

Satisfaction with the Overseas Education in China: A Survey on 44 Institutions of Higher Learning in Jiangsu Province

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Abstract: In order to fully grasp the service level, management quality and effectiveness of the overseas education in China, a satisfaction survey was carried out on 44 institutions of higher learning in Jiangsu province from 5 dimensions of school learning, school life, school administration, surrounding environment, and urban civility and environment. Findings include 1. Students' nationality: students from Asia and Africa are the most while students from Oceania are the least; 2. Student category: more than 1/3 of overseas students are Chinese language students, but overseas students in Jiangsu province have a higher level of matriculate quality and educational pursuit, for those pursuing a higher education degree at the bachelor's, the master's and the doctoral level have reached an accumulative 60% of all; 3. The overall student satisfaction is above average, with a significant difference between different colleges and universities within Jiangsu province. Satisfaction with surrounding environment gets the highest score, but dissatisfaction of a certain degree occurs with library, website construction, hostel accommodation, other school facilities and services, and urban civility and environment. As is revealed by the investigation, 70.45% of students respond that their college or university does not have a canteen exclusive for overseas students; 4. There is a significant difference in overall satisfaction and satisfaction with each of the 5 assessment dimensions between different categories of students; 5. A multiple linear regression model shows that the overall accountability is 98.8% on the 11 assessment parameters in the dimensions of school learning and school life (curriculum, teacher, school system, teaching facilities, library, website construction, hostel accommodation, canteen catering, entertainment & sports activities, student affairs and services, and other school facilities and services). Suggestions are as follows: 1. "Foreign language prompts and guidance" are the topmost demand of overseas students in China; 2. The basic living conditions for overseas students should be improved; 3. The international service level of educational administrative employees should be raised; 4. The construction of school library and a portal website should be made to better meet the practical needs of overseas students; 5. The disparity in the overseas education between different colleges and universities in Jiangsu province should be narrowed and a standardized management highlighted.

Keywords: Overseas education in China; overall satisfaction; multiple linear regression model; international service level

1 Introduction

With the constant promotion of China's comprehensive national potential and international status, as well as the quality of higher education in China, the number of overseas students choosing to pursue a further study in China has always been on the rise. Statistics of the whole nation show that the number of overseas students in China has been ever on the rise since 2000 and by 20% year on year. By now China has signed an agreement on the mutual recognition of educational degrees with dozens of countries, including New Zealand, Cuba, South Korea, Vietnam and Malaysia¹. Data of the world and a comparative perspective reveal that in order to attract more international students to study in Japan and promote the internationalization of its higher education, the Japanese Ministry of Education, Culture, Sports, Science and Technology initiated the "100,000 Foreign Students Plan" for the new millennium early in 1983, which was to have accepted 100,000 overseas students by 2003². According to the Mid- and Long-term

¹Wang Yong, Lin Xiaoying, Zhou Jing, Wu Xia, Lai Linjuan. Satisfaction with the Educational Management of Overseas Students in China: Constitution, Contribution and Strategies—Based on a Sampling Survey of Graduates from Peking University [J]. *Education Research Monthly*, 2014(2).

²Xue Ming. Development and Revelation of Contemporary Japanese Overseas Education[D]. East China Normal University,

Educational Reform and Development Outline for Jiangsu Province (2010-2020) and the Chinese “12th Five-year Plan for the Educational Development”, by the year of 2015, the number of international students in Jiangsu province amounted to 30,000 and the international postgraduates in top-notch colleges and universities of Jiangsu province will be 3% of all; by 2020 the number of international students in Jiangsu province will be as many as 50,000, and the international postgraduates in top-notch colleges and universities will be above 5%. In view of these data, a state’s measures to attract overseas students are not only an important representation of the internationalization of its higher education, but it also promotes the international development of the state’s economy, culture and education. In order to accurately assess the satisfaction level of overseas students in Jiangsu province on the dimensions of school learning, school life, school administration, surrounding environment, urban civility and environment, a large-scale “Survey on Overseas Students’ Educational Satisfaction” was carried out in 2015, collecting 2,307 valid samples (responses) from the 2,500 students polled from 44 colleges and universities in Jiangsu province. A systematic analysis was carried out on the large quantities of data collected to formulate a survey report on the level of satisfaction of overseas students in Jiangsu province with their education. This paper is of great significance of practice to understanding the overall satisfaction of overseas students with their study in China’s Jiangsu province and in promoting the quality of overseas education in China.

2 Research Methodology and Sampling

The educational satisfaction of overseas students represents the overall assessment of overseas students on the living conditions, life conditions, educational services etc provided by their colleges and universities. The literature review and questionnaire survey are the methods that are mainly adopted in this paper. At the initial stage of its writing, a basic framework and the initial dimensions were established through a detailed literature review that examined and summarized the perspectives and results of previous studies in this field. The survey tool adopted in this paper is a self-made questionnaire entitled *A Survey on the Educational Satisfaction of Overseas Students in Jiangsu Province*.

2.1 An overview of the questionnaire

The self-made questionnaire entitled *A Survey on the Educational Satisfaction of Overseas Students in Jiangsu Province* contains 10 pages in all. On the very 1st page of it is included a brief introduction in both Chinese and English. The body part of the questionnaire is divided into two parts: in the first part, the students’ respondents are asked to score each of the question items on their educational satisfaction by the Likert scale, a five-point scoring method. The level of satisfaction is scaled down from 1-5 points (1=strongly agree or completely satisfied, 2=agree or satisfied, 3=undecided, 4=disagree or dissatisfied, 5=strongly disagree or completely dissatisfied); the second part contains 15 main items that require the student respondents to fill in their basic information, multiple-choice questions and short-answer questions. The basic information questions concern students’ nationality, gender, major, college or university, student category, time of stay in China; the multiple-choice questions include the reason for studying in China, the motivation of studying in Jiangsu province, the parameters that affect your choice of a college or university, where you get the information of overseas study in China etc. The short-answer questions cover the urgent problem you want to be settled, your monthly consumption, your favorite Chinese city, your favorite Chinese college or university etc.

2.2 Reliability and validity tests on the questionnaire

2.2.1 Reliability test

This paper adopts the Cronbach’s Alpha as the measurement for reliability. According to the survey, the Cronbach’s α of the whole questionnaire and each of its dimensions is all above 0.9, which indicates that the overall reliability and the reliability of each of its dimensions are fairly high.

Table 1 Overall reliability coefficient of the whole questionnaire and each of its dimensions

	school learning	school life	school administration	surrounding environment	urban civility and environment	the whole questionnaire
Cronbach's α	0.971(34)	0.959(35)	0.960(8)	0.957(6)	0.939(10)	0.988(94)

2.2.2 Construct validity test

According to the theory established by Tucker the psychologist, the proper validity of a questionnaire requires the correlation coefficient between the overall score and that of each of its dimension to be between 0.30-0.80, and the correlation coefficient between each of its dimension to be between 0.10-0.60.³ Results of the data analysis in Table 2 show that the correlation coefficient between the overall score and that of each of its dimension is between 0.805-0.953, and the correlation coefficient between each of its dimension is between 0.686-0.826, indicating that the measurement tool, i.e. the self-made questionnaire entitled *A Survey on the Educational Satisfaction of Overseas Students in Jiangsu Province* has a fairly good construct validity. To sum up the above analysis, this questionnaire has a good reliability and construct validity, which is suitable for a questionnaire survey and promises to produce a proper scientific result.

Table 2 Construct validity coefficient of the questionnaire

	N (valid)	M \pm SD	1.	2.	3.	4.	5.	6.
1. overall score of the educational satisfaction	1198	3.54 \pm 0.77	1					
2. school learning	1527	3.58 \pm 0.80	0.953**	1				
3. school life	1685	3.44 \pm 0.81	0.945**	0.825**	1			
4. school administration	2105	3.58 \pm 0.98	0.895**	0.810**	0.826**	1		
5. surrounding environment	2160	3.83 \pm 1.05	0.805**	0.750**	0.686**	0.690**	1	
6. urban civility and environment	2081	3.55 \pm 0.88	0.881**	0.794**	0.783**	0.759**	0.741**	1

2.3 Sampling Method

This research adopted a systematic sampling method to investigate the educational satisfaction of overseas students in Jiangsu province, which collected 2,307 valid questionnaires from the 2,500 questionnaires issued, amounting to a valid response rate of 92.28%. The questionnaire were issued to overseas students from 44 institutions of higher learning in Jiangsu province, including Nanjing University, Southeast University, China Pharmaceutical University, Nanjing Agricultural University, Nanjing University of Science and Technology, Jiangnan University, Hohai University, Yangzhou University, Soochow University, Nanjing Normal University, Nanjing Forestry University, Nanjing University of Posts and Telecommunications, Nanjing Arts Institute, Nanjing Tech University, Jiangsu Normal University, Jiangsu Agricultural University, Jiangsu University of Science and technology, Nanjing University of Finance and Economics, Jiangsu University, and Changzhou University. This paper divides the survey on the educational satisfaction of overseas students into 5 dimensions, respectively the overall satisfaction with school learning (including curriculum, teacher, school system, teaching facilities, library, and website construction), the overall satisfaction with school life (hostel accommodation, canteen catering, entertainment and sports activities, student affairs and services, other school facilities and services), satisfaction with school administration, satisfaction with surrounding environment, and satisfaction with urban civility and environment.

