

العنوان:	Factor Underlying International Students of Jordan Public Universities Analytical Study Institutional Factors
المصدر:	مجلة المنارة للبحوث والدراسات
الناشر:	جامعة آل البيت - عمادة البحث العلمي
المؤلف الرئيسي:	Al Howary, Soulyman I.
المجلد/العدد:	مج 16, ع 1
محكمة:	نعم
التاريخ الميلادي:	2010
الشهر:	فبراير / ربيع الأول
الصفحات:	37 - 64
رقم MD:	346621
نوع المحتوى:	بحوث ومقالات
قواعد المعلومات:	EduSearch, AraBase, EcoLink, HumanIndex, IslamicInfo
مواضيع:	الجامعات الحكومية، مستخلصات الأبحاث، طلاب الجامعات، الطلاب الأجانب، الأردن، سلوك الطلاب
رابط:	http://search.mandumah.com/Record/346621

Factor Underlying International Students of Jordan Public Universities: Analytical Study Institutional Factors

Received: ٢١/٢/٢٠٠٩

Accepted: ١٠/٥/٢٠٠٩

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ملخص

هدفت الدراسة إلى تحديد العوامل المؤسسية المؤثرة في قرار اختيار الطلبة غير الأردنيين للدراسة في الجامعات الرسمية الأردنية، وتمثل مجتمع الدراسة من الطلبة غير الأردنيين الدارسين في الجامعات الرسمية الأردنية والبالغ عددهم (١٢٩٨٥) ألف طالب وطالبة، وتم توزيع عينة عشوائية مقدارها (٢٨٦) طالب وطالبة من جميع الجامعات الرسمية الأردنية، وتم تطوير استبانة مكونة من (٣٠) عبارة تم توزيعها على عينة الدراسة، وتم استخدام أساليب التحليل الإحصائي SPSS للإجابة على أسئلة الدراسة .

وتوصلت الدراسة إلى أن العوامل المؤسسية تؤثر بشكل عال على قرار اختيار الطلبة الوافدين للدراسة في الجامعات الرسمية الأردنية حيث كان لسمعة الجامعة، والاهتمام بالطلبة الوافدين والعناية بهم، والكفاءة التدريسية، وملائمة أوقات المحاضرات، وحرية اختيار الطالب للجدول الدراسي الأثر الأكبر في قرار اختيار الطلبة الوافدين للدراسة في الجامعات الرسمية الأردنية، كما تبين أن ليس هناك فروق ذات دلالة إحصائية بين متوسطات العوامل المؤسسية المؤثرة في قرار اختيار الطلبة تعزى للمتغيرات الديموغرافية، ونوصي باستحداث وحدة متخصصة بتسويق التعليم العالي في المؤسسات التعليمية الأردنية الرسمية تدار بكادر متخصص ومدرب وأن ترتبط هذه الوحدة مباشرة برئيس الجامعة، وتفعيل اتفاقيات التبادل الثقافي بهدف استقطاب المزيد من الطلبة الوافدين.

الكلمات الدالة: التعليم العالي، العوامل المؤسسية، استقطاب الطلبة، الجامعات الحكومية، الأردن.

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Abstract

The present study aims to identify institutional factors that bear on international students, choice of Jordanian public universities. The population (n=12980) consisted of international students studying in Jordanian public universities. The sample (n=286) was randomly selected from the students' population enrolling in the Jordanian public universities. A questionnaire (30 items) was developed and distributed to the target individuals. The Statistical Program for Social Sciences (SPSS) was used to answer research questions.

Results indicated a higher positive effect of the institutional factors on international students' selection of Jordan public universities, The results showed that educational reputation, interest and care to non-Jordanian students, competent faculties, convenient lecture schedules, freedom to select lecture schedules, were the most influential institutional factors affecting international students' choice of Jordan public universities; and there are no statistically significant differences among means institutional factors, means of affecting international students' selection of Jordan public universities attributed to demographic variables. The study recommended the increase of cultural exchange agreements in accordance with the increase of the number of international students, and insisting upon the diversity of the nationalities of the international students coming to study in Jordan public universities, and finally, establishing a special unit for marketing university services, independent unit directly connected to university president, with its all qualified staff (specialized and trained in marketing).

Keywords: Higher Education, Institutional factors, attracting students, public universities, Jordan.

Introduction:

Nowadays, higher education is being driven towards commercial competition imposed by economic forces resulting from the development of global education markets and the reduction of government funds that force tertiary institutions to seek other financial sources. International students recruitment is of paramount importance for many educational institutions. Institutions have looked to fee-paying international students

both as a means of generating income and as a means of adding diversity to the student body. Tertiary institutions had to be concerned with not only what the society values in the skills and abilities of their graduates (Ginsberg, 1991; Lawson, 1992), but also how their students feel about their educational experience (Bemowski, 1991). These new perspectives call attention to the management processes within the institutions as an alternative to the traditional areas of academic standards, accreditation and performance indicators of teaching and research.

