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AN ASSESSMENT OF THE QUALITY ATTRIBUTES OF AN EDUCATIONAL SERVICE AS SEEN FROM THE PERSPECTIVE OF LOYAL AND DISLOYAL STUDENTS OF INSTITUTIONS OF HIGHER EDUCATION

The article deals with the problem of applying the Kano questionnaire to make an assessment of quality features of an educational service by students. The authors present the usability of the Kano questionnaire for this purpose. The main aim of the research was to identify those attributes of an educational service that influence its quality from the point of view of a student of an institution of higher education. At the same time, the authors intended to examine whether there are differences in the evaluation of the qualities of this service between the groups of the so-called loyal and disloyal students. The survey research proved that there exist statistically significant differences of two proportions in the students' assessment of the quality attributes of an educational service, while a hierarchization/classification of these attributes in most cases is similar in both of the examined groups.

Keywords: Kano questionnaire, educational service, college/university student

1. INTRODUCTION

The literature of the subject offers numerous publications dealing with the issue of college students' loyalty (Henning-Thurau, Langer, Hansen, 2001; Helgesen, Nesset, 2007; Thomas, 2011; Chen, 2016). Due to the specific nature of an educational service provided by an institution of higher education such as a college, including its long-term character, research on the formation of students' loyalty to their college is undoubtedly vital. Loyal students project a positive image of their

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college to the outside environment, recommend it to others, and – if a need arises – return to the college with the aim to pursue their education further at the next stages and to obtain higher degrees. Loyal graduates can still maintain contacts later on by, among others, donating, cooperating in the realization of joint projects, offering students places to do practicums or internships in their companies, delivering lectures and training courses.

One can speak of maintaining a student's loyalty when the latter purchases a service over a certain span of time. However, not all services are purchased so often for this definition to apply. This concerns especially educational services offered by an institution of higher education. Therefore, it is necessary to differentiate between definitions of services of a short-term purchase cycle and those of a long-term purchase cycle. An educational service provided by an institution of higher education is characterized by the latter, for example, a three-year study course of the first degree (corresponds to a Bacheror's degree), two-year studies of the second degree or two-year postgraduate studies, where using at least two of these offers will testify to maintaining the student's loyalty (obtaining a Master's degree). The purchase cycle can be accepted to be shorter if we regard the fee for each semester of studies as the determinant of repeat purchase.

Taking the above into consideration, the present article references the proposal of Jill Griffin, in whose opinion, building customer loyalty is a process composed of seven stages. The student passing through stages 1 to 4 of building loyalty can be referred to as disloyal or "doubtfully loyal" and may possibly go to the competition at any time (Stage One: somebody who can become a customer of the company; Stage Two: somebody who most probably will make the first purchase, the so-called potential customer; Stage Three: a potential customer who – according to data obtained by the company – will not make the first purchase; Stage Four: a customer who made the first purchase; Stage Five: a customer who made another purchase – characterizes a loyal student; Stage Six: a customer who makes regular purchases, in other words – a loyal student claiming to be an "advocate of the college"; Stage Seven (the final one): the so-called advocate of the company, who does not buy on a regular basis, but recommends purchasing to others (this is decided by a strong bond between the company and the customer, which is built over a series of years) (Grzanka, 2009, p. 23).

In view of the above, students of WSB University, Department of Economics in Opole, who are inclined to repeat purchases/use the services of the college over a long period of time, were classified as loyal. Students of WSB University, Department of Economics in Opole, who were not inclined to repeatedly use the services offered by the college were qualified as disloyal. In the research, the opinions of the former students of WSB University, Department of Economics in Opole, were also taken into account.

The authors of the present publication analyzed the literature on the subject with reference to quality features of the educational service provided by the college, the essence of a customer's/student's loyalty and the usability of the Kano question-

naire, regarding the assessment of the quality attributes of a product. The authors carried out qualitative and quantitative research. The basic aim of the former was the identification of quality attributes of an educational service by students. At this stage of the research, the "brainstorming" method was used. Simultaneously, the authors' intention was to check whether there are differences between the examined groups of loyal and disloyal students as far as the importance of the qualitative attributes of an educational service is concerned. For this reason the Kano questionnaire was applied, as well as a test for equality of two proportions (quantitative research). The examined students were asked to assess three modules: 1. Organization of studies, distribution of classes and facilities; 2. Infrastructure and 3. Characteristics of the lecturer.

