

The Website Analysis of Nutrition Study Programme

Satwika Arya Pratama^(⊠), Amalia Ruhana, and Rita Ismawati

Nutrition Undergradute Study Programme, Home Economics Department, Faculty of Engineering, State University of Surabaya, Surabaya, Indonesia satwikapratama@unesa.ac.id

Abstract. The aim of website in university are to provide information about profiles, academic programs, facilities and facilities, activities and achievements. The website is the first media interaction and engage interaction to prospective students and public users. To find out how far the Nutrition Program website can be accepted by users, it is necessary to conduct an assessment and a way to improve the quality of service to students. The aims of this study were (1) to determine the quality of information on the nutrition study program website (2) To determine the quality of user service interaction (3) To determine the usability of the nutrition study program website. This research is a quantitative descriptive study with 100 respondents from the Unesa Nutrition Undergraduate Study Program as many as 100 people. The measurement of website service quality is taken using the Webqual instrument. Data collection was carried out in June 2022, using google form. The average score for the Website Information quality dimension of the Unesa Nutrition Undergraduate Study Program is 3.576 (respondents are very satisfied). On the service interaction quality dimension of the website, the average score was 3.349 (satisfied) and for the website usability dimension, the average score was 3.533 (very satisfied). Overall, the respondents were very satisfied with the website with an average score of 3.555. Some suggestions for improvements to the website include adding information about student achievements, scholarship information, information on internships and job vacancies, templates for correspondence/administration, history, video profiles, and curriculum information.

Keywords: Website · Nutrition Unesa · Webqual · Service · Satisfaction

1 Introduction

The study program at the Bachelor of Nutrition at the State University of Surabaya is one of the new study programs at the State University of Surabaya. The Unesa Nutrition Undergraduate Study Programme was established in 2016 with an Establishment Decree signed by the Secretary General of the Ministry of Research, Technology and Higher Education Number 418/KPT/I/2016 and accepted students for the first time in 2017. One of the efforts to make the Nutrition undergraduate study programme more known by the public is to create a study program website with the web address nutrition.ft.unesa.ac.id.

Making a website in the scope of higher education currently has the aim of providing information about profiles, academic programs, facilities and facilities, activities that have been and will take place, achievements that have been obtained and so on. People will search and access the website as the first interaction and attraction for a university, which in this case is a study program [1].

Improving the quality of services from the website needs to always be improved, so that students of the Nutrition Study Program in particular and the public in general can get comprehensive information about the Nutrition Study Program. In addition, the public can also interact with the Nutrition undergraduate study program through the website. So, to find out to what extent the Nutrition Program website can be accepted by users, it is necessary to conduct an assessment to measure from the available websites whether it has been well received by users or not. This measurement also serves as a way to improve the quality of service to students [2].

The webqual method is the result of the development of ServQual, which is widely used to measure service quality. WebQual consists of three dimensions namely; (1) Information Quality is the ability of a system or website to provide and fulfill information needs to users, such as accurate information, information that is easy to understand by users, complete presentation, relevance, and information security. (2) The quality of service interaction can be said as the level of user confidence in a website based on their experience using the website. (3) Usability is the quality of a system's ability to help users [3].

The formulation of the problem in this study are (1) How is the quality of information on the nutrition study program website in providing and meeting information needs to users?; (2) How is the quality of user service interaction with the nutrition study program website based on their experience using the nutrition study program website?; (3) How is the usability of the nutrition study program website?

The purpose of the study is:

- a. To find out the quality of information on the nutrition program website in providing and meeting information needs to users
- b. To determine the quality of user service interactions with the nutrition study program website based on experience using the nutrition study program website
- c. To find out the usability of the nutrition study programme website

2 Research Methods

This research is quantitative descriptive. The population of this study were all active students of the Nutrition undergraduate study program as many as 312 people and then the sample was taken using simple random sampling of the population. The minimum number of research samples is determined using the Slovin formula as follows:

$$n = \frac{N}{N(d)^2 + 1} \tag{1}$$

Information: n = number of respondents

Table 1.	Question	naire of	Website	Quality

No	Question
Quality	y of Information
1	The Nutrition study programme website provides reliable information
2	The Nutrition study programme website provides up-to-date information
3	The Nutrition study programme website provides information that is easy to read and understand
4	The Nutrition study programme website provides detail information
5	The Nutrition study programme website provides relevant information about study programme
6	The Nutrition study programme website provides accurate information
7	The Nutrition study programme website present information in an appropriate format and layout
Service	Interaction Quality
8	The Nutrition study programme website the website makes it easy to attract interest and attention
9	The Nutrition Study Programme website makes it easy to communicate with the Nutrition Study Program
Usabili	ty
10	The Nutrition Study Programme website is easy to operate
11	Interaction with the website is clear and understandable
12	The Nutrition Study Programme website is easy to navigate
13	The Nutrition Study Programme website have an attractive appearance
14	The Nutrition Study Programme website have a display according to the type of website
15	There is additional knowledge from the information on the Nutrition Study Program website
16	The website address of the Nutrition Studies Program is easy to find
Overal	1
17	The overall appearance of the Nutrition Study Program website is good

N = population

d = absolute error that can be tolerated (margin of error)

The margin of error is 10% or 0.1. The margin of error describes the number/probability of errors that may occur during sampling show in Table 1. With a population of and based on a 10% margin of error, the minimum number of samples used is 76 respondents.