Significance of the Study:

The importance of the present study resides in its attempt to identify institutional factors influencing international student choice of Jordanian public universities. Taking this in mind, decision makers in the Jordan public universities will be well-equipped to analyze their institutional strengths and weaknesses and thus be enabled to take the necessary action towards maximizing strengths while simultaneously reduce or eliminate factors adversely affecting international student choice of Jordanian public universities for sake of increasing international students recruited into Jordanian universities.

The significance of this study also stems from the importance of the education sector itself that considerably contributes to the development of Jordanian economy and welfare of the Jordanian people. On the other hand, education has an interdependent relationship with other major sectors of economy such as tourist, farming, health, industrial, hotel, communication sectors as well as local community in the supply-demand formula. Institutional factors play a critical role in attracting international students, there are several pieces of research have been conducted in foreign countries to examine the role of institutional factors in attracting students to enroll in higher education institutions (Kelp Kern, 2000; McDonough, 1997, O'Donoghue et al., 2000; Morgan & Baron, 2003; Mark et al., 2004, Souter & Turner, 2002). In the Arab countries, there is a little research conducted to explore the impact of the institutional factors in attracting international students. Accordingly, this study will explore the role of the institutional factors in attracting international students to enroll

in public universities in Jordan. Thus, this study has merit, and the findings contributed significantly to the body of knowledge.

Study Objectives:

The current study seeks to achieve the following objectives:

1. Describe the geographical distribution of the international students in the Jordanian public universities.
2. Identify the institutional factors that bear on international student choice of Jordanian public universities.
3. Identify the most influential among institutional factors that have impact on international students' choice of Jordanian public universities in order to weigh their relative importance. Given the increased number of universities, enhancing the most influential institutional factors would thus result in greater number of students recruited and larger market share on the Arab countries level.
4. Identify differences among international students' attitudes toward institutional factors that impact their selection of certain public universities in Jordan due to their demographic characteristics.
5. Attempting to reach workable findings from which to make conclusions that are meaningful for educational policy makers regarding this population.

Research Questions:

The research questions are as follows:

1. What are the main institutional factors that have a high positive effect on international student choice of Jordanian public universities?
2. Do the institutional factors have a collective effect on international student choice of Jordanian public universities?
3. Are there any statistical significant differences at ($\alpha \leq 0.05$) of international students' attitudes toward institutional factors influencing their selection of public universities in Jordan due to demographic variables?

Methods:

The population of this study ($n=12980$) consists of international students in the Jordanian public universities both males and females. A questionnaire is considered sufficient from the viewpoint of the researcher

was developed. The questionnaire was developed and administered to international students voluntarily applied to study in the Jordanian public universities, and who speak Arabic clearly and intelligibly. Students who obtained scholarships under educational cooperation between their respective countries and Jordan as students exchange was excluded from the sample. The reason is that they were not free to decide on their university of choice or were speaking Arabic unintelligibly the fact that might adversely affect final results of the study and detriment the author's search for somewhat precise identification of the institutional factors affecting their choice of Jordan public universities. Because of large population of about ١٣, ٠٠٠ students, a representative convenience sample (n=٣٥٠) was drawn out. Such sampling method produces data in quick, efficient, and cost-effective way. The sample was chosen depending on pilot study results (Table ١) conducted within some Jordan public universities based on Ministry of Higher Education Statistics ٢٠٠٧/٢٠٠٨.

Table (١)

International Student Numbers in the Jordanian Public Universities, and questionnaire version numbers mailed and returned

University	Students	Questionnaire Versions		
		Mailed	Returned	Usable
Jordan	٢٧٤١	٥٠	٣١	٢٨
Yarmouk	٢٠٧٨	٥٠	٥٠	٥٠
Mu'tah	١١٦٤	٥٠	٣٧	٣٦
Hashemite	٧٩٦	٥٠	٥٠	٥٠
Science & Technology	٤٤٨٦	٥٠	٤٣	٤٠
Hussein bin Talal	١١٧	٣٠	٣٠	٣٠
Tafila Technology	٢٩	٢٥	٢٤	٢٤
Al-Balqa' Applied	٨٩٤	٤٥	٣٢	٢٨
Total	١٢٣٠٥	٣٥	٢٩٧	٢٨٦

Source: Statistics, Ministry of Higher Education & Scientific Research, ٢٠٠٧/٢٠٠٨.

Instruments:

The instrument used to collect data for this study is a researcher-designed, computerized, recording form. The specific variables measured were selected based on the review of related literature (Kelpé Kern, 2000; McDonough, 1997, O'Donoghue et al., 2000; Morgan & Baron, 2003; Mark et al., 2004, Souter & Turner, 2002, Goenner & Snaith, 2004, Shank and Beasley, 1998, Terenzini, et al., 2001).