2. QUALITY ATTRIBUTES OF AN EDUCATIONAL SERVICE PROVIDED BY AN INSTITUTION OF HIGHER EDUCATION

The literature of the subject distinguishes a series of features characterizing the notion of a service. The most often listed attributes of a service include, primarily, the non-material nature of the activity of providing services (among others, Payne, 1997, p. 20; Kotler, 2002, p. 41; Urbaniak, 2004, p. 26) and inseparability, since provision and consumption of a service is taking place at the same time (among others, Kasiewicz, 2002, p. 134). Łańcucki, apart from the non-material character of a service (a process or an action) and its inseparability, distinguishes such qualities as: variety, instability, inability to produce the service in advance "to keep in stock" and the impossibility to acquire the right of ownership of the service (Łańcucki, 2001, p. 13). In turn, Goranczewski and Szeliga-Kowalczyk distinguish a broad spectrum of attributes of a service, which complement one another (Goranczewski, Szeliga-Kowalczyk, 2015), that is:

1. Complementariness – mutual complementing of educational services is made possible, for instance, through a suitably constructed program of didactic classes within the framework of a given major of studies.

2. Elusiveness – the customer possesses merely a certain representation of what is going to follow. They have limited possibilities of "trying out" a service before making a purchase, e.g., an educational offer of the college rendered in its prospect, recommendations from acquaintances – graduates from the college, etc.

3. Complexity – a service can be provided in its pure form, e.g., didactic classes in the form of a lecture, yet it can also be an extended package of activities, e.g., didactic classes in the given subject in the form of a lecture in contact with the lecturer, group studies/laboratory classes and e-learning.

4. Inseparability of provision and consumption – contemporarily, in the era of digitalization, omission of the provision of a service is possible, e.g., an education-

al service can be realized with the use of e-learning tools, which offers the possibility of recreating didactic material by the student at any moment.

5. Flexibility – an educational service can offer a series of variants catering to the client's individual requirements, e.g., studies of the second degree realized along the "traditional path" or a study course of the second degree, including postgraduate studies (in which case the student earns both the Master's degree and a certificate of completing postgraduate studies).

6. Seasonality – providing a semestral educational service which spans the so-called academic year; in the case of extramural (weekend) studies these classes are conducted during the weekends, in that of intramural (day) studies – they can take place Monday through Wednesday, for instance.

7. Heterogeneity – this is connected with the client's subjective feelings about the provided service. The subjectivism contains non-quantifiable criteria, like the individual reception of an academic lecture repeated by a professor for the n-th time as evaluated by members of the auditorium can vary completely, in the same way as the very manner of delivering the lecture itself can be different, depending on the lecturer's mood.

8. Instability – testifies to the fleeting and transient character of the service. A service that is not consumed at one time – is lost, which entails, among others, negative economic effects in the form of suffered losses, e.g., gaps in the student's body of knowledge and skills, resulting from their absence from classes.

The authors mentioned above also enumerate such significant features of a service as (Goranczewski, Szeliga-Kowalczyk, 2015):
– professionalism (competences of the didactic and administrative personnel, closely linked to securing the trust that the requirements of quality will be met);
– reliability (the level of the quality of a service on offer must be high enough and conform with requirements), and
– client-friendliness (the service is expected to be available in the given place and at the specified time convenient to the client, realized in a kind and expert way, in compliance with the requirements).

Explaining the notion of "quality of service" needs recalling a few definitions. For instance, Łańcucki highlights that "the quality of a service is nothing else but meeting a client's requirements by entities which offer services. More precisely, the quality of service can be defined as a degree to which all the inseparable attributes of a service satisfy a client's requirements" (2001, p. 15). Quality, in this author's opinion, can be considered in a general way and a narrower one as follows (Łańcucki, 2011, p. 11):
– in the first meaning – quality means the kind, property, standard, value of the given object (phenomenon);
– in the other framework – quality is "a feature or a set of features distinguishing the given object from others, or all of the attributes of the given object which are relevant due to its inner structure and its relations, interactions and liaisons with the environment."

The ultimate quality of a service is thus dependent on both the service-provider and the service-receiver, as well as on material conditions in which the service is rendered and its environment.

With reference to the specific group of customers which students represent, it needs observing that they expect to be provided with educational services of high quality that should enable them to gain the knowledge, skills and social competences that will allow them to take up effective activity in the competitive environment (Maciąg, 2011, p. 126). In turn, Botas claims that there exists a certain set of values expected by students, which are of importance to them, as well. They are as follows (Botas, 2011, p. 2):

– functional values (education's utility from the point of view of work),
– values resulting from obtaining new professional qualifications,
– creative values (intellectual development, innovativeness),
– social values (friendships, contacts, living in a group, trust in others),
– emotional values (reaching a balance between the major of studies, interest and preferences).

Expenses which are connected with a service should also be regarded as a vital element in the assessment of its quality. In the framework of marketing, the added value of an educational service is defined as a progressive, positive relation between benefits and costs of studies in its broad understanding (Herman, Szablewski, 1999, p. 9). Here, a measure of the evaluation can be, among others, the level of a student's satisfaction with the educational service.