³Dai Zhongheng. *Psychological Education and Measurement*[M]. Shanghai: East China Normal University Press,1987,62.

3 Data Analysis

3.1 Data preprocessing

First, before statistical analysis a stepwise data preprocessing was carried out that includes checking the outliers, transforming positive values, and processing the missing values; the level of satisfaction was transformed via the variable calculation function of “6-x” into (1= strongly disagree or completely dissatisfied, 2= disagree or dissatisfied, 3=undecided, 4= agree or satisfied, 5= strongly agree or completely satisfied), where the higher the score, the higher the level of satisfaction is. The method for the processing of missing values is to set “0” as a missing value and transform the missing value into the same variable of “0”.

3.2 Basic information

3.2.1 Nationality composition

The second part of the questionnaire investigates the nationality composition of the overseas students in Jiangsu province. As is revealed by the statistics, the valid questionnaires are 2,079, that is 2,079 students polled responded to this item⁴ According to the survey, overseas students from 124 countries and areas choose to study in Jiangsu province, showing a versatile distribution of their nationality. 1-10 on the top rankings are South Korea, Indonesia, India, Kazakhstan, Vietnam, Laos, Ghana, Pakistan and Japan.

①Asia

Of all continents, Asia sends the most students to China, totaling a population of 1423. Of the Asian students, the majority are from Southeast Asian countries, totaling 515 and respectively from Indonesia (296), Vietnam (69), Laos (67), Malaysia (32), Myanmar (23), Thailand (18), Cambodia (7), the Philippines (1), and Brunei (1). Students from East Asia total 394, who are respectively from South Korea (319), Japan (56), Mongolia (13), the PDRK (4), and China’s Taiwan (2). Overseas students from South Asia amount to 207 in all, respectively from India (165), Pakistan (63), Nepal (44), Bangladesh (32), Sri Lanka (2), and Bhutan (1). Students from Middle Asia are 171 in all, respectively from Kazakhstan (142), Uzbekistan and Kyrgyzstan (both 9), Afghanistan (5), Turkmenistan (3), Tajikistan (2), and Karakalpak (a republic within Uzbekistan) (1). West Asian students are the least of all, adding up to a mere population of 34 in Jiangsu province, probably due to the difference in customs, culture and diet between these countries and China, who are respectively from Iran (11), Yemen (8), Turkey (7), Syria (5), Jordan (2), and Azerbaijan (1).

②Africa

The number of African students choosing to study in Jiangsu province amount to 376, among whom 111 are from 13 countries in West Africa, respectively Ghana (63), Congo (21), Nigeria (11), Cape Verde and Guinea (both 3), Benin and Niger (both 2), Mauritania, Mali, Liberia, Cote d'Ivoire, Gambia and Togo (1 each). Students from Southern African countries amounted to 108, respectively from Zambia (36), Zimbabwe (36), South Africa (26), Namibia (4), Malawi (3), Lesotho (2), Botswana (1). Those from North Africa are 56 students, respectively from Sudan (44), Egypt (8), and Tunisia, Sierra Leone, Algeria and Libya (all 1). 48 students are from 6 East African countries, respectively Kenya (14), Mauritius (12), Comoros (10), Uganda (6), South Sudan and Somalia (both 1). Only 35 Middle African students choose to study in Jiangsu province, who are respectively from Rwanda (15), Cameroon (14), Madagascar and Ethiopia (both 3). Only 15 students from 1 country in Southeast Africa.

③Europe

Statistics show that the number of European students choosing to study in Jiangsu province amount to 208 in all, the majority of whom are from Eastern European countries, including 77 students respectively from Russia (28), Turkey (25), Poland (11), Belarus (5), Ukraine and Romania (both 3), Estonia and Latvia (both 1). Those that follow are 53 students from West Europe, including the United Kingdom (20), France (19), the Netherlands (9), Belgium (4) and Ireland (1). Then come 35 students from South Europe and 34 students from Middle Europe, including Italy (26), Spain (8), Serbia (1); Germany (25), Czech Republic (3), Hungary and Slovakia (both 2), Austria and Switzerland (both 1). The least students are from North Europe, respectively Finland and Sweden (both 2), Kurdish, Denmark, Saint Lucia and Norway (1 each).

⁴Note: Among the respondents, there is 1 student labeling his or her nationality as “Asia”, 3 as “Africa”, 1 as “Europe” and 1 as an American Indian, grouped by the researcher into “North and South America”.

④North and South America

Students from America total a population of 65, including 3 overseas students from Middle American states and areas, respectively the Caribbean islands, Panama and Dominica (all 1). There are only 16 students from South America choosing to study in Jiangsu province, including Brazil (6), Ecuador (4), Peru (3), Chile (2), and Venezuela (1). 45 students are from North America, respectively the United States (29), Canada (5), Mexico (4), Cuba (2), Jamaica, Dominica, Honduras, Costa Rica, and Barbados.

⑤Oceania

9 students are from Oceania, respectively Australia (7), Vanuatu, and Papua New Guinea (all 1).

3.2.2 Gender composition

Of the 2,190 valid samples, there are 1,087 females and 1,103 males, respectively a percentage of 47.12% and 47.81%, a roughly equal percentage. However, there are 117 missing values on this item.

3.2.3 Student categories

The basic information part of the questionnaire divides the students into five categories: Chinese language students, bachelor degree candidates, master degree candidates, doctor degree candidates, and other students. There are 1,794 students responding to this item, including 644 Chinese language students, 547 bachelor degree candidates, 298 master degree candidates, 292 doctor degree candidates and 13 other students, respectively a percentage of 35.90%, 30.49%, 16.61%, 16.28%, and 0.74%.

3.3 An overall analysis of the educational satisfaction

As shown in Table 3, there are no missing values in 1,198 of the 2,307 returned questionnaires. The average score of their educational satisfaction is 3.54, above the median score of 3, indicating that the overseas students in Jiangsu province are more inclined to label their satisfaction with the education of their affiliated college or university with the status of “agree or satisfied”. Viewed merely from the average score, the level of satisfaction still needs to be raised.

As shown in Table 4, the valid percentage of the number of overseas students in Jiangsu province is 52.42% whose educational satisfaction scores are above the mean ($M=3.54$), against the maximum mean of 5 scores, which is obtained by 25 students; the percentage of the number of overseas students in Jiangsu province is 47.58% whose scores are below the mean ($M=3.54$), against the minimum mean of 1 score, which is obtained by merely 4 students. It can be concluded here that there is the phenomenon of polarization concerning the educational satisfaction of overseas students in Jiangsu province.

Table 3 Overall score of the educational satisfaction of overseas students in Jiangsu province

N(valid)	M	SD	SE
1198	3.54	0.77	0.02

Table 4 Percentage of the educational satisfaction scores of overseas students

M=3.54	N(valid)	percentage
≥ 3.54	628	52.42
< 3.54	570	47.58

3.4 An analysis of satisfaction with school learning

As is shown in Table 5, there are 1,527 valid responses to the satisfaction of overseas students in Jiangsu province with school life, whose average score is 3.58, above the median score of 3. The standard deviation of 0.80 shows that there exists a sharp difference in the satisfaction of overseas students in Jiangsu province with school learning and the difference may be derived from different schools, areas and majors, or from the varied cognition of an individual student’s satisfaction with his or her school learning. The 6 parameters of satisfaction polled with school learning are curriculum, teacher, school system, teaching facilities, library and website construction. A comprehensive assessment was carried out on the satisfaction of overseas students with school learning.

Satisfaction with curriculum: this part of the questionnaire investigates overseas students' assessment of 4 secondary parameters, that is "reasonable curriculum", "colorful learning contents", "proper choice of textbooks", and "versatile selective courses". 2,056 valid responses to satisfaction with curriculum were collected, whose average score is 3.59 (above the median) and inclines towards a level of satisfaction. There is a rather sharp internal difference in the standard deviation.

