

A Correlation Analysis between Motivation Types and Learning Achievements of TFC English Major Students

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Abstract

The tuition-free policy has been implemented in China for more than eight years. AS a special group of college students, they have become the target of research and have been studied in many perspectives. This study attempted to reveal the relationship between students' motivation type and their learning outcome by means of questionnaire and interview. Students' TEM 4 test results were also adopted to learn the correlation of motivation and achievements. The results showed that compared with the non-tuition-free counterparts, the tuition-free students did outperform in TEM 4 and there was a positive correlation between their motivation type and learning outcome. Most of the tuition-free students have intrinsically-driven motivation while the non-tuition-free students' motivations are mostly extrinsically-driven, which could help explain the differences in learning outcome. The findings suggest that the language teachers should try their best to create a learning atmosphere which may stimulate students' learning interest and intrinsic motivation.

Key words: tuition-free students; motivation type; learning outcome; correlation

Introduction

In 2007, the Ministry of Education in China has issued a policy to enroll excellent students to the six normal universities attached to the Ministry of Education for free education with the purpose of cultivating high-quality teaching staff for remote and underdeveloped areas. So far, the tuition-free policy has been implemented for eight years. Ever since its implementation, scholars begin to research into the special group of college students. Some of the researches are done into the understanding and rationality of the free education policy; others are concerned with the influencing factors of tuition-free students' career belief; still others are tackling the education model of the tuition-free students. These studies deal with the issue in a macro level. Few studies have been carried out to research into the micro-aspects of them. Besides, these studies are case studies with one of the six normal universities as the subject of their studies, especially the East China Normal University, Central China Normal University and Southwest University. Generally speaking, the research on tuition-free students can be divided into three stages. In the first stage, it mainly deals with the tuition-free students' study and life, including their identity recognition and their motives of being a tuition-free student. In the second stage, the researchers go deeper to explore the tuition-free students' psychology and value-orientation as well as their learning mood/style, and career-orientation. In the third stage, researchers start to do empirical studies on tuition-free students from the perspective of motivation. They adopted questionnaire and interview to investigate the students' motivation, recognition of the teaching career and the learning achievements. Few studies have been carried out to explore relationship among tuition-free students' motivation, their degree of engagement and learning outcome. This study aims to explore the correlation of the three variables.

Research questions

Three questions will be addressed in this study:

1. Do the tuition-free students exhibit different motivation types from non-tuition-free students?
2. Does motivation influence students' effort to study?
3. Do motivation type and motivation intensity lead to different learning outcome?

Subjects

The students admitted to School of Foreign Languages, Shanxi Normal University in Sept, 2012 were taken as the subjects. There are totally 73 students who are divided into two classes, with 33 students being the tuition-free students and the other 40 being the non-tuition free students. The average scores of English in College Entrance Examination are 121.26 and 118.67 respectively, which further confirms that at the beginning of college study, they exhibit no significant difference (Zheng Jianfeng, 2013:11). That is to say, both groups had the same starting point in terms of language proficiency when they started their university study. All the students in the tuition-free class are female while there are only 2 males in the other class. They are 23 years old on the average. What's more, in the past two years since they were admitted to the university, they have followed the same teaching syllabus and have been taught all the subjects by the same teachers at the same pace. The author chose them as the subjects to study because there is only one difference between them, namely the job prosperity after graduation. To put it specifically, unlike the other class of students, tuition-free students (TFC) know clearly that after graduation, they must go to the remote or poverty-stricken areas to teach English for at least three years and they are not allowed to take the graduate entrance examination before they have fulfilled their obligation. Therefore, during the college time, they do not need to worry about their future job, nor do they have the pressure of preparing for the graduate entrance examinations. The author assumes that such differences may more or less affect their motivation to learn English, which in turn influences the efforts they have made to their learning. As a result, the author assumes that it is significant to investigate them against the non-tuition-free (NTFC) peers.