A fact that is stressed in the literature on the subject is that satisfaction is nothing more than the service-receiver's emotional reaction to the perceived quality/value of the service, and thus satisfaction with a service is a complex evaluation of that in what way the process of its providing influences the client (Stoma, 2004, p. 34). Satisfaction is a measure of quality, which is closely linked to the evaluating person. This measure also makes it possible to assess the level of satisfaction with the quality of educational services. The student's sense of satisfaction can be influenced by various factors (including attributes of services indicated above) and their significance is determined by the student's requirements (expectations). A customer's satisfaction with previous transactions (services experienced earlier) are the chief determinant which decides about the customer's loyalty (Hill, Alexander, 2003, p. 32-33). Accordingly, the following section will present the essence of client loyalty in the light of the literature of the subject.

3. CLIENT'S (STUDENT'S) LOYALTY

In the popular understanding, loyalty stands for devotion, attachment, engagement. The literature of the subject features a large variety of definitions of the word "loyalty." Already, upon an initial analysis of scientific publications, one can con-

clude that loyalty is a multidimensional notion that resists an unambiguous defini-
tion. Nevertheless, we often stress the fact that loyalty is a bond, a customer's at-
tachment to the company or people who work for it, or products offered by it. The
notion of client loyalty has kept appearing in marketing since the beginnings of this
very domain itself and it is there that we can observe the greatest number of ap-
proaches towards the understanding of the word. Loyalty is often used interchange-
ably with such terms as: being accustomed, repeat purchase, satisfaction, prefer-
ences, engagement, retention, faithfulness, passing good opinions, and even –
a compulsion (Urban, Siemieniako, 2008, p. 9). Jacoby and Chestnut define brand
loyalty in the following way: "The (a) biased, (b) behavioral response, (c) ex-
pressed over time, (d) by some decision-making-unit, (e) with respect to one or
more alternative brands of a set of such brands, and (f) is a function of psychologi-
cal (decision-making, evaluative) processes" (Jacoby, Chestnut, 1978, p. 80).

The essence of the phenomenon of loyalty is underlined by the definition which
frames it as a certain state of the customer's relation to the company, the products
of which the former buys. This state is characterized by a high durability, long-
term character and acceptance of purchase conditions. A loyal client is a steady
client who is not susceptible to actions organized by the competition, and shaping
customers' loyalty is the goal of complex actions run on the market (Wilmańska-
-Sosnowska, 2008). Rudawska, in turn, stresses the element of loyal clients taking
care of the image of the company (2005, p. 15-16). A similar approach is presented
by J. Griffin mentioned earlier, who calls the loyal client an "advocate of the com-
pany." Here, there are two joint conditions which must be met – regular purchase
and recommending purchase to others (Grzanka, 2009, p. 23).

Summing up, the essence of loyalty can be grasped in two categories: custom-
ers' attitudes and customers' behaviors. The former means subjective feelings,
which impact a client's individual attachment to products, services or brands. Be-
havior, on the other hand, manifests itself in repetitive purchasing, increasing orders
and recommendations passed to others (Urban, Siemieniako, 2008, p. 9; Skowron,
Skowron, 2012, p. 67).

With regard to an educational service, a loyal student is one for whom the offer
of providing such a service (studies of the first degree) satisfied their expectations
and proved to be so attractive (delighted/excited them) as to make them want to use
the same (reliable) college's offer of a Master's course and further – postgraduate
studies, irrespective of offers from the competition, i.e., other institutions of higher
education. Hence, the company (college) "which intends to make a success must
carry out the transaction of exchange in such a way as to win a place in the hearts
and minds of the clients, as well as a share of the means in their pockets." The skill
of acquiring local clients is of key importance to companies and is the main factor
in building a competitive advantage (Storbacka, Lehtinen, 2001, p. 36). One of the
ways in which loyal students are won is engaging assessment of quality attributes
in the whole process, with the aim of distinguishing and grouping those which are,
in the first place – indispensable, secondly – realized, made aware of and clearly

defined, and thirdly – capable of delighting (decisive in building loyalty to the greatest extent). The subsequent section will present a tool to render such a classification possible.

4. RESEARCH TOOL, METHODOLOGY AND RESULTS
OF THE RESEARCH

The research was conducted in three stages. In the first one, the "brainstorming" method was used in a group of 20 students (both loyal and disloyal) attending weekend study courses of the second degree in order for them to point to those features of an educational service which have an influence on its quality. The results of the first stage were used to elaborate the Kano questionnaire.

