

Perception on the improvement of attention service to the students under the basic conditions of quality for the institutional licensing of the Private University of Trujillo

[Percepción sobre la mejora del servicio de atención a los estudiantes bajo las condiciones básicas de calidad para el licenciamiento institucional de la Universidad Privada de Trujillo]

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Received: 17 December 2020; Accepted: 21 December 2020; Published: 07 January 2021

Resumen

Este trabajo de investigación se ha desarrollado con el propósito de evaluar la mejora del servicio de atención a los estudiantes de la Universidad Privada de Trujillo con el cumplimiento de la condición I, componente I.4 referente a los sistemas de información de las condiciones básicas de calidad (BCQ) para obtener la licencia institucional. Los indicadores utilizados como sistemas de información que involucran matrícula, pagos, material bibliográfico, aprendizaje virtual se han utilizado para evaluar la mejora del servicio de atención a los estudiantes. La hipótesis se contrastó aplicando el diseño pre-experimental con pre-test y post-test. El resultado obtenido de los coeficientes significativos de los respectivos indicadores el pre-test fue 0.42, 0.15, 0.71, 0.58, 0.35, 0.22, 0.42, 0 y el posttest fue 0.93, 1, 0.88, 0.79, 0.88, 0.90, 0.83, 0.67. Se pudo determinar que no existe contradicción dentro de cada uno de los indicadores, ya que los resultados muestran que en cada indicador luego de utilizar los sistemas de información requeridos en las condiciones básicas de calidad, se obtuvo un mejor servicio para los estudiantes.

Palabras clave: Sistema de información, condición básica de calidad, licenciamiento.

Abstract

This research work has been developed with the purpose of evaluating the improvement of the attention service to the students of the Private University of Trujillo with the fulfillment of condition I, component I.4 referring to information systems of the Basic Conditions of Quality (BCQ) to obtain institutional licensing. The indicators used as information systems that involve enrollment, payments, bibliographic material, virtual learning have been used to evaluate the improvement of the attention service to students. The hypothesis was contrasted by applying the pre-experimental design with pre-test and post-test. The result obtained from the significant coefficients of the respective indicators the pre-test was 0.42, 0.15, 0.71, 0.58, 0.35, 0.22, 0.42, 0 and the post-test was 0.93, 1, 0.88, 0.79, 0.88, 0.90, 0.83, 0.67. It was possible to determine that there is no contradiction within each of the indicators, since the results show that in each indicator after using the information systems required in the basic quality conditions, a better service for the students was obtained.

Keywords: Information system, basic conditions of quality, licensing.

1. Introduction

With the enactment of Law No. 30220 (University Law, 2014), the Ministry of Education (MINEDU) assumes the leadership of the Quality Assurance Policy for Higher University Education. In addition, the same law creates the National Superintendency of Higher University Education (SUNEDU), and introduces compulsory and renewable licensing of universities, and ensures quality in higher education (CINDA, 2012).

The Private University of Trujillo officially requests its institutional licensing process on August 8, 2017 identified with a record of documentary procedure No. 027540-2017-SUNEDU-TD, for which it must comply with the Basic Conditions of Quality (SUNEDU, 2015). The present work focuses on Condition I, Component I.4 regarding Enrollment Information Systems, virtual learning, library management and virtual payments. Since 2009, the university has its own transactional information system that controls the flow of security and the consistency of the data involved (Domínguez, 2012) and that works within an intranet for internal communication of the company (Arribas A., 2018) where students or guardians have the urgent need to appear in person to carry out their respective procedures, generating discomfort and delay in the processes for both students and administrative personnel who interact with students. To comply with component I.4, a web application was developed and implemented where the client, server and protocol are standardized (Luján, 2002) that can be used from a computer, tablet or mobile device with internet access, to which created user accounts for administrative staff, teachers and students of the university. The information system was developed using languages implemented back-end technologies, such as PHP and the front-end, such as HTML5, CSS3, Javascript and AJAX, these being the technologies with which the user interacts (Valdivia, 2016), likewise the use of a framework to normalize and structure the system code (Martínez et al., 2010).

The facts revealed in the investigation had an influence on the improvement of the service of attention to the university students with the use of an information system required in the Basic Conditions of Quality.

