# **Asian Journal of Contemporary Education**

ISSN(e): 2617-1252 DOI: 10.18488/journal.137.2018.22.136.148 Vol. 2, No. 2, 136-148 © 2018 AESS Publications. All Rights Reserved.

URL: www.aessweb.com



# FACTORS INFLUENCING INDONESIAN STUDENTS SATISFACTION DURING THEIR STUDIES IN CHINA

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# **Article History**

Received: 31 July 2018 Revised: 30 August 2018 Accepted: 3 September 2018 Published: 6 September 2018

# **Keywords**

China Higher education Indonesian students Quantitative approach Students' satisfaction.

# **ABSTRACT**

Since more Indonesian students are coming to pursue higher education in China, understanding the factors influencing Indonesian students' satisfaction could facilitate Chinese higher education institutions and the policymakers to improve and develop their services to match the needs of current Indonesian students in China and to attract potential Indonesian students to study in Chinese higher education institutions. Therefore, the main objectives of this study were (1) to analyze influential factors on Indonesian students' satisfaction toward Chinese higher education, (2) to examine level of Indonesian students' satisfaction toward Chinese higher education, and (3) to provide recommendations for both Chinese higher education institutions and the related policymakers. This study applied quantitative approach by using questionnaire as a tool to collect primary data from the 215 Indonesian students currently studying in several universities in Wuhan. The findings indicated four factors have significant positive influence on Indonesian students' satisfaction toward Chinese higher education. These four factors are education service, infrastructure and staff support, safety, and students' preparation before coming to China. The multiple regression models with these four factors could predict 60.8% of the variance in the overall Indonesian students' satisfaction.

**Contribution/ Originality:** This study contributes in the study of higher education students' satisfaction towards the rapid development of China's higher education service from the perspectives of Indonesian students. Such study has not been explored and this study is intended to fill the gap and enrich the literature related to higher education students' satisfaction.

## 1. INTRODUCTION

China's rapid economic growth has sparked a prominent growth of demand on its higher education internationally. The unprecedented economic growth of China over the last three decades has put China into one of the powerhouses in attracting international students. According to the deputy director of the Department of International Cooperation and Exchange of China's Ministry of Education, China has become Asia's most popular destination for overseas students (China Daily, 2017).

In 2012, China set a goal of becoming an international education hub and targeted as many as 500,000 international students enrollments in higher education at all levels of education by 2020 (Ibttimes, 2011;

Schulmann, 2017). Since the aforementioned year, hundreds of thousands of students from Asia, Europe, Africa, and the Americas has come and pursued their higher education in China. According to China's Ministry of Education, more than 400,000 international students from 205 countries had come to study in China Ministry of Education (MoE) (2017) and made China the third most popular destination country for international students after the U.S. and the U. K (Roy et al., 2016). As a result, it is predicted that China will overtake the U.K. to become the second biggest host country for international students in 2020 (Chu, 2017; Schulmann, 2017).

Several factors have helped increasing the appeal of Chinese higher education to international students worldwide. Strong support and investment of the government has improved China's higher education system. For example, the 1993 "Outline for Education Reform and Development in China" initiatives have steadily transformed Chinese higher education into a world class system, followed by project 985 and 211 which further developed selected elite universities in China to be well-recognized and compete in global university rank (Iftekhar and Kayombo, 2016). More scholarships which provide additional one-year Chinese language preparation courses and providing more English-taught programs (Montgomery, 2017) and relatively easier visa and residence permit for students have attracted students from an array of countries around the world to study in China.

One crucial factor impacting the internationalization of China's higher education is the "One Belt One Road" project (OBOR). This initiative has significant implications for China's international education agenda (Montgomery, 2017). The cultivation of international talent in OBOR countries, crucial to the implementation of the OBOR framework, has boosted China's internationalization ambitions. In fact, nearly half of foreign students studying in China came from OBOR countries and the percentage of government-sponsored students from OBOR countries is five times higher (MoE, 2017). These facts suggest that China's international academic exchange intertwines closely with the country's economic pursuits via OBOR project.