Satisfaction with teacher: this part investigates overseas students' assessment of 5 secondary parameters, that is "a wide scope of knowledge", "good teaching attitude", "flexible teaching method", "good teaching effect", and "easy but accurate teaching language". 2,150 valid responses to satisfaction with teacher were collected, whose average score is 3.74 (also above the median of 3) and inclines towards a level of satisfaction. Since the discreteness of these data is above 1, it can be concluded that there is a rather sharp internal difference within the collected data.

Satisfaction with school system: this part investigates overseas students' assessment of the properness of "elective way" and "make-up system". The valid responses to the satisfaction with school system add up to 2131, whose average score is 3.57 and inclines towards a level of satisfaction, but there is a sharp internal difference within the collected data.

Satisfaction with teaching facilities: this part investigates overseas students' assessment of 6 secondary parameters concerning teaching facilities, that is "advanced teaching facilities", "good classroom learning environment", "air-conditioned classrooms", "clean and tidy teaching buildings and classrooms", "advanced laboratory equipment", and "proper laboratory equipment-student ratio". The assessment with teaching facilities received 1,985 valid responses, whose average score is 3.70 and inclines towards a level of satisfaction, but there is still a sharp internal difference within the collected data.

Satisfaction with library: this part investigates overseas students' assessment of 9 secondary parameters concerning a library, that is, "comfortable learning environment in the library", "sufficient books and periodicals and audio-video products (teaching Chinese as a foreign language)", "sufficient books and periodicals and audio-video products (foreign languages)", "available guidance in both Chinese and a foreign language for book borrowing inside the library and on the website", "proper days of borrowing a book", "proper number of books borrowed for each course", "proper equipment of computers in the library", "proper number of desks for book reading in the library", and "foreign language guidance offered by a librarian to overseas students". The valid responses to satisfaction with library are 1,965, whose average score is 3.51 and inclines towards the level of satisfaction. The satisfaction with library has the least internal difference among all the parameters of satisfaction with school system.

Satisfaction with website construction: this part investigates overseas students' assessment of 7 secondary parameters of website construction, that is "very practical school foreign language website", "exclusive school website in Chinese and English for overseas students", "elaborate contents of the foreign language", "constant website updates", "suitable website framework", "beautiful web pages", and "significant website information". The valid responses to website construction are 2,049, whose average score is 3.41 and inclines towards the level of satisfaction, but there is also a sharp internal difference within the collected data.

Table 5 Satisfaction of overseas students in Jiangsu province with school learning

parameters (satisfaction)	N(valid)	M	SD	SE
school learning	1527	3.58	0.80	0.02
curriculum	2056	3.59	0.96	0.02
teacher	2150	3.74	1.07	0.02
school system	2131	3.57	1.00	0.02
teaching facilities	1985	3.70	0.96	0.02
library	1965	3.51	0.79	0.02
website construction	2049	3.41	0.93	0.02

3. 5 An analysis of satisfaction with school life

The 5 parameters for satisfaction with school life in the questionnaire include hostel accommodation, canteen catering, entertainment and sports activities, student affairs and services and other school facilities and services. As shown in Table 6, the valid responses to the overall satisfaction of overseas students in Jiangsu province with school life are 1685, whose average score is 3.44 and inclines towards the level of satisfaction, but the score needs to be further promoted. The standard deviation shows that there is a sharp internal difference in the scoring.

Hostel accommodation: this parameter investigates overseas students' satisfaction with hostel accommodation. It has 10 questions to answer, respectively "well-equipped life facilities in the bedroom", "well-run information and communication facilities", "foreign language TV channels in the bedroom", "satisfactory public laundry in the hostel", "satisfactory public kitchen in the hostel", "sense of safety of residing in the hostel", "reasonable charges for a hostel room", "good hygiene for the hostel's public area", "comfortable living environment nearby the hostel", and "convenient shopping nearby the hostel". There are 1,975 responses to hostel accommodation questions, whose average score is 3.39 and inclines towards the level of satisfaction, but there is a sharp internal difference within the collected data.

Canteen catering: 6 questions are included to investigate overseas students' satisfaction with canteen catering on the campus. For the convenience of data processing, the researchers put the two yes-no questions, "Is there a canteen on campus exclusive for overseas students?" and "Is there a canteen on campus exclusive for Muslims?" for separate processing. The overall satisfaction with canteen catering was calculated according to the scores on the other 4 questions, that is "delicious canteen meals", "various canteen meals", "high performance/price ratio of canteen meal", and "good canteen environment and hygiene". The valid responses collected to canteen catering, whose average score is 3.48 and inclines toward the level of satisfaction, but the internal difference within the collected data is higher than 0.9.

As show in Table 7, in the responses to the yes/no questions, 1,271 students answered "no" to "Is there a canteen on campus exclusive for overseas students?", which is 70.45% of all respondents. In contrast, only 29.55% of overseas students responded that there is an exclusive canteen providing services to overseas students. As to the question of "Is there a canteen on campus exclusive for Muslims?" more than half of the students responded that there is an exclusive canteen for Muslims on campus. It can be concluded that no exclusive canteen for overseas students might a potential cause for the low satisfaction assessment of overseas students with canteen catering.

Entertainment and sports activities: this parameter investigates overseas students' assessment of entertainment and sports activities on campus. It contains 6 secondary parameters to assess whether the college or university has "exclusive venue for entertainment activities", "exclusive venue for sports activities", "well-equipped entertainment facilities", "well-equipped sports facilities", "colorful contents of entertainment activities", and "colorful contents of sports activities". There are 2076 valid responses to satisfaction with entertainment and sport activities, whose average score is 3.55 and inclines towards the level of satisfaction, but the satisfaction needs to be improved and there is a sharp internal difference within the collected data.

Student affairs and services: this parameter investigates overseas students' assessment of the student services offered by the college or university. It has 7 secondary parameters that assess "satisfactory life advice and help", "satisfactory student activities assistance and guidance", "colorful activities to promote the understanding of Chinese culture", "free Chinese coaching service", "practicable help for students in buy insurance services", "good teacher's service attitude", and "good teacher's service quality". There are 2,064 valid responses to satisfaction with student affairs and services, whose average score is 3.45 and inclines towards the level of satisfaction, but the internal difference within the collected data is significant and the standard deviation is higher than 0.9.

Other school facilities and services: this parameter investigates overseas students' assessment of other school facilities and services. It has 3 secondary parameters, that is: "well-equipped school hospital and good doctor's service attitude", "a convenient life with prompts in Chinese and English all venues for overseas students", "wi-fi services on campus". There are 2,000 valid responses to satisfaction with other school facilities and services, whose average score is 3.26, lower than that of other parameters, and in the meanwhile there is a sharp internal difference within the collected data.

Table 6 Satisfaction of overseas students with school life

parameters (satisfaction)	N(valid)	M	SD	SE
school life	1685	3.44	0.81	0.02
hostel accommodation	1975	3.39	0.93	0.02
canteen catering	2056	3.48	0.91	0.02
entertainment and sports activities	2076	3.55	0.96	0.02
school affairs and services	2064	3.45	0.94	0.02
other school facilities and services	2000	3.26	0.97	0.02

Table 7 Percentage of students responding to the yes-no questions on canteen catering for foreign students

		N(valid)	percentage
canteen for overseas students	Yes	533	29.55
	No	1271	70.45
canteen for Muslims	Yes	414	52.08
	No	381	47.92

3.6 An analysis of satisfaction with school administration

The parameters in the questionnaire for the satisfaction with school administration concerns 7 aspects of assessment, that is “reasonable administrative regulations and system”, “high level of employee management”, “high level of administrative employees’ service quality”, “good administrative employees’ service attitude”, “high administrative employees’ work efficiency”, “excellent command of a foreign language by administrative employees”, and “strong communicative capability of administrative employees”.

As shown in Table 8, the valid responses to satisfaction of overseas students with school administration amount to 2105, whose average score is 3.58 and inclines towards the level of satisfaction, but the score needs to be further improved where the coefficient of variation is close to 1 and the discreteness is high.

As shown in Table 9, nearly half of the students polled gave a lower than average score to their satisfaction with school administration, the number of whom are nearly 1,000. In the meanwhile, more than 1,000 gave a higher than average score to their satisfaction with the school administration. It can be seen here than the internal difference within the collected data is very large, so those schools who had got a lower than average score should make efforts to promote their level of administration so as to meet the demand of overseas students on the administrative services provided by them.