A Kano questionnaire allows us to determine the individual requirements (features) of customers and the significance of the features in the perception of quality (Högström, Rosner, Gustafsson; Dominici, Palumbo, 2013, p. 215-236). All of the customer's requirements can take on the following character: expected, anticipated, unforeseen and over-anticipated (Karaszewski, 2009, p. 260; Shahin, Nekuie, 2011, p. 176-188; Grudowski, Dembowski, 2012, p. 77-87). The expected characteristics, as the very name itself implies, are ones that the customer expects to characterize the given product. The anticipated features are those that the customer is unaware of, although when they do appear – they are of paramount importance to the customer's subjective feeling. Expectations which are unforeseen are characterized by the fact that when they are fulfilled, the customer does not feel satisfaction; however, when they are not met – the customer will not be pleased. The over-anticipated features are characterized by the fact that not meeting them does not evoke a customer's dissatisfaction, whereas meeting them causes a growth in satisfaction (Obora, 2005, p. 52-53). In the majority of cases, the quality which is perceived does not equal that which is received. For this reason Noriaki Kano carried out a correlation analysis between a customer's satisfaction and the offered quality. He classified the quality characteristics of a product into the following groups (Kano, Seraku, Takahash, Tsuji, 1984):

– Obligatory characteristics / indirectly expected "M" (Must be) – are those indispensable to obtain a customer's satisfaction; nevertheless, the very appearance of them will not raise the level of a customer's satisfaction, whereas a lack of these features will bring about a drop in satisfaction;
– One-dimensional / directly expected "O" (One-dimensional) – are features which are made aware of and precise, the lack of which results in lowering the customer's satisfaction, whereas their presence brings about an increase in satisfaction;

– Attracting features / lures "A" (Attractive) – are features which are attractive enough for the customer to whom the offer is addressed, to make them be interested in it more than in competitors' offers; it greatly increases satisfaction, frequently determines loyalty; still, a lack of this type of characteristics is not of considerable significance to the customer;

– Indifferent features "I" (Indifferent) – are ones of no significance to the customer, the so-called errors; meeting them does not raise satisfaction, and a lack of them does not result in a decrease in satisfaction;

– Dubious features "Q" (Questionable) – are ones which are hardly identifiable at the given time; it is not obvious at which moment they will become relevant to the customer and when their presence can influence an increase in their satisfaction;

– Reverse features "R" (Reverse") – are ones, whose appearance causes the customer's dissatisfaction, while the lack of them leads to satisfaction.

Noriaki Kano constructed the questionnaire in order to determine the individual characteristics which constitute the given product and to classify them into one of the groups listed above. The respondent filling in the questionnaire is asked to answer the questions in two dimensions: positive – when the defined feature of the product appears and fulfills its function in the right way, and negative – when the defined feature does not appear or it does but to an unsatisfactory extent. A Kano questionnaire is very often formed from questions which are organized according to the model given in Table 1 below.

Table 1. Structure of questions and answers in a Kano questionnaire

	Functional (positive) form of the question	Dysfunctional (negative) form of the question
Questions	When the defined feature is present, how do you feel?	When the defined feature is not present (or is faulty), how do you feel?
Answers	A. I like it that way. B. It must be that way. C. I am neutral. D. I can live with it that way. E. I dislike it that way.	A. I like it that way. B. It must be that way. C. I am neutral. D. I can live with it that way. E. I dislike it that way.

Wolniak, Skotnicka, 2008, p. 143-144.

Each of the features is determined by a combination of two answers, which can take on five values. As a result, it is possible to obtain 25 variations, as presented in Table 2, and it is possible to detect the type of feature in a concrete situation.

Table 2. Kano model mapping Source: (Wolniak, Skotnicka, 2008, p. 144)

Customer require-ments		Dysfunctional				
		I like it	It must-be	Neutral	I can live with it	I dislike it
Functional	I like it	Q	A	A	A	O
	It must-be	R	I	I	I	M
	Neutral	R	I	I	I	M
	I can live with it	R	I	I	I	M
	I dislike it	R	R	R	R	Q

Legend:
A – Attractive, O – One-dimensional, M – Must-be, I – Indifferent, R – Reverse, Q – Questionable

The categories of characteristics, which are listed above, should be included in the product in appropriate proportions. They can serve to design a new product or to improve the already existing one. It is very important that the product should include all the obligatory features indicated by customers; there is no need, though, for the level of these attributes to be the highest possible. In this case, it suffices if they are just present in the product. Regarding the attributes which are made aware of, the level of their quality must be the same or higher than that of products offered by the competition. Designing/perfecting these features in the context of their quality must be very well-thought-out and executed in a manner that is most careful. The attractive attributes need to reflect the highest possible quality. While designing or improving the product, it is necessary to select only a few attractive features and ensure that they are of the highest quality. The proper choice of "lures" allows one to create a unique product and – what results from this – to gain a competitive advantage on the market (Kano, Seraku, Takahash, Tsuji, 1984).