The measurement scale for the level of satisfaction is 1 (very dissatisfied), 2 (not satisfied), 3 (satisfied), 4 (very satisfied). In addition to the questions on the webqual

Range of Scales	Criteria
$1 \le x < 1.75$	Very Dissatisfied
$1.75 \le x < 2.5$	Dissatisfied
$2.5 \le x < 3.5$	Satisfied
$3.5 \le x \le 4$	Very Satisfied

Table 2. Range of Scales and Criteria

questionnaire, respondents were also given open-ended questions regarding suggestions for improvements to website services.

The descriptive analysis carried out in this study is as follows [4]:

1. Calculating the score and average score on each variable indicator

Average score of each indicator :
$$(F \times S)/n$$
 (2)

F = Frequency of answers S = Score on the answer scale n = number of respondents

2. Calculate the scale range to get a descriptive analysis.

Descriptive analysis is a method that serves to describe or provide an overview of the object. This analysis is carried out by using the scale range formula as follows:

Range of Scale (RS) =
$$\frac{(largest \ score - smallest \ score)}{number \ of \ intervals}$$
(3)

So the scale range is as follows in Table 2.

3 Results and Discussion

3.1 Quality of Information Nutrition Undergraduate Programme Website

Based on Table 3, the highest average score for the quality of website information is on the Nutrition Study Program Website indicator providing reliable information, which is 3,733, the lowest average score is on the Nutrition Study Program Website indicator providing fairly detailed information, which is 3,384. So in general for the dimensions of website information quality, respondents were very satisfied with the quality of Website Information for the Unesa Nutrition Undergraduate Study Program with an average score of 3,576. Several studies have shown that the quality of information in a website has an effect on user satisfaction. The better the quality of information owned by a website, the higher the level of satisfaction felt by website users [5].

Indicators	Average Scores	Interpretation
The website provides reliable information	3.733	Very Satisfied
The website provides up-to-date information	3.459	Satisfied
The website provides information that is easy to read and understand	3.671	Very Satisfied
The website provides detail information	3.384	Satisfied
The website provides relevant information about study programme	3.658	Very Satisfied
The website provides accurate information	3.651	Very Satisfied
The website present information in an appropriate format and layout	3.479	Satisfied
Total Average Scores	3.576	Very Satisfied

Table 3. Quality of Information Indicators Website Nutrition Undergraduate Programme

Table 4. Service Interaction Quality Nutrition Undergraduate Programme Website

Indicators	Average Scores	Interpretation
The website was easy to attract interest and attention	3.356	Satisfied
The website makes it easy to communicate with the Nutrition Study Program	3.342	Satisfied
Total Average Scores	3.349	Satisfied

3.2 Service Interaction Quality Nutrition Undergraduate Programme Website

Based on Table 4, the highest average score for Website Service Interaction Quality is on the Nutrition Study Program Website indicator that makes it easy to attract interest and attention, which is 3,356. In general, for the dimensions of service interaction quality, respondents were satisfied with the service interaction quality of the Unesa Nutrition Undergraduate Study Program Website with an average score of 3,349. Website service interactions affect user satisfaction [6, 7].

3.3 Usability Nutrition Undergraduate Programme Website

Based on Table 5, the highest average score for the Usability website is on the indicator that the Nutrition Study Program Website is easy to operate, which is 3,658. The lowest average score is on the Nutrition Study Program Website indicator which has an attractive appearance, which is 3,384. So in general for the quality of website information, respondents were very satisfied with the usability of the Website of the Unesa Nutrition Undergraduate Study Program with an average score of 3.533. The usability dimension has a positive and significant effect on user satisfaction. This means that the increased

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Indicators	Average Scores	Interpretation
The website is easy to operate	3.658	Very Satisfied
Interaction with the website is clear and understandable	3.607	Very Satisfied
The Nutrition Study Programme website is easy to navigate	3.527	Very Satisfied
The Nutrition Study Programme website have an attractive appearance	3.205	Satisfied
The Nutrition Study Programme website have a display according to the type of website	3.534	Very Satisfied
There is additional knowledge from the information on the website	3.575	Very Satisfied
The website address is easy to find	3.623	Very Satisfied
Total Average Scores	3.533	Very Satisfied

Table 5. Usability of Nutrition Undergraduate Programme Website

Table 6. Suggestions from respondents for Website Improvement of the Undergraduate NutritionStudy Programme.

No	Suggestions
1	Added profile video for Nutrition Undergraduate Programme
2	Website appearance is made even more attractive
3	More information about student achievement is highlighted
4	The background website should be more colorful, not just white
5	Updating Curriculum Information
6	Added information about the history of the product
7	Added templates for correspondence/administration
8	Every activity can be shown a youtube link
9	Provided information on scholarship offers, job vacancies, internships, etc

usability of the website will increase user satisfaction, feeling helped by this convenience [5].

