REVISTA ESPACIOS

International students' satisfaction with university services: The case of postgraduate students from Central Asia

Satisfacción de los estudiantes internacionales con los servicios universitarios: El caso de estudiantes de posgrado de Asia central

Botagoz SABATAYEVA 1; Askar SADUOV 2; Elvira MADIYAROVA 3; Gulnara JEMPEISSOVA 4; Irina SELEZNEVA 5; Marina SHTILLER 6; Tatiana FURSOVA 7

Content

ABSTRACT:
Nowadays universities enroll students from around the world. This study will attempt to fill the gap in scientific literature regarding satisfaction of international students from Central Asia. Data from survey of 2043 students was analysed by applying statistical methods. Multiple regression analysis showed that the relevance of academic courses to future job prospects and social activities were determinant variables in predicting overall satisfaction with overseas education.
Keywords: satisfaction; international students; Central Asia; students' mobility; marketing for education; university services; postgraduate students; education management; overseas education; survey

RESUMEN:
Actualmente las universidades inscriben a estudiantes de todo el mundo. Este estudio tratará de llenar la brecha en la literatura científica con respecto a la satisfacción de los estudiantes internacionales de Asia central. Los datos de la encuesta de 2043 estudiantes se analizaron mediante la aplicación de métodos estadísticos. El análisis de regresión múltiple mostró que la relevancia de los cursos académicos para futuras perspectivas de empleo y actividades sociales fueron variables determinantes para predecir la satisfacción general con la educación en el extranjero.
Palabras clave: satisfacción; estudiantes internacionales; Asia central; movilidad de los estudiantes; Marketing para la educación; servicios universitarios; estudiantes de posgrado; gestión educativa; Educación en el extranjero; encuesta

1. Introduction

Most companies share the view that improving the quality of customer service is one of key factors for success in the competition. Achieving a high level of satisfaction with the quality of customer service has always been an important goal for the management of organizations, including non-for-profit and educational organizations (Braun & Zolfagharian, 2016). Heightened competition among higher education institutions on the global market place is one of the challenges of globalisation, which requires considering students as customers, thereby studying and monitoring the needs, requirements and satisfaction of students. By focusing their attention on students, as the main consumers of educational services, many educational organizations may increase their competitiveness and attract new students.

Nowadays universities enroll students from around the world. Although the number of international students has tripled in last decade, there are However, still few studies are available regarding to this segment of international education markets, even little known about factors shaping satisfaction with studying abroad of international students from Kazakhstan.   The previous studies examined international students from different regions studying in particular country or university, focused on the aspects such as motivation to study abroad, strategies for searching information, factors influencing destination choice (will be discussed in the next section). Analysing on international student satisfaction generate information for decision makers of both foreign and local universities, in the context of meeting needs and recruiting. The aims of this paper to analyse satisfaction of students with university services, and to find perceived quality of which features and services of a university impacts on a student's overall satisfaction with the university relating to international students from Kazakhstan. Data from survey of 2043 Kazakh postgraduate students who just finished their study in foreign universities will be examined. This study will attempt to fill the gap in scientific literature regarding satisfaction of international students from Kazakhstan. Also it will add knowledge to the pool of quantitative studies about factors influencing satisfaction of international students.

This article organized in following order: on than Methodology section will give information regarding the data source and used data analysing the next section existing literature about students satisfaction will be reviewed, strategy, followed by result and discussion sections.

2. Literature review

The final stage of the customer decision-making process relates to studying is post-choice behaviour, especially customer satisfaction. In order to be more effective, education providers should focus on customer satisfaction and their value, because the quality of their services is highly determined by the level of satisfaction of their customers (students, alumni, parents, and employers) (Kotler & Fox, 2002; Maringe, 2006). According to marketing literature, high customer satisfaction leads to positive word of mouth communication and repeated purchases. One method to measure the level of student satisfaction is to give them the opportunity to rate the level of performance they feel regarding each component that is essential to education quality (Kotler & Fox, 2002). The level of customer satisfaction with company services can be identified by the difference between perceived performance and the expectation of customers. When customers' perceived quality of service is met or is higher than their expectations, customers are satisfied. Alternately, when perceived performance of service is lower than expectations, customers may be dissatisfied. The overall service performance of the same institution can be assessed differently because perceived quality of service by students with various backgrounds often differs. There is role played by students' past experience and differences in learning styles, thus a uniform standard of service performance in a university can be problematic (Arambewela & Hall, 2008). While student satisfaction is of considerable importance and, in most cases, it requires separate and specific research, in this study it is considered to be the final step in the decision-making process of students.