The authors, bearing in mind the above-mentioned recommendations of the Kano method, set out to realize the second stage of the research and then the third one, in which respondents-students filled in the Kano questionnaire, paying attention to hierarchizing the quality attributes of an educational service, which had been identified and selected prior to that. Stage 2 included a pilot survey which was carried out in November 2016 and engaged 210 (76%) first year students of extramural study course of the second degree, attending WSB University in Wroclaw, Department of Economics in Opole – participants of a lecture in one of the subjects that are obligatory by the curriculum. The third stage was the main part of the research, for the needs of which it was decided to collect a sample numbering at least 384 elements (with 95% confidence level and 5% margin of error) in order to achieve the accepted precision of the results. The full-scale survey was conducted between August and October 2017, with the use of an Internet-assisted survey questionnaire (CAWI research). The number of respondents who participated in the survey was 832 (the achieved margin of error was 3.4%). The students were asked

to evaluate the organization of studies, the distribution of classes set by the curriculum and facilities, the infrastructure and characteristics of the lecturer.

5. RESULTS AND DISCUSSION

Nearly 60% of the study participants were recruited among students of the first degree studies run by WSB University, Department of Economics in Opole (precisely students of the following majors: Management, Finance and Accounting, Logistics, Administration and Internal Security, Pedagogy). About 20% of the respondents were students of the second degree study courses (the college conducts Master's studies solely in the major of Management). The sample also included graduates of the Bachelor's and Master's courses (about 20% of the examinees). Women made up 83% and men 17% of the respondents, the percentage of the questioned in the age groups being as follows: 21% – 19-22 years of age, 45% – aged 23-25 years, 12% – 26-30 years, and 22% – 31-54 years, respectively.

The analysis of the results of categorization of the quality attributes of an educational service leads to an initial conclusion that, in the case of the majority of the features, the assessments of significance are similar irrespective of the type of students (loyal/disloyal).

At the next stage of the analysis, the test for the difference between two population proportions was used with the aim to verify the hypothesis that the two identified populations (those of loyal and disloyal students) show two different proportions of indications of the given category.

$H_0: \pi_1 = \pi_2$

$H_1: \pi_1 \neq \pi_2$

As far as the group of disloyal students is concerned, the results of Kano categorization showed 4 items in the Attractive category, 10 items in the *Must-be* category, 14 items in the *One-dimensional* category, 6 items in the *Indifferent* category. On the other hand, in the group of loyal clients the results of Kano categorization showed 2 items in the *Attractive* category, 14 items in the *Must-be* category, 13 items in the *One-dimensional* category, 5 items in the *Indifferent* category. The results of calculations are presented in Tables 3-5 (attachments).

As regards the issue of organization of studies, the distribution of classes and facilities, among the indispensable (*Must-be*) attributes (Category "M") indicated by both groups of students, the following were found: informing students about eventual changes in the class schedule, offering a suitable number of classes/tutorials/lectures/laboratory classes, and also supporting students in their going abroad to attend courses at colleges, do practicums or internships (attachment – Table 3). Among the attractive requirements (Category "A"), which were agreed

on by both groups, there were found: offering subjects for students to choose and support in searching for a job, internship or practicum (Table 3).

The results presented in Table 3 point to numerous differences regarding the evaluation of the organization of studies, distribution of classes and facilities between loyal and disloyal students (Table 3, p-value < 0.1). Statistically significant differences of two proportions in the assessment of the organization of studies, the distribution of classes and facilities were recorded in 10 cases out of 14. The most visible differences of the two proportions appeared in the case of evaluating the process of student engagement, convenience of contacts with departments and workers of the college, as well as the speed, range and transparency of the information provided by the workers.

Table 4 (attachment) presents the hierarchization of the quality features and their evaluation in the sphere of the infrastructure of the college by both of the examined groups of students, i.e., loyal and disloyal. Among the *Must-be* (Category "M") attributes regarding the infrastructure, according to those indicated by loyal and disloyal students, the following were found: providing a suitable number of free parking places for students, taking care of cleanliness in the building and providing access to the Internet. Then, among the *One-dimensional* features, those unanimously indicated by loyal and disloyal students included: classes held in one building, air-conditioned lecture halls and classrooms, access to a small shop and cloakroom on the premises of the college. In the case of the assessment of the infrastructure, statistically significant differences between the examined groups were observed much more frequently (10 out of 10 items) than in the case of the evaluation of the organization of studies, the distribution of classes and facilities. The most evident differences in the two proportions appeared in relation to the assessment of the availability of air-conditioned rooms, access to rest places and to computers.

Table 5 (attachment) presents the classification of quality features and their evaluation in the sphere of characteristics of lecturers in the college by both of the examined groups. The results (Table 5) point to the appearance of differences between loyal and disloyal students in terms of the assessment of attributes connected with the characteristics of a lecturer. Among the requirements relating to this feature, perceived by both groups of students as indispensable to satisfy the basic needs (Category "M") there were the following: good knowledge of theory and the skill of giving good practical examples. The most visible differences in the two proportions occurred in the case of the evaluation of the lecturer through the prism of practical examples. The disloyal students much more often pointed out that for them it was definitely an attractive attribute, yet the so-called mistake answer at the same time. On the other hand, the loyal students far more frequently chose the category – the feature made precise, one that students are aware of (*One-dimensional*).