For data gathering, a questionnaire has been developed, which consisted of two parts: the first measures demographic characteristics of the international students. The other part explores the institutional factors influencing international student choice of Jordanian public university. The questionnaire included 30-statements of likert 5-scales type, where 1=strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree.

Validity:

To verify apparent validity, the instrument was shown to a number of expert judges specialized in fields of education, assessment and measuring and statistics from the Jordanian public universities for purpose of ensuring intelligibility, language accuracy, appropriateness of statements to respondents, and belongingness of items to domain intended to measure. Taking their notes in mind, items were reshaped to fit the adjustments as suggested.

Reliability:

To ensure item reliability, the researcher conducted a pilot study with preliminary sample (n=30) of the original population to which the survey was administrated. Reliability was secured using Chronbach alpha test to identify validity of the instrument to measure the variables. of the study. The decision was that where alpha value is greater than 70% (Sekran, 2000) it would be an acceptable measure. As Chronbach alpha value was 72%, the instrument was revised in accordance to notes obtained from the subjects.

Following data gathering and analysis, reliability test was made to the final questionnaire, Chronbach alpha (0.93) was computed by computer and considered appropriate, which is distinctively higher than the acceptable level of (70%) indicating internal consistent responses and questionnaire reliability level was (0.93).

Data Gathering Method:

The current study gathered data from both primary sources as represented by the questionnaire designed to measure the study variables, and secondary sources including relevant books, textbooks, journals and websites to develop the theoretical framework of this study to more emphasize on major intervening factors.

Statistical Treatment:

To answer the study questions, SPSS statistical software program was used, particularly, Chronbach alpha, which measures the internal consistency of items and able to produce consistent responses by subjects to questionnaire items. Means, standard deviations, frequencies, and percentages were also computed for the 30-items measuring institutional factors affecting international students' choice of Jordanian public university. The decision was that where means ratings by international student were less than (2.0), between (2.0-less than 3.0), or (3.0-5) the expected effect will be low, moderate, and high respectively. One-way analysis of variance ANOVA was used to identify statistical differences in subject responses by their demographic characteristics. The researcher applied one sample t-test for all items within domain institutional factors to reveal whether statistical significantce exists for the apparent difference between the eventual and hypothetical mean of ($M=3$).

Study Limitations:

This study concerns with institutional factors influencing international student selection of a Jordanian public university, so Jordanian private universities were excluded from the study. Similarly, this study is limited to international students voluntarily applied for placement in a Jordan public university who clearly communicates in the Arabic language, exchange students, who were offered scholarships placements in response to cooperation between their respective countries and Jordan, were thus excluded from participation. The reason is that they did not voluntarily select their university, which would determine the final results. To avoid influence of helpers on final results, non-Arabic speakers who have difficulty to complete the questionnaire or understand its items were excluded from participation.

Literature Review:

Academic reputation, the variety of courses, the quality of education, campus safety, costs/fees, financial aid, location of institution are things that affect a student's choice to select a particular university. Some studies of the factors affect a student's choice to select a particular college Brown & Hoyt (2003) found that course offering times and delivery methods (night, weekend, and Web-based) affect student college choice. This is interesting because the review of the literature did not find any study that considered this factor. Campus safety was an influential consideration, particularly for females. High school concurrent enrollment credit also appears to encourage selection of the institution, especially by the high-achieving student. A study conducted by Nora & Cabrera (1992) found many determining variables that influenced college choice beginning as early as middle school. In Grades 7 through 9, parental encouragement, socioeconomic status, parental educational attainment, school experience and student ability influenced students' attitudes about going to college. Around the junior year and continuing through the senior year, educational and career aspirations, socioeconomic status, ability, parental encouragement, college attributes (i. e., quality, campus, academic programs, and distance from home) and financial limitations are the factors that most influence students in their college-choice processes. Chapman (1981) described student characteristics such as demographics, socioeconomic status, and college preparation, along with external influences that include counseling, costs, and location of the institution as things that affect a student's choice to attend a particular college.

A study conducted by Dixon & Martin (1991) discovered four types of influences that affect college choice. These include academic reputation, social climate, costs and location, and influences of parents, friends, counselors, and recruiters. They suggested that colleges and universities need to understand the importance of these college-choice influences if these institutions want to effectively influence college-choice decisions. Bowers & Pugh (1973) found that proximity to home was an important factor; they also identified cost as an important consideration, as well as the social life on campuses, students were considering. Raley (1972) identified

four sets of factors that appeared to affect a student's college choice: factors internal to the institutions, such as academic reputation and prestige; factors external to the institution, such as its location and proximity to home; human influences outside the students, such as encouragement from friends or counselors; and individual student factors, such as their personal and family finances.

One cannot ignore the fact that students' academic abilities and socioeconomic status play a significant role in college decision-making activities, Kelp Kern, (2000); McDonough. (1997). Heller (1997) found that low-income students appear to be more sensitive than middle- or upper income students to rising college costs. This sensitivity constrains low-income students' consideration sets and their potential enrollment options, making them less likely to select private or four-year institutions. Family income was found to be an influence on college choice, Zemsky & Oedel, (1983); Flint, (1992), although students' willingness to pay, rather than their ability to pay, influenced whether they selected a private or public institution, Hu & Hossler, (1998).

