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FACTORS FOR CHINESE STUDENTS CHOOSING POLAND HIGHER EDUCATION

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As the world's second largest economy, China has attracted extensive attention from the rest of the world in various aspects. Education, as a way to export talent, has always been valued by the world. Although China's education industry is growing, many Chinese students still choose to study abroad. China is one of the world's leading exporters of international students. Poland, located in Europe, has a clean educational environment, advanced European knowledge and unique cultural charm. In recent years, Sino-Polish relations have grown so close that studying in Poland will be a good choice for Chinese students. This article mainly introduces the admission of Chinese elite universities and the study and life of Chinese students in Poland.

Key words: education, new college entrance examination, Poland, reasons for studying abroad

How to get into China's elite universities

Since the 1990s, the scale and quantity of higher education in China have expanded rapidly, and the cause of higher education has developed so rapidly that China has popularized higher education in the early 21st century. But the Gaokao is still an important way to select the elites. The subjects of Gaokao changed many times in history, and traditionally, examinees can choose liberal arts and science generally, both having a few same compulsory exam subjects such as: mathematics, Chinese, foreign language. In most areas of the country, examinees choose to study liberal arts or science in their second year of high school, while science examinees take the comprehensive examinations of Chinese, mathematics, foreign languages and science (physics + chemistry

+ biology). Liberal arts examinees take comprehensive examinations of the Chinese, mathematics, foreign languages, literature and history (politics + geography + history). The Chinese and foreign language papers of science and engineering are the same as those of liberal arts. Some provinces have adopted different examination modes. The Gaokao implements the “3+X” examination mode, where the examination is divided into science subjects and liberal arts subjects.

Table 1

Subject of examination	Full score	Total score of Gaokao
Chinese	150	750
Mathematics	150	
Physics + Chemistry + Biology/ History + Politics + Geography	300	
Foreign language	150	

In recent years, China has carried out the reformation of Gaokao – new Gaokao. New Gaokao reform was officially started in September 2014 by the ‘Opinions on Deepening Reform on Examination & Recruitment System issued by the State Council (“Opinions”)’. The ‘opinions’ specifies the reform of exam subject setup, the need to enhance the correlation between Gaokao and high school learning and that the total score of the examinee is determined by the unified Gaokao examinations of Chinese, mathematics and foreign language with the same subjects and score scale, regardless of liberal arts and sciences, with two examination opportunities provided for foreign languages. The traditional division of liberal arts and sciences will be abolished. The New Gaokao has not fully implemented so far. Launched in 2014, the reform was implemented in 2017 in Zhejiang province and Shanghai; Launched in 2017, the reform will be implemented in 2020 in Beijing, Tianjin, Shandong, Hainan; Launched in 2018, the reform will be implemented in 2021 in Jiangsu, Hebei, Chongqing, Liaoning, Anhui, Fujian, Hunan, Hubei and Guangdong; Of the 15 provinces that have not implemented the reform, nine have postponed reform this year.

Table 2

New Gaokao exam subject combinations, namely the “3 + 1 + 2”

‘3 + 1 + 2’ model		
“3”	Unified exam	Chinese, Mathematics, Foreign language
“1”	one out of two	Physics History

"2"	two out of four	Biology Chemistry	Biology Chemistry
		Biology, Ideology and politics	Biology, Ideology Politics
		Biology, Geography	Biology, Geography
		Chemistry, Geography	Chemistry, Geography
		Ideology and Politics, Geography	Ideology and Politics, Geography
		Ideology and Politics, Chemistry	Ideology and Politics, Chemistry

In China, the score is the determinant of what universities students are eligible to attend.,To be admitted into a first-class Chinese university, students are required to have a very strong ability to take exams with high Gaokao scores, or extraordinary ability to be picked by first-class universities. The following form is the minimum requirements and maximum preferential treatment for independent enrollment of Peking University and Tsinghua University.¹