OBOR project has included countries and regions where both economic development and education systems may be still lagging, and the internationalization of China's higher education has included students from these countries to increase enrollment in degree programs (Chu, 2017). These students may not have the means to study in North America, Australia, or Europe, and may be attracted to a Chinese education, which is comparatively affordable, in addition to numerous scholarships offered by the Chinese government. In fact, the Chinese government supports about 11 percent of international students through a variety of scholarship programs, some of which support students from nations in Africa, the Association of Southeast Asian Nations (ASEAN), and the Pacific Island Countries (MoE, 2017; Schulmann, 2017).

Although growth in the number of international students in China is a surefire in the near future, more efforts are needed to provide sufficient scholarship and entrepreneurship opportunities, among other incentives, to attract more to study in China. In addition, several factors could halt the country's ambitious goal in internationalizing its higher education, such as language barrier, political climate, and the capacity of China's elite higher educations to compete in global academic rank (Li et al., 2011; Bloom et al., 2016; Ding, 2016). One crucial factor that may have direct factor is student satisfaction. The considerably and consistently low levels of international students' satisfaction with their study and living experiences may bring unprecedented impact of sustainable growth in the international student market (Ding, 2016). Recent research (Roy et al., 2016) indicated that students who are more satisfied with their experiences are more likely to recommend an institution. Similar conclusions are also found in Choudaha and Schulmann (2014) as well as Garrett (2014). Thus, knowing factors affecting student satisfaction during their study in China may be a crucial point of analysis to get better picture of current internationalization effort, the high and low points of such effort, and which parts of services that China higher education institutions need to be improved to deliver better experience to their international students.

One of the countries with steadily increasing number of students come to China to pursue higher education is Indonesia, one of the countries included in OBOR initiatives. Indonesian students coming to China are rising in recent years. While the majority of the students came to China to study Chinese language and literature, the number of those entering other fields of studies is rising, including industrial technology, industry, and medicines (Studyin China, 2015). Other than that, several agreements including CSC scholarships via Indonesian embassy and Indonesian Directorate General of Higher Education (DGHE) (2017) have been set up to attract more Indonesian students to study in postgraduate level in China. Since Indonesia is also a member of ASEAN, the implementation of the two China-ASEAN 10,000 Student Exchange Programs and CSC – ASEAN University Network (AUN) (China Scholarship Council, 2017) also give additional opportunities to Indonesian students to study in China. As the result, according to MOE China, in 2016, there were 14,714 of Indonesian students in China, making them the 7th largest national group among international students (MoE, 2017). Since the steady increase of Indonesian students are coming to China, analyzing their satisfaction during their study in China can be crucial to maintain the rising trend of Indonesian students to come to China and to attract more potential Indonesian students to come and study in China. Thus, it is vital to recognize crucial factors that influence Indonesian students' satisfaction toward Chinese higher education.

## 2. LITERATURE REVIEW

## A. Student Satisfaction in Higher Education

Rapid expansion of higher education in modern era has forced higher education institutions to develop different approach in analyzing the quality of their services. More higher education institutions are acknowledging that higher education services in this era are getting closer to a business-like service industry and they are beginning to focus more on meeting or even exceeding the needs of their students, as their consumers (Oldfield and Baron, 2000; Rolfe, 2002). They need to think and approach differently about the role of student satisfaction for their continued existence in this business. The focus on market-driven strategies in the international education has received considerable attention among universities all over the world. It requires not only to attract but also to retain students in this competitive environment (Arambewela and Hall, 2009). Thus, they need to understand their target markets and modify their offerings to meet those needs.

Since students are seen more as the consumers, student satisfaction can be seen as customer satisfaction in education services. Elliott and Shin (2002) argue that student satisfaction is the student's subjective evaluation of the various outcomes and experiences associated with what their received during the period of education. This satisfaction is continually constructed by repeated experiences during their study. This satisfaction in study has become increasingly prominent, as they now act as the consumers of higher education services and their demand to earn the best possible out of the institutions has become a strategic issue to be accomplished by the institutions as the service providers (Narasimhan, 2001). As students are increasingly seen as consumers of higher education services, their satisfaction should be important to institutions that want to recruit new students (Thomas and Galambos, 2004). Similarly, Appleton-Knapp and Krentler (2006) suggest that students' satisfaction with their educational experience should be the aim of the institutions, in addition to learning.

