



Data Analysis on the Factors Affecting the Entrepreneurial Intentions of English Majors in Local Universities

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Abstract

In this paper, a questionnaire is compiled to collect data about factors affecting the entrepreneurial intentions of English majors in Hei Longjiang province using a sample of 756. Through the analysis by SPSS, the results show that students' background information has less significance on entrepreneurial intentions, however, self-efficacy, the influence of parents and friends, government support and university support have significant impacts on entrepreneurial intentions.

Keywords: data analysis; entrepreneurial intentions; affecting factors; English majors

1. INTRODUCTION

With the development of The Belt and Road Initiative and the massive wave of business startups and innovation, entrepreneurship becomes a driving force of economic development. Alongside that, the number of graduates is growing larger and English graduates are no exception, so the employment prospects of English majors remain grim. Party and government always give top priority to employment because employment is pivotal to people's well-being. There is no doubt that entrepreneurship can be helpful in alleviating employment pressure. Factors affecting entrepreneurial intention are reasonable predictors for business startups. Therefore, figuring out those factors can be a useful way to encourage entrepreneurship in order to stabilize employment and ensure the living standard. A bunch of researches has been done in the field of influencing factors of starting business, but rare researches focus on English major graduates in Hei Longjiang province. Hence, the author discussed the affecting factors of entrepreneurial intentions in English majors from local universities, and some main factors are concluded so that some suggestions can be drawn.

2. RESEARCH DESIGN

There are some factors affecting the entrepreneurial intentions of college students. Stein K [5] analyzed

entrepreneurial intentions of students from Norway and Indonesia and built a model, then found that background information and personality characteristics are major factors. Guo Jinfeng [2] found that self-efficiency is the inner drive force for entrepreneurial intention. Bandera [1] pointed out that abundant relevant knowledge could enhance entrepreneurial intention from the perspective of psychology. Witold Nowiński and Mohamed Yacine Haddoud [6] proved that the absence of role models leads to low entrepreneurial intention.

According to the literature review, the entrepreneurial intention is affected by some factors mainly including personality characteristics, self-efficiency, professional knowledge of English majors, the impact of parents, government support, college support. Therefore, those factors are arranged in the questionnaires including 31 questions. The questionnaire was filled out by 756 English major undergraduates from different universities in Hei Longjiang Province including Northeast Petroleum University, Harbin University of Science and Technology, Heilongjiang Bayi Agricultural University, Daqing Normal University, Qiqihar University and Mudanjiang Normal University. 756 questionnaires are available, and the SPSS22 is used.

In order to test the reliability of the questionnaire, the Cronbach's Alpha is 0.928 according to the analysis of SPSS22.

TABLE 1: Chart 1 Reliability Statistics

Cronbach's Alpha	N of Items
.928	7

Also, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy(KMO) is 0.952, and the Bartlett Test of Sphericity is significant.

TABLE 2: Chart 2 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.952
Bartlett's Test of Sphericity	Approx. Chi-Square	15965.775
	df	231
	Sig.	.000

3. RESULTS AND ANALYZES

3.1. Descriptive statistics

Entrepreneur's background information is important to entrepreneurial intention. Therefore, descriptive statistics is used to analyze some background information.

TABLE 3: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
entrepreneurial intentions	756	1.00	5.00	2.7136	1.04549
Valid N (listwise)	756				

According to the result, it shows that the overall entrepreneurial intention of English majors in Hei Longjiang province is not so strong. The mean of entrepreneurial intention is 2.71 and the standard deviation is 1.04.

TABLE 4. Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
entrepreneurial intentions	assumed	.585	.445	.758	754	.449	.08544	.11275	-.13589	.30678
	not assumed			.712	124.203	.478	.08544	.12005	-.15216	.32304

The result of independent samples test between genders shows that there is no significant difference between genders. That the number of female students is much more than male students in English majors may account for this.

Then the element in background information is analyzed one by one.

3.1.1. Gender

The result of independent samples test between genders shows that there is no significant difference between genders. That the number of female students is much more than male students in English majors may account for this.

