

ASSESSING THE INPUT-PROCESS-OUTPUT MODEL FOR QUALITY MANAGEMENT IN ASEAN UNIVERSITIES: PERSPECTIVES OF CHINESE STUDENTS ABROAD

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Abstract

The aim of the study is to assess how well the input-process-output (IPO) model explains the satisfaction levels of Chinese students regarding their academic experiences in Association of Southeast Asian Nations (ASEAN) countries. Employing a quantitative methodology, the research gathered data through an online survey from a voluntary response sample of 61 Chinese students in ASEAN institutions. The findings indicate statistically significant relationships between the IPO model's components – input factors ($p=0.14$), process factors ($p=0.00$), output factors ($p=0.028$) – the students' satisfaction. The study reveals that these factors critically influence the quality management of ASEAN universities in meeting the expectations of Chinese students. The results underscore the importance of aligning university offerings in terms of academic, cultural, social inputs, processes, outputs with the needs of Chinese students. The article concludes with recommendations for ASEAN universities to enhance their educational frameworks by closely aligning them with the social, cultural, academic expectations of Chinese students to encourage positive referrals.

Keywords: Academic Success, Cultural Adaptation, Student Satisfaction, Teaching Quality, University Reputation.



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INTRODUCTION

Remaining competitive in the competition and sustaining the competitive advantage requires academic institutions to effectively satisfy students' demands for education (Sisavath, 2021; De Prada et al., 2022). Need satisfaction is a quality management aspect that is founded on the ability to plan, organize, and control user expectations, processes and outcomes (Cudney et al., 2020; Pham, 2018). The flow of events in an academic institution shows that there are input elements, process elements, and output elements; each of the element carries a quality connotation, implying that they need to be organized in a way that they satisfy the demands of students. The three elements merge to form the input-process-output (IPO) model, which is a quality management model for academic institutions. A level of quality in institutions of higher education, that is based on the IPO model idea, ensures a wide understanding of the components which higher education quality concept consist of (Dwaikat, 2020).

The IPO model assumes that academic institutions in Association of Southeast Asian Nations (ASEAN) countries are making unprecedented efforts to ensure that their input, process and output factors are consistent with the needs of Chinese students. Regardless of its hypothesized robustness to explain quality management in academic institutions, past literature does not present an adequate evaluation of its effectiveness to explain student satisfaction with education being offered.

Currently, numerous Chinese students are seeking to secure admissions to study in universities in ASEAN countries (Pengpid and Peltzer, 2018; Hands, 2019). The ASEAN that was founded in the year of 1967, has a strong intention to encourage active cooperation and mutual support in questions that rely to general interest, and to social, economic, industrial and agricultural, cultural and transport areas in particular (Gross domestic product..., 2021). The ten member countries include the Philippines, Singapore, Malaysia, Thailand, Indonesia, Brunei, Vietnam, Cambodia, Burma, and Laos (Four changes that are shaping..., 2016). The current educational competition that characterizes the global landscape implies that the opening of the ASEAN community leads to stimulated competition in educational market as they strive the interests of both local, regional, and international students.

Although the several studies to figure out the aspect of management quality level in the educational institution were conducted, research attention to the specific factors such as input, process, and output that constitute the IPO model remains largely limited (Yang, 2018; Kondakci et al., 2018; Choudaha, 2017). A formation of students' motivation to choose particular universities can be a result of the IPO model introduction, which provides a diverse explanation of higher education (Akhsutova et al., 2024; Francis et al., 2025). However, contextualizing the model the realities of serving the demands of the Chinese students' studying in ASEAN countries has not been adequately executed. Previous studies that attempted to investigate the IPO model in relation to educational management research limited their studies to specific single countries (Van et al., 2016; Depoo et al., 2022). Moreover, while it could be expected that Chinese students could opt for universities in the ASEAN region due to cultural similarity, Husin and Ahmad (2015) exclaimed that several Chinese students are showing a trend of seeking enrolments in the Western countries like the United Kingdom. It is extremely important to study the level, at which educational institutions situated in the ASEAN countries satisfy the Chinese students' demands. Such research could be founded on the IPO model.