Table 8 Overall satisfaction scores of overseas students in Jiangsu province with school administration

N(valid)	M	SD	SE
2105	3.58	0.98	0.02

Table 9 Percentage of the satisfaction of overseas students with school administration

M=3.58	N(valid)	percentage
≥3.58	1122	53.30
<3.58	983	46.70

3.7 An analysis of satisfaction with surrounding environment

This parameter in the questionnaire is intended to investigate the overseas students’ assessment of the surrounding environment around their schools. It has 5 aspects of assessment, that is “elegant surrounding environment”, “beautiful school environment”, “favorable school location”, “convenient shopping nearby”, and “convenient traffic nearby”.

As shown in Table 10, the valid responses to satisfaction of overseas students with surrounding environment add up to 2,160, whose average score is 3.83 and inclines towards the level of satisfaction, but the coefficient of variation is higher than 1, indicating that the degree of discreteness is very high.

As shown in Table 11, more than half of the overseas students gave a higher than the overall average score to the surrounding environment, but there are still 895 students whose assessment score on the surrounding environment is lower than the overall score, indicating that nearly half of the overseas students are not satisfied with the surrounding environment of their colleges or universities.

Table 10 Overall satisfaction scores of overseas students in Jiangsu province with surrounding environment

N(valid)	M	SD	SE
2160	3.83	1.05	0.02

Table 11 Percentage of the satisfaction of overseas students with surrounding environment

M=3.83	N(valid)	percentage
≥3.83	1265	58.56
<3.83	895	41.44

3. 8 An analysis of satisfaction with urban civility and environment

This parameter may reflect the overseas students' assessment of the urban civility and environment of the city where the school is located. It contains 9 aspects of assessment, that is "good environment and public health", "good urban greening and living environment", "good social security", "good public order", "high quality of public officials and city residents", "good attitude of public officials", "foreign language prompts at the city streets and scenic spots", "convenient foreign language voice prompts for foreign information services hotline and other public services", and "convenient foreign language voice prompts on public transportation".

As shown in Table 12, the valid responses to the satisfaction of foreign students with urban civility and environment are 2,081, whose average score is 3.55 and inclines towards the level of satisfaction, but the score needs to be improved. The coefficient of variation is close to 0.9, indicating that there is a marked internal difference within the collected data.

As shown in Table 13, there is a great disparity among overseas students in Jiangsu province in their assessment of urban civility and environment. More than 1000 respondents' satisfaction with urban civility and environment is higher than the overall level of satisfaction, while nearly 45% of overseas students are not so satisfied with urban civility and environment of the city where their colleges or universities are located.

Table 12 Overall satisfaction scores of overseas students in Jiangsu province with urban civility and environment

N(valid)	M	SD	SE
2081	3.55	0.88	0.02

Table 13 Percentage of the satisfaction of overseas students with urban civility and environment

M=3.55	N(valid)	percentage
≥3.55	1167	56.08
<3.55	914	43.92

3. 9 A horizontal comparison of the satisfaction of each dimension

As shown in Table 14, the assessment of overseas students in Jiangsu province with surrounding environment is comparatively better than their assessment of other parameters. However, the internal difference within the collected data is rather sharp, whose coefficient of variation is higher than 1, indicating that there exist both high evaluation and low evaluation at the same time and the phenomenon of polarization in their evaluation of the same parameter. The level of satisfaction of overseas students in Jiangsu province with school life is found to be the lowest, which gets a score of only 3.44, lower than that with the overall level of satisfaction with education.

Table 14 Scores of the satisfaction of overseas students in Jiangsu province with their education and each of its dimensions

parameters (satisfaction)	N(valid)	M	SD	SE
education	1198	3.54	0.77	0.02
school learning	1527	3.58	0.80	0.02
school life	1685	3.44	0.81	0.02
school administration	2105	3.58	0.98	0.02
surrounding environment	2160	3.83	1.05	0.02
urban civility and environment	2081	3.55	0.88	0.02

3. 10 An internal vertical comparison of the satisfaction each dimension

The investigated satisfaction with school learning is comprised of 6 parameters, that is curriculum, teacher, school system, teaching facilities, library and website construction. The satisfaction with school life contains 5 parameters that cover hostel accommodation, canteen catering, entertainment and sports activities, student affairs and services, other school facilities and services. A comprehensive of the contribution of the satisfaction of overseas students with the 11 parameters for school learning and school life to the overall level of satisfaction will help reveal the less satisfactory parameters and provide a basis and data support to the improvement of the educational services work for overseas students.

3.10.1 Satisfaction with curriculum

As shown in Table 15, the overseas students in Jiangsu province is much satisfied with the courses offered by their colleges or universities ($M=3.59$), particularly with curriculum setting, learning contents and choice of textbooks, but they are the least satisfied with the number of selective courses, which gets the lowest score ($M=3.44$).

Table 15 Overall satisfaction with curriculum and satisfaction with each of its parameters

parameters (satisfaction)	N(valid)	M	SD	SE
overall satisfaction	2056	3.59	0.96	0.02
reasonable curriculum	2220	3.66	1.11	0.02
colorful learning contents	2228	3.63	1.12	0.02
proper choice of textbooks	2222	3.59	1.17	0.03
versatile selective courses	2135	3.44	1.14	0.03

3.10.2 Satisfaction with teacher

Generally speaking, overseas students in Jiangsu province are fairly satisfied with their teachers ($M=3.74$), particularly with the scope of knowledge, teaching attitude, teaching method and teaching language of their teachers ($M=3.87$, $M=3.88$, $M=3.69$, $M=3.74$), but they think that the teaching effect of their teachers is comparatively worse ($M=3.68$), and in the meanwhile there is a marked internal difference within the data collected.

Table 16 Overall satisfaction with teacher and satisfaction with each of its parameters

parameters (satisfaction)	N(valid)	M	SD	SE
overall satisfaction	2150	3.74	1.07	0.02
wide scope of knowledge	2239	3.87	1.22	0.03
good teaching attitude	2248	3.88	1.23	0.03
flexible teaching method	2246	3.69	1.17	0.03
good teaching effect	2213	3.68	1.19	0.02
easy but accurate teaching language	2217	3.74	1.07	0.03

3.10.3 Satisfaction with school system

As shown in this investigation, the overseas students are fairly satisfied with the regulations of course selection and the make-up system of their schools ($M=3.57$, $M=3.56$), and their satisfaction with these two parameters are roughly on a par with the overall satisfaction with the school system.

Table 17 Overall satisfaction with school system and satisfaction with each of its parameters

parameters (satisfaction)	N(valid)	M	SD	SE
overall satisfaction	2131	3.57	1.00	0.02
proper regulations of course selection	2214	3.57	1.09	0.02
proper make-up system	2150	3.56	1.10	0.02

3.10.4 Satisfaction with teaching facilities

As shown in Table 18, the satisfaction of overseas students in Jiangsu province with teaching facilities generally inclines towards the level of satisfaction ($M=3.70$), but their scores on the 2 parameters of “advanced laboratory equipment” and “proper laboratory equipment-student ratio” are lower than the score on overall satisfaction with teaching facilities.

Table 18 Overall satisfaction with teaching facilities and satisfaction with each of its parameters

parameters (satisfaction)	N(valid)	M	SD	SE
overall satisfaction	1985	3.70	0.98	0.02
advanced teaching facilities	2198	3.70	1.09	0.02
good classroom learning environment	2243	3.78	1.18	0.03
air-conditioned classrooms	2229	3.74	1.38	0.03
clean and tidy teaching buildings and classrooms	2224	3.73	1.25	0.03
advanced laboratory equipment	2094	3.58	1.12	0.02
proper laboratory equipment-student ratio	2104	3.59	1.14	0.02

3.10.5 Satisfaction with library

As shown in Table 19, the overall assessment of overseas students in Jiangsu province with the library services inclines towards the level of satisfaction ($M=3.51$), but the index is rather low. The coefficient of variation is close to 0.9, indicating a sharp difference within the collected data. The cause may be ascribed to the inconsistency in the service quality in different types of libraries, and/or in different areas of Jiangsu province. A specific analysis reveals that overseas students are generally affirmative of the comfortable learning environment in the library ($M=3.72$), but their satisfaction with “foreign language guidance offered by a librarian to overseas students” is rather low. Thus the international quality and professional competence of the librarians should be promoted so as to better meet the need for the globalization of education and provide better and practicable services for the overseas students.