6. CONCLUSIONS

Designing and improving on the quality of educational services is a difficult process, though indispensable at the same time, which should be developed in a permanent way. Identification of the quality attributes of an educational service, their hierarchization with regard to their importance to service-receivers/students, form the foundation of design-related and perfecting actions. A useful tool of assessment of the quality of an educational service is the Kano questionnaire, the application of which was presented in this work. Recognition of the student's needs and expectations constitutes the basis of determining ways of providing services and building the student's loyalty towards the college.

In the conclusions presented here, which follow from the conducted research, it should be confirmed that there is a noticeable difference regarding the perception of the essence of quality attributes of an educational service in both of the examined groups of students. The difference was noted in the case of the classification of eleven out of thirty-three examined attributes. Simultaneously, statistically significant differences in the frequency of indications were observed for individual categories in both groups.

Twenty-two features were classified by both loyal and disloyal students. The most numerously represented is the category of *Must-be* attributes. The *Must-be* features which, according to both groups of the examined students, should characterize an educational service are the following: the practice of informing students about any changes introduced into the schedule, a suitable number of classes/lectures/laboratory classes that are attended, supporting students in their going abroad to study, take part in internships and practicums, providing a suitable number of free parking places for students, ensuring the building's cleanliness, providing access to the Internet in the building, good theoretical knowledge and the skill of giving good practical examples. The category of *One-dimensional* attributes includes: classes held in one building, air-conditioned didactic rooms and halls, a shop/bar/buffet and a cloakroom available on the premises of the college, lecturers' presentation of material that prepares students to cope with problems of real-world scenarios, a friendly approach on the part of lecturers towards students, availability of lecturers to students outside classes. The following should count into *Attractive* attributes, indicated in unison by both groups: offering students subjects to choose and supporting students in looking for a job/internship/practicum. Among the *Indifferent* attributes, the following were chosen: encouraging students to be active in classes, facilitating for individual students to take an individual course of studies, offering paid training courses and the availability of literature on the subject and other publications in the college library.

The examined students did not point to the price of the service (cost of studies) as a quality feature of an educational service. Other attributes turned out to be of

higher priority to them. The features were grouped in appropriate modules and presented in the tables above.

The features of a given service undergo relatively frequent changes since students' expectations are continuously growing; over a certain period of time, the attributes of a service which were classified as attractive, become ones that are one-dimensional (made aware of) with their progressing introduction into the offers of competitors. Similarly, one-dimensional features, after being available for a longer period of time, become obligatory, as regards the student's expectations. In the light of the above considerations, it must be concluded that institutions of higher education should take into account their students' suggestions related to the significance of the quality attributes of their educational services in the process of designing and perfecting them.

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OCENA CECH JAKOŚCIOWYCH USŁUGI EDUKACYJNEJ Z PERSPEKTYWY LOJALNEGO I NIELOJALNEGO STUDENTA SZKOŁY WYŻSZEJ

Streszczenie

W artykule podjęto temat wykorzystania kwestionariusza Kano do oceny cech jakościowych usługi edukacyjnej przez studentów. Autorki prezentują użyteczność kwestionariusza Kano. Głównym celem badań była identyfikacja atrybutów usługi edukacyjnej, które mają wpływ na jej jakość z punktu widzenia studenta szkoły wyższej. Równocześnie zamiarem autorek było sprawdzenie, czy pomiędzy badanymi grupami studentów tzw. lojalnych i nielojalnych występują różnice w ocenie ważności cech tejże usługi. Badania ankietowe wykazały, że występują statystycznie istotne różnice dwóch proporcji w zakresie oceny cech jakościowych usługi edukacyjnej, natomiast hierarchizacja/klasyfikacja tychże cech w większości przypadków przebiegała podobnie w obu badanych grupach.

Słowa kluczowe: kwestionariusz Kano, usługa edukacyjna, student

Attachments – tables 3-5

Table 3. Evaluation of organization of study courses, distribution of classes and facilitations – relative frequency (%) for the given category

