Study on the Influencing Factors of College Students' Entrepreneurship based on Network Quesrionnaire and SPSS System

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Abstract-Due to the changes and development of economic society and the advent of the information age, many college students choose to start their businesses in university rather than after graduation. The purpose of this research is to analyze the factors that affect college students' entrepreneurship. It uses a convenient random sampling method, uses the form of network questionnaire to collect data, and uses SPSS system to analyze the relationship between variables. The results show that there is a different relationship between each of the three variables. From the research, we can find that the willingness to start a business and the background knowledge of entrepreneurship will directly affect entrepreneurship. In addition, the attitude towards learning indirectly affects the development and achievement of entrepreneurship through the intermediary role of GPA. The novelty of this study is to combine three variables closely related to college students. It fills the gap of College Students' entrepreneurship. It is helpful to the academic expansion in this field, as well as to help college students understand the actual situation of entrepreneurship.

Keywords-College students; learning attitude; GPA; college students' consumption; economic status; entrepreneurial background; entrepreneurial

1 INTRODUCTION

1.1 Background of the research & Knowledge gap

With the development of economy and the rapid update of the information age, there are more and more ways to make money. Entrepreneurship has become the mainstream choice of many people, and the advent of the era of national economy has made many people catch up with the mainstream of economic development. The identity of entrepreneurs has also changed from stereotype to more young students. College Students' entrepreneurship has far-reaching significance, and the state has also issued a lot of corresponding preferential policies. Policy makers in Europe and the United States believe that more entrepreneurship is required to reach higher levels of economic growth and innovation [1]. This study will start from the personal experience of college students, research and analyze the factors affecting college students' entrepreneurship. Many universities have integrated the cultivation of entrepreneurs and the idea of students becoming entrepreneurs into university courses. The dominant entrepreneurship education program in secondary schools and colleges in the US and Europe is the Junior Achievement Young Enterprise student mini-company (SMC) program. Many studies only focus

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on the age division of entrepreneurs, but not on the change of entrepreneurs' social identity. They pay attention to the age representation of entrepreneurs, do not analyze the changes of entrepreneurs' identity, and lack of entrepreneurship research on school students. This study focuses on the entrepreneurial needs and entrepreneurial spirit of college students. In addition, in this study, I will find the specific relationship between students' performance, entrepreneurial knowledge and students' attitude towards things.

1.2 Research questions

In the process of starting a business and becoming an entrepreneur, they will encounter three problems I have studied. The first question is what is the purpose of College Students' entrepreneurship? The second question is what are the methods and methods of College Students' entrepreneurship? The third question is the attitude of College Students' parents towards their children's entrepreneurship and entrepreneurship? These research problems based on the actual situation can analyze and get the influencing factors of entrepreneurship. Students' GPA and learning attitude will lead to their enthusiasm and attitude towards entrepreneurship. Moreover, these three questions can lead to their recognition of knowledge at ordinary times. The understanding of entrepreneurial knowledge can also be reflected.

1.3 Structure and division of chapters in the research report

The structure of this paper is as follows. After the introduction, the second part is to review the relevant literature and put forward the research hypothesis of this paper. And the analysis assumes the relationship between each variable. The third part, it introduces the data sources and the definition of variables and links the questions in the questionnaire with the objects in my research. In the fourth part, the model validation of the whole study and the analysis of the final results. The fifth part shows the discussion part of the whole research and shows the limitations. Finally, the summary and statement of this study, as well as the help for future research.

2 LITERATURE REVIEW

2.1 The impact of students' performance on Entrepreneurship

Performance indicators represent a very simple and compelling idea. They are measures of how well something is being done [2]. Performance indicators can alternatively be viewed as barometers or “dials” to regulate the supply of resources [3]. But if students want to be entrepreneurs, they must have entrepreneurship. The successful entrepreneur is also described as having strong drives for independence and success, with high levels of vigor, persistence, and self-esteem [4]. Social entrepreneurs will be one of the most important sources of innovation. Social entrepreneurs identify under-utilized resources – people, buildings, equipment – and find ways of putting them to use to satisfy unmet social needs. They innovate new welfare services and new ways of delivering existing services [5].