The main purpose of this research is to assess the efficiency of the IPO quality management model of educational institutions for serving the demands of students from China who are studying in ASEAN Countries. For achieving the aim, the study seeks to achieve three specific objectives, namely: To investigate the effectiveness of input factors of educational institutions for serving the demands of Chinese students studying in ASEAN Countries. To assess the effectiveness of process factors of educational institutions for serving the demands of Chinese students studying in ASEAN Countries. To evaluate the effectiveness of output factors of educational institutions for serving the demands of Chinese students studying in ASEAN Countries.

The study intends to test three alternative hypotheses, which include: H01: Input factors are effective in serving the demands of Chinese students studying in ASEAN Countries. H02: Process factors are effective in serving the demands of Chinese students studying in ASEAN Countries. H03: Output factors are effective in serving the demands of Chinese students studying in ASEAN Countries.

The results of this study have a scientific and practical value. The study provides crucial information that contributes to the literature on the effectiveness of the IPO model factors in explaining how universities in the ASEAN region meet the demands of Chinese students studying there. Future researchers and academicians can use the findings to inform their quest for knowledge and background to their studies. The education field's policymakers will be capable to use the results of this research in order to create effective policies. Such step could raise the efficiency indicators of academic institutions for making the process of meeting international students' needs more productive. The universities in ASEAN countries will also use the findings to identify areas of inputs, process, and outputs factors that require improvements to satisfy the demands of Chinese students studying abroad. It could promote the adaptation of their suggestions for the demonstration to international students with their needs, and for those who have the Chinese origins in particular.

LITERATURE REVIEW

The increased focus on quality management in higher education results from external pressures such as politics, economics and technology and competition that characterize labor and education markets (Leiber, 2018; Gulden et al., 2020). Due to the mentioned factors, higher education institutions

were tasked to revise their institutional arrangements and management approaches within the organizations in order to increase the overall education quality (Tight, 2020; Shen, 2024). There is a strong belief that the attraction more of potential stakeholders and preservation their positions in the context of global and local competitive markets will be more effective in a such way. (Thai universities working..., 2019). Higher education establishments are responding differently to such pressures and uncertainties using a wide array of studies that identify current best practices for quality management (Seyfried and Ansmann, 2018). Part of institutions' quality management responsiveness is meant to satisfy the demands of individuals seeking education, aligning with their expectations and requirements. These demands include expectations regarding academics, employers, alumni, and society.

Quality management in higher education refers to the systematic approach to planning, implementing, and continuously improving the processes and outcomes of educational services to meet the expectations and needs of students and other stakeholders. It involves ensuring that the inputs (resources, faculty, infrastructure), processes (teaching methods, administrative procedures), and outputs (student outcomes, employability) are aligned with high standards and contribute to the overall satisfaction and success of students.

Quality management has always been a component of the academic tradition. Therefore, it is not a revolutionary concept in higher education (Seyfried and Ansmann, 2018; Khotimah et al., 2024). Quality itself is associated concepts such as 'conformance to standards', 'meeting customer expectations', 'fitness for purpose', and 'value for money or added value' (Kerimkhulle et al., 2022; 2023; Mohsin et al., 2025). Therefore, the goal of quality management is to guarantee that the inputs, processes, and outputs, that are proposed by the organization, fully satisfy their users' needs. Request for effective quality management models is formulated by the raising demand of improvement of the higher education quality that can completely satisfy the students' needs (Ibrayeva et al., 2018; Shahini, 2024). One of the main development directions of organizations that refer to the higher education area. While there are several generic models that higher education institutions adopt to manage quality, most of the existing models have not been evaluated to ascertain their fitness in explaining student satisfaction with organizational offerings. The IPO model is applied to conduct a holistic analysis of the university studies' activity (Subaeki et al., 2019). Several countries use the IPO model to construct systems for monitoring national education, particularly performance indicators (Podra et al., 2020; Suranchiyeva et al., 2023).

