

## THE ISO 9001 CERTIFICATION IMPACT ON QUALITY IN HIGHER EDUCATION: MISCONCEPTIONS AND REALITIES

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**Abstract.** While the majority of academic community firmly substantiates the advantages of ISO 9001 standard implementation in the universities, today there exist voices of skepticism concerning its efficacy. The purpose of this study is to discern and present empirical evidence that can shed light on these contrasting perspectives about the influence of ISO 9001 certification on university's quality. Comparative and correspondence analysis of data collected from the Ukrainian universities websites and government open databases were applied for evaluation of ISO 9001 certification influence on the universities competitiveness and their applicants' commitment. The most common misconceptions about ISO 9001 certification results and their rebuttals are summarized. The results of the study confirm that universities with certified quality management systems on the ISO 9001 standard do not deteriorate the indicator of applicants' commitment if the implementation procedure is proper and responsible. Making decision on the application of the ISO 9001 standard to internal quality management system, its efficacy should be evaluated to specific goals that university intend to achieve.

*Keywords:* higher education institutions, ISO 9001 certification, quality management, statistical evidence

## Introduction

According to the ISO Survey (ISO, 2022), which reflects the estimated number of valid certificates for 16 standards in 194 countries, 1265216 organizations in 39 industrial sectors have been certified worldwide under the international standard ISO 9001:2015 Quality management systems — Requirements, including 11718 in the education sector. The ISO Survey 2022 analysis conducted by Oxbridge (Paris, 2023) shows a notable trend towards an increase in the total number of ISO 9001 certifications, with significant contributions from countries such as China, India, the United Arab Emirates, Saudi Arabia, Qatar, and several Asian nations. Concurrently, there has been a waning level of interest in the standard within leading European countries, the USA and Canada. Following an initial surge, the number of certified organizations in these countries has reduced to a level reflecting the amount of steadfast supporters on ISO 9001 management principles. The sectors with the highest level of certification in 2022 are Basic metal & fabricated metal products, Wholesale

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& retail trade, repairs of motor vehicles, motorcycles & personal & household goods, Electrical and optical equipment and Construction. Education's rank in this list is only 18.

The public policy of the vast majority of countries in the world does not provide for the mandatory application of the ISO 9001 standard. However, its versatility and practicality, a wide network of certification bodies, and a long experience of use contribute to the popularity of this standard. Despite the fact that higher education institutions currently give preference to national regulations or regional standards in the development of internal quality assurance systems (like the Standards and guidelines for quality assurance in the European Higher Education Area or the African standards and guidelines for quality assurance in higher education), ISO 9001 remains one of the basic quality management tools for universities, especially in countries that have recently started the institutionalization of quality assurance in the national educational dimension, such as Ukraine. In the absence of any methodology for the development of an internal quality assurance system, the ISO 9001 standard has filled this gap and has become a guide for the further formation of university practices for quality management. For a example, today in Ukraine there are two leading approaches to the implementation of internal quality assurance systems in higher education institutions (HEIs): 1) in accordance with the Law of Ukraine 'On Higher Education', based on the Standards and guidelines for quality assurance in the European Higher Education Area; and 2) in accordance with the international standard ISO 9001, based on the Total Quality Management methodology. As of 2023 six higher education institutions of Ukraine have had ISO 9001 certified quality management systems for more than ten years.

In addition, ISO 9001 is a tool for international cooperation, since conformity certificates are recognized worldwide, in contrast to national and regional accreditation requirements. Due to the international status of the standard, certified HEIs have the opportunity to integrate into the global educational space.

On the other hand, the considerable attention of the academic community to the problem of quality assurance in the field of higher education has given impetus to the development of new methodological approaches designed to solve it. In particular, the integration of the ISO 9001 standard into HEIs is complicated by the fact that, unlike organizations of other types, universities have a larger number of stakeholders. The new ISO 21001:2018 standard, developed specifically for educational organizations, takes this feature into account. Other reasons that have slowed down the implementation of ISO 9001 in universities are the high cost and long-term process of establishing a quality management system. But the greatest influence on the decision on the feasibility of applying this standard is the assessment of its efficiency. Whether this management tool has become a silver bullet that solved quality problems in the field of higher education, we suggest considering the example of ISO 9001 certification at Ukrainian universities.