2. Materials and Methods

The universe was the students enrolled in the 2018 academic year, which was provided by the academic records area of the Private University of Trujillo. The population was 921, which represents the continuity of students enrolled in the 2018-I and 2018-II academic semesters. The sample was obtained using simple random sampling with a result of 271 students. In this research work the analytical method will be used (Hurtado I. and Toro J. 2005). The hypothesis contrast design was a pre-experimental design with pre-test and post-test (Hernández et al., 1997). The scheme is as follows:

G: O1 → X1 → O2

Where:

G: Students enrolled in the 2018 academic period.

O1: Conformity of students with the use of a university's own information system.

O2: Conformity of students with the use of an information system required in the BCQ.

X1: information system.

For this, questionnaires were used as research instruments according to García T. (2003).

The questions asked are:

Question 01: Do you consider that the enrollment process is timely?

Question 02: Can you choose your own courses in which you want to enroll considering the concept of prerequisites?

Question 03: Do you have access to all the content of the courses in which you are enrolled?

Question 04: Do you know the status of your academic progress regarding your attendance and grades during the academic semester?

Question 05: Do you find the desired bibliographic material in the bibliographic collection for the reservation or loan process?

Question 06: In the bibliographic collection, is there a summary or the contents of a bibliographic material that you want to consult?

Question 07: Are you constantly available to make payments for various concepts with credit or debit cards?

Question 08: Do you make payments for various items virtually?

3. Results

The results obtained from the statistical treatment of the data at the beginning and end of the academic semesters 2018-I and 2018-II based on the questions asked are:

Related to question 1: Timely enrollment process.

Table 1. Results of question 1

	Yes	No	Sample 1 (P1)	Sample 2 (P2)
Use of the university's own information system	114	157	114/271 = 0.42	252/271 = 0.93
Use of information system required in the BCQ	252	19		

Where:

P1: population proportion (start) = 0.42,

P2: population proportion (end) = 0.93

Ho (Null Hypothesis): the proportion of students does not consider the enrollment process timely.

Ha (Alternative Hypothesis): the proportion of students considers the enrollment process timely.

P1 = 0.42 and P2 = 0.93 were obtained, deducing that $P1 < P2$. Therefore, Ha was accepted.

Related to question 2: Select your own courses in which you want to enroll considering the concept of prerequisite.

Table 2. Results of question 2.

	Yes	No	Sample 1 (P1)	Sample 2 (P2)
Use of the university's own information system	42	229	42/271 = 0.15	271/271 = 1
Use of information system required in the BCQ	271	0		

Where:

P1: population proportion (start) = 0.15,

P2: population proportion (end) = 1

Ho (Null Hypothesis): the proportion of students do not select their own courses in which they wish to enroll, considering the concept of prerequisite.

Ha (Alternative Hypothesis): the proportion of students selects their own courses in which they wish to enroll considering the concept of prerequisite.

P1 = 0.15 and P2 = 1 were obtained, deducing that $P1 < P2$. Therefore, it was accepted Ha.

Related to question 3: Access to all the content of the courses in which you are enrolled.

Table 3. Results of question 3

	Yes	No	Sample 1 (P1)	Sample 2 (P2)
Use of the university's own information system	192	79	$192/271 = 0.71$	$239/271 = 0.88$
Use of information system required in the BCQ	239	21		

Where:

P1: population proportion (start) = 0.71,

P2: population proportion (end) = 0.88

Ho (Null Hypothesis): the proportion of students does not have access to all the content of the courses in which they are enrolled.

Ha (Alternative Hypothesis): the proportion of students has access to all the content of the courses in which they are enrolled.

P1 = 0.71 and P2 = 0.88 were obtained, deducing that $P1 < P2$. Therefore, Ha was accepted.

Related to question 4: Knowledge of their academic progress regarding their attendance and grades during the academic semester.

Table 4. Results of question 4

	Yes	No	Sample 1 (P1)	Sample 2 (P2)
Use of the university's own information system	156	115	$156/271 = 0.58$	$214/271 = 0.79$
Use of information system required in the BCQ	214	57		

Where:

P1: population proportion (start) = 0.58,

P2: population proportion (end) = 0.79

Ho (Null Hypothesis): the proportion of students does not know their academic progress regarding their attendance and grades during the academic semester.

Ha (Alternative Hypothesis): the proportion of students knows their academic progress regarding their attendance and grades during the academic semester.

P1 = 0.58 and P2 = 0.79 were obtained deducing $P1 < P2$, therefore Ha was accepted.