The role of input factors has been consistently studied in previous due to their instrumentality in encouraging students to select a given learning institution. Lecturers' qualification and teaching experience are crucial input factors that students consider when deciding to join a learning institution abroad (Nechyporenko et al., 2019; Niyazova et al., 2013). Although ways through which students can determine lecturers' qualifications and teaching experience has not been established, Saengawut et al. (2016) alluded that students tend to share their learning experiences on both online and offline platforms during or once they complete their studies in a given institution, which helps other students to judge the quality of lecturers' qualifications and teaching experience. Moreover, research experience, reliability and reputation, lecturers' academic position in an institution, the advice that lecturers offer, and an institution's global rank can indicate lecturer quality (Saengawut et al., 2016; Waichalad and To-im, 2016; Factors affecting satisfaction..., 2014). This has given significance to input factors as part of the determinants for quality of education offered by academic institutions in ASEAN countries.

Existing literature shows that factors related to an institution itself can greatly determine international students' motivation to join such university (Kawiana et al., 2023). For example, Wattanasiri (2010) found out the location of an institution, atmosphere that provide educational support, and the nature of the facility are important factors for students' consideration before opting to seek admission into a given institution. Moreover, the location, image, and prestige of the institution influence students' decision to move abroad to study (Intawa and Sutamaung, 2013; Factors affecting satisfaction..., 2014). Some institutions tend to institute facilities that provide special services to international students. Thus, students may be motivated to join an international institution if it has certain characteristics that are consistent with the needs that they intend to satisfy.

The aspects of curriculum such as the diversity of subjects studied in an institution, clarity of course description, credit transfer among universities, availability of opportunities to engage in the exchange and double diploma programs, and possibility of future prospects after graduation are some of the motivating factors for students' search for education opportunities abroad (Saengawut et al., 2016; Rexhepi et al., 2024). Irrespective of the curriculum efficiency, prohibitive costs influence the intension

of international applicants to enter abroad universities (Van et al., 2016). However, availability of scholarships to study abroad and fairly manageable cost of living in another country can greatly determine students' willingness to relocate.

Process elements characterizing foreign institutions of learning can potentially influence students' satisfaction with the course content being delivered (Spytska, 2024a). Based on the research findings from a study by Mirasol et al. (2021), an institution's learning processes such as the adoption of learning processes that encourage collaborative learning, availability of academic trips, and a clear description of courses online provide crucial information that guides students' decision processes. Cultural elements of a given country such as cultural diversity and sensitivity are considerations that students take when making decisions to study abroad (Mohamed et al., 2024; Spytska, 2024b). For example, China is a collectivist country, thus, it may be suggested that the majority of the Chinese students seeking study opportunities abroad may opt for countries whose cultures align with China's cultures. However, there have been several Chinese students opting to study in Western countries among which the United States, Canada, and the United Kingdom (Tu and Nehring, 2020). The cultural implications on the choices made by students have not been exhaustively investigated.

Availability of information enables the Chinese students to make decisions to study abroad. Accessibility of information is one of the core factors that have an impact on the purchase decision process. Through information and marketing, Waichalad and To-Im (2016) appreciated the role that academic advertisement plays in motivating international students to join a given university abroad. Social networking with friends creates opportunities for connection and interaction, which Lewis (2016) further believes that it influences quality perceptions of students' regarding a given academic institution. Some universities in the ASEAN region have been found to provide educational services tailored for international students, which assures them that their life will be safe at foreign countries, hence, developing the drive to move abroad for further studies.

Politics and public security aspects such as political stability and safety of students within the university are crucial aspects that determine the willingness to study in a university abroad (Alemu and Cordier, 2017; Lomer, 2018). War-torn countries that face constant threat of attacks attract minimal number of students while more stable countries are known to be harbors to foreign students who are interested in studying abroad (Beech, 2018). Despite these, studies such as Riaño et al. (2018) and Almaiah et al. (2020) have consistently shown that laws and regulations of a country concerning important elements such as immigration policy and ease to apply visa provides an impetus for students to study abroad.

Outputs include the eventual results or benefits the students accrue from engaging in an education process abroad (Bakhtibaeva et al., 2016; Ramankulov et al., 2015). According to Depoo et al. (2022), international students tend to evaluate academic quality of an institution when considering to relocate to another country for studies. Measuring output also involves checking performance on standardized tests, assessment of graduate performance by employers, entry salary levels of graduates, the rate at which graduates secure employment, and external sources' ranking and reputation of a university (Bocheliuk et al., 2019; Mirasol et al., 2021). However, the measures of quality that students in China use to judge a foreign university particularly those in Asian countries has not been explored (Gao and De Wit, 2017). Furthermore, universities with higher opportunities for students to secure employment after studies and personal fulfillment of students for studying in a university that they choose has been recognized as important of determinants of students' perceptions of quality of an academic institution.