In higher education, the SERQUAL framework is widely used to measure student satisfaction (Quinn, Lemay, Larsen, & Johnson, 2009). SERQUAL is an instrument which is employed to measure customer satisfaction in the service and retail sectors. It uses a technique in which gaps between service performance and customer expectation are measured. The problem is that there is no common set of components or variables that can measure student satisfaction within this framework and so various studies have included different sets (Arambewela & Hall, 2008; Gibson, 2010; Li-Wei, 2005). Thus, it is difficult to compare outcomes. Other critiques of this model are related to measuring perception. The key problem is the timing of the research on satisfaction, because when more time elapses after completing studies the more critical customers are (Brenda & Steve, 2000). Despite these critiques, use

of SERQUAL as an instrument to measure satisfaction remains important.

It has been shown that using linear regression models in the analysis of satisfaction can be very useful to determine predictive variables of overall satisfaction (Gibson, 2010; Li-Wei, 2005). Regression analysis identifies the best predictive variables of overall satisfaction among all variables. Summarising previous studies into student satisfaction, (Gibson, 2010) showed that variables such as teaching, curriculum, and academic factors had obtained the highest importance in most studies. Factors related to the outcomes of studying, such as relevance to future job perspectives, have also been rated as important in predicting overall satisfaction (Arambewela & Hall, 2008; Gibson, 2010). Also, non-academic factors such as advice, support, and the number of international students have been found to be important in the reviewed literature. However, variables related to physical facilities, such as computers and library facilities, have had mixed results. In some studies of international students these facilities have been rated as very important (Arambewela & Hall, 2008; Arambewela, Hall, & Zuhair, 2005), as well as being rated important in studies not concentrating only on international students (Li-Wei, 2005). Despite the considerable number of studies in the area of customer satisfaction, including student satisfaction, the amount of literature regarding international student satisfaction is limited (Arambewela et al., 2005), particularly studies of Kazakh postgraduate students.

The current study concentrated on satisfaction with university services of Kazakh postgraduate students persuaded their study at overseas higher education institutions. In the current study the respondents were able to give a personal assessment of physical facilities, academic and non-academic services of universities. Also, the option of overall satisfaction evaluation was provided to show levels of satisfaction among Kazak students studying at overseas HE institutions.

In summary, previous studies of students' satisfaction with university services mostly considered the students with different background who studied in the particular country (Chankseliani & Hessel, 2016; Shahijan, Rezaei, & Amin, 2016) or in the particular university (Abubakar, Shanka, & Muuka, 2010) or courses (Kim, Guo, Wang, & Agrusa, 2007). The investigation of academic, non-academic, other factors influencing student satisfaction with services of overseas HE institution have given mix results. Thus, future research is required in the international students' satisfaction with university services. In addition, these studies have not investigated particularly Kazakh postgraduate students. Through this research, features of Kazakh postgraduate students' satisfaction with overseas education will be identified.

3. Methodology

The aim of this section is to illustrate used methods and methodology of the current study of satisfaction with university services of postgraduate students from Kazakhstan who obtained their degree in overseas universities. In this chapter primary data collecting method and procedure, questionnaire design and content, the sample frame, sampling method and main data analysis strategy will be detailed.

In order to add knowledge regarding international students satisfaction with their study in case of Kazakh postgraduate students, quantitative research method was deployed used. Namely, the self-administrated online survey was conducted for primary data-gathering. After the review of related literature questionnaire were developed. From the literature review information necessary for the survey and data analysis has been gathered. The questionnaire was designed in tree main sections. In the first section respondents provided demographic information (gender, age, marital status). The second section was designed to capture information regarding students' academic circumstances, their course profile, studying country and fund sources. While in the third section students were asked to evaluate the quality of services and facilities (including academic, non-academic components, outcomes of the study and physical facilities) in their studying institutions by using 5 points bipolar scales (5- very good, 1- very poor) and also to assess overall satisfaction in 5-point with 5- very satisfied and 1- not at all satisfied. The measure was adapted from the studies by (Arambewela et al., 2005) and (Li-Wei, 2005). Information from the first and the second section (nominal variables) are important for grouping the participants in the data analysis stage and for the sample characteristics (Malhotra, 2010). The questionnaire for the online survey was translated into Russian and pretested with 10 potential respondents, in terms of wording, content, sequence, instructions and time spend to fill. The questionnaire was situated in online Qualtrics.com platform and the link was distributed among postgraduate students with a foreign education according to the study. Advertisement of the survey was produced and posted in the offices and social media pages of student societies, alumni associations, education agencies and scholarship providers in Kazakhstan, but main partners who support our survey were two offices working with students who are just arriving from studying abroad. First is Department for Alumni Affairs of the Centre for International Programs – administrators of 'Bolashak' scholarship (this scholarship supports Kazakh students to study abroad). And second assistant were Bologna process and Academic mobility Center of Ministry of Education and Science of Republic of Kazakhstan, their activities includes nostrification of foreign documents on education. These two offices are main points which visited by students when they completed overseas universities.