3.1.2. Grades

According to the Anova test of grades, grade differences were not significant as well, which means entrepreneurial intentions from every grade are all weak.

TABLE 5: Anova

entrepreneurial intentions					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.022	3	2.674	2.460	.062
Within Groups	817.228	752	1.087		
Total	825.250	755			

This result is different from other researchers', that is to say, even senior English majors from Hei Longjiang province show less interest in starting their own business.

3.1.3. Family structure

Test of Homogeneity of Variances is the premise of Anova test. Therefore, the figure below explains the homogeneity of variances. In the next table, the figure of Anova test indicates that the influence of family structure to entrepreneurial intention is not notable.

TABLE 6: Test of Homogeneity of Variances

entrepreneurial intentions			
Levene Statistic	df1	df2	Sig.
3.568	3	752	.014

TABLE 7: Anova

entrepreneurial intentions					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.062	3	1.021	.934	.424
Within Groups	822.187	752	1.093		
Total	825.250	755			

The result is entirely alien from Li Linli [3] who claims The single-parent families of English major students in Chongqing have stronger entrepreneurial intentions than those non-single-parent .

3.1.4. The order of siblings

Based on the table below, the order of siblings has less significant impact on English majors' entrepreneurial intentions.

TABLE 8: Test of Homogeneity of Variances

entrepreneurial intentions			
Levene Statistic	df1	df2	Sig.
3.259	3	752	.021

TABLE 9: Anova

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.843	3	2.614	2.405	.066
Within Groups	817.406	752	1.087		
Total	825.250	755			

From this result, we can see that practice without theoretical support and guidance is meaningless. That's the reason why students are in badly need of organized internship.

3.1.5. Parents' jobs

The data analysis below illustrates that English majors' entrepreneurial intentions are less significantly impacted by their parents' jobs.

TABLE 10: Test of Homogeneity of Variances

entrepreneurial intentions			
Levene Statistic	df1	df2	Sig.
2.411	4	751	.048

TABLE 11: Anova

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.342	4	.336	.306	.874
Within Groups	823.907	751	1.097		
Total	825.250	755			

In former research, it is often accepted that students whose parents run a business would tend to create their own business. But the data tell the opposite answer. There is an assumption that what really matters is who is students' real model. A student born in a business family may worship scientist, that's why he shows no interest in entrepreneurship.

3.1.6. Part-time experience

Obviously, there is no clear significance between part-time experience and entrepreneurial intentions.

3.1.7. Student cadres' experience

Likewise, there is no sign of significance about being student cadres have positive impact on entrepreneurial intentions.

Cadres' experience could train students leadership, capability of handling things and so on. But that is far from enough, since there are more indispensable abilities in starting a business.

The result proves that no matter the order of siblings, the oldest child or the youngest one, students all have the potential to start their own business.

TABLE 12: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
entrepreneurial intentions	Equal variances assumed	.530	.467	-.240	754	.810	-.01842	.07659	-.16878	.13194
	Equal variances not assumed			-.241	722.470	.810	-.01842	.07641	-.16844	.13160

government support and university support are strongly related to entrepreneurial intentions.

3.2 Correlation analysis

As it is shown from the table, the Pearson correlation between entrepreneurial intentions and personal traits is .453, which reveals moderate degree of correlation. The coefficient of correlation between entrepreneurial intentions and entrepreneurial self-efficacy is .697, which means they are strongly associated. The Pearson correlation between entrepreneurial intentions and professional knowledge of English majors is .580, a moderate degree of correlation. The correlation coefficient between entrepreneurial intentions and the influence of parents as well as friends is .700 demonstrating a strong correlation of the two. The figure of Pearson correlation between entrepreneurial intentions and government support is .779. What's more, The correlation coefficient between entrepreneurial intentions and university support is .759. Both of them belong to strong correlation.