## B. Measuring the Factors Influencing Student Satisfaction

It is known that satisfaction level is determined by the difference between the service received by customers and what the customers initially expect (Zeithaml et al., 1990). Measuring student satisfaction is not a simple work. Critical factors or variables influencing student satisfaction can be seen differently by institutions, resulting in numerous methods applied to measure student satisfaction. Not only they are different among institutions, they are also different from one researcher to another. Kotler and Keller (2012) argue periodic surveys are applicable tools to track their satisfaction directly and also ask the respondent's willingness to recommend the institution to others. Besides conducting periodic surveys, educational institutions can analyze their customer loss rate or in this case the number of students enrolling or applying to the course. Dissatisfied students may cut down on the number of courses or drop out of colleges or universities completely. In their opinion, student satisfaction is not simply

dependent on the teaching consideration only, but there should be an in-depth analysis to find out the whole influential factors that contribute to the student's answers, whether they are satisfied or not to the services they got.

Wang et al. (2011) applied McLeod and Wainwright's social learning theory to assess Chinese students' satisfaction towards their study abroad program. This study examined factors based on an individual's preparation, considered it as internal factor that can be controlled by students, and those external factors faced in a study abroad program (cultural factor and education factor) which are beyond students' control. Their findings suggested that Chinese students' preparation before going abroad to pursue their studies is essential for the students to thrive well in their programs and the students who were better prepared to pursue their study abroad showed higher satisfaction compared to those who felt under-prepared. Therefore, preparation is one significant factor in predicting students' satisfaction of study abroad program.

A study by Keaveney and Young (1997) analyzed student satisfaction by using Student Satisfaction and Retention Model, measuring set of independent variables critical in influencing students' higher education and impacted overall student satisfaction: faculty performance, advising staff performance, and classes. Although there are many variables that could influence students' satisfaction but the core education services provided by institutions are the major factors in affecting students' satisfaction towards their education experience (Keaveney and Young, 1997). The results of their study indicated that faculty performance (lecturer) and classes had a significant influence on the student's experience, and it was positively related to their satisfaction and intentions to stay at college or university. In addition, students who had a positive experience were more satisfied with their institutions than students who did not have any positive experience.

Another interesting study on students' satisfaction was conducted by DeShields *et al.* (2005). They developed their study based on Frederick Herzberg's two-factor theory that distinguishes two sets of factors: dissatisfiers or hygiene factors (factors that cause dissatisfaction) and satisfiers or motivators (factors that cause satisfaction). Satisfiers result in satisfaction when adequately fulfilled. Dissatisfiers cause dissatisfaction when undersupplied. DeShields, Kara, and Kaynak applied Herzberg's theory to their study and categorized faculty performance and classes as satisfiers which directly related to student's college experience and their satisfaction. On the other hand, the performance of advising staff was considered as dissatisfier that may cause dissatisfaction because dissatisfaction occurs with the absence of good advising staff performance.

Study by Arambewela and Hall (2009) tested and developed a model of student satisfaction and found that the importance of service quality factors related to both educational and non-educational services which lastly impacted on student satisfaction. This study used structural and equation model to analyze their collected data in order to test a causal approach examining a set of relationships between independent variables and dependent variables. Seven main factors, both educational and non-educational issues, are perceived to affect students' satisfaction in their study: education, social, technology, economic, accommodation, safety, prestige and image. All factors mentioned were considered as significant predictors of student satisfaction.

The studies reviewed above are used as the basis of determining the factors used to analyze student satisfaction in this study. The summary of reviewed studies provide several crucial findings to determine factors influencing student satisfaction:

- Students' preparation (Wang et al., 2011)
- Teachers' performance, classes, and academic staff (Keaveney and Young, 1997; DeShields et al., 2005)
- Education, social, technology, economic, accommodation, safety, prestige and image (Arambewela and Hall, 2009).

