



## EVALUATION OF THE LEARNERS' PERCEPTION ON VALUE SYSTEM OF PAYAM UNIVERSITY IN TEHRAN, IRAN

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### **Abstract**

*Higher education is very important to national economies, both as a source of trained and educated personnel for the rest of the economy. For the purpose of keeping their dynamic role they require planning and development strategies to improve their processes and make a continuous monitoring on their quality. One way to see to what extent an institution of higher education is being efficient and fulfilling its role, is through the analysis of customers' satisfaction. In this way, the analysis of learners' satisfaction in higher education becomes fundamental. In this study researcher aimed to study the performance of University of Payam according to opinions of the students. This study is a descriptive and survey-based in which three criteria of Trainers' Performance, Service Variety, and Evaluation system of the university got examined according to learners' satisfaction. Sampling method is a random sampling method on the sample of 395 students from different section of this university. The instrument used in this study is proved its validity. The reliability of the instrument is also tested by Cronbach's . and data analysis is carried out using SPSS.*

**Keywords:** *Customer satisfaction, Perception & Evaluation, Value Chain.*

### **Introduction**

Higher education is very important to national economies, both as a significant industry in its own right and as a source of trained and educated personnel for the rest of the economy. Universities as one of the pillar of high education system play an important role to direct social, political and economic movement of a country, hence, for the purpose of keeping their dynamic role they require planning and development strategies to improve their processes and make a continuous monitoring on their quality. Universities are increasingly called upon to attain efficient and reliable management standards, with responsible utilization of the resources allocated. However, Universities are an organizational type that engages in fairly unusual activities, and demands specific management practices. Higher education institutions need constantly to gather feedback from their key stakeholders in order to understand how they value the services provided and how these could be improved.

### **Learner's Satisfaction**

Customer satisfaction is defined as "the number of customers, or percentage of total customers, whose reported experience with a firm, its products, or its services (ratings) exceeds specified satisfaction goals." Farris, Paul W.; Neil T. Bendle; Phillip E. Pfeifer; David J. Reibstein (2010). Expectations are a key factor behind satisfaction. When customers have high expectations and the reality falls short, they will be disappointed and will likely rate their experience as less than satisfying.

### **University's Students Perception & Evaluation**

Thomas and Galambos (2004) argue that students are regarded as consumers of higher education. University students' satisfaction is important to institutional success in that effective institutions have satisfied 'customers' because this satisfaction supports the enrolment of additional students or 'customers'. Several theories have been proposed in an effort to better understanding the psychosocial dynamics of student satisfaction. For example, the "happy-productive" student theory (Cotton, Dollard, & de Jonge, 2002) suggests that student satisfaction is mediated by psychosocial factors such as coping, stress and well-being. Based on their "happy-productive" theory it provides evidence that high levels of psychological distress at university related to lower satisfaction.

### **Value Chain in Learning Organization**

In the educational organizations, many actors are involved in the educational process: faculty, course coordinators, editors, instructional designers, technology specialists, academic experts, examination invigilators, and technical and other administrative personnel who support the educational process. As these actors work in administratively distinct units of the organization, intra- and inter-departmental linkages are critical to efficient and effective service in online distance education organizations (Woudstra & Powell, 1989). A part time learning education institution is typically only a part of the larger set of activities in what Porter calls the value delivery system. the value chain of an online learning institution affects (and is affected by) others in the value system, including publishers, providers of authoring and development tools, enterprise systems, portals integrators, distributors and delivery partners, suppliers, the government, other educational institutions, and learners (buyers of educational services).

### **Research Methodology**

For the purpose of sustainable growth in both quantitative and qualitative educational dimension, it is critical to evaluate the quality service of this university. Evaluation of educational quality helps in the process of education and responsiveness of organization. This will provide information for management which will help in controlling and developing better plan and appraising of their activities.

### **Scope of Study**

The scope of the study was restricted to the central Payam-e Noor University, Tehran, Iran, where the most of the students of university are resideing. Payam-e Noor University (PNU).

### **Period of the Study**

This study has been conducted during 2009-2013 in Payam-e Noor University, in Tehran, Iran.