The overall appearance of the Nutrition Study Program website is good with average score 3.555. The study program website is one part of the services in the Nutrition undergraduate study program. The dimensions of the quality of services provided by educational institutions have a positive and significant influence on customer satisfaction partially and simultaneously [8].

Table 6 showed the suggestions from respondents to improve the website of the Unesa nutrition undergraduate study program. These suggestions were expected to be realized by the website manager. Website innovation is important to increase user satisfaction and

trust [9]. Improving the quality of this website is expected to increase user satisfaction with the website of the Nutrition undergraduate study program. A good website quality will increase the reuse of the website by users [7, 10]. The quality of usability, information and services has a positive effect on user satisfaction [6, 11]. Website quality also has a direct influence on user loyalty [12].

4 Conclusion

On the Information Quality Dimensions of the Unesa Nutrition Undergraduate Study Program Website, the average score is 3.576, which means that respondents are very satisfied. In the dimension of service interaction quality of the Website of the Unesa Nutrition undergraduate study programme, the average score is 3.349, which means that respondents are satisfied.

On the website usability dimension, the average score is 3.533, which means that the respondents are very satisfied. Overall, the respondents were very satisfied with the website of the Nutrition undergraduate study program with an average score of 3.555.

Some suggestions for improvements to the website include adding information on student achievements, scholarship information, information on internships and job vacancies, templates for correspondence/administration, study programs history, study program profile videos, and updating study program curriculum information.

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References

- D. B. Napitupulu, "Evaluasi Kualitas Website Universitas XYZ Dengan Pendekata Webqual [Evaluation of XYZ University Website Quality Based on Webqual Approach]," Bul. Pos dan Telekomun., vol. 14, no. 1, p. 51, 2016, https://doi.org/10.17933/bpostel.2016.140105.
- W. Abbas, "Analisa Kepuasan Mahasiswa terhadap Website Universitas Negeri Yogyakarta (UNY)," 2013, pp. 1–6.
- A. E. Yudistira, B. T. Hanggara, and H. M. Az-Zahra, "Pengukuran Kualitas Website Program Studi Sistem Informasi Menggunakan Metode WebQual dan Importance and Performance Analysis," J. Pengemb. Teknol. Inf. dan Ilmu Komput., vol. 4, no. 10, pp. 3571–3579, 2020.
- K. Roz, "Analysis of the Effect of Website Quality on User Satisfaction Using the WebQual Method 4. 0," J. Manaj. Dan Kewiraushaan, pp. 41–49, 2019.
- Y. Suharto and E. Hariadi, "Analisis Kualitas Website Badan Pengembangan Sumber Daya Manusia Menggunakan Metode Webqual 4.0," J. Manaj. dan Organ., vol. 12, no. 2, pp. 109– 121, 2021, https://doi.org/10.29244/jmo.v12i2.33917.

- W. P. Bintari, I. B. N. Udayana, and B. D. Maharani, "Pengaruh Usability, Information Quality, dan Service Interaction Terhadap Loyalitas Konsumen Dengan Kepuasan Sebagai Variabel Intervening (Studi Pada Konsumen Tokopedia di Kabupaten Kediri)," J. Ekon. dan Manaj., vol. 20, no. 1, pp. 68–75, 2022.
- A. D. Prayogo and M. Sutisna, "Pengaruh Kualitas Website (Webqual 4.0) Terhadap Penggunaan Kembali," J. Ris. Bisnis dan Investasi, vol. 3, no. 2, p. 39, 2018, https://doi.org/10. 35697/jrbi.v3i2.932.
- 8. A. Indrawati, "Pengaruh Kualitas Layanan Lembaga Pendidikan terhadap Kepuasan Konsumen," J. Ekon. bisnis, vol. 16, no. 1, pp. 25–35, 2011.
- S. Bairamzadeh and A. Bolhari, "Investigating factors affecting students' satisfaction of university websites," Proc. 2010 3rd IEEE Int. Conf. Comput. Sci. Inf. Technol. ICCSIT 2010, vol. 1, no. August 2010, pp. 469–473, 2010, https://doi.org/10.1109/ICCSIT.2010.5565050.
- M. Sutisna, A. Prayogo, and I. Sarah, "Evaluating Website Repeat Usage Using Webqual 4.0: a Guide for E- Commerce Business Evaluating Website Repeat Usage Using Webqual 4.0: a Guide for E-Commerce Business," pp. 1–7, 2019, https://doi.org/10.1088/1757-899X/662/2/ 022105.
- A. Manik, I. Salamah, and E. Susanti, "Pengaruh Metode Webqual 4.0 terhadap Kepuasan Pengguna Website Politeknik Negeri Sriwijaya," J. Elektro dan Telekomun. Terap., pp. 477– 484, 2017.
- Hadita, "Kualitas Website Dan Harga Mempengaruhi Loyalitas Pelanggan Melalui Variabel Kepercayaan Di Traveloka," J. Kaji. Ilm., vol. 22, no. 2, pp. 205–218, 2022, https://doi.org/ 10.31599/jki.v22i2.1110.

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