Instruments

1. Questionnaire

The questionnaire used in this study was designed on the basis of Gao Yihong's Chinese College Undergraduates' English Learning Motivation Questionnaire (Gao Yihong et al, 2007) and Sun Yi's Questionnaire of Vocational College Students' Learning Motivation (2009). There are two parts, with Part One being designed to elicit personal information about the subjects, including their gender, age, type of students, scores on TEM 4. Part Two consists of 30 items which fell into two sub-scales of motivation type (1--20) and motivation intensity (21--30). The motivation type can be further divided into two groups and six categories, which are intrinsic motivation, including interest and motivation (4, 10, 16, 20) and integrative motivation(5, 11,17); and extrinsic motivation, including social motivation(1, 7, 13), certificate motivation(2, 8, 14), instrumental motivation(3, 9, 15, 19) and achievement motivation(6,12,18). As the students are major in English education, questions 2, 9 and 14 are changed to suit the characteristic of the students. The questionnaire adopted Likert five-point scale ranging from 1 (never true of me) to 5 (always true of me). According to Gao Yihong, the Cronbach's alpha of the questionnaire is 0.84.

2. Interview

To supplement the questionnaire, the author designed two open-ended questions for interview in order to know whether the policies concerning employment and graduate entrance examination have affected the tuition-free students' motivation of learning English. In other words, one question aims to learn whether a student becomes tuition-free students out of their own will or due to the financial burden of their family. The other question tries to know the impact of career orientation on their motivation, i.e. their willingness to be middle school English teachers in some underdeveloped areas.

3. Test

TEM4 for English majors was adapted to measure students' proficiency of English. It is an English proficiency test designed by the English Group of the Teaching Guiding Committee for College Foreign Language Majors under the Ministry of Education in China and administered to second-year English majors each spring. It has a history of about 20 years in China. As it is a nationwide examination, its validity and reliability need not be doubted. There are six parts in the test, including listening comprehension, cloze, grammar and vocabulary, reading comprehension and writing. The total score is 100 points. Besides dictation and writing, the rest of the test are mainly in the form of multiple choices, the rating of which is done by computer, thus the objectivity of rating can be guaranteed. Even the subjective parts can avoid subjectivity because they are rated by English teachers from colleges and universities all over China in Shanghai unanimously.

Procedures of data collection

1. Test

The subjects, together with all the sophomores of English major all over China, attended the TEM 4 examination in April 17th, 2014 and the test lasted 135 minutes. Immediately after the test, test papers were collected and sent to Shanghai through post. In May, 2014, the test papers were rated by teachers of English major selected from nearly all colleges and universities. The rating lasted about 10 days. The results of the tests were sent to each college and university from Shanghai at the end of October.

2. Questionnaire

On December 20, 2014, the author distributed the questionnaire to the two groups of students in regular class hour. The author firstly introduced the purpose of the questionnaire and informed the students that the questionnaire would be used for research and the result would be kept confidential. Then students started to fill in the questionnaire and it took them about 20 minutes to finish the questionnaire.

3. Interview

After the students have finished filling in the questionnaire, the author selected six students from the tuition-free class to conduct the interview. Two of them were regarded as the successful learners as they have got a score higher than 70 in TEM 4, two of them have got a score between 60 and 70 and the last two students failed the exam. The author recorded their responses with the mobile phone and transcribed them into words for subsequent analysis. The interview lasted about half an hour.

Result analysis

1. Analysis of students' TEM 4 results

In mid November, 2014, students' scores in TEM 4 have been sent to the university. Through calculation and sorting, we have got the distribution of students' performance in the test. As is shown in Table 1, in terms of means, the tuition-free students outperformed the non-tuition-free students, with the means and standard deviation being 68.82 vs 63.55 and 6.44147 vs 7.17596 respectively. What's more, as is shown in Tables 2 and 3, about one third of the tuition-free students have scored above 70 points while the proportion of non-tuition-free students is only 17.5%. On the contrary, the failing rate of tuition-free students is only 18.18%, almost 10% less than the non-tuition-free students (27.5%).