## Material and methods

### Literature review and hypotheses construction

A large number of publications both in Ukraine and abroad are devoted to the issue of implementing the ISO 9001 standard in higher education institutions. Thus, Ukrainian scientists in the early 2000s defined the standard as a main means for solving the problems of quality assurance in higher education (Vitkin, 2002; Nikolaienko, 2006). Subsequently there were scientific publications that revealed the methodological aspects of the implementation of ISO 9001 and considered it as a tool for integrating national higher education into the European or global higher education area (Michalska-Cwiek, 2009; Musienko, 2010; Annienkova, 2011; Popovych, 2011; Moturi and Mbithi, 2015). Today, scientists are exploring the experience of implementing quality management systems and ISO 9001 certification in HEIs (Bruieva, 2017; Hussein et al., 2017; Kasperaviciute-Cerniauskiene and Serafinas, 2018; Vitkin, 2018; Ivata and Komysnyk, 2019; Kotvitska and Nazarko, 2020), methods for evaluating and enhancing the efficiency of the quality management system (QMS) in higher education organizations (Koval, 2015; Aamer et al., 2021; Girmanova et al., 2022).

The vast majority of the researchers are inclined to the opinion of the positive impact of the QMS certification on the efficiency of HEIs. Most of them reveal the benefits of QMS certification on ISO 9001 standard and give recommendations for overcoming the difficulties encountered in achieving this goal. Thus, Haman (2012) defines QMS as an effective tool for ensuring the competitiveness of a higher education institution in the educational services market. Stankevich et al. (2015) emphasize that the quality management system plays a significant role in ensuring the sustainable development of educational organizations, increasing the efficiency of its activities, achieving a high degree of trust and enduring commitment of consumers (customers) of education services. Jingura, Kamusoko and Taperera (2019: 97) say 'although there is some considerable workload exerted by the standard, it can be applied with ease. There is both theoretical and empirical basis for the standard to embolden quality assurance and enhancement in higher education. Both academic provision and administrative services can benefit from the standard. The standard can promote and strengthen quality culture in HEIs'. Grabovenko (2020) notes that HEIs that have implemented a quality management system in accordance with ISO 9001 are reliable, prestigious and well-organized.

Recently, however, there has been a debate on the pages of some scientific and analytical publications between supporters of ISO 9001 quality assurance philosophy and its critics. Zaplotynsky and Tupkalo (2017) emphasized the negative aspects of the standard practice implementation in Ukraine. Fonseca and Domingues (2017) investigated the problems of using ISO standards. The Schmuck (2021) has showed that despite the identity of ISO 9001 standard and Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG), the latest are much better suited for HEIs, because they were designed with the needs of the higher education sector in mind. Therefore, ESG are more appropriate for the quality assurance at universities. According to the Kartikasari et al (2018) in comparison with the implementation of

the ISO 9001 standard, higher education accreditation provides more benefits in terms of performance improvement, student number, student satisfaction and organizational reputation. At the same time, the implementation of the ISO 9001 standard is more expensive and long-term, and provides advantages only in document improvement. Thus, based on a cost-effectiveness analysis of both tangible and intangible aspects, the researchers concluded that quality management in the HEI is better to build on the basis of accreditation, and ISO certification can be an additional tool if the HEI has sufficient financial resources. In addition, Paris (2022) indicates the inaccuracies in the collection and processing the ISO Survey data which makes it impossible to use for confirming the efficiency of the standard.

Thus, the aforementioned studies do not offer a conclusive inquiry of whether the ISO 9001 certification elevates the academic quality of universities. To address this question, the present study assesses the influence of ISO 9001 certification on some education quality indicators within the universities.

