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A Study on the Effects of Learning Motivation and Boredom on English Learning Outcomes of Chinese College Students

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Abstract: In recent years, boredom has become a research hotspot in the field of second language acquisition. What's more, the effects of boredom on learning outcomes and motivation on learning outcomes have been widely discussed by scholars. However, it is a rare study on the effects of motivation and boredom on English learning outcomes. There is a gap in the research. The aim of this study is to explore the relationship between the three projects. After that, this study will provide better strategies to achieve the best learning results for educators and learners. The results show that there is a significant correlation between boredom and learning motivation, and boredom also has an effect on learning outcomes. However, there is no correlation between learning motivation and learning outcomes. Based on this result, the educators and learners can reduce boredom to develop learning outcomes by many approaches, such as reward system, interest in learning and so on.

Keywords: learning motivation, boredom, English learning outcomes, Chinese college students

1. Introduction

In recent years, with the "Emotional turn" of language applied linguistics, the study of emotion in language learning has become a new hot topic, and the research shows a significant growth trend [1]. Emotion plays an important role in the quality of college English teaching and the learning effect of students. Good emotion can make students quickly integrate into college English learning activities and cultivate good motivation, strengthen the quality of teaching, improve the effectiveness of learning [2]. At present, more and more researchers have paid attention to the study of the effects of motivation and emotion on second language acquisition. Besides, most researchers focus on the hindrance of boredom to learning motivation, the influence of learning emotion on learning achievement, and the influence of learning motivation on learning achievement. However, little attention has been paid to the interaction among motivation, boredom and learning outcomes [3-5].

The purpose of this study is to explore the relationship among intrinsic motivation, extrinsic motivation and boredom. Meanwhile, it will further research the effects of learning motivation and boredom on learning outcomes. Also, it provides suggestions on how to help teachers motivate students and how to formulate effective learning strategies to achieve the best learning outcomes.

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2. Method

2.1. Research Hypothesis

In some previous studies, researchers have not clearly defined the relationship between learning motivation and learning emotion, and put emotional factors into the category of motivation. The distinction between intrinsic motivation and extrinsic motivation is also in a fuzzy state. In order to get more accurate and specific results, this study will assume that intrinsic motivation, extrinsic motivation, boredom as three completely independent parts, and there is no cross-inclusion relationship. On that basis, we will explore the interaction between the three.

2.2. Research Instruments

2.2.1. Learning Motivation Scale

The measurement of intrinsic motivation and extrinsic motivation in learning motivation was made by Amabile et al and revised by Chi Liping and Xin Ziqiang [6,7]. The scale consists of 30 items, including two subscales of intrinsic motivation and extrinsic motivation. The scale adopts a 4-grade scoring method, and the score indicates the level of motivation.

2.2.2. Short Version of the Boring Tendency Scale

Boredom was measured using a short version of the boredom tendency scale designed by Famer and Sundberg and revised by Li Xiaomin et al. [8]. The scale consists of 12 items, which are divided into two dimensions: internal and external stimulation. The higher the total score, the higher the tendency of boredom.

2.2.3. Data Analysis Software

The correlation among learning motivation, boredom and learning outcomes were analyzed by SPSSAU software. A total of 7 groups of tests were carried out, including 3 groups of experiments with boredom as an independent variable, intrinsic motivation, extrinsic motivation and learning achievement as dependent variables. Intrinsic motivation and extrinsic motivation as independent variables, the boring emotion and learning effect were taken as dependent variables in 4 groups of experiments.

2.3. Questionnaire Design

There were 18 items in the questionnaire, including gender, grade and other basic information. According to learning motivation scale, 6 items of intrinsic motivation and extrinsic motivation were selected to measure learning motivation. 3 items in the short version of the boredom proneness scale were selected for the analysis of boredom proneness, and the grade 4 of the national college students was used as the test standard of learning effectiveness [1,3]. The reliability and validity of the questionnaire were tested. The reliability and validity of the questionnaire were 0.854(> 0.8) and 0.844(> 0.8), which indicated that the reliability and validity of the questionnaire were very strong and the study data were very suitable for extracting information.

2.4. Questionnaire Distribution and Recall

In this study, 203 questionnaires were collected, 97 boys and 106 girls. The effective rate was 99%. The survey covers a wide range of college students from 21 provinces in China.

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3. Result

As Table 1 shows, the relationship between boredom and learning motivation was significant, and the p-values of each question was less than 0.1, there was a strong correlation of 0.00 between “I don't care so much what other people think of my academic performance” and “It's hard for me to find an academic course or work assignment that excites me” “All I had to do was repeat the monotony” and “I always feel that the surroundings are monotonous and boring”.