Table 19 Overall satisfaction with library and satisfaction with each of its parameters

parameters (satisfaction)	N(valid)	M	SD	SE
overall satisfaction	1965	3.51	0.89	0.02
comfortable learning environment in the library	2181	3.72	1.23	0.03
sufficient books and periodicals and audio-video products	2178	3.59	1.17	0.03
(teaching Chinese as a foreign language) sufficient books and periodicals and audio-video products (foreign languages)	2161	3.44	1.12	0.02
available guidance in both Chinese and a foreign language guidance for book borrowing inside the library and on the website	2126	3.41	1.08	0.02
proper days of borrowing a book	2093	3.55	1.06	0.02
proper number of books borrowed for each course	2100	3.53	1.06	0.02
proper equipment of computers in the library	2111	3.45	1.11	0.02
proper number of desks for book reading in the library	2115	3.55	1.17	0.03
foreign language guidance offered by a librarian to overseas students	2106	3.27	1.14	0.03

3.10.2 Satisfaction with website construction

As shown in Table 20, the overall assessment of overseas students in Jiangsu province with website construction inclines towards the level of satisfaction ($M=3.41$), but the index needs to be promoted. However, the overseas students are affirmative of the beautiful web pages and the suitable website framework, but they are not so satisfied with the parameters of website practicability, significant website information, constant website update and elaborate contents of the foreign language websites ($M=3.39$, $M=3.39$, $M=3.37$, $M=3.30$).

Table 20 Overall satisfaction with library and satisfaction with each of its parameters

parameters (satisfaction)	N(valid)	M	SD	SE
overall satisfaction	2049	3.41	0.97	0.02
very practical school foreign language website	2166	3.39	1.17	0.03
exclusive school website in Chinese and English for overseas students	2174	3.44	1.15	0.03
elaborate contents of the foreign language	2176	3.30	1.13	0.02
constant website updates	2177	3.37	1.13	0.02
suitable website framework	2129	3.45	1.09	0.02
beautiful web pages	2159	3.50	1.09	0.02
significant website information	2179	3.39	1.19	0.03

3.10.7 Satisfaction with hostel accommodation

As shown in Table 21, the overall satisfaction of overseas students with hostel accommodation is not so high (M=3.39). This assessment of “sense of safety of living in a hostel room” is the highest, their assessment of the living environment and the shopping environment nearby the hostel is fairly high, but their scoring on the parameters of “foreign language TV channels available in the bedroom” and “satisfactory public kitchen in the hostel is rather low.

Table 21 Overall satisfaction with hostel accommodation and satisfaction with each of its parameters

parameters (satisfaction)	N(valid)	M	SD	SE
overall satisfaction	1975	3.39	0.93	0.02
well-equipped life facilities in the bedroom	2121	3.49	1.23	0.03
well-run information and communication facilities	2138	3.26	1.29	0.02
foreign language TV channels available in the bedroom	2109	2.87	1.41	0.03
satisfactory public laundry in the hostel	2129	3.26	1.31	0.03
satisfactory public kitchen in the hostel	2124	3.15	1.41	0.03
sense of safety of living in the hostel	2141	3.70	1.27	0.03
reasonable charges for a hostel room	2112	3.46	1.25	0.03
good hygiene for the hostel’s public area	2128	3.43	1.24	0.03
comfortable living environment nearby the hostel	2138	3.59	1.19	0.03
convenient shopping nearby the hostel	2143	3.69	1.18	0.03

3.10.8 Satisfaction with canteen catering

As shown in Table 22, the valid responses of overseas students in Jiangsu province to the satisfaction of canteen catering amount to 2056-2191. Among them, the overall satisfaction with canteen catering is fairly high (M=3.48), but there is a large internal difference within the collected data. Overseas students in Jiangsu province are much satisfied with canteen environment and hygiene, but they think not so highly of the variety of canteen meals.

Table 22 Overall satisfaction with canteen catering and satisfaction with each of its parameters

parameters (satisfaction)	N(valid)	M	SD	SE
overall satisfaction	2056	3.48	0.91	0.02
delicious canteen meals	2121	3.49	1.23	0.03
various canteen meals	2184	3.46	1.18	0.02
good canteen environment and hygiene	2191	3.58	1.14	0.02

3.10.9 Satisfaction with entertainment & sports activities

As shown in Table 23, the overall satisfaction of overseas students in Jiangsu province with entertainment and sports activities inclines towards the level of satisfaction (M=3.55), but the index needs to be further promoted. The overseas students are fairly satisfied with the exclusive venue for entertainment and sports activities, but they are not so satisfied on the parameters of well-equipped sports facilities colorful contents of entertainment activities colorful contents of sports activities.

Table 23 Overall satisfaction with entertainment and sports activities and satisfaction with each of its parameters

parameters (satisfaction)	N(valid)	M	SD	SE
overall satisfaction	2076	3.55	0.96	0.02
exclusive venue for entertainment activities	2158	3.63	1.14	0.03
exclusive venue for sports activities	2176	3.75	1.15	0.03
well-equipped entertainment facilities	2164	3.45	1.10	0.02
well-equipped sports facilities	2169	3.58	1.10	0.02
colorful contents of entertainment activities	2179	3.37	1.13	0.02
colorful contents of sports activities	2175	3.46	1.14	0.02

3.10.10 Satisfaction with student affairs and services

As shown in Table 24, the overall satisfaction of overseas students in China with student affairs and services is rather low ($M=3.45$). A specific analysis reveals that the overseas students are fairly satisfied with teacher's service attitude and teacher's service quality ($M=3.62$, $M=3.63$). But their scores on the 2 parameters of "free Chinese coaching services" and "practicable help for students in buying insurance services" are rather low. It can be concluded here that those in charge of overseas education should provide the overseas students with more information and services to help them on these 2 parameters.

Table 24 Overall satisfaction with student affairs and services and satisfaction with each of its parameters

parameters (satisfaction)	N(valid)	M	SD	SE
overall satisfaction	2064	3.45	0.94	0.02
satisfactory life advice and help	2199	3.47	1.13	0.02
satisfactory student activities assistance and guidance	2206	3.50	1.11	0.02
colorful activities to promote the understanding of Chinese culture	2212	3.40	1.15	0.02
free Chinese coaching services	2187	3.23	1.24	0.03
practicable help for students in buying insurance services	2155	3.30	1.17	0.03
good teacher's service attitude	2208	3.62	1.18	0.03
good teacher's service quality	2192	3.63	1.17	0.03

3.10.11 Satisfaction with other school facilities and services

As shown in Table 25, the valid responses to the satisfaction with other school facilities and services are between 2000-2163, where the overall satisfaction of this parameter is comparatively low ($M=3.26$). A specific analysis reveals that the overseas students are not so satisfied with the 3 secondary parameters of "well-equipped school hospital", "prompts in Chinese and English in all venues for overseas students on campus" and "coverage of wi-fi services on campus" ($M=3.34$, $M=3.17$, $M=3.24$). The result of this investigation will fix the orientation for the future administrative work on overseas education, which is helpful to the improvement of the quality of overseas students education and the level of satisfaction of overseas students with education.

Table 25 Overall satisfaction with other school facilities and services and satisfaction with each of its parameters

parameters (satisfaction)	N(valid)	M	SD	SE
overall satisfaction	2000	3.26	0.97	0.02
well-equipped school hospital	2093	3.34	1.12	0.02
prompts in Chinese and English in all venues for overseas students on campus	2163	3.17	1.20	0.03
coverage of wi-fi services on campus	2110	3.24	1.31	0.03

3.10.12 Satisfaction with school administration

As shown in Table 26, the valid responses of this parameter are between 2105-2211, the overall satisfaction with school administration of overseas students in China's Jiangsu province is fairly high ($M=3.58$), but there exists a sharp difference within the collected data. A specific analysis reveals that the

overseas students polled are much satisfied with school administrative regulations & systems, administrative employees' management, service quality, attitude and work efficiency (M=3.57, M=3.62, M=3.61, M=3.65, M=3.60), but they deem that there is something to be desired in the foreign language level and intercultural communicative competence of the school administrative employees (M=3.47, M=3.52).

Table 26 Overall satisfaction with school administration and satisfaction with each of its parameters

parameters (satisfaction)	N(valid)	M	SD	SE
overall satisfaction	2105	3.58	0.98	0.02
reasonable administrative regulations & system	2197	3.57	1.15	0.02
high level of administrative employees' management	2211	3.62	1.13	0.02
high level of administrative employees' service quality	2210	3.61	1.11	0.02
good administrative employees' service attitude	2208	3.65	1.14	0.02
high administrative employees' work efficiency	2201	3.60	1.12	0.02
excellent command of a foreign language by administrative employees	2211	3.47	1.17	0.03
strong intercultural communicative competence of administrative employees	2177	3.52	1.08	0.02

3.10.13 Satisfaction with surrounding environment

As shown in Table 27, the valid responses to this parameter are between 2160-2220. The level of overall satisfaction of overseas students with surrounding environment is fairly high (M=3.83). A specific analysis reveals that overseas students polled are much satisfied with school environment nearby, campus environment, school location and nearby traffic (M=3.81, M=3.84, M=3.81, M=3.90), but in contrast, they think less of the shopping convenience nearby (M=3.75).