To summarize and simplify the points found in the reviewed studies, this article will combine the factors into two category: internal factor and external factors, as seen in the table below.

Table-1. Summary of factors from the reviewed studies.

| Internal factor         | External factors                                       |  |
|-------------------------|--|--|
| — Students' preparation | — Education service                                    |  |
|                         | <ul> <li>Support (infrastructure and staff)</li> </ul> |  |
|                         | — Image and prestige                                   |  |
|                         | — Sociocultural  |  |
|                         | — Safety   |  |
|                         | — Economic   |  |

# 3. RESEARCH METHODOLOGY

## A. Conceptual Framework

The conceptual framework of this study was based on summarized factors from the literature review (Table 1). The researchers formulated a framework based on the table as *independent variables*, which were assumed to have crucial impact on student satisfaction, and Indonesian overall students' satisfaction was considered as a *dependent variable*. This framework is conceptualized in figure 1.

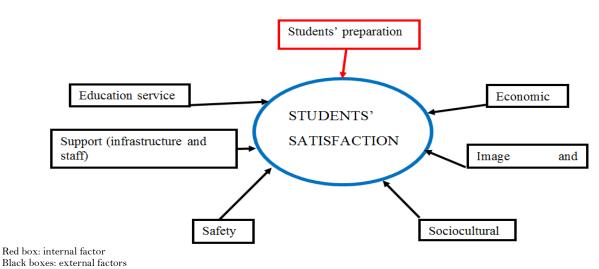


Figure-1. Conceptual framework of this study.

Based on the research framework above, I proposed hypotheses of this study as follows:

Hypothesis 1 (H1):

All seven factors have a positive relationship with overall Indonesian students' satisfaction.

Hypothesis 2 (H2):

All seven factors are significant and accurate predictors of overall Indonesian students' satisfaction.

# **B.** Independent Variables

The independent variables consisted of one internal factor, which is Indonesian students' preparation before they came and study in China, and six external factors: educational services, infrastructure and administrative support, safety, sociocultural support, image and prestige of the institution, and economic considerations.

The instrument was designed specifically for measuring student's satisfaction with the services offered by a university, covering most aspects of student life, were developed based on the literature reviewed. A total of 50 questions were included in the survey, covering various items explained below.

Three items regarding students' preparation, based on study from Wang *et al.* (2011) to measure how well Indonesian students prepared themselves before studying in China were analyzed: Chinese language preparation, living abroad preparation, and study preparation. Ditto with preparation, education factor has also three items:

educational service they receive (knowledge, skills, attitude), teachers (assignments, classroom communication, guidance and feedback, and assessment), and classroom interaction and atmosphere.

Seven items in infrastructure and administration support were analyzed to measure students' satisfaction with facilities and support provided by institution: library (including online) resources, students' visa and resident permit application, computer and internet availability, semester and courses registration and selection, services of the international student service center/office, on-campus accommodation quality, and in-campus transportation. The items of safety referred to students' satisfaction toward: safe campus environment, no racial discrimination and abuse, and China's positive image for safety.

In terms of sociocultural support, this factor focused on Indonesian students' satisfaction with activities that help students overcome their culture shock and how they are helped to learn about Chinese culture. The questionnaire under this factor had three main items: counseling services, student orientation, and cultural and recreational activities. Image and prestige of institution discussed about students' satisfaction with university's reputation: international reputation and rank, reputation within China, and also in Indonesia.

Lastly, for Economic consideration, the questionnaire had five items, focused on students' satisfaction toward: tuition fees, financial aid or scholarships, daily living cost, opportunity for part-time jobs to ease the economic burden, and future employability/upward mobility after they graduate.

# C. Dependent Variable

Overall Indonesian students' satisfaction was the single dependent variable in this study, which was assumed to be heavily influenced by all seven independent variables summarized and described above. The questionnaire had three items: students' overall satisfaction with their choice to study in China, their willingness to recommend China and the institutions to their friends or family, and whether the expenses and sacrifices to study in China was worth it.

