

DETERMINANTS OF THE QUALITY OF EDUCATION FROM THE STUDENTS' PERSPECTIVE

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Purpose: The aim of the survey was to assess the perceptions of students in the Faculty of Management and Quality Science at Gdynia Maritime University (FMQS GMU) on factors affecting the quality of education.

Design/methodology/approach: The study was conducted by means of a diagnostic survey with the use of the author's own questionnaire.

Findings: It was found that, in the opinion of the students of FMQS GMU the quality of education is determined to the greatest extent by factors related to academic staff and the organisation of classes, and to the least extent by factors related to students themselves. When analysing the results at the level of individual factors, however, it was found that the quality of education is most influenced by the content-related competences of the academic teachers, the equipment of the laboratories, the teaching skills of the teachers (conveying knowledge and explaining issues in a simple and understandable way) and the provision of teaching materials, e.g. lecture presentations or additional studies, by the teachers to the students.

Research limitations/implications: The survey was conducted among students of only one university. The results obtained cannot therefore be generalised to the entire student population in Poland.

Practical implications: The results of the study may serve as an inspiration for the university to define and implement activities aimed at improving the quality of teaching services provided, and as a result, increasing student satisfaction with the quality of education.

Originality/value: To identify the factors which, in the opinion of students, determine the quality of education to the greatest extent, and thus should be prioritised by universities when taking measures to improve the services provided.

Keywords: quality of education, university, students.

Category of the paper: Research paper.

1. Introduction

A key factor determining the competitiveness of modern universities, and thus the competitiveness of national higher education systems, is the quality of education. Under the provisions of the Bologna Process, all universities operating within the European Higher Education Area are obliged to implement activities aimed at ensuring high-quality education (Kraśniewski, 2009; Kujawa, 2021). Poland, as a signatory to the Bologna Declaration, has accepted the obligation to respect and implement the provisions contained therein, hence the provision of top quality education has been recognised as one of the pillars of the mission of the Polish system of higher education and science (Ustawa..., 2018).

The quality of education can be defined as the degree of meeting the requirements formulated by various groups of university stakeholders (students, teaching staff, business environment, accrediting institutions, state authorities), which relate to the education process and its effects, taking into account internal and external conditions (Roszczynialski, 2020). Due to the fact that stakeholders perceive different characteristics affecting the quality of education and have different priorities in this regard, it is difficult to indicate a single, universally acceptable definition of the quality of education (Biolik, 2009; Popek, Świda, 2011; Jabłońska, Wróbel, 2009).

The university's most important stakeholder are the students, for whom the quality of education is becoming increasingly important and who are looking for ever higher standards in this respect (Jabłońska, Wróbel, 2009). Achieving and maintaining student satisfaction and loyalty is currently one of the fundamental problems of university management staff, hence the activities related to the design and improvement of the university's offer should be implemented in a systematic manner (Duchnowska, 2019). Most authors of definitions of educational quality presented in the literature emphasise that the concept focuses on the student, as the most important stakeholder of the university, and the fulfilment of their needs and expectations. According to Gos (2015), the quality of education is such a level of teaching for students that guarantees the acquisition of knowledge, skills and competences in accordance with continuously improved educational programmes that are accepted by the university environment. According to Machowska-Okrój (2023) it is the sum of positive features of the teaching process, relevant from the students' point of view, which can be objectively measured. Malinowska and her team (2014) defined educational quality as a set of characteristics of the educational service provided by a university that satisfy the current and future requirements of students in terms of skill formation and knowledge transfer. Przystupa (2017), in turn, states that the quality of education is determined by students' satisfaction with the knowledge and skills they have acquired and by the usefulness of the competences acquired during their studies to meet the identified or foreseeable needs of the job market.

The link between educational quality and students' needs and expectations is also highlighted in the document 'Standards and Guidelines for Quality Assurance in the European Higher Education Area', approved by the Ministerial Conference in May 2015. According to these guidelines, the quality of education is linked to the objectives of education, and one of these objectives may be to prepare students for active citizenship and future professional work (by increasing their competitiveness in the job market, supporting their personal development or providing advanced knowledge) (Wytyczne dla EOSW; Machowska-Okrój, 2023). These guidelines impose on universities the obligation to implement and develop internal systems for ensuring the quality of education, the integral element of which should be the systematic assessment of the effects of the education process and the analysis of students' satisfaction with the quality of didactic classes (Gotlib, 2011).