Students' perceptions of college characteristics and preference research, found good academic reputation, quality of degree programs, good job placement, well-managed facilities, affordability, geographic location, and contact with faculty were all important, Comm & LaBay, (1996); Delaney, (1996); O'Donoghue et al., (2000); Morgan & Baron, (2003); Mark et al., (2004). Career preparation, library resources, quality of research programs, and distance from home were also found to be important, Martin, (1996). Financial assistance, faculty-student interaction, types of degrees as well as quality of staff and faculties were found by Coccari & Javalgi, (1990) to be important as well.

Claggett (1999) also found low costs, convenient location, small classes, and attentive faculty to be the students' reasons for attending a particular college. A more recent conjoint analysis study of Western Australian high school seniors Souter & Turner (2002) showed the four most important determinants of university preference were; course suitability, academic reputation, post graduation job prospects, and teaching quality. "Others" influence were identified as an important factor

in students' selection of college, along with location and cost, Choy & Carroll (1998).

Academic Reputation:

The academic reputation of an institution can be very important to non-Jordanian students. They expect to acquire knowledge and skills in a particular field so they will be marketable for the jobs they want to pursue. Attending a college that has an excellent reputation for a specific academic program such as engineering or business will assist them in achieving their goal. Students also see academic reputation as leading to more job opportunities for them.

Academic reputation is one of the influential factors on college choice, research by Goenner & Snaith (2002) who found that academic reputation is the most important factor influencing students' decision to attend the University of North Dakota (UND). They further reported that ranking in national magazines at first glance seemed less important to enrollment, as only 4.09% of the freshmen surveyed indicated that it was a very important influence in their decision to attend UND. These students were drawn to UND because of the academic quality of the institution. Murphy (1981) found when it came to choice in schools, students listed academic reputation as the most important criterion. Manski & Wise (1983) deemed quality of faculty, quality of majors of interest, and overall academic reputation as being the most important features of the college selection process. Other studies have found only the quality of the faculty to be the most important attribute in the college selection process (Sekely & Yates, 1991; Shank & Beasley, 1998; Widdows & Hilton, 1990). Broekemier & Seshadri, (1999) reported that parents found academic reputation significantly more important than students.

Variety of Courses:

The number and variety of programs/subjects is a major influence on students' choice of institutions. Comm & LaBay (1996) identified the number and extensive course choices available to students as seventh amongst 32 choice criteria. This appeared to support the studies conducted by Licata & Maxham, (1998), Rickman & Green, (1993) that the diversity of programs, subjects was a major influence on students' choice of their

host institutions. Litten & Hall (1989) found course variety as an important criterion for students and teaching faculty for parents. Male students were more than twice as likely as females to choose well-published faculty (22% versus 9%) as an important selection criterion. Shank and Beasley (1998) and Litten & Hall (1989) found college women rated a broad range and variety of courses (degrees offered) significantly higher in importance than men.

Location of Institution:

Choosing an institution close to home is a way for many students to alleviate some of the burden of higher education's cost (Angel & Barrera, 1991; Terenzini, et al., 2001). By attending a college close to home, students have the option of living at home in order to avoid paying rent (Absher & Crawford, 1996; Griffith & Connor, 1994). Maguire & Lay (1981) ranked location as factor number five amongst students' choice criteria. Comm & LaBay (1996) ranked location as number 17 amongst 32 choice criteria. A study conducted by Lawley (1998) reported that students gave 2.0 ratings on a three-point scale to geographic location as an influence on students' choice of higher education institutions. The safety of students on campus was also considered to be an influence on students' choice of their host institutions. Walker & Trebbi (1990) have measured differences in this college selection criterion between college men and women. The results showed that college women believed location was more important as a selection criterion than college men. No studies found that addressed parents gender and location selection. A study conducted by Paulsen (1990) stated that an institution's proximity to a student's home had a strong influence on college choice family and geographical proximity were sources of influence cited most often, and this fact led researchers to conclude that students' college-choice processes were unsophisticated.

Quality of Education:

Defining quality in higher education has proved to be a challenging task. Cheng & Tam (1997) suggested that "education quality is a rather vague and controversial concept" (Pounder, 1999) argues that quality is a "notoriously ambiguous term". As a result of the difficulty in defining quality, the measurement of quality has also proved to be contentious.

There have been various attempts to draw on industry models such as the quality dimensions of Garvin and Parasuraman, Owlia & Aspinwall, (1996), SERVQUAL Oldfield & Baron, (1998); Aldridge & Rowley, (1998), importance-performance analysis Ford et al. (1999) and the balanced scorecard Cullen et al. (2003) to develop quality assessment models for higher education. Internationally, the tool most frequently drawn upon Cruickshank. (2003); Motwani & Kumar, (1997); Eriksen, (1990).