### **Research Objectives**

1. To evaluate learners' Satisfaction over the value system provided by Payam-e Noor University in Tehran, Iran, according to the university's standards.
2. To know the problems that Payam-e Noor University's learners interface.
3. To evaluate trainers' performance in Payam-e Noor University.
4. To Study the service varieties provided to learners in Payam-e Noor University.
5. To identify the strength and weakness of evaluation system in Payam-e Noor University.

### **Sampling Techniques**

The number of sample is determined as 369, out of population of 3790560 learners of Central Branch in Tehran as a location specific study and respondents through proportionate random sampling with the help of systematic sampling method. The confidence level was selected on 95% with the interval of 5. For more confidence 430 questionnaires were distributed out of which 395 were qualified which is more than the required sample, hence it is justified.

### **Tools Used In the Study for Analyses**

1. **Primary data:** "survey" method and the data were gathered using the "Customers satisfaction Index in high education organization" adapted from ACSI, which investigates the aspects of the Payam-e Noor value system. Responses to items are given on a frequency scale varying 1 (strongly disagree) to 5 (strongly agree) of Likert's scale.
2. **Secondary data:** Payam University data base and journals.

### **Findings of the Study**

**Table 1 presents the demographic characteristics of the participants.**

**Table 1: Characteristics of the Participants**

Item	Category	Percentage
Gender	Female	41.0
	Male	59.0
Age	20-30 years old	11.6
	30-40 years old	60.0
	40-50 years old	27.3
	Above 50	1.0
Education	Diploma	13.9
	Post-Diploma	10.9
	Undergraduate	48.1
	Graduate	27.1
Occupation	Student	33.7
	Employee	21.3
	Manager	11.4
	Faculty	26.3
	Other	7.3

Source – primary data .

### Inference

Among the sample group of 395 learners, 233 respondents were males and 162 were females. In addition, majority of (60%) of the respondents was from the age group 30 to 40 years, and only 11.6% were from 20 to 30 years. In terms of education of the learners in the study, 27.2% of the respondents were graduated, while most of the learners (48.1) were under-graduate. Finally, in terms of occupation of learners, a majority of (33.7) was mere students while 21.3% were employees and 26.3% were faculty members.

**Table 2 Presents the Frequencies Regarding Main Variables**

**Table 2: PNU value system and Learners' satisfaction**

	1	2	3	4	5	6	7
	No. of answers	Mean	standard deviation	t- statistic	Level of freedom	Significance level	Learners' Perception
Trainers' Performance	395	3.25	0.95	33.766	394	Less than 0.10	Agreed
Service variety	395	3.50	1.02	0.500	394	Less than 0.10	Agreed
Evaluation system to Learners	395	3.38	1.05	1.344	394	Less than 0.10	Neutral

Source – primary data compiled in SPSS.

### Reliability Test

Table 3:

Cronbach's Alpha	N of Items
.996	54

Table 4: Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
181.14	2536.944	50.368	54

Source – primary data compiled in SPSS

The above table describes the Cronbach's Alfa value is .996, which indicates good internal consistency of the primary data collected. The mean value calculated at 181.14 with a standard deviation of 50.368.

## KMO ANALYSIS

### KMO Analysis for Trainers' Performance

Table 5: KMO and Bartlett's Test for Trainers' Performance		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.879
Bartlett's Test of Sphericity	Approx. Chi-Square	3383.803
	df	10
	Sig.	.000

Before applying Factor analysis the KMO-Bartlett's test was conducted to check sample. Adequacy and test of Sphericity where both are more significant with KMO value is 0.879 more than 0.5 which indicate statistically significant and Bartlett's value is highly significant with .000. This is less than 0.05.

Table 6: Communalities	
	Extraction
Proper response from trainers	.920
Technical skill are high	.917
Supportive trainers	.928
Complementary job within trainers	.946
Good relationship	.930

Extraction Method: Principal Component Analysis.

Table 7: Total Variance Explained			
Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	4.641	92.814	92.814

Extraction Method: Principal Component Analysis.

The Extraction Sums of Squared Loadings are at 93 % which indicate 07% data and Sums of Squared Loadings are at 93 % which indicate 07% data was extracted from the study which is nearly significant. After conducting this entire test we approached for factor analysis where the 1<sup>st</sup> most influencing factor is complementary jobs within trainers.

