal of my English learning is to emigrate abroad</td>
<td>1 2 3 4 5</td>
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<td>47 I learn English because it is an instrument for “life”</td>
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<tr>
<td>48 Fluent oral English is the symbol of one cultivation and education</td>
<td>1 2 3 4 5</td>
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</table>

Appendix 2 Interview Protocol

1 Please make a brief introduction of yourself such as your major, how long you have learned English, whether you have passed CET.

2 Please describe your daily English learning. The following questions are used to make a prompt if necessary:
   1 Are you clear of your teacher’s teaching aims?
   2 Do you often make plans on English learning? If you do, is it under the requirements of your English teacher?
   3 Can you catch up with the rhythms of your English teacher in class?
   4 Do you know what the English learning strategies are?
   5 How about your English learning strategies? Do you often use them in your English learning?
   6 Do you reflect the effectiveness of those strategies in your learning?
   7 Do you often think it over that your learning methods/approaches are effective? If they are not efficient, what will you do?

Continued on p. 75