The service-product bundle refers to the inseparable offering of many goods and services including what a university has to offer its students. This bundle consists of three elements, Jacqueline Douglas et al., (2006):

- (1) The physical or facilitating goods;
- (2) The sensual service provided – the explicit service; and
- (3) The psychological service – the implicit service.

For a university the facilitating goods include the lectures and tutorials, presentation slides, supplementary handout documents/materials and the recommended module rooms and their level of furnishing, decoration, lighting and layout as well as ancillary The explicit service includes the knowledge levels of staff, staff teaching ability, the consistency of teaching quality irrespective of personnel, ease of making appointments with staff, the level of difficulty of the subject content and the workload. The implicit service includes the treatment of students by staff, including friendliness and approachability, concern shown if the student has a problem, respect for feelings and opinions, availability of staff, capability and competence of staff. It also includes the ability of the university's environment to make the student feel comfortable, the sense of competence, confidence and professionalism conveyed by the ambience in lectures and tutorials, feeling that the student's best interest is being served and a feeling that rewards are consistent with the effort put into coursework's/ examinations.

Galloway (1998) studied the role of the faculty administration office in one UK University on student's perceptions of service quality. He found that it impacted directly on students and influenced their perceptions of the quality of the whole institution. The office performance also had a direct impact on academic and technical staff within the faculty.

Adapting a TQM perspective in order to assess higher education quality, requires as a starting point the identification of a number of key facets that reflect the complexity of quality indicators, Roffe, (1998). In the current HE environment, these encompass the identification of whose perspective is being taken into account; what specific dimensions of the educational process are being assessed, how this assessment is undertaken and for what purpose. Nina and Maureen (2006) propose that a comprehensive audit tool therefore needs to assess the degree to which:

- (1) The different perspectives of internal and external education stakeholders are considered.
- (2) Inputs, processes and outputs of the educational system are assessed.
- (3) Different quality dimensions are considered, (Harvey and Knight, 1996).
- (4) Quantitative or qualitative assessments are used.
- (5) Quality assessments are used as snapshots of current practice or for benchmarking purposes through a longitudinal study; and
- (6) Assessments are used for quality assurance or quality enhancement purposes, and the extent to which these processes are interlinked.

In a survey of graduating international students, Smith et al. (2002) reported that the quality of education offered by institutions ranked highly on student satisfaction.

Sample Profile:

The randomly selected sample (n=286) consisted of students attending Jordanian universities. Table [3] shows participants distribution by demographic variables

Table [3]

Participant's distributions by demographics

Variable	Level	Frequency	%
University	Jordan	28	9.8
	Yarmouk	50	17.5
	Tafila	24	8.4
	Hashemite	50	17.5
	Mu'tah	36	12.6
	Science & Technology (JUST)	40	14.0

Variable	Level	Frequency	%
	Hussein	30	10.5
	Balqa'a Applied	28	9.8
	Total	286	100.0
Gender	M	208	72.7
	F	78	27.3
	Total	286	100.0
Age	Less than 20	64	22.4
	From 20 to less than 22	128	44.8
	From 22 to less than 30	88	30.8
	From 30 to less than 40	6	2.1
	Total	286	100
Marital Status	Single	270	94.4
	Married	16	5.6
	Total	286	100.0
Education	Diploma	10	3.5
	Bachelor	238	83.2
	Higher Diploma	6	2.1
	Master	28	9.8
	Doctorate	4	1.4
	Total	286	100%
Monthly income	100 to less than 200	11	38.5
	200 to less than 300	86	30.1
	300 to less than 500	48	16.8
	500 or more	42	14.7
	Total	286	100.0

As shown in table [9], the highest percentages in descending order for participants' distribution by university from Yarmouk University (17.5%), and Hashemite University (17.5%), followed by Science & Technology University (JUST) (14%) and the least percentage was for Tafila University (8.4%).

As for gender, the sample was dominantly males ($n=208, 72,7\%$) versus females ($n=78, 27,3\%$).

The highest percentage ($44,8\%$) for variable age was for the age group ($20-22$ yrs), next ($30,8\%$) was the age group ($22-30$ yrs), followed by ($22,4\%$) for the age group (less than 20 yrs), whereas the age group ($30-40$ yrs) had the lowest percentage ($2,1\%$). As for marital status variable, participants were dominantly single ($94,4\%$) versus married of only ($5,6\%$).

Participants' distribution by their education showed highest percentage ($83,2\%$) for BA holders, next ($9,8\%$) for the MA holders, followed by Diploma holders ($3,0\%$). Doctoral degree holders had the lowest percentage ($1,4\%$).

As shown in table [3], participant's responses distribution by their income level had the highest percentage ($38,0\%$) for income level ranging between "JD's $100-200$ ", next group was "JD's $200-300$ ", ($30,1\%$), followed by "JD's $300-500$ ", ($16,8\%$). However, the lowest percentage ($14,7\%$) was for income level "JD's 500 or more".