### KMO Analysis for Learners' Satisfaction

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.957
Bartlett's Test of Sphericity	Approx. Chi-Square	9112.983
	df	45
	Sig.	.000

Before applying Factor analysis the KMO-Bartlett's test was conducted to check sample. Adequacy and test of Sphericity where both are more significant with KMO value is 0 .957 more than 0.5 which indicate statistically significant and Bartlett's value is highly significant with .000. This is less than 0.05.

	Extraction
Service above expectation	.926
Possible meetings	.930
Easy communication	.924
Friendly behavior	.953
Flawless procedure	.939
Proper training procedure	.944
Same training was expected	.890
Trust in receiving service	.938
Proper supportive training	.943
Expectation is fulfilled	.900

Extraction Method: Principal Component Analysis.

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	9.287	92.870	92.870

Extraction Method: Principal Component Analysis.

The Extraction Sums of Squared Loadings are at 93 % which indicate 07% data and Sums of Squared Loadings are at 93 % which indicate 07% data was extracted from the study which is nearly significant. After conducting this entire test we approached for factor analysis where the 1<sup>st</sup> most influencing factor is friendly behavior of trainers.

### KMO Analysis for Trainers capabilities

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.872
Bartlett's Test of Sphericity	Approx. Chi-Square	2906.516
	df	6
	Sig.	.000

The KMO-Bartlett's test was conducted to check sample before applying Factor analysis. Adequacy and test of Sphericity where both are more significant with KMO value is 0 .872 more than 0.5 which indicate statistically significant and Bartlett's value is highly significant with .000. This is less than 0.05.

<b>Table 12: Communalities</b>	
	Extraction
Knowledgeable faculties	.961
High skilled trainers	.951
Authority delegation	.958
Qualified trainers	.961

Extraction Method: Principal Component Analysis.

<b>Table 13: Total Variance Explained</b>			
Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	3.832	95.789	95.789

Extraction Method: Principal Component Analysis.

The Extraction Sums of Squared Loadings are at 96 % which indicate 04% data and Sums of Squared Loadings are at 96 % which indicate 04% data was extracted from the study which is nearly significant. After conducting this entire test we approached for factor analysis where the 1<sup>st</sup> most influencing factor represent qualification of trainers and being knowledgeable.

#### KMO Analysis for Trainers Responsiveness to Learners' enquiry

<b>Table 14: KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.831
Bartlett's Test of Sphericity	Approx. Chi-Square	3154.426
	df	6
	Sig.	.000

Before applying Factor analysis the KMO-Bartlett's test was conducted to check sample. Adequacy and test of Sphericity where both are more significant with KMO value is 0 .831 more than 0.5 which indicate statistically significant and Bartlett's value is highly significant with .000. This is less than 0.05.

<b>Table 15: Communalities</b>	
	Extraction
Availability of consultants	.969
Accessibility of managers	.840
Adequate references	.973
Offered special hours	.967

Extraction Method: Principal Component Analysis.

<b>Table 16: Total Variance Explained</b>			
Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	3.749	93.726	93.726

Extraction Method: Principal Component Analysis.

The Extraction Sums of Squared Loadings are at 94 % which indicate 06% data and Sums of Squared Loadings are at 94 % which indicate 06% data was extracted from the study which is nearly significant. After conducting this entire test we approached for factor analysis where the 1<sup>st</sup> most influencing factor is offering adequate references to learners.

#### KMO Analysis for Payam-e Noor University's Goodwill

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.818
Bartlett's Test of Sphericity	Approx. Chi-Square	2441.520
	df	6
	Sig.	.000

The KMO-Bartlett's test was conducted to check sample before applying Factor analysis. Adequacy and test of Sphericity where both are more significant with KMO value is 0 .818 more than 0.5 which indicate statistically significant and Bartlett's value is highly significant with .000. This is less than 0.05

	Extraction
Feeling proud	.939
Optimistic about future employment	.934
Help in future success	.927
Pioneer university	.939

Extraction Method: Principal Component Analysis.

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	3.739	93.467	93.467

Extraction Method: Principal Component Analysis.

The Extraction Sums of Squared Loadings are at 93 % which indicate 07% data and Sums of Squared Loadings are at 93 % which indicate 07% data was extracted from the study which is nearly significant. After conducting this entire test we approached for factor analysis where the 1<sup>st</sup> most influencing factor represent that learners' proud of studying in the Payam-e Noor University and considering PNU as one of the pioneer universities in Iran.