Related to question 5: Desired bibliographic material is in the bibliographic collection for the reservation or loan process.

Table 5. Results of question 5

	Yes	No	Sample 1 (P1)	Sample 2 (P2)
Use of the university's own information system	94	177	94/271 = 0.35	238/271 = 0.88
Use of information system required in the BCQ	238	33		

Where:

P1: population proportion (start) = 0.35,

P2: population proportion (end) = 0.88

Ho (Null Hypothesis): the proportion of students does not find the desired bibliographic material in the bibliographic collection for the reservation or loan process.

Ha (Alternative Hypothesis): the proportion of students finds the desired bibliographic material in the bibliographic collection for the reservation or loan process.

P1 = 0.35 and P2 = 0.88 were obtained, deducing that $P1 < P2$, therefore Ha

Related to question 6: Existence of a summary or the contents of a bibliographic material that you want to consult.

Table 6. Results of question 6

	Yes	No	Sample 1 (P1)	Sample 2 (P2)
Use of the university's own information system	59	212	59/271 = 0.22	244/271 = 0.90
Use of information system required in the BCQ	244	27		

Where:

P1: population proportion (start) = 0.22,

P2: population proportion (end) = 0.90

Ho (Null Hypothesis): the proportion of students does not consider that there is a summary or the contents of a bibliographic material that they wish to consult.

Ha (Alternative Hypothesis): the proportion of students consider that there is a summary or the contents of a bibliographic material that they wish to consult.

P1 = 0.22 and P2 = 0.90 were obtained, deducing that $P1 < P2$, therefore Ha is accepted.

Related to question 7: Constant availability to make payments for various concepts with credit or debit cards

Table 7. Results of question 7

	Yes	No	Sample 1 (P1)	Sample 2 (P2)
Use of the university's own information system	114	157	114/271 = 0.42	225/271 = 0.83
Use of information system required in the BCQ	225	46		

Where:

P1: population proportion (start) = 0.42,

P2: population proportion (end) = 0.83

Ho (Null Hypothesis): the proportion of students does not find constant availability to make payments for various concepts with credit or debit cards.

Ha (Alternative Hypothesis): the proportion of students is constantly available to make payments for various concepts with credit or debit cards.

$P_1 = 0.42$ and $P_2 = 0.83$ were obtained, deducing that $P_1 < P_2$, therefore Ha is accepted.

Related to question 8: Making payments for various concepts virtually

Table 8. Results of question 8

	Yes	No	Sample 1 (P1)	Sample 2 (P2)
Use of the university's own information system	0	271	$0/271 = 0$	$182/271 = 0.67$
Use of information system required in the BCQ	182	89		

Where:

P_1 : population proportion (start) = 0,

P_2 : population proportion (end) = 0.67

Ho (Null Hypothesis): the proportion of students does not make their payments for various concepts virtually.

Ha (Alternative Hypothesis): the proportion of students makes their payments for various concepts virtually.

$P_1 = 0$ and $P_2 = 0.67$ were obtained, deducing that $P_1 < P_2$, therefore Ha is accepted

4. Conclusions

- There is an increase of 51% where students consider that the enrollment process is timely using an information system required in the BCQ for institutional licensing. Using the information system required in the BCQ, there is unanimity where students can choose the open courses they want to take in the academic semester, in contrast to only 15% using the university's own information system.
- There is an increase of 17% in students who can access the contents of the courses in which they are enrolled with the information system required in the BCQ. With the information system required in the BCQ, 79% of students are aware of their academic progress regarding grades and attendance, compared to only 58% of students with the university's own information system. 88% of students can find a bibliographic material in the bibliographic collection for reservation or loan processes using the information system required in the BCQ, increasing by 53% with respect to the use of the university's own information system. 90% of students consider that there is a summary or the contents of a bibliographic material that they wish to consult using the information system required in the BCQ, in contrast to only 22% using the university's own information system. 83% of students have constant availability to make their payments with credit or debit cards using the information system required in the BCQ, increased by 41% with respect to using the university's own information system. 67% of students can make payments virtually with the information system required in the BCQ, since with the university's own information system, no student could make virtual payments.

Acknowledgments

Our sincere thanks to the academic records area and the systems and infrastructure area of the Private University of Trujillo for facilitating access and the corresponding information and to students of all professional careers for giving us their time in carrying out this research.

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