Table 1: Comparison of Students' Scores in TEM 4

	Class	N	Mean	Standard deviation	Levene's Test for Equality of Variances		t-test for Equality of Means	
					F	Sig.	t	Sig.(2-tailed)
TEM4	TFC	33	68.82	6.44147	.223	.639	1.600	.115
	NTFC	40	63.55	7.17596			1.613	.112

Table 2: The Percentages of Scores by TFC

		No.	percentage	Valid percentage	Accumulated percentage
valid	>=80	1	1.5	3.04	3.04
	80-70	10	16.4	30.3	33.34
	70-60	16	22.4	49.48	82.82
	<60	6	6.0	18.18	100.0
	total	33	46.3	100.0	
total		33	100.0		

Table 3: The Percentages of Scores by NTFC

		No.	percentage	Valid percentage	Accumulated percentage
Valid	80-70	7	10.4	17.5	17.5
	70-60	22	31.3	55	72.5
	<60	11	11.9	27.5	100.0
	total	40	53.7	100.0	
total		40	100.0		

2. Analysis of Questionnaire

Table 4 shows the overall situation of the two classes' motivation type and motivation intensity. The means for motivation in both classes are slightly above three, belonging to the medium level, which shows that students' learning motivation and motivation intensity are not strong enough. The T-test shows that there is no significant difference between the TFC and NTFC as Sig (2 tailed) are all greater than 0.05. However, in terms of intrinsic motivation, as is shown in Table 5 and Table 6, the TFC students got a higher mean score than the NTFC students and there is significant difference between the two groups of learners (Sig (2 tailed)=0.032<0.05). On the contrary, as is shown in Tables 7 and 8, the NTFC students got a higher mean score than the TFC students when it comes to extrinsic motivation and the difference is significant (Sig (2 tailed)=0.012<0.05).

Table 4 Comparison of Motivation Type and Motivation Intensity

	Class	N	Mean	Standard deviation	Levene's Test for Equality of Variances		t-test for Equality of Means	
					F	Sig.	t	Sig.(2-tailed)
Learning motivation	TFC	31	3.2776	.34855	.885	.350	1.711	.092
	NTFC	39	3.1181	.41570			1.746	.085
Motivation intensity	TFC	31	3.0674	.24615	6.651	.012	-1.048	.298
	NTFC	39	3.1562	.41657			-1.109	.272

Table 5 Group Statistics of Intrinsic Motivation

	Class	N	means	SD	Standard error Deviation
Intrinsic motivation	TFC	31	3.1818	.35417	.06165
	NTFC	39	2.9778	.42919	.06786

Table 6 Independent T-test of Intrinsic Motivation of TFC and NTFC

		Levene's Test for Equality of Variances		t-test for Equality of Means							95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig.(2-tailed)	Mean difference	Std. Error Difference	Lower	Upper		
Intrinsic motivation	Equal variances assumed	.100	.752	2.185	71	.032	.20404	.09339	.01782	.39026		
	Equal variances not assumed			2.225	70.999	.029	.20404	.09169	.02122	.38686		

Table 7 Group Statistics of Extrinsic Motivation

	Class	N	mean	Std. Deviation	Std. Error Mean
Extrinsic motivation	TFC	33	2.9879	.19646	.03420
	NTFC	40	3.1150	.21786	.03445

Table 8 Independent T-test of Extrinsic Motivation of TFC and NTFC

	Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig.(2-tailed)	Mean difference	Std. Error Difference	Lower	Upper	
Extrinsic motivation	Equal variances assumed	.176	.676	-2.593	71	.012	-.12712	.04903	-.22488	-.02936
	Equal variances not assumed			-2.619	70.406	.011	-.12712	.04854	-.22392	-.03032

Tables 9 and 10 indicated the results of correlation analysis, which showed that TFC students' TEM 4 results are positively related to their intrinsic motivation ($p=0.000<0.01$) while no such correlation can be found with the extrinsic motivation ($p=0.544>0.01$). That is to say, students with intrinsic motivation usually will seek various opportunities to devote to English learning, which will lead to their better performance in the examination. For the NTFC students, their success in the examination is attributed to their extrinsic motivation rather than intrinsic motivation ($p=0.000<0.01$).