#### KMO Analysis for Learners' Loyalty

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.896
Bartlett's Test of Sphericity	Approx. Chi-Square	4111.380
	df	15
	Sig.	.000

Before applying Factor analysis the KMO-Bartlett's test was conducted to check sample. Adequacy and test of Sphericity where both are more significant with KMO value is 0 .896 more than 0.5 which indicate statistically significant and Bartlett's value is highly significant with .000. This is less than 0.05.

**Table 21: Communalities**

	Extraction
Use service again	.924
Gratitude	.909
Participation	.894
Suggest sponsors	.936
Suggest to friends	.937
Remember PNU	.920

Extraction Method: Principal Component Analysis.

**Table 22: Total Variance Explained**

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	5.519	91.978	91.978

Extraction Method: Principal Component Analysis.

The Extraction Sums of Squared Loadings are at 92 % which indicate 08% data and

The Extraction Sums of Squared Loadings are at 92 % which indicate 08% data and Sum of Squared Loadings are at 92 % which indicate 08% data was extracted from the study which is nearly significant. After conducting this entire test we approached for factor analysis where the 1<sup>st</sup> most influencing factor to learners are suggesting payam-e-noor university to their friends and also suggesting appropriate sponsors to PNU.

**KMO Analysis for Provisions of Modern Facilities:**

**Table 23: KMO and Bartlett's Test for Provisions of Modern Facilities**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.868
Bartlett's Test of Sphericity	Approx. Chi-Square	4081.819
	df	10
	Sig.	.000

The KMO-Bartlett's test was conducted to check sample before applying Factor analysis. Adequacy and test of Sphericity where both are more significant with KMO value is 0 .868 more than 0.5 which indicate statistically significant and Bartlett's value is highly significant with .000. This is less than 0.05.

**Table 24: Communalities**

	Extraction
Up-to-date technology	.956
Popper MIS	.948
Integrated automation	.960
Useful facility	.908
Accelerating facility	.947

Extraction Method: Principal Component Analysis.



Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	4.720	94.393	94.393

Extraction Method: Principal Component Analysis.

The Extraction Sums of Squared Loadings are at 94 % which indicate 06% data and Sums of Squared Loadings are at 94 % which indicate 06% data was extracted from the study which is nearly significant. After conducting this entire test we approached for factor analysis where the 1<sup>st</sup> most influencing factor represent existence of integrated automation system throughout the university.

#### KMO Analysis for Quality of Given Service

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.874
Bartlett's Test of Sphericity	Approx. Chi-Square	3494.832
	df	10
	Sig.	.000

Before applying Factor analysis the KMO-Bartlett's test was conducted to check sample. Adequacy and test of Sphericity where both are more significant with KMO value is 0 .874 more than 0.5 which indicate statistically significant and Bartlett's value is highly significant with .000. This is less than 0.05.

	Extraction
Accepted service level	.913
Better than other universities	.943
Service can be improved	.931
Perfect service	.919
On time service	.940

Extraction Method: Principal Component Analysis.

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	4.645	92.908	92.908

Extraction Method: Principal Component Analysis.

The Extraction Sums of Squared Loadings are at 93 % which indicate 07% data and Sums of Squared Loadings are at 92 % which indicate 07% data was extracted from the study which is nearly significant. After conducting this entire test we approached for factor analysis where the 1<sup>st</sup> most influencing factor to learners is that the given service is better than other universities.

### KMO Analysis for Service Variety

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.833
Bartlett's Test of Sphericity	Approx. Chi-Square	2004.433
	df	6
	Sig.	.000

The KMO-Bartlett's test was conducted to check sample before applying Factor analysis. Adequacy and test of Sphericity where both are more significant with KMO value is 0 .833 more than 0.5 which indicate statistically significant and Bartlett's value is highly significant with .000. This is less than 0.05.

**Table 30: Communalities**

	Extraction
Adequate varieties	.882
Progressing	.886
Particular services cape	.947
Objectivity of service varieties	.890

Extraction Method: Principal Component Analysis.

**Table 31: Total Variance Explained**

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	3.605	90.119	90.119

Extraction Method: Principal Component Analysis.

The Extraction Sums of Squared Loadings are at 90 % which indicate 10% data and Sums of Squared Loadings are at 90 % which indicate 10% data was extracted from the study which is nearly significant. After conducting this entire test we approached for factor analysis where the 1<sup>st</sup> most influencing factor is that given service is provided at particular services cape.