# D. Data Collection and Analysis

A questionnaire was developed based on the literature review of the related studies summarized above as the research instrument for this study. The questionnaire contained three sections: participants' personal demographic data and their preparation before studying in China, Indonesian students' satisfaction toward six external factors and their overall satisfaction rating, and comments and suggestions.

Indonesian students in Wuhan were chosen as the samples for this study because the researcher was also an international student in Wuhan. The questionnaire link was attached to the Indonesian students association in Wuhan's social media chatroom and the members of the group were politely asked to complete the questionnaire. A total of 215 completed questionnaires were obtained, from total 447 active members (48%).

The questionnaire mostly applied a five-point Likert scale, ranging from Very Satisfied (5) to Very Unsatisfied (1), to measure Indonesian students' satisfaction, through a multi-item structure. First, the students had to rate levels of their satisfaction with Chinese universities in each item asked and concluded them with their overall satisfaction. This approach was used to generate an accurate reflection on each factor questioned, based on the conceptual framework to measure level of Indonesian students' satisfaction toward Chinese higher education and tested the hypotheses of the study. The Cronbach's Alpha test was applied to estimate the internal reliability of this survey. The result of the test was 0.982, which was considered excellent.

Quantitative data analysis process was conducted by using SPSS 19. Descriptive statistics consisted of frequency, percentage, mean, and standard deviation were applied to gather and describe personal characteristics of the samples, their level of preparation, and level of satisfaction. To test the two hypotheses, inferential statistics (multiple regression and correlation analysis) were conducted to identify the relationships between all seven factors

(independent variables) and the overall Indonesian students' satisfaction (dependent variable), and to examine which of the seven factors having the most predictive power on the overall Indonesian students' satisfaction.

**Table-2.** Numbers and percentages of the respondents classified by personal demography (N = 215)

| Personal Factor              | ers and percentages of the respondents classified by personal demography $(N = 215)$ Number Percentage |             |
|------------------------------|--|-------------|
| Gender                       | rumber   | 1 creentage |
| female                       | 136  | 63.3        |
| Male                         | 79   | 36.7        |
|                              | 19   | 36.7        |
| Age                          |  |             |
| ≤20                          | 1  | 0.5         |
|                              |  |             |
| 21                           | 2  | 0.9         |
|                              |  |             |
| 22                           | 20   | 9.3         |
|                              |  |             |
| 23                           | 73   | 34          |
|                              |  | 20.7        |
| 24                           | 79   | 36.7        |
| 25                           | 25   | 11.6        |
| 20                           | 20   | 11.0        |
| 26                           | 4  | 1.9         |
|                              |  |             |
| 27                           | 2  | 0.9         |
|                              |  |             |
| 28                           | 3  | 1.4         |
|                              |  |             |
| 29                           | 2  | 0.9         |
|                              |  |             |
| 30                           | 2  | 0.9         |
| ≥31                          | 2  | 0.9         |
| University                   | 2  | 0.3         |
| Central University           | 75   | 34.9        |
| WuhanTech                    | 48   | 22.3        |
| National University          | 26   | 12.1        |
| Science University           | 21   | 9.8         |
| Farm University              | 20   | 9.3         |
| Economy University           | 19   | 8.8         |
| Geography University         | 4  | 1.9         |
| Province University          | 1  |             |
| Health University            |  | 0.5         |
| Field of Study               | 1  | 0.5         |
| Chinese language             | 115  | 53.5        |
| Public administration        |  |             |
| Business Administration      | 27   | 12.6        |
|                              | 25   | 11.6        |
| Finance                      | 24   | 11.2        |
| Economy                      | 20   | 9.3         |
| Medicine Media Communication | 3  | 1.4         |
| Level of Study               | 1  | 0.5         |
| ·                            | 7  | 9.9         |
| Bachelor                     |  | 3.3         |
| Master                       | 176  | 81.9        |
| Doctor                       | 32   | 14.9        |

## 4. FINDINGS AND ANALYSIS

From the sample of 215 Indonesian students studying in higher education institutions in Wuhan, the research findings were classified into 3 parts as follows:

Part 1: Demographic data of the sample.