Table 3

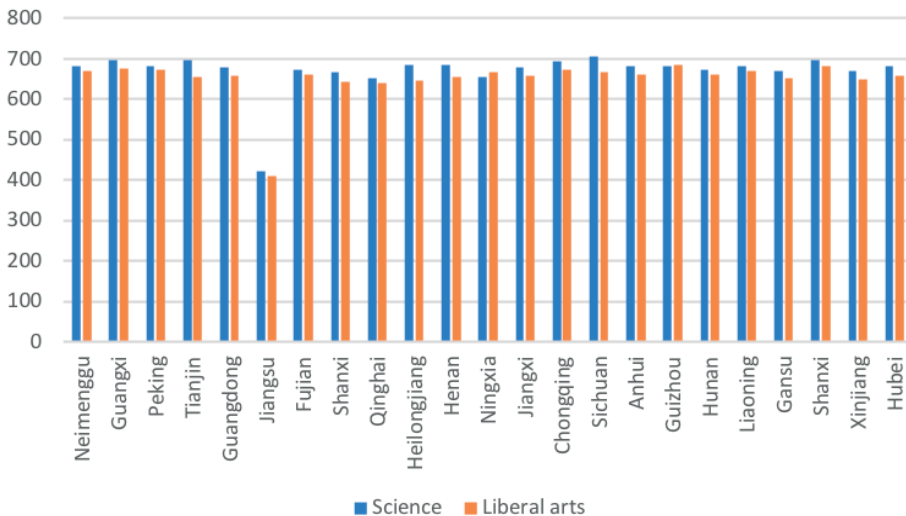
University	Minimum requirements for independent enrollment		Maximum preferential treatment(score)	
	2018	2019	2018	2019
Peking University	Students who have won the national finals of the five subject competitions ¹	Students who have won the national finals of the five subject competitions	60	20
	Students who have made inventions or participated in national finals of science and technology competitions or international competitions with excellent results	Students who have won the national finals of the five subject competitions		
	Those who have specialty in related subjects and innovation potential within the scope of independent enrollment and have achieved excellent results in relevant specialized learning and practice activities at home and abroad			

¹ The five subject competitions are five subjects: index science, physics, information science, chemistry and biology.

Tsinghua University	Students who have best performance in five subject competitions	Winner of provincial first prize or above in five subject competitions	60	20
	Students who have outstanding performance in scientific and technological inventions, research practice, literary creation and other aspects	Winner of national first prize at the national youth science and technology innovation competition		
	Students who have outstanding talent in humanities and society, innovation and design, etc., or who have achieved excellent results in related learning practices	Winner of fourth prize at Intel international science and engineering grand prix		

The first-class universities have different admission requirements and quota for each province in China Taking Tsinghua University as an example, we can see that the tier-1 admission scores of Tsinghua University vary from one province to another.

Table 4



Therefore, to be admitted to China’s elite universities, students need to achieve the entry scores of the desired university in their home provinces. It’s not easy.

Chinese students in Poland today

With the gradual implementation of the ‘The Belt and Road’ initiative² of China, and the deepening of cooperation and exchange with Poland in various fields, more and more international students swarm into Poland. It can be found that after several years of practice, the quality of students coming to Poland has increased year by year. Among them, students and teachers from Tsinghua University, Beijing Foreign Studies University, Zhejiang University, and other top Chinese universities have come to Poland for exchange and continuing education, with excellent academic achievements. Some students get scholarships from the National Scholarship Program, and some are exchange students through the European Erasmias exchange system. Some of them come to Poland to study at their own expense, in addition to some academicians from the Chinese Academy of Sciences in Poland on academic visits.

In many popular destination countries, Chinese students account for the majority of the world’s international student population. There are 72 743 foreign students from 170 countries studying in Poland, over 6 950 more than a year ago (over 10% increase) in the academic year 2017/2018.³ But in Poland, Chinese students only account for a small portion of international student population, According to the statistics of the Chinese Embassy in Poland, in December 2018, there were about 1,400 Chinese students studying in Poland. This is very small compared to the number of Chinese students in other countries.

Investigation of the Factors affecting Studying in Poland

Table 5

Variable declaration

Variable name	Variable	Note
Willingness to return	Willingness to re- turn:WR	Score 1~5
Willingness to stay Poland	Willingness to stay:WS	no:0 yes:1

² The Belt and Road Initiative, the brainchild of Chinese President Xi Jinping, is an ambitious project that focuses on improving connectivity and cooperation among multiple countries across the continents of Asia, Africa, and Europe. Dubbed as the “Project of the Century” by the Chinese authorities, BRI spans about 78 countries.