Supporters of the ISO 9001 approach to quality management in HEIs (Bruieva, 2017; Vitkin, 2018; Ivata and Komysnyk, 2019; Kotvitska and Nazarko, 2020; Grabovenko, 2020) indicate such advantages of the results of the standard implementation in some Ukrainian universities:

- clear structuring of all processes and their detailed regulation — effective procedures for interconnection with stakeholders (employers, students and other); avoidance of functions duplication; improvement of document flow; orientation to labor market needs;
- establishment of the efficiency criteria for all processes, systematic monitoring and corrective actions — strengthening staff motivation; transparency of responsibility areas; reducing the number of inconsistencies in the work; increase in labor productivity;
- improving the quality of educational programs content — orientation in teaching the disciplines to the ultimate goal of the program; interdisciplinary integration of the learning process; integration of theoretical and practical training;
- the rational use of university resources.

Due to these advantages, the level of satisfaction with educational services and learning outcomes increases for students, employers, staff (scientific-pedagogical, administrative, service), stakeholder confidence enhances, which has a positive effect on reputation and investment in higher education institutions. The ISO 9001 certification provides international recognition of higher education institution, strengthens its competitiveness and attracts foreign students. Thus, Tavli (2011) notes that raising the satisfaction level of students with some delay should be reflected in the improvement of the image of university and, as a result, in the increase in commitment of applicants in subsequent periods.

In light of this, the following key performance indicators to evaluate the influence of ISO 9001 certification on the quality within educational institutions were chosen — competitiveness of HEIs and commitment of its applicants. So, the hypothesis of the study was formulated as follows: HEIs with certified QMS improve the competitiveness and applicants' commitment, or at least do not worsen them.

## Data and Methodology

The ISO report on certificates number in education sector includes the data from organizations of any type not only the universities. So it is unknown precisely how many higher education institutions have certified their QMS on ISO 9001. That's why, the estimated number of ISO 9001 certified HEIs was obtained by the author through researching the information about QMS certification on Ukrainian universities websites. The data were collected during January-March 2023.

There was analyzed 293 websites of officially registered as of 10 January 2023 higher education institutions that are included in the Unified State Electronic Database on Education (USEDE, 2023). To get the list of HEIs the electronic table 'Higher education institutions' from this database were downloaded. Records about colleges, branches, separate structural subdivisions, institutions of postgraduate education, technical schools (371 entities) were excluded from 664 rows of this table and the list of 293 HEIs was get. The information about QMS certification was found in the sections 'Quality assurance of education', 'History of the university' or on the home page of the universities websites. The year of initial certification, the validity of certificates by years and the year of the last certification were fixed in the result table. After the websites analysis this table contains 54 (out of 293) HEIs that had ISO 9001 certified QMS at least once. Twelve of them discontinued certification by the end of 2021 and one more — by the end of 2022. There are no data for two reorganized HEIs, so basic sample includes 52 entities.

The competitiveness of HEI was assessed by its place at the annual ranking of Ukrainian universities TOP-200 within 2013–2022 (Euroeducation, 2022), which is formed and is based on the methodology of the international IREG Conference, in particular the Berlin Principles on Ranking of Higher Education Institutions (the basic indicators of the ranking are academic activity, international activity, employment of graduates, publishing activity, web representation, citation metrics of teachers, scientific work of students, innovation activity, applicants' commitment). The sample includes data for 49 universities from the result table (three HEIs are out of the ranking).

Commitment of applicants was defined as the product of the average competitive score of applicants and the number of applications submitted to HEI, divided by the total number of applications in Ukraine in the corresponding year. The data about average competitive score of applicants, the number of HEI applications and the total number of applications in Ukraine within 2018–2021 was downloaded from the Unified State Electronic Database on Education (USEDE, 2022). The sample includes data for 52 universities from the result table.

War on the territory of Ukraine in 2022 significantly influenced the distribution of data on applications and average competitive score for applicants. The total number of applications in Ukraine has almost halved compared to 2021 (from 1056495 to 594526). There was a outflow of applicants from higher education institutions which were in the regions where hostilities are taking place and were forced to change their locations. At the same time, the number of applicants has increased for universities had been not very popular in previous years but located in relatively safe regions of Ukraine. That's why data for

2022 had to be excluded from the study. Government open data on the admission campaign in Ukraine are systematically observed only since 2018. Hence, the timeframe for collecting data regarding the commitment of applicants is rather constrained.