Given that the research is anchored on the IPO mode, the theoretical scope for the study is shown in Figure 1.

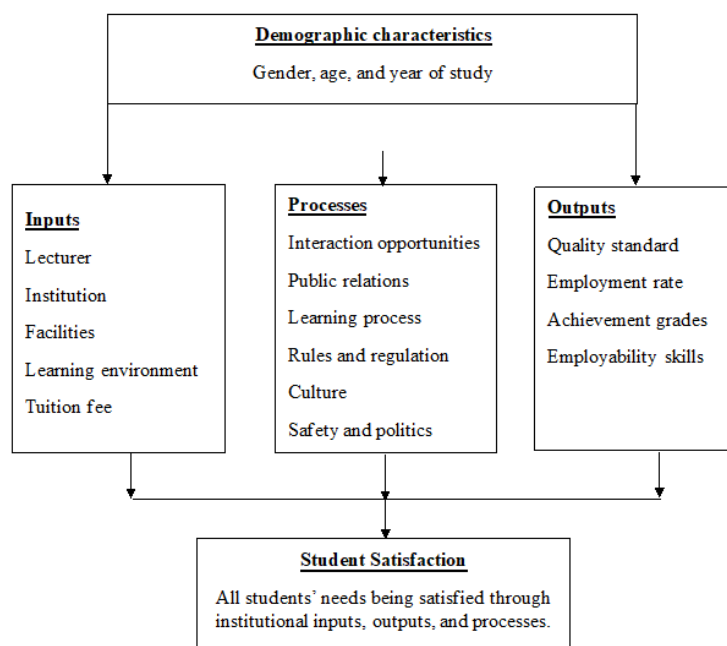


Figure 1. The theoretical framework of the relationship between students' demographics, IPO factors' and Chinese students' perceptions of quality of universities in ASEAN countries

The theoretical framework above depicts a hypothesized relationship between students' demographics, IPO factors' and Chinese students' perceptions of quality of universities in ASEAN countries. The framework recognizes that students' demographics influences their perspectives of ASEAN universities' inputs, processes, and outputs, which makes it a powerful model to explain the quality management in academic institutions.

RESEARCH METHOD

The study was an intersectoral one conducted within a short time period to elucidate the whether the input, output, and process factors implemented by universities in ASEAN countries meet the quality requirements of Chinese students studying abroad. A positivist philosophy was used as a study paradigm, thus, requiring the use of quantitative data based on statistical facts. The study adopted a survey strategy; according to Walliman (2010), surveys facilitate posing one or more questions to respondents who help to generate by the information they provide. A quantitative research approach was adopted, implying that the study collected and analyzed data that was expressed in numerical terms.

The target population consisted of all the 928,000 Chinese students who are currently studying abroad (The Chinese Study Abroad Market..., 2021). However, available statistics show that there are about 120,000 Chinese students studying in ASEAN countries (Four changes that are shaping, 2016). The sample frame for this study included the Chinese students studying in ASEAN countries. Thus, the sampling frame is the 120,000 Chinese students currently enrolled for various programmes in the ASEAN countries.

The research focused on 120 students who have been selected, which is 10% of the sampling frame. The study successfully accessed a total of 61 students to respond to the survey instrument. All the 61 students who participated were the Chinese students studying in universities in the ASEAN region. Accessing the sample was through a voluntary response sample, which Patten and Newhart (2017) describe as selecting participants based on their strong opinion on the subject being studied. Despite their inability to fetch satisfactory sample sizes, voluntary response samples are effective for online studies that cover large areas. Using a voluntary sample involved sharing the questionnaire on platforms that are easily accessible by the target population and providing a comprehensive explanation regarding what the study entails.