Results and Discussion:

Institutional factors were represented by 30 -items to which participants' responses were elicited and aggregated for each item to calculate means, and standard deviations.

Question one: What are the main institutional factors that have a high positive effect on international student choice of Jordanian public universities?

To identify which institutional factors that have a high positive effect on international student's selection of Jordanian public universities, means, and standard deviations were computed for all items within domain institutional factor. One sample t-test was also applied for all items within the domain to identify statistical significance of the apparent difference between eventual and hypothetical (\bar{v}) means as shown in table [3].

Table [٣]
Means, Standard Deviations, T-Value for all items within domain
institutional factors affecting international student selection of
Jordanian public university

No.	Importance Order	Item	M	SD	T-Value	α	Effect Size
١	٢	The interest and care demonstrated to non-Jordanian students	٤.٠٠	١.٠٩	١٥.٤٨ ٣	High
٢	١	Good educational reputation	٤.١٧	١.٠١	١٩.٧٢ ١	High
٣	٢٦	Exemptions and scholarships for exceptional students	٣.٢٨	١.٤٢	٣.٣٤٦	Moderate
٤	٨	Good reputation of program offerings	٣.٧٠	١.٢٠	٩.٨٨٢	High
٥	٩	Diversity program offering in the Jordanian public universities	٣.٦٩	٠.٩٩	١١.٧٩ ٣	High
٦	٣	Jordanian universities have competent faculties	٣.٩٢	٠.٨٩	١٧.٣٩ ٨	High
٧	٤	Convenient lecture schedules in a Jordanian universities	٣.٩٠	٠.٧٦	٢٠.٠٢ ٥	High
٨	٤	Students free to select their specialties and lecture schedules	٣.٩٠	١.٠٠	١٥.٢٤ ٩	High
٩	١٢	Appropriate student numbers in a classroom	٣.٥٨	١.١٢	٨.٧٦٢	High
١٠	٧	The teaching language used fits to my own	٣.٧٤	١.٠١	١٢.٤٠ ٩	High
١١	٢٢	Availability of diversified teaching	٣.٣٧	١.٠٥	٦.٠٠٣	Moderate

		languages					
١٢	٢٧	Availability of effective advising programs by faculties	٣.٢٣	١.١٢	٣.٤٧٨	٠.٠٠	Moderate
١٣	٥	Availability of a special unit serving international students	٣.٨٤	١.١٣	١٢.٥٨	٠.٠٠	High
١٤	١٤	Availability of convenient hygienic utilities	٣.٣٢	١.٢٠	٤.٥٣٣	٠.٠٠	Moderate
١٥	٢٣	Availability of service facilities	٣.٣٣	١.١٧	٤.٧٤٥	٠.٠٠	Moderate
١٦	١٤	Student receives good treatment by faculties	٣.٥٥	١.٠٥	٨.٧٧٥	٠.٠٠	High
١٧	١٣	University accessible to students.	٣.٥٧	١.٠٧	٩.٠٠٩	٠.٠٠	High
١٨	٦	University locates in vicinity of the town center.	٣.٧٧	١.٠٦	١٢.٣٠	٠.٠٠	High
١٩	١٩	Cleanse of classrooms and other campus facilities	٣.٤١	١.٢٩	٥.٤١٤	٠.٠٠	Moderate
٢٠	١٨	Possibility of academic researching	٣.٤٣	١.٢٥	٥.٨٨٦	٠.٠٠	Moderate
١٢	١٧	University employees show good manners	٣.٤٥	١.١٥	٦.٧٠٢	٠.٠٠	Moderate
٢٢	١٩	University employees show effective communication skills	٣.٤١	١.١٣	٦.٠٦١	٠.٠٠	Moderate
٢٣	١٨	University delivers teaching based on advanced technology	٣.٤٣	١.٠٨	٦.٧٠٥	٠.٠٠	Moderate

٢٤	١١	Office equipments available to meet student needs	٣.٦٣	١.٠٧	٩.٩٤١	٠.٠٠	High
٢٥	١٦	Computers available in sufficient numbers for students	٣.٥٠	١.١٦	٧.٣٤٠	٠.٠٠	High
٢٦	٢١	Simplistic procedures of admission and registration	٣.٣٨	١.٢٦	٥.٠٧٥	٠.٠٠	Moderate
٢٧	١٠	The campus characterizes with multiculturalism	٣.٦٨	٠.٩٩	١١.٦٠٧	٠.٠٠	High
٢٨	٢٥	Effective security measures in campus	٣.٣١	١.٢٥	٤.٢٥٦	٠.٠٠	Moderate
٢٩	٢٠	Strong relations with business organization for greater training opportunities	٣.٣٩	١.٠٣	٦.٤١١	٠.٠٠	Moderate
٣٠	١٥	Managerial functions in campus highly dependent on technology	٣.٥٤	١.٠٩	٨.٣٤٩	٠.٠٠	High

As shown in table [٣], self-reported institutional factors highly and positively attracted international students to study in Jordanian public universities were (١٧) out of (٣٠) with means were greater than the median (٣.٥), where T-value was statistically significant at ($\alpha \leq 0.05$) level on the entire items of domain institutional factors. This indicates a perceivable effect of institutional factors on international student selection of Jordanian public universities. The present study found that the four most important determinants of university preference for international students were institutional reputation, interest and care, competent faculties, convenient lecture schedules, which mirrors a number of studies undertaken in other countries.