To assess whether the certification improves the competitiveness and the applicants' commitment, data from universities holding valid ISO 9001 certificates (during the certification period) and universities that have discontinued the certification (during the post-certification period) were compared. It is considered that the competitiveness of HEIs has increased if the sum of rating deviations compared to the previous year during the observation period is less than zero, has down — if greater than zero, remained stable — if equal to zero; the applicants' commitment has increased if the sum of deviations of this indicator compared to the previous year during the observation period is more than zero, has down — if less than zero.

Researching the universities websites it has been revealed different ways in representing the information about certification: some HEIs use the certificate as part of their public relation (PR) activity, others publish news about all stages of QMS development and certification. Due to this finding, universities with certified QMS were divided into three categories according to the way they use certification:

- as management tool — the certificate is placed in the section of the website on quality assurance, the procedures of the quality system and the results of their application are described, website contains information about the training of personnel in quality, supervisory audits, goals and benefits obtained (not expected!) by the university through ISO 9001 certification;
- as PR tool — the certificate is published on the homepage, or in the general information about the university, while the section on quality assurance is hard to find or missing on the website, there is no data about preparation for certification (staff training, supervisory audits etc.);
- there is not enough data to make a clear assessment.

A number of researchers (Haman, 2012; Zaplotynsky and Tupkalo, 2017; Vitkin, 2018) draw attention to the fact that the presence of a certified QMS does not necessarily indicate a really functioning quality system in higher education institution. Its qualitative implementation often requires a fundamental restructuring of the entire organization management system, long-term training and motivation of staff. Therefore, it is important not only to implement and certify QMS, but to do it properly and responsibly. Based on these assumptions the hypothesis of the study was clarified: indicators of competitiveness and applicants' commitment do not deteriorate in those universities that use the ISO 9001 standard as a management tool. In order to test this hypothesis, a correspondence analysis was conducted for assessing relationship between the way of certification exploitation (management tool, PR tool, not enough data) and competitiveness (rating has declined, has increased, stable), as well as the applicants' commitment (has declined, has increased, not enough data).

Analytics software package STATISTICA was employed for data processing.

## Results

Firstly, it should be noted that within the top ten TOP-200 2022 (Euroeducation, 2022), only four HEIs have ISO 9001 certificate: National University of Life and Environmental Sciences of Ukraine, Lviv Polytechnic National University, National Technical University “Kharkiv Polytechnic Institute”, V. N. Karazin Kharkiv National University. At the same time, the majority of ever certified universities (37 out of 52 HEIs or 71,2%) is in the first hundred of the TOP-200 2022 ranking, three universities (5,8%) is out of the rating. However, the majority of universities that discontinued the certification (8 out of 12 HEIs or 66,7%) is in the first hundred of the ranking too, Figure. 1.

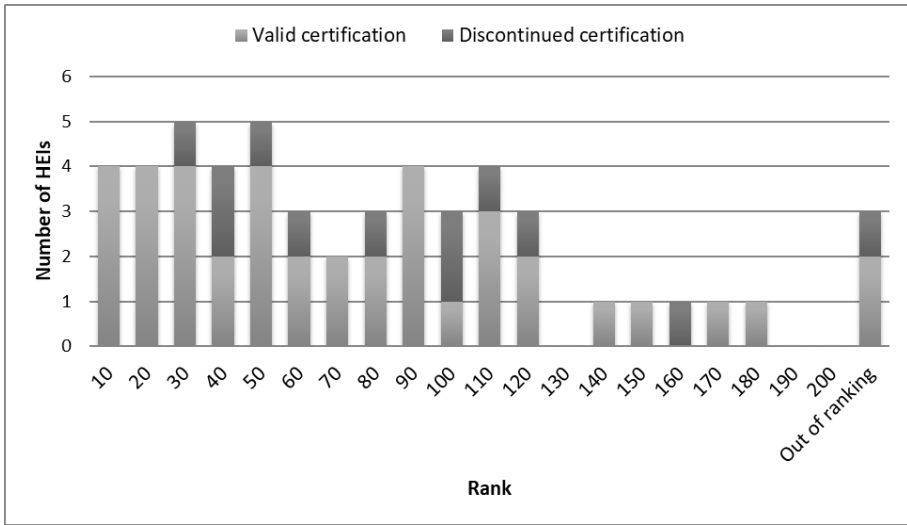


Figure 1: The distribution of the ever certified HEIs number at the TOP-200, 2022 (source: Euroeducation, 2022)