By providing and improving the quality of education, universities should systematically monitor the needs and expectations of students to take into account their point of view. Most often, universities collect and analyse students' opinions on the quality of classes and the work of academic staff, as such activities are a formal and legal requirement imposed on Polish universities by the Act of 20 July 2018. Law on Higher Education and Science (Ustawa..., 2018). In fulfilling this obligation, universities conduct evaluation using questionnaires, which are the most popular and most widely used method of surveying students' opinions about the quality of courses (Hall, 2022; Horstein, 2017; Serin, 2019; Wach-Kąkolewicz, 2015). However, this approach is insufficient because, as Akareem i Hossain (2016) point out, the quality of education from the students' perspective should be assessed not only through the evaluation of teaching activities, but also, more broadly, through the evaluation of the learning environment throughout the study period. This is necessary to determine which factors most strongly determine the students' perception of the quality of education, to identify the needs for improving the didactic processes implemented by the university and to determine priorities in this regard (Wójcik, 2017). Identifying the attributes of an educational service that are important to students and prioritising them in terms of importance forms the basis of design and improvement activities for the university's offer, as achieving student satisfaction by meeting their needs and expectations is the basis for building relationships with them and loyalty to the university (Duchnowska, 2019). Being able to achieve student satisfaction is also a source of benefit for both the students themselves, the academic staff and the universities, operating in a dynamically changing environment (Bielińska-Dusza et al., 2023). The survey of student opinions on the quality of education also highlights the role of students as partners of universities in the development of the services they provide (Roszczyński, 2020). In doing so, universities should bear in mind that a survey of students' perceptions of the quality of education should be carried out systematically, since the factors on which student satisfaction depends are not only very different, but also their impact on student satisfaction may change over time (Biesok, Wyród-Wróbel, 2015).

Different views on the factors shaping the quality of education are presented in the literature on the subject. Roszczyński (2020) notes that educational quality can be considered externally, in terms of compliance with higher education legislation, as well as internally, in terms of the fulfilment of students' needs and expectations relating to the educational service. According to Krajewska (2016), the determinants of the quality of education can be considered in terms of object (from the perspective of the university) and subject (from the perspective of participants in the education process). In terms of the object, the quality of education is determined, among other things, by the educational programme, the learning environment, the resources of the HEI, the evaluation of results (achievements), the mission, policies and objectives of the HEI, the management of the HEI, the staff of the HEI, the structure of the HEI, the organisation and course of the educational process. On the other hand, in terms of subjects, the quality of education is determined by factors related to teachers (e.g. the educational methods used, competences, attitudes towards students, commitment to the educational programme, requirements for students) and students (their motivation, commitment to classes and learning).

Among the determinants of educational quality, Gos (2015) mentions the teaching staff, the material base, the educational programmes and the procedures for improving the educational process. In turn, Jabłońska i Wróbel (2009) point out that the quality of teaching processes is shaped by factors such as the study programme, the organisation of classes, teaching methods, student assessment methods, teaching staff, recruitment conditions, the learning environment and teaching aids. Numerous factors determining the quality of education are also mentioned by Popek i Świda (2011). They include:

- methods of program implementation (reduction in the proportion of lectures and predominance of student-activated activities),
- programme delivery standards (including qualifications of academic staff),
- group sizes adapted to the form of the classes,
- daily teaching load,
- consultations for students,
- teaching aids made available to students,
- student assessment principles,
- premises for carrying out activities,
- equipment to support the learning process,
- access to the library,
- information infrastructure and an integrated learning management system,
- cultural, sporting and recreational facilities,
- social and health care facilities,
- administrative and support services.

The determinants of educational quality and their importance in terms of their impact on student satisfaction have been the subject of numerous studies. For example, Wójcik (2017) conducted a study to assess the extent to which selected factors related to the organisation of the educational process affect the quality of university education as assessed by students of natural sciences. Hall (2011) assessed the validity of didactic and non-didactic criteria determining student satisfaction at one technical university in Poland. Research to identify the key determinants of student satisfaction was also carried out by Szeliga-Duchnowska and Szewczyk (2019), who, using the Kano method, distinguished between attributes of an educational service that are obligatory, one-dimensional, attractive and indifferent from the students' point of view. In turn, Kocot and Kwasek (2024) made an attempt to assess students' expectations towards study programmes, the importance of individual elements of the programme and their impact on student satisfaction. In another study, Akareem and Hossein (2016) assessed how students' sociodemographic characteristics, as well as their status and background, affect their perceptions of the quality of education. Biesok's and Wyród-Wróbel's study (2015), on the other hand, aimed to assess the impact of factors related to lecturers' attitude and approach to classes on student satisfaction.

The aim of the survey was to assess the perceptions of students in the Faculty of Management and Quality Science at Gdynia Maritime University (FMQS GMU) on factors affecting the quality of education. Based on the objective formulated in this way, it was hypothesized that individual factors determine the quality of education and student satisfaction with the services provided by universities to varying degrees. The research problem posed in the study was to identify which factors have the greatest impact on students' perceptions of educational quality and thus should be prioritised by universities when implementing improvement measures.

The novelty of the research stems from an identified research gap - research aimed at finding out the opinions of students of FMQS GMU on the factors determining the quality of education had not been previously conducted at the Faculty. Therefore, no factors have been identified thus far that, in the opinion of the students of the Faculty, have the greatest impact on their satisfaction with teaching quality. The originality of the survey results obtained lies in the identification of factors that should be prioritised by the Faculty when taking measures to improve the quality of the education service provided.

The article was prepared on the basis of an analysis of the literature devoted to the issue of the quality of education services provided by universities, with particular emphasis on the factors determining this quality, as well as on the basis of the results of a survey conducted among students of FMQS GMU.

2. Methods

The study was conducted by means of a diagnostic survey with the use of the author's own questionnaire. The questionnaire contained three questions. The first was designed to assess students' perceptions of the extent to which factors related to academics, study programme, students, organization of the classes and university infrastructure affect the quality of education. A five-point ordinal scale was used to assess the influence of each factor, where 1 meant definitely not influential and 5 meant definitely influential. The remaining two questions, which were single-choice in nature, sought students' evaluations of the effectiveness of different forms of course delivery. The survey questionnaire was made available to respondents online, as well as on paper during teaching sessions. The selection of the sample was intentional and non-random. The research was carried out between January and November 2024.