To mitigate potential response biases such as social desirability bias or acquiescence bias, several measures were taken. First, the questionnaire was designed to include a mix of positively and negatively worded items to reduce the likelihood of acquiescence bias. Additionally, participants were assured of the anonymity and confidentiality of their responses, which aimed to minimize social

desirability bias by encouraging honest responses. The questionnaire also included attention-check questions to ensure that participants were engaged and responding thoughtfully. The data were collected using a questionnaire close type. The researcher constructed the questionnaire and typed it into Google Forms. This facilitated the generation of a link was sent to the participants. The online questionnaire was preferred because the population is dispersed across a number of countries, which would not allow reaching them through printed questionnaires. Regardless of the low response rates that characterize online surveys (Sue and Ritter, 2012), using online platforms is a safer approach that helps to minimize contact especially during the current COVID-19 pandemic.

Data collection involved sharing the questionnaire on online platforms that Chinese students studying in ASEAN countries can access. These included social media platforms and email addresses of the universities that were requested to share the questionnaire with only Chinese students. The study was limited to only Chinese students because the study purpose was to examine the Chinese students' quality perceptions of the inputs, process, and outputs as pertains to the offerings by academic institutions. The link to the questionnaire was easily accessible on internet-enabled gadgets and students could respond to it seamlessly by simply clicking on selections from the multiple answer questions it contained. The submit button signaled the end of the response process to guide the respondents to submit the responses. The questionnaire link was active for three weeks before which it was inactivated to allow for data analysis.

Data gathered came under coding and was listed into the Statistical Package for Social Sciences (SPSS). The SPSS commands were used to generate descriptive and logical statistics. Descriptive statistics such as means, frequencies, and standard deviations provided important descriptions of the datasets. Inferential statistics included correlations and regressions; correlations were used in order to test the link between the independent and independent variables while the regressions were included to the study to examine the link between the variables. Regression analysis results generated significance values (p-values), which were used to test the hypotheses. In accordance with standard statistical practice, p-values less than 0.05 indicate statistical significance. Therefore, the null hypotheses associated with variables that scored p-values below 0.05 were rejected, suggesting that these variables significantly influence student satisfaction. Conversely, for variables with p-values greater than 0.05, the null hypotheses were not rejected. A predictive linear equation that links inputs, processes, and outputs was constructed as shown in formula (1):

$$Y=C+B_1X_1+B_2X_2+B_3X_3+e \dots (1)$$

where: C – is the constant value, Y – is the independent variable (ability to serve the demands of Chinese students studying abroad), B₁-B₃ – are confidants of independent variables, X₁, X₂ and X₃ – are the independent variables input, process, and output, e – is the error term.

The study complied with the ethical requirements of informed consent, anonymity, confidentiality and data safety. Before engaging the respondents in the study, the researcher disclosed all the material facts of the study including the aims and objectives, risks and benefits of participation in the research, and eventual utilization of the findings. Participants' personal details were not disclosed to third parties. After data collection, electronic data was saved in computers and backups with strong passwords to prevent interference.

RESULTS AND DISCUSSION

The results from the study revealed that majority of the Chinese students studying in ASEAN countries are males (52.5%) aged 21-30 years (78.7%) currently at sophomore level (52.45%). Table 1 below provides further details for demographics.

Table 1. Analysis of respondents' demographic details

Variable	Characteristic	Proportion	Percentage
Gender	Male	32	52.5%
	Female	29	47.5%
	Total	61	100%
Age	Below 20 years	1	1.6%
	21-30 years	48	78.6%
	31-40 years	2	3.3%
	41-50 years	7	11.5%
	51-60 years	2	3.3%
	Above 60 years	1	1.6%
	Total	61	100%
	Freshman	2	3.3%
Level of education	Sophomore	33	54.1%
	Junior	5	8.2%
	Senior	3	4.9%
	Graduate	16	26.2%
	Other	2	3.3%
	Total	61	100%
Students' satisfaction	Yes	49	80.3%
	No	7	11.5%
	May be	1	1.6%
	Not sure	3	4.9%
	Total	61	100.0%

Based on table 1 above, the information presented in this report is mostly from the sophomore students aged 21-30 years. In terms of gender, there was an almost equal representation of males and females. Most of the students (80.3%) agreed that their needs are fully satisfied with the education services they are gaining in ASEAN countries. However, 11.5% noted that their expectations were totally failed.

Descriptive Analysis

The study tested the relevance of IPO model's three factors to the ASEAN universities' ability to satisfy the demands of Chinese students. The factors included input, process, and output factors as depicted under the IPO model. Thus, the three elements of the model formed the independent variables for the study. Each of the variable was tested using mean and standards deviations. Table 2 below presents the aggregate mean for each variable and the mean standard deviation.