From correlation analysis, entrepreneurial self-efficacy, the influence of parents as well as friends,

3.3 Multiple regression analysis

Multiple regression equations were constructed with entrepreneurial intention as the dependent variable and personal traits, self-efficacy, English expertise, the influence of parents and friends, government support, and university support as independent variables. The results of the equation test showed that the regression equation is significant ($F=268.846$, $p<0.001$), the independent variables personal traits ($t=-0.531$, $p=0.596$) and English professional knowledge ($t=-1.418$, $p=0.157$) were not significant, and the rest of the independent variables were significant, explaining a total of 68.3% of the variance in the dependent variable. Therefore, the multiple regression equation can be represented as $Y(\text{entrepreneurial intentions})=-0.317+0.252X_1(\text{self-efficacy})+0.119X_2(\text{the influence of parents and friends})+0.283X_3(\text{government support})+0.309X_4(\text{university support})$.

TABLE 13. Regression equations were normalized by the regression coefficients and the tests

pendent Variable	independent variable	β	t	F	ΔR^2
entrepreneurial intentions	constant	-0.317	-3.121**	268.846***	0.683
	personal traits	-0.014	-0.531		
	self-efficacy	0.252	7.656***		
	English expertise	-0.044	-1.418		
	the influence of parents and friends	0.119	3.331**		
	government support	0.283	6.196***		
	university support	0.309	7.851***		

Note: * $p<0.05$, ** $p<0.01$, *** $p<0.001$.

4 CONCLUSIONS AND SUGGESTIONS

In light of this study on English majors, it's found that the personal backgrounds of English majors including gender, family structure, the order of siblings, grade, parents' job, part-time experience and student

cadre experience were not significantly related to their entrepreneurial intentions, which means that we have the opportunity to stimulate and activate every English major's entrepreneurial intention regardless of their personal backgrounds.

What really affects English majors' entrepreneurial intentions are personal traits, self-efficacy, English expertise, the influence of parents and friends,

government support, and university support. Therefore, based on the above findings, some suggestions were given in the essay.

TABLE 14: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
entrepreneurial intentions	Equal variances assumed	.003	.958	.363	754	.717	.03147	.08667	-.13868	.20162
	Equal variances not assumed			.361	340.124	.718	.03147	.08715	-.13995	.20289

TABLE 15: Correlations

		entrepreneurial intentions	personal traits	self-efficacy	English expertise	the influence of parents and friends	government support	university support
entrepreneurial intentions	Pearson Correlation	1						
personal traits	Pearson Correlation	.453**	1					
self-efficacy	Pearson Correlation	.697**	.583**	1				
English expertise	Pearson Correlation	.580**	.553**	.646**	1			
the influence of parents and friends	Pearson Correlation	.700**	.493**	.682**	.626**	1		
government support	Pearson Correlation	.779**	.494**	.704**	.667**	.794**	1	
university support	Pearson Correlation	.759**	.472**	.649**	.665**	.707**	.840**	1

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

4.1. From the university point of view

4.1.1. Add entrepreneurship-related courses into the curriculum of English majors

Firstly, the courses of English majors mainly include English and American literature, translation, et al. The concept of entrepreneurship and starting business should be penetrated when teaching these courses in order to

encourage self-employment. Secondly, English majors should develop their language communication skills, innovative thinking and logical reasoning ability, critical thinking manners, collaboration spirit and self-learning ability. A good mastery of language as a tool will lay a good foundation for their future entrepreneurial career. In addition, the curriculum should focus on cultivating interdisciplinary talents. Therefore, English is an excellent tool, and it will be the most advantageous to study together with other disciplines such as law,

economics and so on. Finally, the curriculum should also increase the practical courses of entrepreneurship in response to the call of the state to enhance labor education and foster hard-working spirit.

4.1.2. Create a platform for entrepreneurial practice

To achieve an effective link from the English classroom to every walk of life, universities should launch a variety of creative and practical activities on starting-ups in the campus, such as entrepreneurship competitions. There is also the option of building entrepreneurial platforms in conjunction with off-campus enterprises. In such a manner, these activities can provide a platform for students to sharpen their entrepreneurial skills and pave the way for future entrepreneurship.