Feature	A		M		O		R		Q		I	
	D	L	D	L	D	L	D	L	D	L	D	L
Student's rights and duties are clearly defined	4.8	3.7	45.8	42.3	40.1	47.1	0.0	0.0	0.8	0.0	8.6	6.0
	$p = 0.431$		$p = 0.310$		$p = 0.042**$		–		–		$p = 0.359$	
Classes are planned optimally during each weekend's schedule (e.g., no 'gaps' in the schedule)	11.8	12.0	23.9	27.8	54.4	50.8	0.0	0.0	0.0	0.0	9.8	9.4
	$p = 0.929$		$p = 0.200$		$p = 0.299$		–		–		$p = 0.845$	
Organization of classes encourages students' active participation	14.6	23.4	22.4	20.7	15.4	22.8	2.5	1.4	0.0	0.0	45.1	31.7
	$p = 0.001***$		$p = 0.551$		$p = 0.007***$		$p = 0.249$		–		$p = 0.000***$	
College facilitates individual organization of study courses/individual course of studies	17.9	17.9	23.9	23.0	12.1	25.7	0.0	0.0	0.0	0.0	46.1	33.3
	$p = 1.000$		$p = 0.759$		$p = 0.000***$		–		–		$p = 0.000***$	
College informs about changes in the schedule	5.0	2.3	61.7	60.5	27.7	31.3	0.0	0.0	0.0	0.0	5.5	6.0
	$p = 0.037**$		$p = 0.723$		$p = 0.256$		–		–		$p = 0.757$	
Number of students in groups is reasonable (e.g., with reference to the size of rooms, number of computer stations)	10.1	10.8	40.1	43.2	29.0	28.3	0.0	0.0	0.0	0.0	30.9	17.7
	$p = 0.742$		$p = 0.365$		$p = 0.824$		–		–		$p = 0.242$	
Contact with individual departments and workers of the college is convenient (days, office hours; possibility of contact via telephone or e-mail)	11.6	7.4	34.8	43.9	40.1	41.1	0.0	0.0	0.0	0.0	13.6	7.6
	$p = 0.038**$		$p = 0.007**$		$p = 0.964$		–		–		$p = 0.005**$	
College offers subjects to choose	40.8	37.7	9.8	12.9	21.4	27.4	0.0	0.0	0.0	0.0	28.0	22.1
	$p = 0.360$		$p = 0.160$		$p = 0.045**$		–		–		$p = 0.049**$	
College offers trainings, workshops that are additionally paid for	18.9	23.2	10.1	13.3	7.6	9.2	5.3	4.6	0.0	0.0	58.2	49.7
	$p = 0.129$		$p = 0.153$		$p = 0.407$		$p = 0.642$		–		$p = 0.014**$	
College offers free trainings, workshops	37.0	27.8	10.1	16.1	19.9	24.6	0.0	0.0	0.0	0.0	33.0	31.5
	$p = 0.005***$		$p = 0.011**$		$p = 0.104$		–		–		$p = 0.644$	
Speed, range and transparency of information passed by administration workers are suitable	3.8	8.7	46.9	38.6	31.7	39.1	0.0	0.0	0.0	0.0	17.6	13.6
	$p = 0.004***$		$p = 0.016**$		$p = 0.026**$		–		–		$p = 0.111$	
College supports students in searching for job/internship/practicum	35.0	37.0	13.1	13.8	18.9	20.7	0.0	0.0	0.0	0.0	33.0	28.5
	$p = 0.548$		$p = 0.768$		$p = 0.516$		–		–		$p = 0.160$	
Books/magazines (literature of the subject) are available in the college library	33.2	29.2	20.7	20.7	10.6	11.5	0.0	0.0	0.0	0.0	35.5	38.6
	$p = 0.213$		$p = 1.000$		$p = 0.679$		–		–		$p = 0.355$	

Feature	A		M		O		R		Q		I	
	D	L	D	L	D	L	D	L	D	L	D	L
College supports students in going abroad to study/to do internships/practicums	23.4	18.4	31.2	30.8	17.1	23.9	0.0	0.0	0.0	0.0	28.2	26.9
	p = 0.076*		p = 0.901		p = 0.015		–		–		p = 0.675	

Asterisks indicate statistical significance with*: p-value < 0.10, **: p-value < 0.05, ***: p-value < 0.01.
D – disloyal customer; L – loyal customer, p – p-value.
Source: own calculations on the basis of results of survey research.

Table 4. Assessment of infrastructure – relative frequency (%) for the given category