Table 27 Overall satisfaction with surrounding environment and satisfaction with each of its parameters

parameters (satisfaction)	N(valid)	M	SD	SE
overall satisfaction	2160	3.83	1.05	0.02
elegant environment nearby	2217	3.81	1.14	0.02
beautiful campus environment	2220	3.84	1.16	0.03
favorable school location	2216	3.81	1.21	0.03
convenient shopping nearby	2216	3.75	1.20	0.03
convenient traffic nearby	2197	3.90	1.18	0.03

3.10.14 Satisfaction with urban civility and environment

As shown in Table 28, the valid responses to satisfaction with this parameter are between 2081-2219. The overall satisfaction of overseas students with urban civility and environment inclines towards the level of satisfaction (M=3.55), but the index needs to be raised. A specific analysis reveals that overseas students polled are much satisfied with urban public environment, urban greening and living environment, social security in Jiangsu province, public order, quality of public officials and their services, and quality of city residents. But the rating on the specialized services for overseas students is rather low, particularly concerning 3 parameters of foreign language prompts at the city streets and scenic spots, foreign language voice prompts for public services, and foreign language voice prompts on public transportation.

Table 28 Overall satisfaction with urban civility and environment and satisfaction with each of its parameters

parameters (satisfaction)	N(valid)	M	SD	SE
overall satisfaction	2081	3.55	0.88	0.02
good environment and public health	2207	3.56	1.16	0.03
good urban greening and living environment	2194	3.74	1.08	0.02
good social security	2219	3.81	1.15	0.02
good public order	2210	3.72	1.12	0.02
high quality of public officials and city residents	2210	3.59	1.09	0.02
good attitude of public officials	2197	3.62	1.07	0.02
foreign language prompts at the city streets and scenic spots	2215	3.31	1.17	0.03
convenient foreign language voice prompts for public services	2177	3.24	1.11	0.02
convenient foreign language voice prompts on public transportation	2210	3.30	1.19	0.03

3.11 Different satisfaction of different student categories

The questionnaire divides students polled into Chinese language students, bachelor degree candidates, master degree candidates, doctor degree candidates, and other students. As shown in Table 29, there exists a significant difference ($P=0.006$, $P=0.007$, $P=0.001$, $P=0.000$, $P=0.001$) in the overall satisfaction of different categories of students with education and in their satisfaction with each of its 5 dimensions that include school learning, school life, school administration and urban civility and environment.

Table 29 Overall satisfactions of different categories of students with education and their satisfaction with each of its dimensions

questionnaire and its dimensions	Chinese language students M±SD	bachelor degree candidates M±SD	master degree candidates M±SD	doctor degree candidates M±SD	other students ⁵ M±SD	df	P value
overall satisfaction	3.47±0.68	3.56±0.82	3.58±0.76	3.73±0.79	3.85±0.94	986	0.006**
school learning	3.51±0.75	3.60±0.82	3.61±0.77	3.75±0.78	3.82±0.87	1227	0.007**
school life	3.32±0.73	3.48±0.83	3.50±0.81	3.57±0.86	3.79±0.78	1374	0.001**
school administration	3.48±0.95	3.58±1.00	3.57±1.01	3.82±0.94	3.87±1.11	1690	0.000***
surrounding environment	3.81±1.04	3.85±1.07	3.78±1.06	4.00±0.99	4.06±0.77	1728	0.088
urban civility and environment	3.46±0.87	3.56±0.90	3.60±0.88	3.71±0.82	3.83±0.73	1668	0.001**

3.11.1 An overall analysis of overall satisfaction with education

A specific analysis reveals that there is a significant difference in the overall satisfaction with education between Chinese language students ($M=3.47$) and bachelor degree candidates, master degree candidates and other students ($P=0.108$, $P=0.107$, $P=0.185$), but the overall satisfaction of the other categories of students are conspicuously lower than that of doctor degree candidates ($M=3.85$, $P=0.000$); there is a significant difference in the overall satisfaction with education between bachelor degree candidates ($M=3.56$) and master degree candidates and other students ($P=0.798$, $P=0.321$), which is significantly lower by a score of 0.29 than the overall satisfaction of doctor degree candidates ($M=3.85$, $P=0.023$) on 95% statistical significance level; there is no significant difference between the overall satisfaction with education of master's degree candidates ($M=3.58$) and the overall satisfactions with education of doctor degree candidates and other students ($P=0.073$, $P=0.357$); and there is also no significant difference between the overall satisfaction with education of doctor degree candidates and the overall satisfaction with education of other students ($P=0.682$).

⁵Note: Other students are merely 7-13.

3.11.2 An analysis of satisfaction with school learning

The satisfaction with school learning represents the overall assessment of overseas students on school curriculum, teacher, school system, teaching facilities, library and website construction. there is also no significant difference between the satisfaction with school learning of Chinese language students ($M=3.51$) and the satisfactions with school learning of bachelor degree candidates, master degree candidates and other students ($P=0.079$, $P=0.106$, $P=0.264$), but the satisfaction with school learning of Chinese language students is significantly lower by 0.24 than the satisfaction with school learning of doctor degree candidates ($M=3.75$, $P=0.000$); the score of satisfaction with school learning of bachelor degree candidates ($M=3.60$) is significantly lower by 0.15 ($P=0.031$) than the satisfaction with school learning of doctor degree candidates ($M=3.75$); there is no significant difference in the satisfaction with school learning between master degree candidates and doctor degree candidates ($P=0.075$, $P=0.466$), and in the meanwhile there is no significant difference in this parameter between doctor degree candidates and other students ($P=0.811$).

3.11.3 An analysis of satisfaction with school life

There is also no significant difference between the satisfaction with school life of Chinese language students ($M=3.32$) and the satisfaction with school life of other students ($P=0.070$), but is significantly lower by respectively a score of 0.16, 0.18, and 0.25 than the satisfactions with school life of bachelor degree candidates, master degree candidates and doctor degree candidates ($P=0.003$, $P=0.005$, $P=0.000$); there is no significant difference between the satisfaction with school life of bachelor degree candidates and the satisfactions with school life of master degree candidates, doctoral degree candidates and other students ($P=0.727$, $P=0.183$, $P=0.230$); there is no significant difference between satisfaction with school life of master degree candidates and the satisfactions with school life of doctoral degree candidates and other students ($P=0.388$, $P=0.271$); there is no significant difference between the satisfaction with school life of doctoral degree candidates and the satisfaction with school life of other students ($P=0.394$).

3.11.4 An analysis of satisfaction with school administration

There is no significant difference in satisfaction with school administration between Chinese language students and bachelor degree candidates, master degree candidates and other students ($P=0.076$, $P=0.214$, $P=0.157$), but satisfaction with school administration of Chinese language students is significantly lower than that of doctor degree candidates ($P=0.000$); there is no significant difference in satisfaction with school administration between bachelor degree candidates and master degree candidates and other students ($P=0.819$, $P=0.300$), but satisfaction with school administration of bachelor degree candidates is significantly lower by a score of 0.24 than that of doctor degree candidates ($P=0.001$); the satisfaction of master degree candidates is significantly lower than that of doctor degree candidates ($P=0.003$), but there is no significant difference in this respect between doctoral candidates and other students ($P=0.853$).

3.11.5 An analysis of satisfaction with surrounding environment

There is no significant difference in satisfaction with surrounding environment between Chinese language students and bachelor degree candidates, master degree candidates and doctor degree candidates ($P=0.480$, $P=0.669$, $P=0.392$), but satisfaction with school administration of Chinese language students is significantly lower by a score of 0.19 than that of doctoral degree candidates ($P=0.015$); there is no significant difference in satisfaction with surrounding environment between bachelor degree candidates and master degree candidates, doctoral degree candidates and other students ($P=0.324$, $P=0.068$, $P=0.480$); satisfaction with surrounding environment of master degree candidates is significantly lower than that of master degree candidates ($P=0.014$), but it has no significant difference from that of other students ($P=0.340$); there is also no significant difference in satisfaction with surrounding environment between doctor degree candidates and other students ($P=0.824$).

3.11.6 An analysis of satisfaction with urban civility and environment

There is no significant difference in satisfaction with urban civility and environment between Chinese language students and bachelor degree candidates and others ($P=0.066$, $P=0.132$), but satisfaction of

Chinese language students is significantly lower than that of master degree candidates and doctoral degree candidates ($P=0.025$, $P=0.000$); there is no significant difference in this parameter between bachelor degree candidates and master degree candidates and other students ($P=0.485$, $P=0.267$), but satisfaction of bachelor degree candidates is significantly lower than that of doctoral degree candidates ($P=0.018$); there is no significant different in satisfaction with urban civility and environment between master degree candidates and doctoral degree candidates and other students, and between doctoral degree candidates and other students ($P=0.141$, $P=0.361$, $P=0.636$).