³ <http://www.studyinpoland.pl/en/index.php/news/85-foreign-students-in-poland-numbers-and-fac>

Gender	Gender	female=0;male=1
Degree	Degree	Preparatory course =0;Bachelor's degree =1;master's degree =2;Doctor's degree =3
Difficulty of Application	Difficulty of Application:DA	Score 1~5
Relative difficulty of application China	Relative difficulty of application (China):RDAC	Easier=0; more difficult=1
Relative difficulty of application others	Relative difficulty of application(others):R-DAO	Easier=0; more difficult=1
Difficulty of Course	Difficulty of Course:DC	Score 1~5
Difficulty of Graduation	Difficulty of Graduation:DG	Score 1~5
Prospects	Prospects	Back to China=0 Stay in Poland=1
Source of tuition	Source of tuition:ST	From parents or family=0;From personal savings=1;Government expense or exchange program =2; other=3
Tuition acceptance	Tuition acceptance:AT	expensive=0; not expensive=1
Polish Food or Chinese food	Food	Chinese food=0; Polish food=1↔both=2
Source of living expenses	Source of living expenses:SL	From parents or family =0;Personal savings or part-time income =1; At public expense =2
Living expenses acceptance	Living expenses acceptance:AL	well-off=0; not well-off=1
part-time job	part-time job:PTJ	yes=0;no=1
Willing to learn Polish	Learn Polish:Polish	yes=0;no=1
Plan to go to other countries to live	other countries to live:OC	yes=0;no=1
Impression of the Poles	Impression of the Poles:IP	Score 1~5
Work attitude and work efficiency of the Poles	Work attitude and work efficiency of the Poles:WP	Score 1~5

Description of variable

(include: Freq., Percent and Cum.)

Table 6

Tabulation

		Freq.	Percent.	Cum.
WR	1	5	4.17	4.17
	2	10	8.33	12.50
	3	45	37.50	50.00
	4	18	15.00	65.00
	5	42	35.00	100.00
WS	0	47	39.17	39.17
	1	73	60.83	100.00
Gender	0	72	60.00	60.00
	1	48	40.00	100.00
Degree	0	8	6.67	6.67
	1	40	33.33	40.00
	2	53	44.17	84.17
	3	19	15.83	100.00
DA	1	31	25.83	25.83
	2	28	23.33	49.17
	3	55	45.83	95.00
	4	6	5.00	100.00
RDAC	0	107	89.17	89.17
	1	13	10.83	100.00
RDAO	0	116	96.67	96.67
	1	4	3.33	100.00
DC	1	6	5.00	5.00
	2	17	14.17	19.17
	3	72	60.00	79.17
	4	21	17.50	96.67
	5	4	3.33	100.00

DG	1	4	3.33	3.33
	2	15	12.50	15.83
	3	64	53.33	69.17
	4	29	24.17	93.33
	5	8	6.67	100.00
Prospects	0	92	76.67	76.67
	1	28	23.33	100.00
ST	0	90	75.00	75.00
	1	4	3.33	78.33
	2	26	21.67	100.00
AT	0	10	8.33	8.33
	1	110	91.67	100.00
FOOD	0	91	75.83	75.83
	1	1	0.83	76.67
	2	28	23.33	100.00
SL	0	87	72.50	72.50
	1	10	8.33	80.83
	2	23	19.17	100.00
AL	0	80	66.67	66.67
	1	40	33.33	100.00
PTW	0	36	30.00	30.00
	1	84	70.00	100.00
Polish	0	72	60.00	60.00
	1	48	40.00	100.00
OC	0	99	82.50	82.50
	1	21	17.50	100.00
IP	1	3	2.50	2.50
	2	3	2.50	5.00
	3	39	32.50	37.50
	4	47	39.17	76.67
	5	28	23.33	100.00
WP	1	22	18.33	18.33
	2	39	32.50	50.83
	3	46	38.33	89.17
	4	12	10.00	99.17
	5	1	0.83	100.00