264 students from the Faculty of Management and Quality Science at Gdynia Maritime University took part in the survey, representing different fields of study (Management, Quality Science, Quality Engineering), degree (first-cycle, second-cycle) and form of study (full-time, part-time). The structure of the respondents is shown in Table 1.

Table 1

Structure of respondents by fields, degree and form of study

Differentiating factor		n	%
Fields of study	Management	138	54
	Quality Science	45	18
	Quality Engineering	73	29
Degree of study	first-cycle	202	79
	second-cycle	54	21
Form of study	full-time	189	74
	part-time	67	26

Source: own elaboration.

The results obtained were analysed using descriptive statistics methods. Due to the lack of proportion in the size of specific groups of respondents and the related limited possibilities of using statistical tests, the results were not analyzed using statistical inference methods to determine the diversity of students' responses depending on the differentiating factor.

3. Results and discussion

The factors influencing the quality of education and student satisfaction with the services provided by the university were divided into those related to academic staff, the study programme, students, the organisation of classes and the university's infrastructure.

Figure 1 shows respondents' average ratings of factors related to academics.

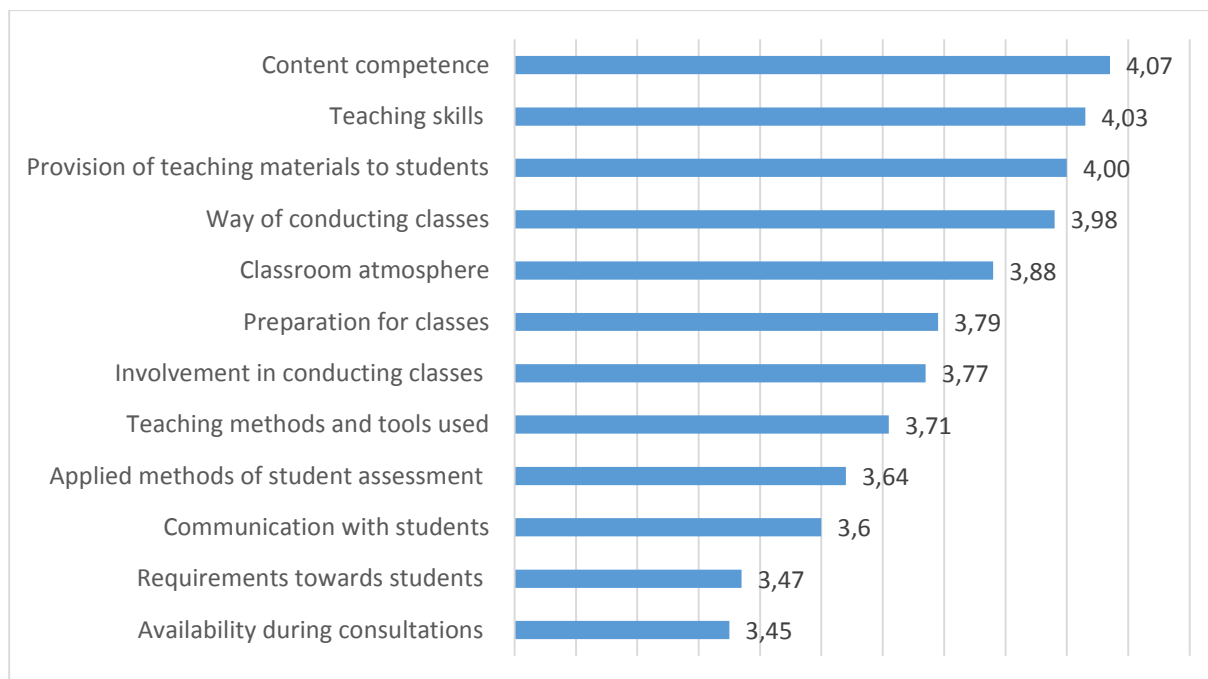


Figure 1. Respondents' opinions on the impact of factors related to academics on the quality of education.

Source: own elaboration.

In the opinion of the majority of respondents, all factors related to the academic staff determine the quality of education and student satisfaction with the courses - for each factor a total of more than 55% of indications were found: rather influences and definitely influences. Three factors, such as the substantive competence of teachers, the ability to transfer knowledge and making teaching materials available to students, received an average rating of 4 and above, which proves that they significantly affect the students' perception of the quality of services provided by the university.

According to the students, the greatest influence on the quality of education is the content competence of the academic staff, their knowledge and experience (4.07). Similar results were obtained by Madziła and their team (2023), who showed that professionalism and a high level of theoretical and practical preparation of people conducting classes are very important for students. Also, the results of the studies by Wójcik (2017) as well Akareem and Hossain (2016) confirm that the factor that most strongly determines students' perceptions of the quality of education is the content preparation and knowledge of the teachers. Szeliga-Duchnowska and Szewczyk (2019), on the other hand, showed that the content competence of teachers is perceived by students as an essential (mandatory) feature of the teaching service that must absolutely be provided, as its lack significantly affects student dissatisfaction. Slightly different results were obtained by Malik and their team (2012), who demonstrated that for business school students in Pakistan, the competence of lecturers is only the sixth most important factor (out of 48 assessed) in determining the quality of education.