3.12 An exploration into the parameters that affect overseas students' educational satisfaction

3.12.1 Contribution of each parameter to the educational satisfaction

The educational satisfaction investigated in this research is constituted of 5 dimensions that is satisfaction with school learning, satisfaction with school life, satisfaction with school administration, satisfaction with surrounding environment, and satisfaction with urban civility and environment. The dimension of school learning is further divided into 6 parameters that include curriculum, teacher, school system, teaching facilities, library, and website construction; the dimension of school life is further divided into 5 parameters that cover hostel accommodation, canteen catering, entertainment and sports activities, student affairs and services, and other school facilities. A focused study was carried out on the contribution of these 11 parameters to the overall satisfaction with education. First, a correlation analysis on the relationship between the 6 parameters of school learning and the educational satisfaction reveals that each of the 6 parameters of school learning has a significant correlation with the educational satisfaction, whose coefficient is between 0.742-0.859. A correlation analysis on the relationship between the 5 parameters of school life and the educational satisfaction reveals that each of the 5 parameters of school life has a significant correlation with the educational satisfaction, whose coefficient is fairly high, between 0.751-0.865.

Table 30 Correlation between satisfaction with school learning and its 6 parameters and the overall educational satisfaction

correlation	school learning	curriculum	teacher	school system	teaching facilities	library	website construction
Pearson correlation	0.953**	0.786**	0.742**	0.769**	0.817**	0.859**	0.806**
significance (bilateral)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
N	1198	1198	1198	1198	1198	1198	1198

Table 31 Correlation between satisfaction with school life and its 5 parameters and the overall educational satisfaction

correlation	school life	hostel accommodation	canteen catering	entertainment and sports activities	student affairs and services	other school facilities and services
Pearson correlation	0.945**	0.829**	0.803**	0.816**	0.865**	0.751**
significance (bilateral)	0.000	0.000	0.000	0.000	0.000	0.000
N	1198	1198	1198	1198	1198	1013

The data regression analysis was adopted based on data in Table 32 and Table 33 to analyze the accountability and influence of 6 school learning parameters and 5 school life parameters to the overall educational satisfaction. It is found that of the 6 school learning parameters, 2 parameters of the highest accountability are library and teaching facilities, whose R^2 is respectively 73.8% and 66.7%; of the 5 school life parameters, 2 parameters of the highest accountability are student affairs and services and hostel accommodation, whose R^2 is respectively 74.8% and 68.7%.

Table 32 Accountability of satisfaction with school learning and its 6 parameters to the overall educational satisfaction

parameters	B value	SE (standard error)	standardized coefficient	T value	Sig	R2
(constant)	1.169	0.056		20.960	0.000	0.617
curriculum	0.659	0.015	0.786	43.918		
(constant)	1.451	0.057	0.742	25.622	0.000	0.551
teacher	0.554	0.014		38.294		
(constant)	1.363	0.054	0.769	25.153	0.000	0.592
school system	0.610	0.015		41.664		
(constant)	1.119	0.051	0.817	21.873	0.000	0.667
teaching facilities	0.660	0.013		48.958		
(constant)	0.898	0.047	0.859	19.128	0.000	0.738
library	0.753	0.013		58.019		
(constant)	1.273	0.050	0.806	25.454	0.000	0.649
website construction	0.663	0.014		47.042		

Table 33 Accountability of satisfaction with school life and its 5 parameters to the overall educational satisfaction

parameters	B value	SE (standard error)	standardized coefficient	T value	Sig	R2
(constant)	1.167	0.048	0.829	24.305	0.000	0.687
hostel accommodation	0.693	0.014		51.242		
(constant)	1.141	0.053	0.803	21.463	0.000	0.645
canteen catering	0.685	0.015		46.660		
(constant)	1.161	0.050	0.816	23.003	0.000	0.666
entertainment and sports activities	0.676	0.014		48.784		
(constant)	1.011	0.044	0.865	23.025	0.000	0.748
student affairs and services	0.728	0.012		59.560		
(constant)	1.527	0.057	0.751	26.825	0.000	0.565
other school facilities and services	0.607	0.017		36.210		

3.12.2 Model fitting

Through a number of goodness-of-fit tests at the multivariate linear regression model, the linear model was finally fixed as:
 $y=0.008+0.054X_1+0.086X_2+0.027X_3+0.124X_4+0.115X_5+0.099X_6+0.137X_7+0.068X_8+0.105X_9+0.131X_{10}+0.057X_{11}$. It is concluded that the overall accountability of the 11 parameters reaches 98.8%.

Table 34 Overall accountability of 11 parameters of assessment: a model summary

model	R	R-squared	adjusted R-squared	standardized estimated error
1	0.994	0.988	0.987	0.09020

Predictors (constant): curriculum, teacher, school system, teaching facilities. Library, website construction, hostel accommodation, canteen catering, entertainment and sports activities, student affairs and services, other school facilities and services; Note: X_1 - X_6 respectively represents the β value of standardized coefficient of the 6 parameters for school learning; X_7 - X_{11} respectively represents the β value of standardized coefficient of the 5 parameters for school life.

4. Conclusion

4.1 Students' nationality

(1) In view of nationality of overseas students in China, Asian students are the most (1,423), followed by African students (376) and European students (208), whereas students from North and South America (65) and students from Oceania (9) are the least 2 group of overseas students choosing to study in Jiangsu province. (2) In view of student categories, Chinese language students cover more than 1/3 percentage of all overseas students, showing that Chinese language students are still the most populous group of students

choosing to study in Jiangsu province. However, to the joy of colleges and universities in Jiangsu province, a certain proportion of overseas students are now choosing to pursue a higher education degree at the bachelor's, the master's and the doctoral level in Jiangsu province, which has reached an accumulative 63.38% of all. The new trend shows that the quality of overseas students in Jiangsu province is constantly on the rise and the education of overseas students in Jiangsu province is now highlighted by receiving a diploma/degree education in a Chinese institution of higher learning.

4.2 An analysis of educational satisfaction

4.2.1 Overall satisfaction

The overall satisfaction with education of overseas students in Jiangsu province is at the upper middle level. A specific analysis reveals that there exists a serious polarization on the level of satisfaction with education of overseas students in Jiangsu province, where the overall satisfaction with education of 52.42% of students is higher or equal to 3.54, but the overall satisfaction with education of nearly 50% of students is lower than the average level. Because this large-scale questionnaire involved a lot of colleges and universities of different types in different areas and at different levels, including both nationally well-known key universities and some higher vocational technical colleges, there exist great differences between these colleges and universities in faculty resources, learning resources, equipment resources, other resources and schooling orientation, and as a result the different teaching quality, learning atmosphere and conception of school administration causes a great disparity in the satisfactions with education of overseas students from different colleges and universities in Jiangsu province.

4.2.2 School learning

The overall satisfaction of overseas students with school learning is not so prominent. A specific analysis shows that the satisfactions of overseas students with teacher and teaching facilities are fairly high, but they are popularly not satisfied with library and website construction. According to a survey, most foreign students choosing to study in Jiangsu province have not learned Chinese before arriving in China, but since they are going to take the HSK test, these beginners of the Chinese language are urgently in need of foreign language prompts in their daily life to help them learn to communicate with the Chinese teachers and partners in Chinese. However, an analysis on the satisfaction with library reveals that the overseas students are popularly not satisfied with "foreign language guidance offered by a librarian to overseas students", "available guidance in both Chinese and a foreign language inside the library and on the website for book borrowing", and "sufficient books and periodicals and audio & video products", with the lowest score given to "foreign language guidance offered by a librarian to overseas students".⁶

4.2.3 School life

The satisfaction with school life of overseas students in Jiangsu province is rather low, at a mere score of 3.44. They give the lowest scores to their satisfactions with hostel accommodation ($M=3.39$) and other school facilities and services ($M=3.26$), but the highest score to entertainment and sports activities ($M=3.55$). A specific analysis reveals that among the 4 secondary parameters of hostel accommodation, the overseas students are least satisfied with "well-run information and communication facilities", "Foreign language TV channels available in the bedroom", "satisfactory public laundry in the hostel" and "satisfactory public kitchen in the hostel". It can be concluded that the dissatisfaction of overseas students with hostel accommodation mainly lies in their doubts about the service quality of basic amenities provided by their schools. Therefore, recruitment colleges and universities should take measures to improve the hardware aspect of the hostel accommodation for overseas students, mainly to improve the internet service quality of the hostels, to increase foreign language TV programs for overseas students, to meet the cultural needs of overseas students from different nations, to increase the washing machines in the public laundry in the hostel, and to provide public kitchen for overseas students to cook meals for themselves.