Table 9 Pearson Correlation between TEM 4 Results and Motivation Type of TFC

		TEM 4	Intrinsic motivation	Extrinsic motivation
TEM 4	Pearson correlation	1	.823**	.109
	Sig.(2-tailed)		.000	.544
	N	33	33	33
Intrinsic motivation	Pearson correlation	.823**	1	.015
	Sig.(2-tailed)	.000		.934
	N	33	33	33
Extrinsic motivation	Pearson correlation	.109	.015	1
	Sig.(2-tailed)	.544	.934	
	N	33	33	33

**. Significant at the level of .01 (2-tailed)

Table 10 Correlation between TEM 4 Results and Motivation Type of NTFC

		TEM4	Intrinsic motivation	Extrinsic motivation
TEM 4	Pearson correlation	1	.355*	.743**
	Sig.(2-tailed)		.024	.000
	N	40	40	40
Intrinsic motivation	Pearson correlation	.355*	1	.193
	Sig.(2-tailed)	.024		.234
	N	40	40	40
Extrinsic motivation	Pearson correlation	.743**	.193	1
	Sig.(2-tailed)	.000	.234	
	N	40	40	40

*. Significant at the level of .05 (2-tailed)

**. Significant at the level of .01 (2-tailed)

3. Analysis of Interview

Six students with different grades in TEM 4 from TFC were involved in the interview. When they were asked whether they came to the university as tuition-free students out of their own will, only two of them gave an affirmative answer while the other four admitted that they agreed to attend the university just because of the privilege of enjoying free college education. They came from rural areas and their parents could hardly afford the high expenses of college tuition fee just with the income from working on the land and doing some odd jobs. One of the two students who failed the TEM 4 examination mentioned that she regarded the identity of TFC student as an indignity because she was afraid that others might look down upon her because of her poor family condition. Furthermore, even before they came to the university, they knew very clearly of their rights and obligations as TFC students. Some of them said that at the beginning, their prosperity of working as an English teacher in the underdeveloped areas made them disappointed as they were deprived of the opportunity to further their study after graduation. Without an obviously inner drive, they did not know how to manage their college life. One of the interviewees stated that it took her almost two months to adapt herself to the college life and another girl admitted that even two years later, she had not well integrated into community and lacked the initiative to study. However, there were different stories for successful learners. When they were not controlled by extrinsic pressure, they were guided by their interest and would seek opportunities to absorb the essence of English language and culture. One of the interviewees who got a higher score in TEM 4 said that the job prospect did not have a negative effect on her; rather she took it as an opportunity to cultivate herself. She said, "when the other students were busy with other activities at the university, I can spend my time reading English novels or watching English movies or American sitcoms".

Discussion

Gardner and Lambert (1972) have distinguished instrumental motivation from integrative motivation. The former refers to the motivation stimulated by practical considerations, such as passing an English exam or getting a job while the latter refers to motivation arising from positive attitudes to a language and willingness to get integrated into the relevant culture. That is to say, instrumental motivation comes from the external pressures and integrative motivation derives from the intrinsic interest in the language and culture. Although both instrumental motivation and integrative motivation will lead to the success of language learning, it is generally believed that integrative motivation is stronger and longer-lasting than instrumental motivation. As the TFC students have no pressures concerning their job and further study, they are mostly motivated by their interest in English language and culture. Their learning at university is not examination-oriented although they also need to pass various examinations like the NTFC students. As they are not allowed to take the graduate entrance examination and have to serve as an English teacher in some remote areas in Shanxi province for at least three years, they do not need to worry about the job hunting and examination so they can devote to the learning of English whole-heartedly. In the process of learning, they have gained the charm of English, which further strengthened their passion for English language learning and thus a virtuous circle has been formed. It should be noted that some TFC students became drifted and demotivated just for the same reason. That may well explain why they failed the TEM 4 examination. For learners who are strongly affected by instrumental motivation, once such motivation disappears, they would lose the morale to carry on their English learning.

For the NTFC students, ever since they entered the university, they realized the fierce competition in the future job market, so they need to work hard to pass all the examination and get various certificates to prepare for the future job interview. Their time and energy have to be divided evenly to more activities and more directions than the TFC students. In other words, most of them had instrumental motivations and they were job-oriented or certificate oriented. Though they might be successful in examination or competitions for the time being, in the long run, they were lagged behind when they were tested for overall language proficiency.

Conclusion

Motivation plays a dominant role in making learning successful. The degree of motivation will directly influence students' motivation intensity, their attitude to the learning environment, the choice of language learning strategies and their self-efficacy. As students with intrinsic motivation are more likely to become successful language learners, teachers should try every possible means to search authentic materials and design interesting language learning activities to arouse students' interest and enrich the learning channels.

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