Component elements of the institutional factors were ordered depending on their relative importance as revealed by subject responses as shown in table [3]. Results demonstrated that item “Jordanian universities enjoy a good reputation” was ranked top and had the greatest effect ($M=4.17$) to account for international students selection of Jordanian public universities. This result seems to be reasonable as students spend moneys on education in Jordan due to good academic reputation enjoyed by High Education Institutions (HEI) in Jordan, this result is consistent with Goenner & Snaith, (2004); Murphy (1981); Manski & Wise, 1983; Sekely & Yates (1991); Shank & Beasley (1998); Widdows & Hilton (1990); Broekemier & Seshadri (1999).

Results further indicate that the item “Jordanian universities care and interest with their international student” was ranked secondly ($M=4.00$) which emphasizes Jordan’s hospitability and known internationally. In fact, when a student leaves home, accommodation and caring become a priority. This result was agreed upon by respondents who ranked it as the second important institutional factor in accounting for international student’s selection of Jordanian public universities. Regarding item “Jordanian universities have competent faculties” thirdly ranked ($M=3.92$), statistics published by Jordan Minister of Education reported that faculty members employed by Higher Education Institution (HEI) of Jordan holding academic ranks of professor and associate professor were (2014) in number representing 34% of faculties in all Higher Education Institution (HEI) of Jordan. The implications is that Higher Education Institutions (HEI) of Jordan have highly qualified faculties who deliver instruction effectively, which can be viewed as encouraging for international students to select Jordanian public universities. Additionally, Jordanian universities encourage academic research efforts and provide faculties with the financial and human support in order to conduct studies, which hopefully would be beneficial for the Jordanian economy, in terms of knowledge development and finding out solutions to demanding problems, which are faced by various organizations whether industrial, service or educational for profit or not.

Respondents rated items “Convenient lecture schedules in the Jordanian universities”, and “Students free to select their specialties and lecture schedules” in the fourth rank to account for student selection of Jordanian higher education institutions ($M=3.90$). Students in Jordanian public universities freely select their majors to their convenience under what is known as the “International or Parallel Program”. However, lecture times can also be scheduled to student convenience as clearly shown by the lectures timetable posted on the university websites, which are characterized by a variety of courses, diversified faculties, and multiple course classrooms which give individual students greater freedom to select a combination of teacher, course, and time schedule.

Respondents rated item “Availability of a special unit serving international students” in the fifth rank ($M=3.84$) to influence international students choice of Jordanian public universities. Generally, Jordanian higher education institutions have assigned specific units to serve their international students named as “International Student Affairs” or “Foreign Student Affairs” unit that organize special events related to foreign student communities including social, cultural, artistic, and athletic activities in cooperation with embassies representing their respective countries.

Item “Availability of effective advising programs by faculties” was rated by respondents in the lowest rank receiving the lowest degree of agreement ($M=3.23$), this is because of lacking of effective control measures on faculty members that make them respect their office hours during which to advise their students and respond to their inquiries. Technology on the other hand, adversely affected academic counseling programs as students are now able to enroll in a course within a semester without the need to consult their academic adviser hence, a gap has been created between students and their teachers.

Standard deviations for individual items show trivial negligible values that have little scatter indicating that students were greatly consistent, which support confidence in our results.

Question two: Do the institutional factors have a collective effect on international student choice of Jordanian public universities?

To answer this research question descriptive statistics of means, standard deviations were computed as well as the highest and lowest value of participant responses to the questionnaire measuring institutional factors affecting international student selection of Jordanian public universities.

Table [٤]

Means, Standard Deviations of Institutional Factors Affecting International Student Selection of Jordanian Public universities

Factor	Items	Maximum Hypothetical Size	M	SD	Effect
		Mean			
Institutional	٣٠	١٥٠ ٩٠	١٠٧.٤٢	١٨.٨٤	High

As shown in table [٤], the highest mean responses (١٠٧.٤٢) of international student in the Jordanian public universities, which represent a higher positive effect. To find out statistical significance of the apparent difference among eventual and hypothetical means, one sample T-test was employed on the domain institutional factors as demonstrated in table [٥].