Slightly lower, but also important for students, are the teachers' teaching skills - imparting knowledge and explaining issues in a simple and understandable way (4.03). Such a result is consistent with the results obtained by Hall (2011), who showed that the ability of academic staff to impart knowledge is, next to the knowledge of teachers, one of the most important factors determining students' satisfaction with the quality of education. Similar results were obtained by Malik and their team (2012) and Douglas and her team (2006), who demonstrated that, for students in Pakistan and the UK, teachers' didactic competence significantly determines the satisfaction with their classes.

Students also attach great importance to the teaching materials made available to them by the teachers, e.g. lecture presentations or additional studies (4.00), the way the classes are conducted, which should be interesting and engaging (3.98), the atmosphere in which the classes take place, including the teachers' approach to the students (3.88), and the teachers' preparation for the classes (3.79). As Douglas and her team (2006) have shown, making additional materials available is also very important for UK students.

In the respondents' opinion, factors such as the involvement of lecturers in conducting classes (3.77), teaching methods and tools used by lecturers, such as multimedia presentations, case studies, teamwork (3.71), applied methods of student assessment (3.64) and communication between teachers and students (3.60), are less important to ensure the quality of education.

In turn, the factors that are the least important for students are the lecturer's requirements towards students (3.47) and the availability of teachers during consultations (3.45).

The key components that universities need to consider in order to meet the expectations of the modern student are the transparency and clarity of study programmes, their uniqueness, innovation and integration with professional practice, as well as flexibility and stability (Kocot Kwasek 2024). Respondents' average ratings of factors related to the study programme are shown in Figure 2.

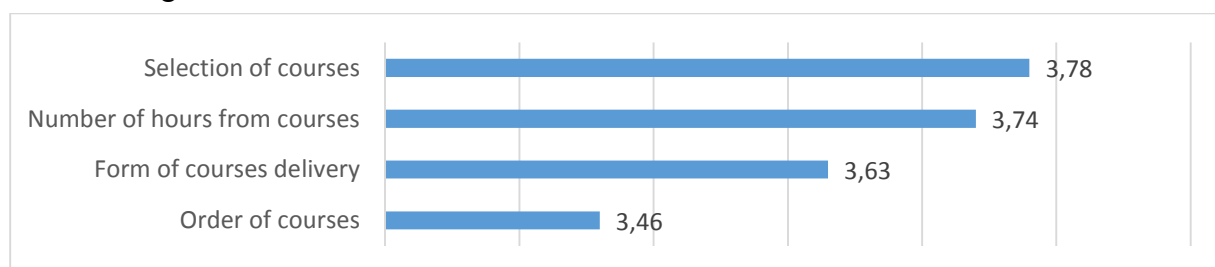


Figure 2. Respondents' opinions on the impact of factors related to the study programme on the quality of education.

Source: own elaboration.

In the group of factors related to the study programme, all of them received an average score of less than 4. However, it should be noted that most students perceive them as determining the quality of education (for each factor a total of more than 59% of indications were found: rather influences and definitely influences). The selection of courses (3.78) and the number of hours

from courses within the study programme (3.74) were found to be of greatest importance to respondents.

In the opinion of students, the form in which the courses are delivered, e.g. lectures, exercises, laboratories, project, determines the quality of education to a slightly lesser extent (3.63). The importance of forms of implementation for students was the subject of Wójcik's research (2017), which showed that the most effective forms of implementation of classes are considered by students to be laboratories and exercises that enable them to acquire practical skills. The less effective form of delivery, according to students, is lectures and the least effective - seminars.

The factor that least determines students' perceptions of the quality of the educational service provided by the university is the order of the courses taken in each semester of study (3.46).

Respondents were also asked to assess how the quality of education is determined by the students themselves (Figure 3).

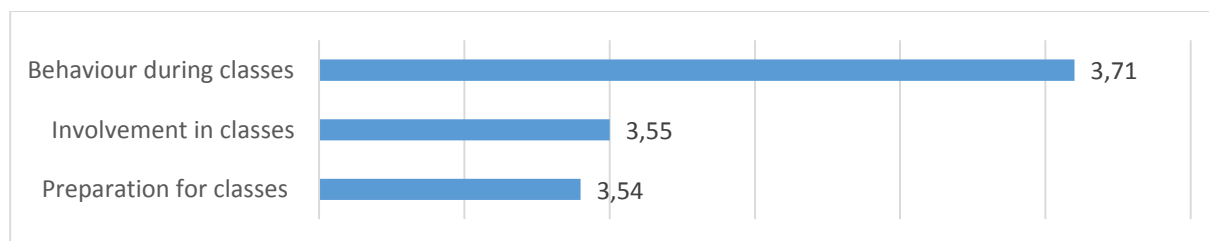


Figure 3. Respondents' opinions on the impact of student-related factors on the quality of education.

Source: own elaboration.

According to the respondents, the quality of education is most affected by the behaviour of the students in class (3.71). Less important is the involvement of students in classes, e.g. their activity during lectures, willingness to perform tasks during exercises and laboratories (3.55), and preparing students for classes (3.54). This is confirmed by the results obtained by Gos (2015), who, surveying students at a Polish university, showed that their degree of commitment to systematic preparation for classes is average.