136 participants (63.3%) were female. 79 (36.7%) students were at the age of 24 with the average age was 23.83 years old. Participants from Central University were the largest with 75 (34.9%) students. Students pursuing master degree were the biggest group, consisted of 176 students (81.9%). In terms of major, 115 (53.5%) came to study Chinese language.

Part 2: Level of Indonesian students' preparation and the satisfaction toward Chinese higher education

The result showed that the level of preparation of Indonesian students before they came to China for their study was in fair level (Mean = 3.30, SD = 0.730). On the other hand, Indonesian students' satisfaction to both education and non-education services from their institutions was in satisfied level (Mean = 3.51, SD = 0.799).

To put the factors into a rank, educational factor came as the first (Mean = 3.62, SD= 0.713), followed by infrastructure and staff support (Mean = 3.52, SD= 0.700). The least influential factor was image and prestige of the institution (Mean = 2.97, SD= 0.689) (Table 3).

|                                    |      | Std.      |           |  |
|------------------------------------|------|-----------|-----------|--|
| Variables                          | Mean | Deviation | Meaning   |  |
| Internal Factors                   |      |           |           |  |
| Student Preparation                | 3.3  | 0.730     | Fair      |  |
| External Factors                   |      |           |           |  |
| Education                          | 3.62 | 0.713     | Satisfied |  |
| Support (Infrastructure and staff) | 3.52 | 0.700     | Satisfied |  |
| Safety                             | 3.51 | 0.744     | Satisfied |  |
| Sociocultural support              | 3.25 | 0.838     | Neutral   |  |
| Economic                           | 3.13 | 0.808     | Neutral   |  |
| Image and prestige                 | 2.97 | 0.689     | Neutral   |  |
| Overall Satisfaction               | 3 51 | 0.799     | Satisfied |  |

Table-8 Summary of descriptive statistics (N = 915

Part 3: Factors influencing Indonesian students' satisfaction toward Chinese higher education.

To prove the hypothesis 1 and to identify the relationships between seven independent variables and the dependent variable, I used Pearson's product moment correlation to check if the correlations occur. Furthermore, to test hypothesis 2, Multiple Regression was used to examine the predictive power of the factors on the Indonesian students' satisfaction. The results of the two hypotheses testing were as follows:

Table 4 provided data and proved that the seven hypothesized factors (independent variables) had significant positive relationships with the overall Indonesian students' satisfaction (dependent variable). The factor having the highest positive relationship with overall Indonesian students' satisfaction towards Chinese higher education was:

- 1. Education (r = 0.723, p = 0.000),
- 2. Safety (r= 0.686, p =0.000),
- 3. Support (infrastructure and staff) (r=0.671, p=0.000),
- 4. Economic (r = 0.622, p = 0.000),
- 5. Sociocultural support(r=0.595, p=0.000),
- 6. Image and prestige (r=0.545, p=0.000), and
- 7. Student preparation (r=0.483, p=0.000).

**Table-4.** Summary of correlations among variables (N = 215)

| No | Variables                          | 1 | 2       | 3       | 4       | 5       | 6       | 7       | 8       |
|----|------------------------------------|---|---------|---------|---------|---------|---------|---------|---------|
| 1. | Student Preparation                |   | .496*** | .473*** | .438*** | .431*** | .418*** | .361*** | .483*** |
| 2. | Education                          |   |         | .742*** | .781*** | .627*** | .699*** | .673*** | .723*** |
| 3. | Image and prestige                 |   |         |         | .726*** | .588*** | .586*** | .622*** | .545*** |
| 4. | Support (Infrastructure and staff) |   |         |         |         | .721*** | .719*** | .715*** | .671*** |
| 5. | Sociocultural support              |   |         |         |         |         | .596*** | .567*** | .595*** |
| 6. | Safety                             |   |         |         |         |         |         | .597*** |         |
| 7. | Economic                           |   |         |         |         |         |         |         | .622*** |
| 8. | Overall satisfaction               |   |         |         |         |         |         |         |         |

Note: Significant at \*\*\*p<0.001.