Table 7

Logistic regression

WS	Coef.	Odds Ratio	z-value	p-value	[95% Conf	Interval]	Sig
Prospects	1.000						
1.Prospects	15.612	8.990	4.77	0.000	5.050	48.263	***
Food	1.000						
2.Food	1.279	0.753	0.42	0.676	0.403	4.054	
Polish	1.000						
1.Polish	0.297	0.153	-2.36	0.018	0.108	0.815	**
OC	1.000						
1.OC	0.340	0.222	-1.65	0.098	0.094	1.221	*
IP	0.708	0.223	-1.09	0.274	0.382	1.314	
WP	2.276	0.739	2.53	0.011	1.204	4.302	**
Constant	0.528	0.744	-0.45	0.650	0.033	8.336	
Mean dependent var		0.605	SD dependent var		0.491		
Pseudo r-squared		0.330	Number of obs		119.000		
Chi-square		52.665	Prob > chi2		0.000		
Akaike crit. (AIC)		121.013	Bayesian crit. (BIC)		140.467		

*** p < 0.01, ** p < 0.05, * p < 0.1.

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Application requirements and tuitions of Polish universities

Table 9

Requirements for application to Polish universities

Degree	Materials	Remarks
Prep class	High school diploma College entrance exam results or transcript of junior college	Personal resume, letter of recommendation and health certificate are required when necessary. Collection of works and entrance exam are required for special majors such as art. Health certificate of fixed template and transcript of specialized courses or internship certificate are required for medical major. Some schools would examine language competence in a flexible manner, for example, interview can be arranged in absence of language certificate.
Undergraduate	High school diploma College entrance exam results or transcript of junior college Language certificate (TOFEL, IELTS, Polish B1-B2)	
Postgraduate	Certificate of undergraduate degree Undergraduate diploma Transcript of undergraduate courses Language certificate (TOFEL, IELTS, Polish B1-B2)	
Doctoral	Certificate of postgraduate degree Transcript of postgraduate courses Personal resume Letter of recommendation from tutor Confirmation of acceptance from doctoral supervisor with the intended school Language certificate (TOFEL, IELTS, Polish B1-B2)	Some schools would also require evidence of engagement in related work or research and specialized thesis. The opinion of the doctoral supervisor would play a decisive role in application for doctoral degree.
Visiting scholar	Application letter provided by Chinese universities or institutions Certificate of highest degree achieved	

Visiting scholar	Certificate of recent research findings Letter of motivation Language certificate	
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Currently, the following documents are required for application to Polish universities. College entrance exam results have no effect on enrollment, although CEE results are required when applying to Polish universities. For now, many famous overseas universities have recognized China's CEE results and it is less difficult to get admitted to Polish universities than popular universities in other countries.

The tuition for studying in Poland is summarized as follows:

Table 10

Major	Euro/year
General majors, such as art, science and business	2000 ~ 3500
Art majors, such as music, piano, painting and performance	~ 7000
Medical majors, such as medicine and dentistry	~ 14000
Tuition in Warsaw for the same majors	20%-30% higher

Tuitions in Poland are all specified by the Polish Ministry of Education or Polish Ministry of Culture and may be adjusted by schools as necessary. Scholarships are available at Polish schools for academic excellence and the Chinese government also offers outstanding student scholarship.

Analysis

WR results indicate that 35% of respondents are highly willing to return to home countries, 37.5% moderately willing and only 5 least willing, accounting for 4.17% of sample population; WS results indicate that 60.83% of respondents will choose to stay in Poland for work and study if given a chance, suggesting that international students in Poland quite identify themselves with this country. But 39.17% of students still choose to return to home countries even if given a chance to study in Poland for study and living, suggesting that these students chose to study in Poland truly for the sake of education or because of the international recognition of these Polish universities in terms of particular specialties.

Gender results indicate that the male-female ratio is 4:6 among the international students in Poland, suggesting that Polish universities are favored more by female students; Degree results indicate that 44.17% of international students in Poland are masters, followed by undergraduate students who account for 33.33%, while prep course students and doctoral students account for 6.67% and 15.83% of sample population respectively.

DA results indicate that 95% of sampled international students in Poland have less than 3 points on a scale of five points, therefore it is believed that it is easier to make successful application; RDAC results indicate that 89.17% of respondents believe it is easy to go to Polish universities; RDAO results indicate that 96.67% of respondents believe it is easy to go to Polish universities compared with other popular universities. The aforesaid three survey questions suggest that the relative ease of application to Polish universities is a major factor affecting application.