Another group of factors assessed by the students was related to the organisation of the classes (Figure 4).

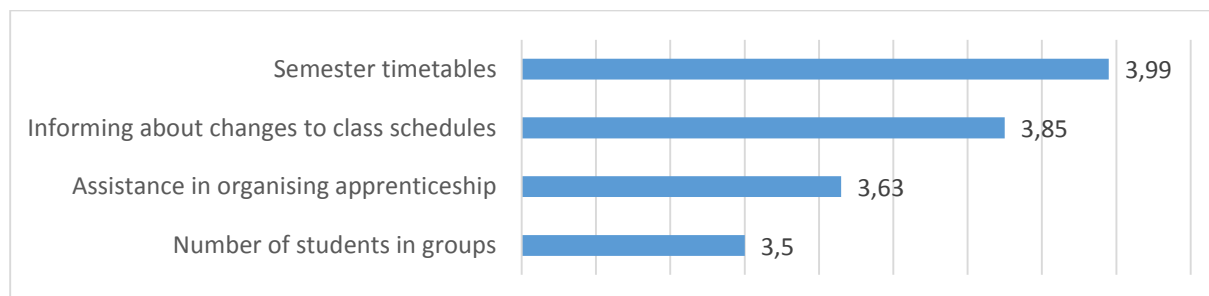


Figure 4. Respondents' opinions on the impact of factors related to the organization of the classes on the quality of education.

Source: own elaboration.

Among the factors related to the organisation of classes, semester timetables, including the times at which classes are held and the lack of breaks between classes, are the most important in ensuring student satisfaction with the quality of education (3.99). Similar results were obtained by Hall (2022), who, in a survey of students at four public technical universities in Poland, showed that the timetable of classes was the most important of the 25 factors identified by the author as determining students' satisfaction with the quality of education. In contrast, different results were obtained by Maik and their team (2012), who demonstrated that for business school students in Pakistan timetables were the least important factor influencing their satisfaction with their studies.

According to the students, the quality of education is also determined to a large extent by the fact that they are informed effectively and well in advance of changes to their schedules (3.85). Slightly less important to them is the assistance provided by the university in organising apprenticeship, including help in finding a company where students can do their placement (3.63). In turn, the size of the student groups in which classes are held is of least importance (3.50). Similar results were obtained by Malik and their team (2012).

The quality of education can also be seen through the prism of the university's infrastructure. The results of the students' assessment of the infrastructure factors are shown in Figure 5.

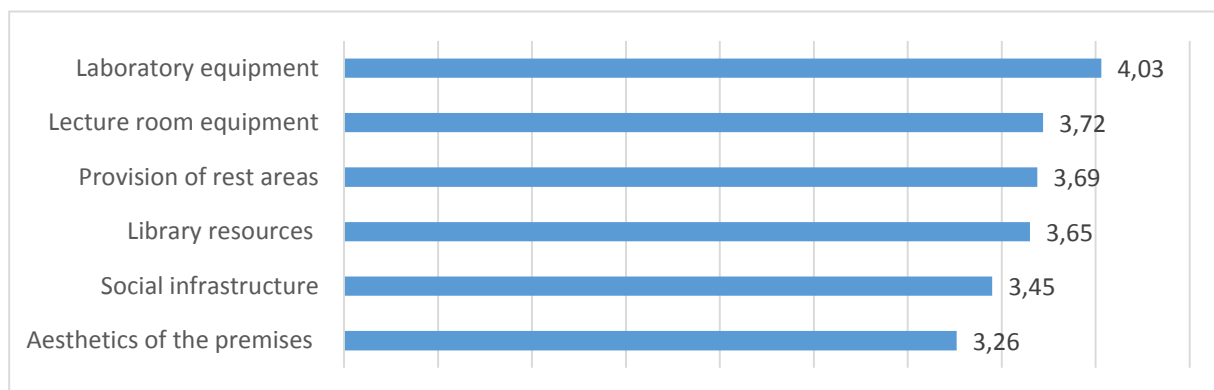


Figure 5. Respondents' opinions on the impact of factors related to university's infrastructure on the quality of education.

Source: own elaboration.

While evaluating factors related to the university's infrastructure, students indicated that laboratory equipment had the greatest impact on the quality of education (4.03). Wójcik (2017) also showed that among the factors related to the infrastructure, laboratory equipment significantly determines students' satisfaction with the quality of classes. Lecture room equipment are also of great importance to respondents (3.72). Similar conclusions were reached by Madziła and their team (2023), who demonstrated the importance of modern equipment used in the teaching process in achieving student satisfaction with the learning service. Similarly, Malik and their team (2012) showed that computer lab facilities are the second most important factor in terms of importance (after library resources) in determining the quality of education according to business school students in Pakistan.

According to respondents, the quality of education is also influenced by the university's provision of rest areas (3.69) and library resources (3.65). Gos (2015) in his research showed that students make little use of the library or reading room, which may be due to the fact that they are increasingly using online resources. In addition, students are limited to reading only the compulsory literature on the subjects studied. In contrast, Malik and their team (2012) showed that business school students in Pakistan rank access to library resources as the most important determinant of their satisfaction with their studies.