Although positive relationships among all seven factors were found and thus confirmed the H1, only four (out of seven) independent variables appeared to have significant predictors on overall Indonesian students' satisfaction as the result of multiple regression analysis: education, support (infrastructure and staff), safety, and student's preparation. This result could only confirm half of H2. The multiple regression model with the four most significant factors mentioned above resulted in 60.8% of the variance in the overall student satisfaction (Adjusted R2 = 0.608). Out of the four factors, education had the highest Beta coefficient ( $\beta$  = 0.337, p=0.000), followed by support in infrastructure and staff ( $\beta$  = 0.292, p=0.000), safety ( $\beta$  = 0.173, p=0.004), and preparation ( $\beta$  = 0.131, p=0.009).

Table-5. Summary results of multiple regression analysis among variables (N=215)

| Variables  |                                      | В    | β    | T        | R    | $\mathbb{R}^2$ | $\mathbb{R}^2$ | Overall F |
|------------|--------------------------------------|------|------|----------|------|----------------|----------------|-----------|
|            |                                      |      |      |          |      |                | adj.           |           |
| Criterion  |                                      |      |      |          | 0.79 | 0.62           | 0.608          | 84.117*** |
|            |                                      |      |      |          |      |                |                |           |
| Predictor: | 1.Education                          | 0.39 | 0.34 | 40847*** |      |                |                |           |
|            |                                      |      |      |          |      |                |                |           |
|            | 2.Support (Infrastructure and staff) | 0.33 | 0.29 | 4.718*** |      |                |                |           |
|            |                                      |      |      |          |      |                |                |           |
|            | 3.Safety                             | 0.17 | 0.17 | 2 9606** |      |                |                |           |
|            |                                      |      |      |          |      |                |                |           |
|            | 4.Student Preparation                | 0.14 | 0.13 | 2.647**  |      |                |                |           |

**Note:** Significance level: \*\*p < 0.01 \*\*\*p < 0.001

To conclude, the factor having the highest significant predictive power and positive influence on overall Indonesian students' satisfaction toward Chinese universities were education, followed by support in infrastructure and staff, safety, and students' preparation.

# 5. DISCUSSION

Research findings and analysis of this study revealed that there were four major factors have significant influence on overall Indonesian students' satisfaction toward Chinese higher education: education services, support in infrastructure and staff, safety, and students' preparation.

Education factor appears to be the most influential because it is a direct influence to their educational experience. Education as the most influential factor is in line with the finding of Keaveney and Young (1997); DeShields et al. (2005) as well as findings from Arambewela and Hall (2009) which argued the importance of teaching quality and the role of teachers, including comfortable learning environment with constructive atmosphere are considered to be the most important variable influencing and generating satisfaction of the students. Furthermore, the finding of this study confirm Herzberg's two-factor theory which points out education issue (lecturers or teachers, quality of teaching, course and classes) are considered as "satisfier or motivator" (DeShields et al., 2005). Regarding support in infrastructure and staff as well as safety in the result of this study, these two significant factors (predictors) partially confirmed the previous research by Arambewela and Hall (2009). Their

study acknowledged several important factors other than educational issues, including infrastructure and staff support as well as safety as influential factors towards student satisfaction. They firmly believed that adequate supports in infrastructure and helpful staff are crucial in helping them to thrive in their academic life. Good reputation for safety, racial tolerance, and cultural mix are considered as crucial safety factor for the prospective students and their families before choosing the institution.

This study also found out, via multiple regression analysis, that preparation, which is regarded as internal factor, had significant influence and predictive power on Indonesian students' satisfaction towards Chinese higher education services. This result confirmed the prior study by Wang *et al.* (2011) which suggested that international student's personal preparation before they came and study abroad is crucial in shaping their satisfaction and to thrive in their study. Students who were better prepared for study abroad showed higher satisfaction, and similarly in this study, the better preparation resulted in the higher the satisfaction level. Therefore, preparation is the significant factor in getting student satisfaction on their studying abroad experience.