4.1.3. Stimulate students' entrepreneurial consciousness and improving college students' sense of entrepreneurial efficacy

Under the impact of traditional notions, many college students may prefer a stable job. Coupled with the current wave of civil service examination boosting, students are showing a strong tendency to find a leisurely job after graduation. In order to break this convention and promote more excellent labor resources to create more social wealth, universities should carry out vigorously lectures on innovation, career guidance courses, etc. so that college students can understand that entrepreneurship is also an important way to get out of poverty and realize their life aspirations. Universities can also invite successful alumni to come back to school and impart their successful or fail experience and exchange ideas with students to set an example or offer a lesson for students on campus. The successful experience of business start-up of friends around them will enhance the self-efficacy of college students to start their own business and motivate them.

4.1.4. Create an entrepreneurship-friendly campus environment

A campus environment that fully embraces entrepreneurship is fertile soil for students to engage in entrepreneurship. Schools should organize various forms of innovative and entrepreneurial activities, such as "Double Innovation Week" and increase the publicity of entrepreneurship and start-ups. It is indispensable to make the concept of being bold, willing, and brave to start a business a trend in the school.

4.1.5. Strengthen the entrepreneurship faculty in universities

Teachers play an irreplaceable role in teaching students by example. Therefore, our ranks of teachers in the university should not only have knowledgeable ones, but also those who are competent in entrepreneurship and starting business. Inspiring school faculty to start business should be a keynote [4]. Schools can join hands with enterprises and hire the best of the enterprises as the students' off-campus mentors to impart experience to students, stimulate their entrepreneurial enthusiasm aiming to establish a cooperative entrepreneurial talent training mechanism among enterprises, schools and governments.

4.2. In the perspective of the government

4.2.1. Provide all-round policy support and optimize entrepreneurial environment

The government's support and encouragement for college students is a key part of college students' entrepreneurship. It is necessary to continuously improve the implementation of inclusive financial policy, reduce the tax, and increase the number of loans for college students' entrepreneurship. At the same time, give lower loan interest rates to college students and simplify the procedure of handling business licenses. Enhance the information service for college students' entrepreneurship, boost the integration of resources and establish the information service platform for college students' entrepreneurship.

4.2.2. Build entrepreneurial bases and strengthen entrepreneurial incentives

Arrange free incubation sites for college students to start their business. Meanwhile, introduce preferential policies to attract them to stay there, such as giving rent subsidies and reducing water and electricity fees. Further material rewards are given to companies and projects successfully incubated and vigorously publicized. An excellent instance lay in Hangzhou city, it was announced that 100,000 yuan was given to college students to start their own business, and if the college students failed to start their own business, then the 100,000 yuan of business debt would be repaid by the local government. This move has inspired the confidence of many college students to start their own business, and talents are constant streams flowing into Hangzhou city.

4.3. In terms of personal Traits

College students need to make an accurate and comprehensive analysis of their own characteristics, understand their strengths and weaknesses, and clarify their career plans and life goals. For those students who

have the intention of entrepreneurship, we need to give them correct guidance so that they can establish the correct values and beliefs. It is fundamental to focus on cultivating college students' innovative and entrepreneurial consciousness. To do so, they can change their own conventional concepts and their personal initiative will have a great impact on their individual behavior. College students should actively participate in some entrepreneurial activities organized by the school and have more internships to build a solid foundation for entrepreneurship. Meanwhile, college students should acquire considerable knowledge of entrepreneurship, including finance, management, policy, company operation and so on. Through trial and error, students' sense of entrepreneurial efficacy can be gradually improved, which will help them access to success in their business.

4.4. Support from family and friends

The support of family and friends is also one of the important conditions for college entrepreneurs to start a successful business. College students are not strong-willed and inexperienced in life, so they need to overcome many difficulties, and the road to entrepreneurship is not smooth and often full of thorns and bumps. Therefore, the support provided by family and friends is crucial, no matter the support is spiritual or material. At the same time, for some successful college students, we should actively invite them to come back to the campus to share their experience and set an example for other college students.

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