According to the study target population was fresh alumni of foreign universities in Kazakhstan who completed postgraduate study. The sampling frame included clients of offices working with foreign alumni, members of alumni associations and societies throughout Kazakhstan. In addition, in order to involve as many participants as possible, the participants were asked to send the link of the questionnaire to their friends who are appropriate for this survey.

Totally 2043 participants were involved to survey, in completed questionnaires were not counted. The demographic profiles of respondents are showing in Table 1.

The reliability and inter consistence of the scalable variables were tested, using Cronbach's alpha coefficient.

All statistical test are applied using value $p<0.05$. Also, the multiple regression analysis of students satisfaction factors were used to identify determine variables of overall satisfaction, on the assumption of previous relevant research (Arambewela et al., 2005; Daily, Farewell, & Kumar, 2010; Donaldson & McNicholas, 2004; Goff, Patino, & Jackson, 2004; Shanka, Quintal, & Taylor, 2006).

4. Results

In the first stage some discriptive statistics were produced: demographic profile (see Table 1) and academic circmustances of respondents (see Table 2). The distribution of respondents by gender is almost equal; the most of them are single and represents age group 21-30.

Table 1
Demographic profiles of respondents

		Category	Percentage
1	Gender	Male	56.3
		Female	43.7
2	Marital status	Single	77
		Married	25
		Other	4
	Age	20 and below	0
		21-30	65
		31-40	30
		41-50	3
		50 and above	2

The sample represents more than 20 countries of study and more than 10 study areas. The most popular destinations for the respondents was Russian Federation and studied Business and management.

Table 2
Academic circumstances of respondents

		Category	Percentage
1	Destination country	Russia	65
		United Kingdom	5
		Kyrgyzstan	5
		Turkey	5
		China	3
		United States	3
		Malaysia	2
		Czech Republic	2
		Germany	1,6
		Netherlands	0,8
		France	0,5
		Canada	0,5
		South Korea	0,5
		Austria	0,2
		Belarus	0,1
		Ukrain	0,1
		Australia	0,05
		Ireland	0,05
		Norway	0,04
		Other	5,56
2	Study area	Business and management	20
		Low and legal studies	13
		computer sciences and IT	11
		Economics science	8,2
		Medicine and health science	7,5
		Political sciences	6,5
		tourism, hospitality and event management	4
		Education	2,2
		Agriculture	0.01
		Others	27,59

In assessing the quality 0f services offered by their university, the respondents used a 5 point scale (1- very poor, 5- very good). Table 3 shows the mean grade of each service given by the respondents; all services were assessed as being higher than satisfactory (the least=3.84). In particular, computer facilities had the highest rank followed by library facilities and relevance of academic course to future job prospects. International orientation programs and social activities were the least satisfactory areas. In order to test the internal consistency and reliability of the eleven variables, a reliability test was conducted. The data generated Cronbach's Alpha equal to 0.931, with total item correlations higher than 0.3, which indicates a very satisfactory level.

Table 3
Mean responses by perceived quality of university services

	Factor	Mean	Standard

			deviation
2	Computer facilities	4.49	0.803
1	Library facilities	4.48	0.801
10	Relevance of academic course to future job prospects	4.37	0.823
8	Information availability	4.35	0.807
3	Teaching	4.27	0.79
4	Academic support	4.24	0.863
9	Recognition of prior learning	4.12	0.769
7	Advising support	4.01	1.013
5	International orientation programs	3.90	1.089
6	Social activities	3.84	1.038

Overall, 46% of the respondents were satisfied and 38.9% were very satisfied with their selected university, with mean 4.21 in the 5 point scale (Table 4).

Table 4
Overall satisfaction

		Frequency	Valid percent
1	Not at all satisfied	16	0.8
2	Somewhat satisfied	32	1.6
3	Moderately satisfied	260	12.7
4	Satisfied	940	46.0
5	Very satisfied	795	38.9
	Mean	4.21	
	Total	2043	100.0

Does perceived quality of various features and services of a university impact on a student's overall satisfaction with the university? In order to answer this question, a multiple regression with Stepwise approach was run which gave the results shown in Table 5.