## 6. RECOMMENDATIONS

The findings of this study provide in-depth analysis which would certainly help because knowing the factors influence student satisfaction is crucial step in improving the satisfaction. In reference to the analysis findings, the influential factors were: education, infrastructure and staff support, safety, and students' preparation. By knowing these influential factors on Indonesian students' satisfaction with their study experience in China, Chinese universities may pay more attention to these factors and further adapt the related conditions to the needs of their international students. As Indonesian students are customers brimming with potentials and prospects to increase in numbers in coming years, the ability of Chinese higher education institutions to acknowledge their needs and implement strategies to improve such factors are crucial in affecting the success in their services. The results from the study could facilitate and support Chinese higher education institutions to improve their planning and programs, including course content arrangement in the future. Furthermore, these might help related government sectors to rethink, reconsider, and reevaluate their international higher education policies and implementation, and policies that have impacted international students in present and in the future.

In accordance with the results of this study, to indicate areas for improvements, there were three factors were in neutral level: sociocultural support, economic consideration, and image and prestige of institution. Chinese higher education institutions could attempt to improve those factors as well to gain more student satisfaction. Moreover, they should have customer-oriented attitude in order to be able to support and satisfy their international students. For the government sector, they should assist higher education institutions in developing their academic and professional capacities to meet international standards. Chinese higher education system, with the goals to enhance Chinese higher education's competitiveness in education worldwide, should address and act in response with the emerging needs and demands of international students. The government should strengthen, develop, and promote policies on quality assurance in higher education institutions regarding their services to international students in order to provide higher quality and services. To gain more international recognition and improving their image and prestige, it is essential that China has to make great efforts on putting more attractive advertisements and promotions for Chinese higher education to increase more international awareness and promote Chinese higher education to be one of the most compelling study destination in Asia and in the world. By strengthening the services on factors enhancing students' satisfaction, those services can be used as the crucial points to be advertised to the prospective international students and increase the image and prestige of the institutions.

## 7. LIMITATIONS OF THE STUDY

Although this study could provide interesting findings and recommendations, there were also several limitations which must be considered in understanding and interpreting the research findings. First, this result of

this study may not be generalized to represent the whole international students studying in China due to its specific sampling strategies in generating data from Indonesian students currently undertaking their studies in Wuhan. Nevertheless, some crucial factors appeared in line with previous studies targeting different international students so the results still could be carefully considered when thinking about international students' services in China. Second, the researcher experienced problem in multiple regression analysis because the independent variables in this study were interrelated with each other, and some had rather high degree of correlations that may present unstable regression coefficient(s). In addition, the independent variables in the model might not cover all important satisfaction determinants. Lastly, most of the respondents did not give any specific and in-depth comments and suggestions of the open-ended question which is the last part of the questionnaire. Therefore, it was difficult to get in-depth information of their preferences and needs.

## 8. FUTURE RESEARCH

There are many issues worth exploring further. In terms of methodology, this study applied quantitative research using questionnaires as a tool to collect the primary data. Study in the future could consider a more qualitative approach, such as an in-depth interview, to earn greater deeper description from the respondents' perspectives about their satisfaction in higher education services in China.

Due to the fact that this study covered only Indonesian students studying in Wuhan as the samples, in order to expand and improve the scope of this topic, future research may extend a scope of study by conducting in other cities and taking students from various countries for the benefit of diverse information and give richer and different results to the descriptions of studies of international students' satisfaction towards China's higher education services.

Because of the problem of interrelated variables in multiple regression analysis appeared in this study, future research analyzing this topic should review independent variables used in their study and remove any independent variables that are highly correlated with others in a multiple regression analysis. Another possible way is to combine correlated variables by using factor analysis to decrease number of variables. Additionally, one more alternative is to increase sample size in order to reduce the impact of interrelated variables. In addition, the adjusted R2 in this study indicated some important factors explaining student satisfaction were still missing and unfortunately were not covered in this study. Therefore, further research could provide and address any missing and significant impact factors which may reveal other dimensions of satisfaction that were not captured in this study.

**Funding:** This study received no specific financial support. **Competing Interests:** The author declares that there are no conflicts of interests regarding the publication of this paper.

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