Table 1: The correlation between boredom and motivation to learn

		It's hard for me to find an academic course or work assignment that excites me	All I had to do was repeat the monotony	I always feel that the surroundings are monotonous and boring
I don't care so much what other people think of my academic performance	Correlation	0.264**	0.270**	0.254**
	p-values	0.000	0.000	0.000
	Sample size	203	203	203
The more difficult the problem, the more willing I am to try to solve it	Correlation	0.233**	0.263**	0.229**
	p-values	0.001	0.000	0.001
	Sample size	203	203	203
I am very clear that my goal or goal is to pursue good grades	Correlation	0.190**	0.259**	0.222**
	p-values	0.007	0.000	0.001
	Sample size	203	203	203
I hope that my job will provide me with the opportunity to increase my knowledge and skills	Correlation	0.130	0.118	0.156*
	p-values	0.064	0.093	0.027
	Sample size	203	203	203
I know exactly what I want to achieve in my academic performance	Correlation	0.131	0.201**	0.136
	p-values	0.062	0.004	0.053
	Sample size	203	203	203
I'm less concerned with what I do than what I get in return	Correlation	0.193**	0.217**	0.257**
	p-values	0.006	0.002	0.000
	Sample size	203	203	203
I care a lot about how people react to my ideas	Correlation	0.222**	0.233**	0.258**
	p-values	0.001	0.001	0.000
	Sample size	203	203	203
I'm more content when I can set my own goals	Correlation	0.226**	0.180*	0.252**
	p-values	0.001	0.010	0.000
	Sample size	203	203	203

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Table 1: (continued)

		It's hard for me to find an academic course or work assignment that excites me	All I had to do was repeat the monotony	I always feel that the surroundings are monotonous and boring
I think there's no point in doing a good job if no one knows about it	Correlation	0.199**	0.169*	0.280**
	p-values	0.005	0.016	0.000
	Sample size	203	203	203
I enjoy doing interesting work that makes me lose my focus	Correlation	0.200**	0.117	0.149*
	p-values	0.004	0.095	0.034
	Sample size	203	203	203
Being able to win the approval and appreciation of others is the main motivation to push me to work hard	Correlation	0.218**	0.193**	0.130
	p-values	0.002	0.006	0.064
	Sample size	203	203	203
I want people to see how well I can do academically	Correlation	0.178*	0.153*	0.216**
	p-values	0.011	0.029	0.002
	Sample size	203	203	203

*p<0.0, **p<0.01

As Table 2 shows, the relationship between boredom and learning outcomes, the p-values for “It's hard for me to find an academic course or work assignment that excites me” “I always feel that the surroundings are monotonous and boring” to “CET-4 scores” were 0.171(>0.05) and 0.057(>0.05), respectively, no correlation. There was a significant positive correlation between “All I had to do was repeat the monotony” and “CET-4 scores” (p=0.041<0.05).

Table 2: The correlation between boredom and learning outcomes

		CET-4 scores
It's hard for me to find an academic course or work assignment that excites me	Correlation	0.096
	p-values	0.171
	Sample size	203
All I had to do was repeat the monotony	Correlation	0.144*
	p-values	0.041
	Sample size	203
I always feel that the surroundings are monotonous and boring	Correlation	0.134
	p-values	0.057
	Sample size	203

*p<0.0, **p<0.01

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As Table 3 shows, study on the relationship between learning motivation and learning effectiveness，the p-values for “I don't think it works well but no one knows” and“CET-4 scores” is 0.074 (<0.1), related. The rest are not related.

Table 3: The correlation between learning motivation and learning outcomes

		CET-4 scores
I don't care so much what other people think of my academic performance	Correlation	-0.002
	p-values	0.983
	Sample size	203
The more difficult the problem, the more willing I am to try to solve it	Correlation	0.062
	p-values	0.381
	Sample size	203
I am very clear that my goal or goal is to pursue good grades	Correlation	0.040
	p-values	0.567
	Sample size	203
I hope that my job will provide me with the opportunity to increase my knowledge and skills	Correlation	-0.034
	p-values	0.629
	Sample size	203
I know exactly what I want to achieve in my academic performance	Correlation	-0.082
	p-values	0.245
	Sample size	203
I'm more concerned about what I do, but what I get from it	Correlation	0.068
	p-values	0.337
	Sample size	203
I care how people react to my opinion	Correlation	0.099
	p-values	0.158
	Sample size	203
When I can set my goals, I feel more better	Correlation	0.027
	p-values	0.702
	Sample size	203
I don't think it works well but no one knows	Correlation	0.126
	p-values	0.074
	Sample size	203
I am happy to be interested in those jobs that will make me forget everything	Correlation	0.027
	p-values	0.702
	Sample size	203
Winning recognition and admiration from others is the main motivation behind my effort	Correlation	0.092
	p-values	0.194
	Sample size	203

*p<0.05, **p<0.01

As Table 4 shows, by using structural equation modeling, this study analyzes the correlation among boredom, learning motivation (intrinsic motivation and extrinsic motivation) and learning outcomes. Boredom was set to factor 1, intrinsic motivation was set to factor 2, the external motivation was set as factor 3, and the learning effect was set as factor 4. The results showed that boredom had a negative correlation with the internal motivation (p=0.00<0.01); there was a positive correlation between intrinsic motivation and boredom (p=0.001<0.01). The effect of boredom on

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extrinsic motivation was positively correlated (p=0.036<0.05), and the effect of extrinsic motivation on boredom was negatively correlated (p=0.00<0.01). There was a negative correlation between boredom and learning outcomes (p=0.083<0.1). However, there is no correlation between intrinsic motivation and extrinsic motivation.