### KMO Analysis for Evaluation System of Payam-e Noor University

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.760
Bartlett's Test of Sphericity	Approx. Chi-Square	1527.812
	df	3
	Sig.	.000

Before applying Factor analysis the KMO-Bartlett's test was conducted to check sample. Adequacy and test of Sphericity where both are more significant with KMO value is 0 .760 more than 0.5 which indicate statistically significant and Bartlett's value is highly significant with .000. This is less than 0.05.

**Table 33: Communalities**

	Extraction
Adequate mechanism	.923
Helpful in personal progress	.960
Structured appraisal sys	.936

Extraction Method: Principal Component Analysis.

Table 34: Total Variance Explained			
Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.819	93.965	93.965

Extraction Method: Principal Component Analysis.

The Extraction Sums of Squared Loadings are at 94 % which indicate 06% data and Sums of Squared Loadings are at 94 % which indicate 06% data was extracted from the study which is nearly significant. After conducting this entire test we approached for factor analysis where the 1<sup>st</sup> most influencing factor to learners is university's evaluation system helps learners in their progress.

### Limitations of the Study

- Many times learners were not really *informed about* the topics.
- The numbers of researchers to explain the questionnaires to learners were not adequate as they would have helped in explaining the concepts to the participants.
- A limitation of the current study was also the small sample of learners. The size, convenience, and homogeneity of the sample limit the generalizability of this study.
- This study only used the views of learners. Considering that Payam-e Noor University as one of the biggest training organization in Iran, the views of different stakeholders and partners could be useful as it would have helped to examine the value system more properly.
- Establishing contacts with learners was difficult as most of them were part time or on-line students

### Findings

1. Among sample group of 395 learners, that 53.6 % of the respondents were male and just 141 people (35.7%) were female.
2. A majority 60% of the respondents was from the age group 30 to 40 years, and just 11.6% of participants were from 20 to 30 years.
3. 47.8% of the respondents were under graduate while only 27.2 were studying for master degree.
4. Majority (33.6%) of participants were students, while 26.4 were faculty members and 21.2% were employees.
5. Majorities of learners are male in Payam-e Noor University while according to secondary data females are the most participants of public universities which hold entrance exams.
6. Learners have evaluated the importance of all variables more than average since all t-values are positives.
7. Mean ranking of variables shows that provisions of modern facilities is the most important factor in determining learners' satisfaction (7.76) and Payam-e Noor university's goodwill (7.48) and trainers' capabilities are the next critical factors in value system of the university.
8. As the results show, trainers' responsiveness to learners' enquiry (4.03) was the least important factor in determining learners' satisfaction.
9. Data obtained from the sample of learners of Payam-e Noor University, shows a good internal consistency reliability ( $\alpha = 0.99$ ).
10. KMO analysis showed that the existence of complementary job within the trainers is the most important factor in the trainers' performance.
11. According to KMO analysis the friendly behavior of trainers is the critical factor in determining learners' satisfaction.
12. KMO test showed that knowledge and qualification of trainers are critical in determining the trainers' capabilities according to the learners.
13. According to KMO analysis offering adequate references to the learners for further study is critical in determining trainers' responsiveness.

14. According to KMO analysis, learners' defined PNU as one of the pioneer universities in Iran and were feeling proud of studying at PNU. These factors were the critical factors for determining the university's goodwill according to learners' perception.
15. KMO analysis represented that learners' further suggestion of Payam-e Noor University to sponsors and other friends define the learners' loyalty.
16. According to KMO analysis the existence of integrated automation system is a critical factor in the provision of modern facility.
17. KMO analysis showed that according to learners' perception, the quality of given service in comparison with other universities is the critical factor for analyzing the given service.
18. According to KMO analysis provision of the adequate services cape is the important factor for analyzing service varieties.
19. KMO analysis revealed that the help of appraisal system in the learners' progress is an important factor for the evaluation of Payam-e Noor University.
20. Improvement in trainers' performance and their tendency to create effective communication will increase learners' satisfaction.
21. Improvement in trainers' capabilities would culminate in an increase in learners' satisfaction which means capable trainers who perform their task with better speed and the quality of their performance would be acceptable.

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