DC results show that 79.17% of sampled international students in Poland have less than 3 points, while DG results indicate the percentage is 69.17%, suggesting that the courses are not particularly difficult.

Prospects results show that 76.67% of respondents believe returning to home countries for jobs is promising, a very large proportion.

ST results show that 75% of respondents are funded by parents or family members, merely 3.33% by personal savings and 21.67% by public funding. AT results show that only 8.33% of respondents consider the tuitions expensive. Tuitions might be a reason why international students choose to study in Poland.

Food results indicate that only 0.83% of respondents prefer Polish food over Chinese food, suggesting that food is not a factor affecting the decision to study in Poland.

SL results show that the major source of living expense is family support, comparable to the source of tuition. Therefore, most of international students studying in Poland are self-financed.

AL results show that two thirds of respondents believe they have no financial difficulties; PTW results indicate that only 30% of respondents have done part-time jobs. Polish results show that 60% of respondents love and want to learn Polish, indicating a large proportion of respondents want to get involved in local culture and life.

OC results show that 82.50% of respondents want to study and seek career prospects in other countries after graduation, suggesting that the international students in Poland have a high level of international vision.

IP results show that only 5% of respondents think negatively of Polish people, 37.5% say OK and 62.5% have good impression of Polish people.

WP results show that 50.82% of respondents do not recognize the work efficiency of Polish people (1 or 2 points on a scale of 1 to 5) and 10.83% think otherwise (4 or 5 points on a scale of 1 to 5).

Research findings show that the odds ratio of staying in Poland is 0.297 for each additional degree in loving Polish, meaning the more international students love Polish, the easier they would choose to stay in Poland. The odds ratio of staying in Poland is 2.276 for each additional level in the recognition of Polish work attitude and efficiency by international students, meaning the more international students recognize Polish work attitude and efficiency, the easier they would choose to stay in Poland. The willingness to return to home countries would reduce with each additional degree in their longing for other countries.

Conclusion and discussion

Studying in Poland is an important attempt for Chinese students, while both the Chinese and Polish sides expect to select the talented people with technical expertise and capabilities to adapt to the current social development through this attempt, thus breaking through the drawbacks and limitations of Chinese education. Chinese students also want to have professional knowledge and overall capabilities matching the national and world situation through studying in Poland. The future of studying in Poland largely depends on the deep exchange and friendship between China and Poland and whether Chinese students have a deep and comprehensive understanding of Poland, which also requires related policy support. This paper analyzes the factors affecting Chinese students' decision to study in Poland using the sample survey findings from Chinese students studying in Poland. The research findings show that the reasons Chinese students chose to study in Poland mainly include the ease of application to Polish universities and the low tuition and international recognition enjoyed by some Polish universities for their specialties. In addition, how much international students love Polish is another factor affecting their decision to stay in Poland after graduation, and the recognition of Polish work attitude and efficiency also affects Chinese students' decision to stay in Poland.

The examination of studying abroad is comprehensive and all-round, and the decision to study in Poland depends largely upon the scientific and normative nature of the recruitment criteria and selection process. Compared with admission process of Chinese universities, Polish enrollment policy is transparent, but selection criteria are not specific enough, especially con-

ring that the assessments of different experts in interviews are considerably subjective and random. Polish universities are expected to give overall consideration to the appraisal indicators in the actual enrollment process so as to provide greater support for outputting talented people to the world. Of course, the easy application and low tuition also give applicants more chances to get admitted to outstanding Polish universities, thus understanding and loving Poland. This is beneficial to the long-term friendly exchange between China and Poland. The national conditions of China mean that most of Chinese people have to live at a fast pace and work efficiently, as opposed to the slow pace of life prevalent in Europe, so it is understandable that Chinese students think Polish work efficiency is low. The language factor is a reason Chinese students choose not to stay in Poland after graduation, as the official language of Poland is Polish, which is completely strange to Chinese people and very difficult to learn without huge efforts. Inability to use Polish means a much less chance to get employed. Meanwhile, the average wage in Poland is much lower than that in China, well below the wage expectation of Chinese students. All of the above are the factors affecting Chinese people's decision to stay in Poland, including Chinese students.

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