Table [٥]

Results from one sample t-test on the domain institutional factors

Factor	Apparent Factor	T-value	Freedom Degrees	α
Institutional	١٧.٤٢	١١.٠٦	٢٨٥	٠.٠٠٠

Table [٥] shows no statistically significant differences on the domain institutional factors, where T-value (١١.٠٦) for the institutional factors was significant at ($\alpha \leq ٠.٠٥$), which clearly demonstrates the influence of the institutional factors on international students' selection of Jordanian public universities.

Question three: Are there statistical significant differences at ($\alpha \leq ٠.٠٥$) of international students' attitudes toward institutional factors influencing their selection of public universities in Jordan due demographic variables?

To answer this research question, one-way analysis of variance (ANOVA) was used for domain institutional factors by demographics

(gender, marital status, group age, and income level) as demonstrated by table [٦].

Table [٦]
Results from one-way analysis of variance (ANOVA) on domain institutional factors by participant demographics (gender, marital status, age group, and income level)

Source	Total Squares	Freedom Degrees	Mean Squares	F-value	α
Gender	١٥٨.٤٢٤	١	١٥٨.٤٢٤	٠.٥٢٠	٠.٤٧٣
Marital Status	٧٠.٥٨٦	١	٧٠.٥٨٦	٠.٢٣٢	٠.٦٣١
Age Group	١٦٦٠.٥٧٤	٣	٥٥٣.٥٢٥	١.٨١٨	٠.١٥٠
Income Level	١٠٨١.٧٦٠	٣	٣٦٠.٥٨٧	١.١٨٤	٠.٣٢١
Error	٢٤٦٥.٣٠٤	٢٧٨	٣٠.٤.٤٣٦		
Total	٥٤٣٦.٦٥	٢٨٦			

* Statistically significant at ($\alpha \leq ٠.٠٥$).

Results from table [٦] shows no statistically significant differences among means within domain institutional factors by demographics (gender, marital status, group age, and income level), where F-values (٠.٥٢٠, ٠.٢٣٢, ١.٨١٨, ١.١٨٤) respectively were statistically insignificant at ($\alpha \leq ٠.٠٥$), indicating no statistically significant differences among means of institutional factors affecting international student selection of Jordanian public universities attributed to demographic variables.

Recommendations:

In light of the main findings of the current study, the following recommendations can be provided:

- 1- Academic leaders in Jordanian higher education institutions (HEI) and educational policy makers are invited to take into account the most significant factors, as revealed by the current study, which, from the viewpoint of international students, were very critical in deciding where

to pursue their education among Jordanian higher education institutions (HEI).

- 2- Jordanian higher education institutions (HEI) required providing sufficient, detailed, and updated information about their program offerings via the Internet having them posted on their websites so that to be easily accessible by international students potentially recruited into Jordanian public universities.
- 3- Anticipating in educational fairs is a way of increasing awareness of the courses offered, and academic capabilities internationally, so that potential international students would have clear idea about program offerings presented by Jordanian higher education institutions (HEI) as well as being a good forum for discussing career opportunities.
- 4- Encourage partnerships with higher education institutions in foreign countries which are typical source of recruiting international students that serves as a means for Jordanian higher education institutions (HEI) to announce about them.
- 5- The higher education institutions have to market the universities specific academic majors to potential students that would prepare them for the careers they seek. They further suggested that the institution promote how they can help students obtain these jobs.
- 6- Make certain that administrators and faculty who will engage in student recruitment are trained well.
- 7- Take responsibilities for establishing an inventory of strengths related to the leading institutional factors determined through this research.
- 8- Produce catalogs and brochures which provide up-to-date copy relevant to the leading institutional factors which most frequently attract prospective students.
- 9- Establish information data files that allow admissions personnel to know more about prospective student inquiry sources.
- 10- Stress evidence of the reputation of the institution, its academic programs and its faculty in communicating with prospective students.
- 11- Educational institutions should also encourage the formation of overseas branches of their alumni associations. These branches could prove very valuable as channels for the distribution of information.

- 12- Educational institutions have to develop strategies that will attract a sustainable share of the market, they need to know their customers, understand their needs and develop strategies to satisfy those needs.
- 13- Institutions could develop other product offerings, such as professional development courses for executives as well as distance education (i. e. offering courses through the Internet). These strategic options could attract a larger share of the education market.
- 14- Develop in breadth and depth the courses and programs offered by the institution, or developing these courses to provide a degree of product differentiation for the institution.
- 15- And lastly, establishing a special unit for marketing university services, this unit should be independent directly connected to university president, with its all qualified staff (specialized and trained in marketing).

Future Researches:

The current study examined the role of institutional factors in attracting international students to Jordanian public universities. Future research should give more attention to examine a comparative study between public and private universities in Jordan. Researchers are highly encouraged to explore what are the main marketing factors (Campus visit programs, use of media mix” magazine and newspaper advertising, radio/TV/cable advertising, Web/ Internet, special events, direct mail, donor relations, alumni relations, view books, etc) that also might influence the decision of international students' enrollment. Moreover, future research should examine the role of social factors in attracting international students to Jordanian public universities.

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