Table 5
Model summary of the multiple regression

M	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.584a	0.341	0.335	0.653
2	0.612b	0.375	0.362	0.639

Table 6
ANOVA in the regression model

Model		Sum of Squares	df	Mean Square
1	Regression	22.081	1	22.081
	Residual	42.596	100	0.426
	Total	64.676	101	
2	Regression	24.231	2	12.116
	Residual	40.445	99	0.409
	Total	64.676	101	

Table 7
Coefficients of the regression model

		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics	

Model		B	Std. Error	Beta	t	Sig.	Tolerance
1	(Constant)	1.849	0.334		5.541	0.000	
	Relevance of academic course to future job prospects	0.546	0.076	0.584	7.200	0.000	1.000
2	(Constant)	1.607	0.343		4.681	0.000	
	Relevance of academic course to future job prospects	0.460	0.083	0.492	5.514	0.000	0.795
	Social activities	0.160	0.070	0.205	2.294	0.024	0.795

Table 8
Collinearity diagnostics in the regression model

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				Constant	Relevance of academic course to future job prospects
1	1	1.981	1.000	0.01	0.01
	2	0.019	10.229	0.99	0.99
2	1	2.946	1.000	0.00	0.00
	2	0.036	9.093	0.24	0.08
	3	0.019	12.589	0.75	0.92

In summary, there is a high level of correlation between perceived quality of university services (R=0.61); this model explains 37% of variation (Table 5). The regression model is as follows: Overall satisfaction=1.607+0.46* Relevance of academic course to future job prospects+0.16* Social activities. These coefficients are shown in Table 7. Overall, it is significant and fits (F=29.656, p<0.05 (Table 6), adjusted R2=0.362). Only 2 out of the 10 variables are significant: "relevance of academic course to future job prospects" and "social activities". The condition index is equal 12.589<15 and there are no multicollinearity problems between these two variables. Both variables have a positive impact on overall student satisfaction with a university (p<0.05), with "relevance of academic course to future job prospects" (β=0.492) having a stronger impact than "social activities" (β=0.205) (Table 7). The other 8 features do not have a significant impact on overall satisfaction compared with the previous two. Overall satisfaction will increase by 0.46 units for each unit increase in quality of "relevance of academic course to future job prospects", given that perception of "social activities" remains constant.

Factor analysis of variables influencing university choice has shown six dimensions underlining the university choice criteria of Kazakh postgraduate students. Finally, two variables by which overall satisfaction can be predicted have been found. These findings will be discussed in more detail in the next chapter.

5. Discussion and Conclusion

The results regarding Kazakh postgraduate students' satisfaction with overseas universities illustrated that overall satisfaction levels were high. University services and facilities such as computer facilities, library facilities, and relevance of academic courses to future job prospects obtained the highest degree of perceived quality. This finding broadly agrees with those of earlier studies that emphasized the importance of investing in IT facilities by universities in order to improve students satisfaction (Li-Wei, 2005). In reviewing the literature, a correlation between the level of student expectation and satisfaction was noticed, thus, Kazakh postgraduate students may have low expectations of overseas study as the results regarding overall satisfaction showed it was quite high.

Multiple regression analysis showed that the relevance of academic courses to future job prospects and social activities were determinant variables in predicting overall satisfaction with overseas education. Level of overall satisfaction can be illustrated by the following equation: Overall satisfaction=1.607+0.46* Relevance of academic courses to future job prospects+0.16* Social activities. This means that each overall satisfaction will increase by 0.46 units for each unit of increase in quality of "relevance of academic course to future job prospects", given that perception of "social activities" remains constant. These two different variables from the academic and non-academic groups both play a key role in prediction of overall satisfaction.

Implications and recommendations stemming from the main findings of the current study for academics and practitioners will be considered in the next chapter.

In order to illustrate the post-purchase stage of the decision-making process of overseas university choice, student satisfaction was assessed. Overall, Kazakh postgraduate students are highly satisfied with their choices and gave high marks for the quality of their universities' services. In the regression model of correlation between overall satisfaction and perceived quality of university services, two factors ("relevance of academic courses to future job prospects" and "social activities") played a key role in predicting overall satisfaction. This does not mean that other facilities and services of the universities were not related to overall satisfaction of the students, but the influence of other factors cannot be shown in a particular equation. Therefore, this suggests the need for more attention to be paid by university managers to academic and non-academic services such as the link between academic courses with future job prospects and social activities for international students. If high satisfaction among students can lead to positive word of mouth communication about the HE institution and the intention to make repeated purchases, it is essential to predict and monitor the level of satisfaction among students of different cultural background. In turn, the insights gained into student satisfaction regarding post-choice behaviour provide the opportunity for universities

to develop strategies to attract students.

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1. candidate of economics, Tourism department of L.N.Gumilyev Eurasian National University, Astana, Kazakhstan

2. doctor of Economics, Professor, E.A. Buketov Karaganda State University, Karaganda, Kazakhstan

3. candidate of economics, head of "Finance, account and taxation" department of D. Serikbayev East Kazakhstan state technical university Ust-Kamenogorsk, Kazakhstan

4. candidate of economics, D. Serikbayev East Kazakhstan state technical university, Ust-Kamenogorsk, Kazakhstan

5. doctor of economics, head of "Finance" department of Turan University, Kazakhstan

6. candidate of economics, head of "Account and audit" department of Academy of Economics and Statistics, Almaty, Kazakhstan

7. candidate of economics, «Finance» department of Turan University, Almaty, Kazakhstan