Table 2. Descriptive analysis of the relevance of IPO model's three factors to the ASEAN universities' ability to satisfy the demands of Chinese students

Variable	No. of statements	Mean	Std. dev.	Comment
Input	6	1.948 (~2)	0.9659	Agreed
Process	6	2.076 (~2)	1.0634	Agreed
Output	5	1.9902 (~2)	1.0232	Agreed
Satisfaction	5	2.0786 (~1)	1.0156	Agreed

The aggregate mean of 1.98 (rounded off to 2) implies that the majority of the participants in testing accepted the inputs statements. According to the study results, previous researches among which Saengawut et al. (2016) and Waichalad and To-im (2016) had also identified that the qualification and experience of lecturers in a given university influences international students' motivation to join a foreign university. The range of programs and subjects taught make students in other countries to perceive education in those countries as quality. Thus, this implies that the input factors are positively contributing to ability of universities to satisfy the demands of Chinese students studying in ASEAN countries. willingness of Chinese to seek admissions in ASEAN countries. Similar findings were arrived at for process and output factors, thus, exhibiting consistency with the arguments by Tu and Nehring

(2020), Van et al. (2016), and Intawa and Samsung (2013) regarding the internal processes implemented by universities consisting of part of the efforts to satisfy needs.

Given that the aggregate mean for satisfaction on was one (1), it means that most students agreed that universities in ASEAN countries are effective in meeting the demands of Chinese students. The way through which they achieved student satisfaction was through managing quality such that it the input, process, and output factors are consistent with student needs. The ASEAN region universities' as Chinese choices was evident in the assertion by Ye (2020) and Pandian et al. (2011). However, the number students from China seeking educational opportunities is lower than expected despite being highest compared to that from other countries. Despite this, it has been evident ASEAN region's universities are greatly improving in terms of quality management (Qu and Dai, 2024); hence, students from China are confident about the inputs, processes, and outputs that characterize universities in the region.

Correlation Analysis

Correlation analysis was conducted to examine the link between the dependent variables (input, process, and motivation) and satisfaction of Chinese students with the ability of ASEAN universities to meet their demands. The results are presented using table 3.

Table 3. Correlation analysis of the association between the dependent variables (input, process, and motivation) and satisfaction of Chinese students with the ability of ASEAN universities to meet their demands.

Variable	Pearson Correlation	Sig.	Nature	Strength
Input	0.812**	0.00	Positive	Strong
Process	0.761**	0.00	Positive	Strong
Output	0.871**	0.00	Positive	Strong

Note: correlation is significant at the 0.01 level (2-tailed).

The findings illustrate that there is a strong and significant association between each of the independent variables (input, process, and output) and satisfaction of students from China with the education level of universities in ASEAN countries. A correlation of 0.812 implies that input and student satisfaction is strong and positive. Similarly, the association between process and student satisfaction (0.761) and output and student satisfaction (0.871) are strong and positive. All association are also significant given the p-value of 0.00 ($p < 0.05$). Strong and positive correlations imply that changing any of the factors of the IPO model leads to a strong and positive change in student satisfaction with the quality of university education. What this means is that the input factors, process factors, and output factors as implemented by ASEAN region universities explain the capacity of the universities to serve the demands of the students. Thus, based on correlation analysis, the IPO model has an explanatory power for quality management of academic institutions in ASEAN countries towards satisfying the demands of the Chinese students studying abroad.

Regressions Analysis

Testing the effectiveness of the IPO model in explaining how universities satisfy Chinese students' demand was done using regression analysis. Table 4 below shows that the r-squared is 0.74. This implies that the three independent variables (input, process, and output) explain 74% of the variability in Chinese students' satisfaction with the quality of education offered by universities in ASEAN countries. The rest of the variability (26%) is due to other factors which have not been included in this model.

Table 4. Model of the effectiveness of the IPO model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.770 ^a	.740	.737	.2269

Due to the variance (ANOVA) analysis, the significance value is 0.00 ($p < 0.05$). This implies that the model generated using the dataset collected in the research is significant in explaining the effect

of inputs, process, and output on the satisfaction of Chinese students studying in ASEAN countries. Results of the analysis of variance is presented in Table 5.