Students' satisfaction with the quality of service provided by the university is least influenced by the social infrastructure, such as access to the canteen or toilets (3.45), as well as the aesthetics of the premises (3.26). Similar results were obtained by Malik and their team (2012) and Douglas and her team (2006).

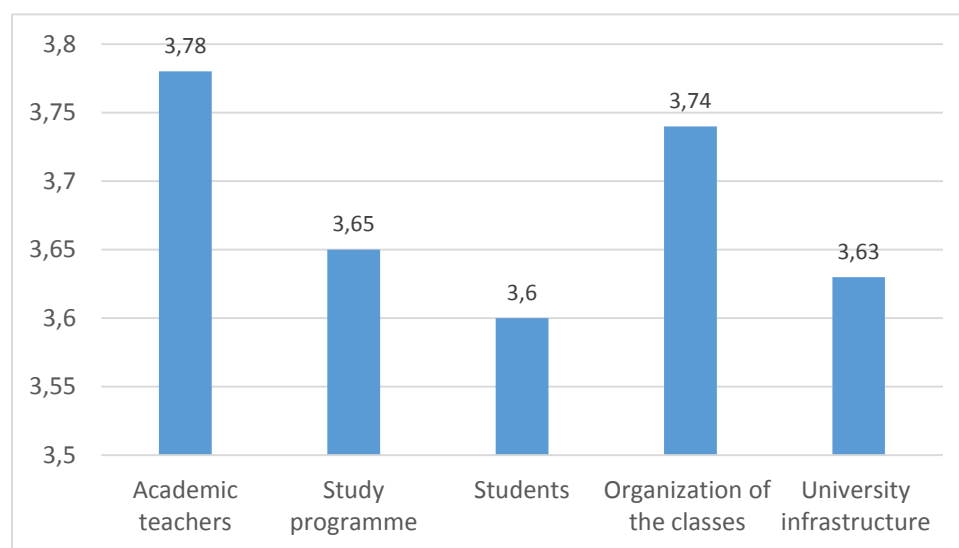


Figure 6. The importance of factors determining the students' perception of the quality of education divided into areas.

Source: own elaboration.

Analysing the results obtained at the level of individual areas (Figure 6), it can be concluded that student satisfaction with the quality of education is most influenced by factors related to academic staff (3.78). Wójcik (2017) and Hall (2011) also confirmed that the quality of education is most strongly determined by factors related to teaching staff, such as the content-related, methodological and communicative competences of teachers, their commitment to their work and their positive attitude towards students. Gos (2015) also counts teachers among the most important factors influencing the quality of education, and Adamska (2018) showed that, according to students, teaching staff is the most important factor shaping the image of a university.

Student satisfaction with the quality of education is also significantly determined by factors related to the organisation of the classes (3.74). Factors related to the study programme (3.65) and the university infrastructure (3.63) are less important for the respondents. In contrast, how students perceive the quality of education is least determined by student-related factors

(3.60). In her research, too, Wójcik (2017) showed that, of the parties involved in ensuring the quality of education, students feel least responsible for this quality. It can therefore be concluded that although students recognise the impact of their attitudes on the quality of education, they consider them to be the least important in terms of influencing the teaching process.

In recent years, an increasing challenge for universities has been the quality of classes delivered using distance learning means (Roszczynialski, 2020). Irrespective of the teaching method, it is the university's task to provide quality education, however, it is widely assumed that distance learning is less effective compared to education delivered in traditional form (Czapiewska, 2021). One of the themes undertaken in the survey was to find out what form of instruction is preferred by students (Figure 7) and how students perceive the forms of delivery in terms of their impact on the quality of education (Figure 8).

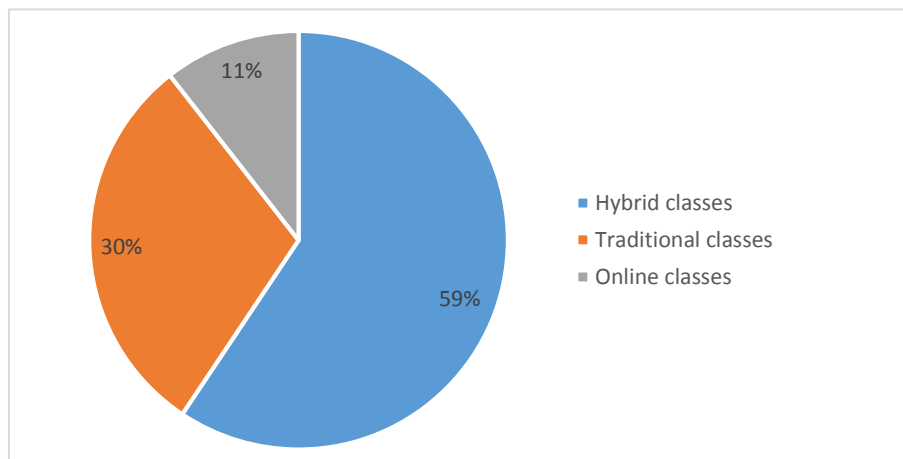


Figure 7. Respondents' preferences for the form of delivery of the course.

Source: own elaboration.