Table 4: The regression analysis of boredom, learning motivation and learning effect

X	→	Y	Non-normalized regression coefficients	*SE*	*z*(CR-*values*)	*p*	standardized regression coefficient
Factor1	→	Factor2	0.210	0.054	3.868	0.000	0.561
Factor1	→	Factor3	-0.538	0.256	-2.096	0.036	-1.377
Factor1	→	Factor4	0.105	0.061	1.735	0.083	0.268
Factor2	→	Factor1	-2.311	0.684	-3.378	0.001	-0.866
Factor2	→	Factor4	-0.173	0.181	-0.959	0.338	-0.166
Factor3	→	Factor1	4.453	0.449	9.907	0.000	1.739
Factor3	→	Factor4	0.207	0.171	1.210	0.226	0.207
Factor1	→	I always feel that the surroundings are monotonous and boring	0.923	0.070	13.221	0.000	0.846
Factor1	→	All I had to do was repeat the monotony	1.020	0.077	13.297	0.000	0.852
Factor1	→	It's hard for me to find an academic course or work assignment that excites me	1.000	-	-	-	0.827
Factor2	→	I hope that my job will provide me with the opportunity to increase my knowledge and skills	0.887	0.132	6.702	0.000	0.635
Factor2	→	I am very clear that my goal or goal is to pursue good grades	1.296	0.175	7.402	0.000	0.754
Factor2	→	The more difficult the problem, the more willing I am to try to solve it	1.112	0.153	7.279	0.000	0.730
Factor2	→	I don't care so much what other people think of my academic performance	1.000	-	-	-	0.557
Factor2	→	I'm more concerned about what I do, but what I get from it	1.043	0.156	6.683	0.000	0.633
Factor2	→	I know exactly what I want to achieve in my academic performance	1.182	0.164	7.217	0.000	0.719
Factor3	→	I want others to see how good I will be	1.161	0.136	8.526	0.000	0.714
Factor3	→	Winning recognition and admiration from others is the main motivation behind my effort	1.107	0.127	8.716	0.000	0.735
Factor3	→	I am happy to be interested in those jobs that will make me forget everything	0.940	0.121	7.794	0.000	0.640
Factor3	→	I don't think it works well but no one knows	1.102	0.133	8.296	0.000	0.690
Factor3	→	When I can set my goals, I feel better	0.960	0.115	8.346	0.000	0.695
Factor3	→	I care how people react to my opinion	1.000	-	-	-	0.663
Factor4	→	CET-4 scores	1.000	-	-	-	0.537

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4. Discussion

The significant relationship between learning motivation and boredom may be due to the fact that boredom can lead to students' unwillingness to complete learning tasks and decrease learning motivation. In contrast, when students have strong learning motivation, they will eliminate their boredom. This can help students to find the best way to control boredom and correct learning motivation, strong intrinsic motivation is conducive to overcome the effects of boredom, and enhance learning effectiveness. However, a strong sense of boredom will weaken students' intrinsic motivation to learn which isn't conducive to the enhancement of learning effectiveness. For example, teachers can take the reward mechanism, create a good learning environment to improve students' learning motivation to reduce their boredom. Students can take self-motivation, self-comfort and other ways [9]. The research shows that the more bored the students are, the stronger their external motivation is. Also, the stronger their external motivation is, the better their boredom will be controlled, and the better their academic performance will be.

The reason for the discordance between learning motivation and learning outcomes may be that the selection of items representing learning outcomes is biased. College students pay little attention to CET-4 and don't study it seriously. They mostly rely on senior high school. Therefore, the influence of learning motivation on learning outcomes can't get real feedback. What's more, the sample base number is small, it will lead to existence error.

5. Conclusion

This study proves the relationship between learning motivation and boredom, and that boredom motivation has a certain effect on learning outcomes, while learning motivation has no effect on learning outcomes. However, there are some limitations in this study:

(1) The study sample is small and the data is not representative. The number of sample data has a significant impact on the results of the study. After the increase of sample data, the relationship of learning motivation, boredom and learning outcomes will change to some extent.

(2) The subjective influence of the investigators has a certain range of deviation. When filling in the questionnaire, the researcher is influenced by the ability to understand the question, the seriousness of filling in the questionnaire, the surrounding environment and so on.

There is some advice for the latter. The follow-up scholars can also adopt more accurate and objective investigation methods. They can expand the sample size and use other methods to reduce the error of learning motivation, boredom, and learning outcomes of the relationship between more in-depth research. They can also continue to explore whether there is an intermediary variable among the three aspects. Besides, whether there is a certain rule among the different results caused by different sample sizes.

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