⁶Note: The overall average score of the satisfaction with library is 3.51, the score for "foreign language guidance offered by a librarian to overseas students" is 3.27, the score for "available guidance in both Chinese and a foreign language for book borrowing inside the library and on the website" is 3.41, and the score for "sufficient books and periodicals and audio & video products" is 3.44.

In the aspect of other school facilities and services, overseas students are least satisfied with the secondary parameters of “prompts in Chinese and English in all venues for overseas students on campus” and “coverage of wi-fi services on campus”. It can be concluded that recruitment colleges and universities have not provided sufficient practicable services to overseas students, particularly in the aspect of offering prompts in both Chinese and English in the venues for overseas students. In the meanwhile, it is worth noting that one of the basic complaints of overseas students focuses on the coverage of wi-fi services on campus. Another question that needs paying attention to is the issue of canteen catering for overseas students. In the survey question on “Is there a canteen on campus exclusive for overseas students?” 1,271 respondents answered “no”, which is a percentage of 70.45%. In contrast, only 29.55% of overseas students responded that there is an exclusive canteen providing services to overseas students. Most overseas students come from different countries, where they have different diets and eating habits, so it is suggested that recruitment schools should grasp the nationalities of overseas students in their schools in recent years and establish an exclusive canteen for overseas students to provide local foods that will meet their dietary needs.

4.2.4 School Administration

The satisfaction of overseas students with school administration is not so prominent and there is a sharp internal difference. A specific analysis reveals that overseas students give the lowest scores to the questions of “excellent command of a foreign language by administrative employees” and “strong intercultural communicative competence of the school administrative employees”. It again shows that the development of higher education is inseparable from the promotion of the quality and level of international quality of administrative employees of an institution of higher learning. A college or university should strive to raise the foreign language level and intercultural communicative competence of its administrative employees and gradually the service quality and professional level of the administrative employees in charge of the education on international students.

4.2.5 Surrounding Environment

The satisfactions of overseas students with surrounding environment and each of its secondary parameters are all fairly high, indicating that they think highly of the elegant environment nearby, the favorable school location, the convenient traffic and shopping environment nearby, which they deem are suitable for their learning and life in China.

4.2.6 Urban civility and environment

The satisfaction of overseas students with urban civility and environment is at the upper middle level. A specific analysis reveals that the satisfactions of overseas students in Jiangsu province with social security and public order are the highest; their assessments are the lowest of the 3 secondary parameters of “foreign language prompts at the city streets and scenic spots”, “convenient foreign language voice prompts for public services”, and “convenient foreign language voice prompts on public transportation”. The lowest score of satisfaction has been repeatedly given to “foreign language prompts and guidance” among all the parameters of educational satisfaction of overseas students. That means “foreign language prompts and guidance” must be provided in order to promote the overseas education work and the internationalization of education, for this is one of the main complaints and appeals of overseas students.

4.3 A comparison of students of different categories

There is a significant difference between students of different categories in the overall satisfaction and satisfaction with each of the 5 parameters of school learning, school life, school administration and urban civility and environment ($P=0.006$, $P=0.007$, $P=0.001$, $P=0.000$, $P=0.001$).

4.4 An analysis of parameters affecting overseas students' educational satisfaction

An analysis based on the constructed multivariate linear regression model reveals that the accountability amounts to 98.8% of the 63 survey questions in the 11 parameters of the 2 dimensions of school learning and school life, which is fairly ideal result. The 11 parameters include curriculum, teacher,

school system, teaching facilities, library, website construction, hostel accommodation, canteen catering, entertainment and sports activities, student affairs and services, other school facilities and services.

5. Suggestions

5.1 “Foreign language prompts and guidance” are the topmost demand of overseas students in China;

The investigation finds that, the overseas students are popularly not satisfied with survey parameters concerning foreign language prompts and guidance, particularly on the 6 questions of “available guidance in both Chinese and a foreign language inside the library and on the website for book borrowing”, “foreign language guidance offered by a librarian to overseas students”, “prompts in Chinese and English in all venues for overseas students on campus”, “foreign language prompts at the city streets and scenic spots”, “convenient foreign language voice prompts for foreign information services hotline and other public services”, and “convenient foreign language voice prompts on public transportation”. From here it can be concluded that when the overseas students arrive in China for the first time, they are urgently in need of breaking their barriers in language communication and improving their intercultural understanding. This conclusion is also valid to the brief answer question of “which is the problem you want to settle the most urgently now?”, where more than 50% of overseas students express the wishes to improve their oral communicative competence in Chinese, to learn the Chinese language, and to pass the HSK test in future.

5.2 The basic living conditions for overseas students should be improved;

The problems revealed in the investigation in this respect include the dissatisfactions of overseas student with the school facilities such as public kitchen, public laundry, and information and communication facilities in the hostel, and the problem of having no exclusive canteen for overseas students in most schools. The score of satisfaction with “coverage of wi-fi services on campus” is also quite low. All these problems revealed point at the scarcity or low quality of the basic amenities for overseas students, so efforts should be made to improve the basic living conditions of overseas students and provide a better learning and living environment for them.

5.3 The international service level of educational administrative employees should be raised;

When they arrive in China for the first time, overseas students are not familiar with their schools and may have a problem of inter-cultural communication, so they are urgently in need of help with their learning and life from the educational administrative employees. This requires the educational administrative employees to have a high level of foreign language competence, to be able to communicate with overseas students and find the practical problems and difficulties they have met with. Complaints of overseas students have been repeatedly noted in the investigation, saying that the educational administrative employees rarely use a foreign language to offer help for overseas students or they are not aware of doing that, as a result of which the satisfactions of overseas with “excellent command of a foreign language by administrative employees” and “strong intercultural communicative competence” are rather low.

5.4 The construction of school library and a portal website should be made to better meet the practical needs of overseas students;

A comprehensive reform planning on the school library suggests providing more focused and practical services to overseas students, such increasing help or guidance desks or stations for overseas students, or opening library service hotlines for overseas students to help overseas students with their problems in time. The deficiency in website construction lies in 3 aspects, including lack of elaborate contents on the school portal, timely updates and practicality. Suggestions on foreign language website construction are as follows: updating campus news and notices at first time, especially those concerning overseas learning, life and educational services and administration; in posting contents on the website, editors in charge should take into consideration the willingness of overseas students and their understanding of the educational level of the college or university, presenting the notices and announcements in a conspicuous manner and providing the links, if any, to them, together with the links to the Chinese websites publishing the same notices and

announcements, to facilitate the retrieval of them by overseas students; adding a column of “work on overseas education” on the foreign language portal, publicizing this webpage among the overseas students; carrying out a large-scale interview with overseas students to grasp their detailed concrete needs for website contents and suggestions for the website construction, and gradually improving the website quality by focusing on the real needs of overseas students.

5.5 The disparity in the overseas education between different colleges and universities in Jiangsu province should be narrowed and a standardized management highlighted.

There commonly exists a rather sharp disparity in the large quantities of data collected from this large-scale sampling survey on educational satisfaction of overseas students. One of the reasons lies in the varied categories and levels of sample schools. Another reason may be ascribed to the lack of a unified cultivation program for international students in Jiangsu province to guide the educational administration and services of overseas students. According to a paper published in *China Higher Education* (2010, Vol.2), entitled “Promotion of the Internationalization of an Institution of Higher Learning in a Globalized Teaching Context, in order to construct a consummate program for international students, majors and disciplines based on primary disciplines suitable for cultivating international students in a globalized context should be selected in accordance with the overall cultivation program of a college or university, where bilingual teaching should be carried out in 50%-70% of courses, including general foundation courses, subject foundation courses and specialized courses.”⁷ An introduction of standardized administrative and service system will help reduce the disparity in overseas education between different colleges and universities in Jiangsu province and optimize the working procedures of overseas education.

Notes:

1. Among the respondents, there is 1 student labeling his or her nationality as “Asia”, 3 as “Africa”, 1 as “Europe” and 1 as an American Indian, grouped by the researcher into “North and South America”.
2. Other students are merely 7-13.
3. The overall average score of the satisfaction with library is 3.51, the score for “foreign language guidance offered by a librarian to overseas students” is 3.27, the score for “available guidance in both Chinese and a foreign language for book borrowing inside the library and on the website” is 3.41, and the score for “sufficient books and periodicals and audio & video products” is 3.44.

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