Most of the students participating in the study (59%) prefer a hybrid form of classes, including the implementation of lectures using distance learning means, and the other types of classes in the traditional form in direct contact between students and academic teachers. Every third respondent prefers classes in the traditional form, and only 11% are in favor of classes carried out remotely. This approach is consistent with the results obtained by Tuczyński (2021), who showed that replacing part of a traditional class with remote teaching has a positive effect on the satisfaction of the class participants.

It is important to note that the survey conducted in connection with this paper did not ask the students of FMQS GMU about the reasons for preferring the hybrid form of education. Identifying the factors that determine the quality of this form of instruction, as well as differences in student preferences depending on the topic or type of instruction, may be a direction for further research. However, as Geng and the team (2019) point out, the acceptance of distance learning may be due to the fact that students perceive it through the lens of learning independence, a sense of responsibility for learning and satisfaction with learning. In addition,

as Ali (2020) points out, contemporary students are hooked on mobile technology and expect technology-integrated learning, as it enables them to catch up with their studies at home. The research conducted so far on the perception of remote classes by students also proves that among the benefits of such classes noticed by students, the most important are time savings, the possibility of studying far from home, the possibility of combining work and study, reduced costs of travel to university, convenience, flexibility of study time, development of digital competences, the possibility of adapting the pace of learning to their needs, the possibility of learning information and communication tools, as well as the possibility of better planning and organizing studies, work and personal life (Ober, Kochmańska, 2022; Geng, Law, Niu, 2019; Bali, Liu, 2018; Zheng, Bendera, Lyon, 2021).

Online classes, which are becoming increasingly common in universities, are associated with flexibility and convenience of study, saving time and reducing the costs spent on commuting to university. However, this does not mean that students are willing to abandon traditional classes altogether. Similar results were obtained by Roszczyński and Kijanka (2020), who, when examining the opinions of students at one of the non-public universities in Poland on distance learning, showed that students are in favor of a form of education where distance learning does not replace, but is complementary to traditional education. A similar position is presented by Czapiewska (2021), who states that distance learning mechanisms should be a permanent element complementing, but not replacing, full-time education at a university. Furthermore, the author indicates that students declare a greater acceptance of online lectures than practical classes (exercises, laboratories, seminars).

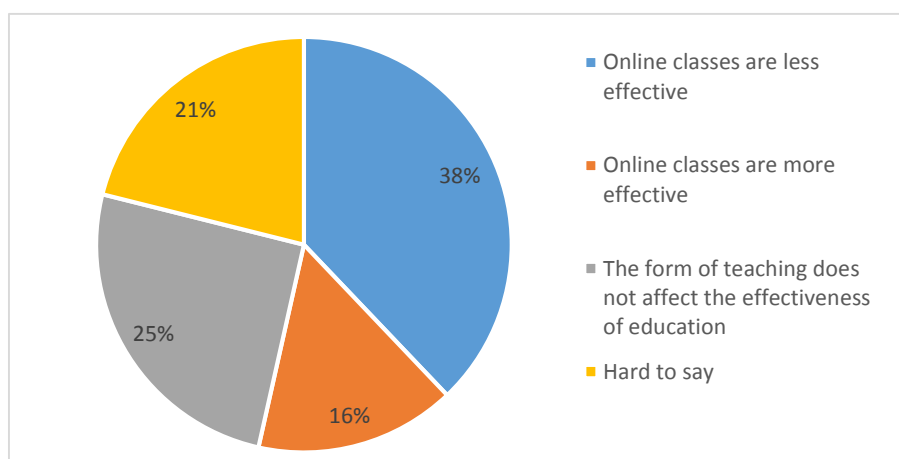


Figure 8. Respondents' views on the effectiveness of classes delivered online.

Source: own elaboration.

Remote learning, as an alternative to traditional education, should ensure the same quality and effectiveness of education, thus meeting the expectations of students and enabling them to achieve the same learning outcomes (Roszczyński, 2020). However, it is generally assumed that distance learning is by definition inferior in quality to that delivered in a classroom-based format, so traditional teaching cannot be completely replaced by distance learning, especially

in the case of forms of teaching where direct contact between students and teachers is essential (laboratories, exercises) (Roszczynialski, 2020; Czapiewska, 2021). These views are corroborated by the results of the study conducted as part of the work - the majority of respondents (38%) perceive classes delivered remotely as less effective in achieving the intended learning outcomes compared to the traditional form of education. For 25% of the respondents, the form of conducting classes is irrelevant, and 21% were unable to express their opinion in this regard. Only 16% of respondents perceive remote classes to be more effective compared to classes delivered onsite.

According to the survey, student satisfaction with their studies is a complex and multidimensional issue. Meeting students' requirements relating to the quality of education is particularly important in terms of maintaining their loyalty and encouraging them to continue their studies at subsequent levels. Therefore, the collection of students' opinions on the level of their satisfaction using periodic evaluation surveys is insufficient for the correct identification of directions for the improvement of the educational processes implemented by universities. This is because such measures are limited to assessing the quality of teaching and the work of academic staff, and as the survey shows - student satisfaction is determined by a number of factors (both didactic and non-didactic) that have different meanings for students. Therefore, a component of any internal educational quality assurance system implemented in universities should be a formalised policy for systematically surveying students' perceptions of the importance of factors influencing their satisfaction with their studies and using the results to improve university operations.