The performance of students is an important thing to evaluate students in the school learning stage. The performance of a student represents the student's attitude towards learning. A student's attitude towards learning often determines the student's attitude towards other affairs. Entrepreneurship requires students have good quality and attitude. And attitude often determines the height of success and development prospects. In this hypothesis, the performance of middle

school students is an independent variable, and the effectiveness of entrepreneurship is a dependent variable. Learning attitude is an intermediate variable, which forms a bridge between performance and entrepreneurship.

H1: Students' attitude towards their studies is only related to what they know about entrepreneurship, and a good attitude will help them understand more knowledge, including entrepreneurial knowledge.

2.2 The influence of entrepreneurial knowledge on students' Entrepreneurship

The changing nature of work suggests that young people may face the prospect of a "portfolio" career including periods of paid employment, non-work, and self-employment, of which the latter implies greater scope for entrepreneurial activity [6]. The achievement of university determines the ability of students in entrepreneurship and the degree of entrepreneurial process. In examining this area, a starting point is to consider whether entrepreneurs are “born or made”. If entrepreneurs can be developed, then business advisers and educationalists could have a positive effect on small business development. If innate entrepreneurial characteristics and traits exist, then these may limit the numbers pursuing this activity [6]. However, an attitude towards an act is the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question [7]. As such, it is a mental affair that deeply lies within oneself. At the same time, the environment can also influence it. In summary, personal attitude is a mentally prepared state for any known subject [8]. The question is: do students put into practice the entrepreneurial attitudes that Enactus instils in them to become entrepreneurs, or it ends as just attitude without action [9]. Entrepreneurial intention is often regarded as the purposive pursuit of forming a new organization [10]. Therefore, in line with past studies, entrepreneurial intentions are deemed to be individuals’ plans to start a new business venture. Personal attitude determines the starting state and operation state of the enterprise. Entrepreneur is not only a word, but also a kind of responsibility and success. Entrepreneurial knowledge will also enable enterprises to have a better start and development [11]. Therefore, students need a correct attitude to learn better entrepreneurship.

H2: The performance of students has a positive effect on the understanding of entrepreneurial knowledge, and a student will consider other additional knowledge only when he has ensured his own performance.

2.3 The impact of parental school support on Entrepreneurship

This is a new variable. It's also an intermediate variable. The support of the school and parents is counted as the students' entrepreneurial intention. School and parents have always been the most solid backing for students in school. School and parents in the spirit of encouragement will make students more confident in entrepreneurship. Many schools and parents will provide start-up funds for students to start their own businesses. These funds are very important to students, which will greatly improve their entrepreneurial enthusiasm. Students will become very down-to-earth psychologically when starting a business. In this hypothesis, the support of schools and parents is an independent variable, and the success rate of students' entrepreneurship is a dependent variable. These two relationships are positively correlated.

H3: The support of school and parents will ensure the quality of students' studies, which will have a positive impact on students' entrepreneurship.

2.4 The influence of learning attitude on students' GPA

Students' learning attitude determines the importance of learning at this stage and students' attention to learning. Students' GPA is a good indicator of students' learning status. It is conducive to the future development of students.

H4: Students' performance scores play a moderating role between learning attitude and entrepreneurial knowledge.

2.5 Theoretical/ conceptual frameworks

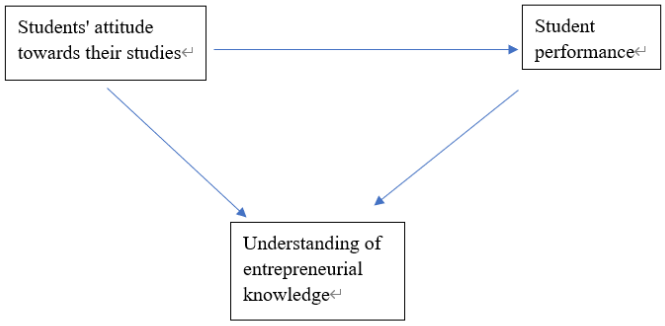

Figure 1. Loop Diagram

According to the display of Figure 1, this loop diagram shows the relationship between the three variables.