Feature	A		M		O		R		Q		I	
	D	L	D	L	D	L	D	L	D	L	D	L
Classes are conducted in one building	24.9	12.2	28.7	31.7	29.2	42.3	0.0	0.0	0.0	0.0	17.1	13.8
	p = 0.000***		p = 0.347		p = 0.000***		–		–		p = 0.188	
College ensures a sufficient number of free parking spaces for their students	18.6	11.5	38.5	45.3	28.5	29.9	0.0	0.0	0.0	0.0	14.3	13.3
	p = 0.004***		p = 0.047**		p = 0.657		–		–		p = 0.646	
College provides air-conditioning in didactic rooms	27.7	22.1	18.9	31.3	30.5	32.0	0.0	0.0	0.0	0.0	22.9	14.7
	p = 0.062*		p = 0.000***		p = 0.641		–		–		p = = 0.002***	
College ensures cleanliness of the building (classrooms, corridors, toilets)	8.8	6.4	45.1	53.1	34.3	31.5	0.0	0.0	0.0	0.0	11.8	9.0
	p = 0.191		p = 0.021**		p = 0.390		–		–		p = 0.185	
College provides access to places of rest during breaks between classes	32.0	20.7	20.2	27.6	20.7	28.3	0.0	0.0	0.0	0.0	27.2	23.4
	p = 0.000***		p = 0.013**		p = 0.011**		–		–		p = 0.207	
College provides a suffi-cient number of computer stations/laptops	19.1	16.1	25.9	33.6	19.9	26.0	0.0	0.0	0.0	0.0	35.0	24.4
	p = 0.256		p = 0.015**		p = 0.037**		–		–		p = = 0.001***	
College provides access to the Internet	27.0	22.1	32.7	31.3	24.2	29.4	0.0	0.0	0.0	0.0	16.1	17.2
	p = 0.105		p = 0.665		p = 0.091*		–		–		p = 0.671	
There is a shop/buffet, bar/vending machine selling drinks and refreshments available on the premises of the college	25.9	20.7	22.4	23.9	27.2	33.6	0.0	0.0	0.0	0.0	24.4	21.8
	p = 0.076*		p = 0.609		p = 0.045**		–		–		p = 0.374	
There is a copying shop on the premises of the college	25.9	16.6	21.2	33.6	33.0	30.3	0.0	0.0	0.0	0.0	19.9	19.5
	p = 0.001***		p = 0.000***		p = 0.403		–		–		p = 0.885	
There is a coatroom on the premises of the college	21.9	23.0	18.6	17.0	30.2	33.1	0.0	0.0	4.3	1.8	24.9	25.1
	p = 0.704		p = 0.546		p = 0.369		–		p = = 0.035**		p = 0.947	

Asterisks indicate statistical significance with*: p-value < 0.10, **: p-value < 0.05, ***: p-value < 0.01.
D – disloyal customer; L – loyal customer, p – p-value.
Source: own calculations on the basis of results of survey research.

Table 5. Teaching, characteristics of lecturers – relative frequency (%) for the given category

Feature	A		M		O		R		Q		I	
	D	L	D	L	D	L	D	L	D	L	D	L
Lecturer clearly defines student's duties	4.0	6.4	38.0	41.8	38.8	35.4	0.0	0.0	0.0	0.0	19.1	16.3
	p = 0.121		p = 0.264		p = 0.310		–		–		p = 0.290	
Lecturer displays good theoretical knowledge	4.8	3.2	51.4	50.8	32.0	37.0	0.0	0.0	0.0	0.0	11.8	9.0
	p = 0.237		p = 0.852		p = 0.863		–		–		p = 0.185	
Lecturer presents good practical examples	17.1	11.0	36.5	39.8	33.0	39.8	0.0	0.0	0.0	0.0	13.4	9.4
	p = 0.011**		p = 0.328		p = 0.042**		–		–		p = 0.069*	
Lecturer presents material that prepares for coping with problems in real-world scenarios	18.4	16.1	33.2	30.3	36.3	41.1	0.0	0.0	0.0	0.0	12.1	12.4
	p = 0.380		p = 0.369		p = 0.156		–		–		p = 0.859	
Lecturer answers questions in a professional way	11.3	6.4	38.5	44.1	39.5	40.2	0.0	0.0	0.0	0.0	10.6	9.2
	p = 0.012**		p = 0.102		p = 0.837		–		–		p = 0.499	
Lecturer is communicative	5.8	5.7	36.8	42.1	43.8	40.7	0.0	0.0	0.0	0.0	13.6	11.5
	p = 0.951		p = 0.118		p = 0.366		–		–		p = 0.360	
Lecturer displays a friendly approach to the student	4.5	6.2	42.8	39.5	46.1	48.0	0.0	0.0	0.0	0.0	6.5	6.2
	p = 0.278		p = 0.334		p = 0.583		–		–		p = 0.859	
Lecturer allows students to discuss problems during classes	16.4	20.9	26.2	21.4	27.2	34.3	0.8	0.5	1.0	0.9	28.5	22.1
	p = 0.097*		p = 0.104		p = 0.027**		p = 0.589		p = 0.882		p = 0.034**	
Lecturer is available to the student outside classes (e.g., office hours, via e-mail)	23.4	17.5	25.4	22.5	42.6	48.0	0.3	0.5	0.0	0.0	8.3	11.5
	p = 0.035**		p = 0.327		p = 0.118		p = 0.650		–		p = 0.124	

Asterisks indicate statistical significance with*: p-value < 0.10, **: p-value < 0.05, ***: p-value < 0.01.
D – disloyal customer; L – loyal customer, p – p-value.
Source: own calculations on the basis of results of survey research.