The conducted study made it possible to achieve the aim of the work and to positively verify the research hypothesis. It was confirmed that individual factors determine the quality of education and student satisfaction with the services provided by universities to varying degrees. Activities related to the improvement of didactic processes should be focused on factors of the greatest importance for students.

The study undertaken in this thesis should be continued. It is reasonable to widen the research sample - to include students representing various universities in Poland, educating in different fields and profiles of study. This approach will make it possible to identify differences in perceptions of educational quality depending on the subject matter or type of course. Furthermore, due to the changing conditions of the market for educational services in which universities operate, research should be repeated from time to time in order to identify changes in students' perceptions of the determinants of educational quality over time and to flexibly adapt the educational service to the requirements currently relevant to students. Furthermore, with the growing importance of distance learning, another potential line of research could be to assess students' perceptions of the factors determining the quality of this form of classes.

4. Conclusions

Students, as recipients of an educational service, determine the required level of quality of that service. They should therefore be seen by modern universities as their most important stakeholder, and a commitment to meeting students' requirements relating to educational quality should be a key element of the university's strategy and quality-based organisational culture. An integral element of such an approach is the systematic examination of students' needs and expectations regarding the quality of education, as well as their opinions on the factors determining this quality. Knowledge of how students perceive the quality of teaching services is essential for university management and all staff involved in the delivery of educational processes, in order to properly identify and implement measures to increase student satisfaction with the services provided by universities, and thus increase its competitiveness in the market for educational services.

Based on the results of the survey, the following conclusions can be drawn:

1. The factors shaping the quality of the educational service, related to the academic staff, the study programme, the students, the organisation of classes and the infrastructure of the university, determine the satisfaction of the students of FMQS GMU with the services provided by the university to varying degrees.
2. When planning and implementing improvement activities, FMQS GMU should prioritise the elements of the education service related to academic staff. These activities should be focused on the development of substantive competences of teachers and their ability to transfer knowledge, as well as the improvement of didactic materials made available to students, supporting the learning process. WZNJ UMG should also improve the laboratory infrastructure used in the delivery of the courses.
3. Students of FMQS GMU prefer the hybrid form of course delivery; however, they perceive courses delivered remotely as less effective compared to those delivered in the traditional form. Therefore, when implementing measures to improve the quality and effectiveness of classes delivered remotely, FMQS GMU should develop the competence of academic teachers in the delivery of classes using distance learning means, as well as improve the tools used in this form of classes.
4. As part of the internal educational quality assurance system implemented at FMQS GMU, rules should be developed and applied for periodically surveying students' opinions on factors determining their satisfaction with the quality of teaching services offered by the Faculty. These results should be made available to students, Faculty management, academic staff and Faculty staff involved in the planning and implementation of learning processes.
5. In order to increase student satisfaction, the Faculty should take measures to increase student participation in the planning and organisation of teaching processes.

The obtained results are of theoretical importance, as they complement the knowledge about the determinants of the quality of education and their significance for students. Research to date has focused primarily on assessing students' satisfaction with the quality of education and less on identifying the determinants of this quality from the students' perspective. The results can also have practical applications - they can be used by universities to identify and implement measures to improve the quality of the educational services provided.

However, the results obtained can be used not only at the level of universities, which, by improving their educational services, can increase their ability to meet the requirements of students, increase their satisfaction and loyalty, and thus shape a positive image in the market for educational services. The obtained results also have a number of implications for other parties interested in the quality of education:

1. From the point of view of the state, they can support the development of the competitiveness of Polish universities and foster confidence in the national higher education system. As students are the main beneficiaries of the education system, their opinions should be the basis for shaping national education policy. Taking into account the results obtained, the assumptions of this policy should include, first and foremost, activities related to improving the teaching competences of academic staff, ensuring that students develop their key competences adapted to the needs of the labour market, as well as activities related to subsidising laboratory infrastructure used in the teaching process.
2. From the point of view of the Polish Accreditation Commission, they can be helpful in determining the directions of potential changes in accreditation standards and support the processes of periodic evaluation of the quality of education at universities. Both the accreditation standards and the evaluation carried out by the evaluation teams should emphasise the development by universities of those elements of the teaching process that are of greatest importance for students.
3. From the point of view of the labour market, they can support employers in attracting graduates with the competences necessary to meet the current and future needs of the economy.

When analyzing the results of the conducted study, one should be aware of the limitations associated with them. The survey was conducted among students of only one university, hence the results cannot be generalised to the entire student population in Poland. However, they can constitute the basis for identifying some trends in how students perceive the quality of educational services provided by universities. The inclusion in the survey questionnaire of a wide range of factors determining the quality of education, which were assessed by the survey participants, should be considered a strength of the study. At the same time, attention should be paid to certain limitations resulting from the measurement tool used and the data analysis method. In the case of the measurement tool, an ordinal scale was used, which is characterised by certain limitations, primarily related to the respondents' avoidance of extreme answers,

subjective interpretation of the scale degrees and the lack of in-depth answers of the respondents – the study did not include justification by students why they perceive the impact of individual factors on the quality of education in this way. On the other hand, considering the method of data analysis, only descriptive statistics methods were applied without the use of statistical inference methods. Therefore, further research in this area is justified. Extending the research sample and conducting surveys in different universities is also justified in the context of identifying whether perceptions of the determinants of educational quality differ according to the field of study, profile and level of study.

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