Table 5. Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	45.967	3	15.322	297.490	.000 ^b
	Residual	2.936	57	.052		
	Total	48.902	60			

The dataset was used to generate coefficients of the independent variable and significance values that were used to test hypotheses. Table 6 below provides details of coefficients and significance values.

Table 6. Coefficients of the independent variable and significance values

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	.115	.079	-1.454	.151
	Input	.516	.086	.196	.014
	Process	.708	.089	.660	.000
	Output	.452	.067	.146	.028

All the three independent variables are significant because they scored significant values of fewer than 0.05. This shows that there is a strong link between input factors, process factors, and output factors and student satisfaction with the way in which universities in ASEAN countries are serving their demands. Thus, all the three null hypotheses were not rejected. Factors in the input aspect such as institutions' experience of staff have been previously found to influence students' willingness to pursue studies in certain universities (Ye, 2020; Waichalad and To-im, 2016). Processes such as learning strategies, laws and regulations, and politics and safety can affect the level to which a university is perceived to satisfy the quality requirements of students (Mirasol et al., 2021; Lewis, 2016). Furthermore, students' expectations of employability and opening up of opportunities linked to certain foreign universities may influence quality perceptions, hence, attracting foreign students to join the universities (Gao and De Wit, 2017; Seyfried and Pohlenz, 2018). Using the results, a predictive equation can be constructed in the formula (2):

$$Y=0.115+0.516X_1+0.708X_2+0.452X_3+0.2269, \dots (2)$$

where: Y – is the independent variable (student satisfaction), B1-B3 – are coefficients of the independent variables, and e is the error term.

The equation can be used to predict changes in student satisfaction resulting from quality management in any of the IPO factors.

CONCLUSION

The IPO model provides a quality management approach that institutions of higher education attempt to serve the demands of foreign students. This research sought to assess the IPO's efficiency in explaining the satisfaction of the demands of the Chinese students studying in ASEAN countries. During the study, it was evident that the inputs, process, and output factors are significant in explaining the quality perceptions of Chinese students studying in ASEAN countries. Students evaluate the quality management of the universities using given criteria when making decisions about their quality for purposes of joining and/or recommending others. From the perspective of input, process, and output, the part of quality management attempt refers to the universities' offers nature. The ability of the students to complete their studies in these countries is heavily dependent on their capacity to cope and adjust with the pre-existing conditions and challenges in the host countries. Therefore, academic demands, cultural and social environment of host countries are important factors to influence the academic success of Chinese students in the ASEAN countries. The study revealed that universities with high reputation

attract higher satisfaction among the students. International Chinese students are more satisfied with institutions that offer high quality teaching and appreciate the role of lecturers in creating a suitable learning environment for them. This is in tandem with assertions that Chinese cultural habits include being teacher-student centred for maximum learning benefits. Moreover, the level of preparation of students to learn in Thai Universities directly affects their satisfaction. Chinese students who are tolerant and well prepared financially and emotionally achieve higher satisfaction in their learning experiences. The ability of universities to satisfy students' needs based on what they offer in terms of input, process, and output is paramount. Thus, it is recommended that universities in the ASEAN region should adjust their academic processes to ensure they exhibit consistency with the social, cultural, and economic expectations of Chinese students for them to inspire them to join those universities. There are four general factors that have impact on the Chinese students' satisfaction. These factors that universities in the ASEAN should prioritize include image and prestige of institution, safety, education and students' preparation. The satisfaction of Chinese students in higher education institutions abroad is directly related to their safety and the image and prestige of the universities they attend. While this study has presented robust findings that can inform theory and practice, there is several limitations that should be mentioned. Firstly, the study used a small sample size (N=61). This was partly due to reliance on a voluntary response sample. A small sample size implies the findings may not be readily generalizable to larger populations. Secondly, the study relied only on quantitative data, which presents figures without considering the personal subjectivities, opinions, and attitudes of the respondents. Future researchers may consider expanding the sample size to larger populations and supplement quantitative data with qualitative data from interviews to upgrade the generality and reliability of the findings.

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CONFLICTS OF INTEREST

The author(s) declare no conflict of interest.

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