3 RESULTS

3.1 Sample characteristics

TABLE 1. DESCRIPTIVE STATISTICS

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
GPA	102	1	5	2.25	1.272	1.618	.655	.239	-.658	.474
Grade	102	1	4	2.27	.548	.300	1.531	.239	2.081	.474
EN	102	1	2	1.85	.356	.127	-2.023	.239	2.134	.474
EN2	102	1	2	1.88	.324	.105	-2.409	.239	3.879	.474
SA	102	1	5	3.81	.841	.708	-.754	.239	1.252	.474
SA1	102	1	5	3.24	.858	.736	-.189	.239	.750	.474
SA2	102	1	5	3.63	.730	.533	-.377	.239	.884	.474
SA3	102	1	5	3.45	.828	.686	.052	.239	.036	.474
SA4	102	1	5	3.56	.863	.744	-.421	.239	.403	.474
Valid N (listwise)	102									

As for the TABLE 1, this chart shows the data distribution of the research survey and a simple summary of the data.

TABLE 2. STATISTICS

Statistics					
		Gender	GPA	Grade	Major
N	Valid	102	102	102	102
	Missing	0	0	0	0

According to TABLE 2, a total of 102 samples were collected. Since the questionnaire is collected electronically, there is no missing part in the data.

TABLE 3. GENDER

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	ale ÄÐ	52	51.0	51.0	51.0
	emale Å®	50	49.0	49.0	100.0
	Total	102	100.0	100.0	

The TABLE 3 shows that the ratio of men and women is roughly one to one. This has a significant impact on the accuracy of the data.

TABLE 4. GPA

GPA					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	>3.7	40	39.2	39.2	39.2
	3.4-3.7	21	20.6	20.6	59.8
	3.0-3.3	23	22.5	22.5	82.4
	2.5-2.9	11	10.8	10.8	93.1
	<2.5	7	6.9	6.9	100.0
	Total	102	100.0	100.0	

This TABLE 4 shows the distribution of GPA, reflecting the GPA score level of different classes and the distribution of the number of people in each section.

TABLE 5. GRADE

Grade					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Freshman	1	1.0	1.0	1.0
	Sophomore	76	74.5	74.5	75.5
	Junior	21	20.6	20.6	96.1
	Senior	4	3.9	3.9	100.0
	Total	102	100.0	100.0	

This TABLE 5 shows the distribution of students in the four grades. From the data, we can see that most of the grades are in sophomores and juniors. As a freshman has just entered the University, the senior is about to leave the school, for the students in the school distribution is the most sophomores and juniors.

3.2 Checking for validity and reliability

TABLE 6. KMO AND BARTLETT'S TEST

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.810
Bartlett's Test of Sphericity	Approx. Chi-Square	1206.672
	df	253
	Sig.	.000

As it is shown in TABLE 6 KMO and Bartlett's Test, the KMO Measure of Sampling Adequacy is .810 which is greater than .6. It is mean that this research sample size is adequate. And the significant value is smaller than .05 which means that our variables are interrelated with each other. So, data analysis is available. The data are correct for the development of research.

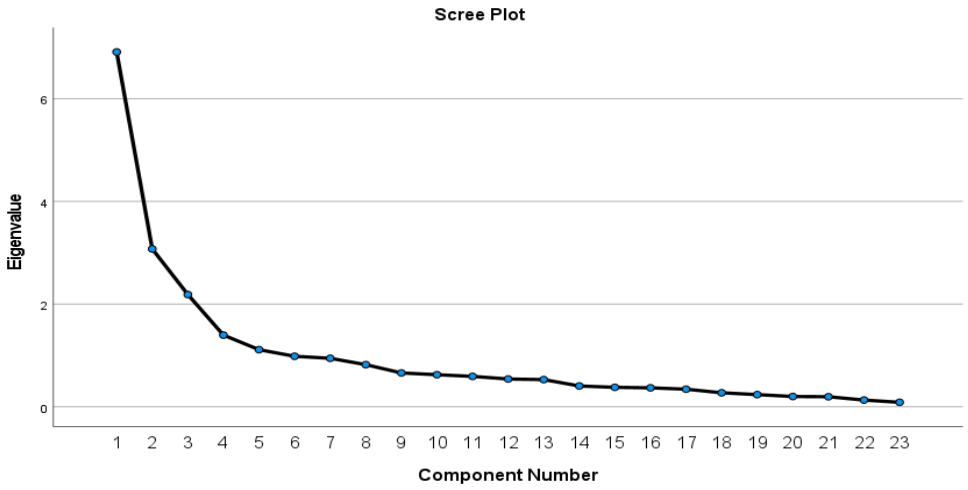

Figure 2. Scree Plot

This Figure 2 shows that the first three variables do not match the problem, so the first three questions cannot be used. Questions below two can be used. It is helpful for subsequent data analysis.

TABLE 7. TOTAL VARIANCE EXPLAINED

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.914	30.062	30.062	6.914	30.062	30.062	4.540	19.741	19.741
2	3.075	13.372	43.434	3.075	13.372	43.434	4.261	18.528	38.269
3	2.187	9.508	52.942	2.187	9.508	52.942	2.665	11.588	49.856
4	1.396	6.070	59.012	1.396	6.070	59.012	1.839	7.994	57.851
5	1.112	4.836	63.848	1.112	4.836	63.848	1.379	5.998	63.848
6	.984	4.277	68.125						
7	.945	4.107	72.232						
8	.821	3.568	75.800						
9	.659	2.865	78.666						
10	.625	2.716	81.381						
11	.592	2.575	83.956						
12	.541	2.353	86.308						
13	.530	2.302	88.611						
14	.405	1.762	90.372						
15	.379	1.647	92.020						
16	.369	1.604	93.624						
17	.343	1.490	95.114						
18	.272	1.185	96.298						
19	.237	1.031	97.329						
20	.200	.871	98.200						
21	.196	.850	99.051						
22	.131	.570	99.621						
23	.087	.379	100.000						

Extraction Method: Principal Component Analysis.

This TABLE 7 shows that there are five variables in this study. But there are only three variables in the author's introduction. Two of these variables belong to intermediate variables and attached variables. In three variables, each variable has a corresponding relationship and change. From these data, it shows that some data values need to be eliminated. To ensure that the relationship between the three variables is reliable.

TABLE 8. COMPONENT TRANSFORMATION MATRIX

Component Transformation Matrix					
Component	1	2	3	4	5
1	.698	.658	-.198	-.054	.194
2	.491	-.352	.615	-.500	-.079
3	-.302	.578	.727	.203	-.076
4	.342	-.329	.219	.786	.331
5	-.253	-.003	.076	-.298	.917

TABLE 8 shows:
Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

TABLE 9. ROTATED COMPONENT MATRIX

Rotated Component Matrix[a]					
	Component				
	1	2	3	4	5
SA3	.850				
SA1	.770				
SA4	.767				
Per2	.692	.450			
SA2	.666				
Per3	.661				
Per4	.596				.526
Per	.595	.484			
EN6		.829			
SA5		.760			
EN4		.727			
EN8		.710			
SA		.667			
EN9		.513			
EN5		.489		.400	
EN			.899		
EN2			.841		
EN3			.618		
EN7		.418	-.433		
GPA				.755	
Gender				-.674	

Grade				.471	
Per1					.840

TABLE 9 shows:
Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

3.3 Checking for normality

TABLE 10. DESCRIPTIVE STATISTICS

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
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Valid N (listwise)	102									

As for TABLE 10 shows:
If the skewness is between - 2 - 2 and kurtosis is between - 7 - 7, the data is considered as normal. Therefore, we can confidently say that our data are normal. The normal data is of great help to the correctness of our later research and the research. It is necessary to carry out the research, and the research is meaningful. According to the criteria put forward by Hair et al. (2010) and Bryne (2010)

From the analysis in, we can see the relationship between the three variables. Students with higher GPA generally believe that learning attitude will affect their learning outcomes and motivation. There is strong support that the understanding of entrepreneurial knowledge has a direct impact on entrepreneurship. It can be seen that all the hypotheses in this study are tenable. For college students' entrepreneurship, learning attitude, GPA, and the degree of understanding of entrepreneurial knowledge will determine the entrepreneurship of college students.

4 CONCLUSION

Most students think that the attitude towards their studies will affect their attitude towards entrepreneurship. Finally, many students do not understand the entrepreneurial knowledge and background, which is the direct result of their entrepreneurship. Many college students think that starting a business is a cool thing. Most of them think that the cost of living promotes the start of business. Many students are not satisfied with the current level of living and consumption, they will choose to start a business in school.

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