The study reveals that within the certification period, the ratings of 27 out of 49 universities (55.1%) featured in the TOP 200 2022 did not deteriorate, while the ratings of 22 universities (44.9%) experienced a decline. The data suggests that there is no compelling evidence to assert that university ratings decline in the post-certification period. Among the 11 universities studied in the post-certification period, 3 institutions witnessed a decrease in their ratings, while 8 institutions saw an improvement, Table 1.

Table 1: Comparative analysis of competitiveness: the certification period vs. the post-certification period

	The certification period	The post-certification period
The rating has down	24	3
The rating is stable	3	0
The rating has increased	22	8
TOTAL	49	11

Source: own calculation

The majority of higher education institutions (21 out of 52 or 40.4%) increased the indicator of applicants' commitment during the period of the certificates validity, in 12 universities (23.1%) these indicator have declined. For 19 HEIs (36.5%) there are not enough data to make a conclusion (too short certification period or certification stopped by 2018), Table 2.

Table 2: Comparative analysis of applicants' commitment: the certification period vs. the post-certification period

	The certification period	The post-certification period
The applicants' commitment has declined	12	2
The applicants' commitment has increased	21	4
Not enough data	19	6
TOTAL	52	12

Source: own calculation

Among the 12 higher education institutions that discontinued certification, four showed improvements in the indicators of applicants' commitment in the post-certification period, while two demonstrated declines. Therefore, it is not definitively clear whether the termination of certification had a negative impact on applicants' commitment.

It was found that 30.8% of certified universities (16 out of 52) use QMS certification for PR purposes. At the same time, 38.5% of HEIs (20 out of 52) present the certification as a management tool. On the websites of other 16 universities (30.8%) there are no enough data to make a clear assessment how they use the certification.

Competitiveness did not decline in most universities (11 out of 19) that use the ISO 9001 standard as a management tool during the certification period, Table 3. However, based on the correspondence analysis of the certification period data, there is no arguments to conclude a too strong statistical relationship between the way of certification exploitation and competitiveness (chi-square = 5, 5538, statistical error  $p = 0, 2351$ ).

Table 3: Correspondence table between the way of certification exploitation and competitiveness within the certification period

	Not enough data	Management tool	PR tool	TOTAL
The rating has declined	10	6	8	24
The rating is stable	1	2	0	3
The rating has increased	4	11	7	22
TOTAL	15	19	15	49

Source: own calculation



Based on the correspondence analysis of the post-certification period data, the statistical relationship between the way of certification exploitation and competitiveness is not very strong since chi-square=2,3571 with  $p=0,30773$ , Table 4. Among the universities that discontinued the certification there are no ones which rating remained unchanged.

Table 4: Correspondence table between the way of certification exploitation and competitiveness within the post-certification period

	Not enough data	Management tool	PR tool	TOTAL
The rating has declined	0	0	3	3
The rating has increased	3	1	4	8
TOTAL	3	1	7	11

Source: own calculation

At the same time, based on the correspondence analysis of the certification period data, it can be concluded about quite a strong relationship between the way of certification exploitation and the applicants' commitment (chi-square=10,474 with  $p=0,03318$ , Table 5). The applicants' commitment has increased within the certification period for most universities (10 out of 19) which exploit the ISO 9001 standard as a management tool.

Table 5: Correspondence analysis between the way of certification exploitation and the applicants' commitment within the certification period (source: own calculation)

	Not enough data	Management tool	PR tool	TOTAL
The applicants' commitment has declined	1	5	6	12
The applicants' commitment has increased	5	10	6	21
Not enough data	11	4	4	19
TOTAL	17	19	16	52

Source: own calculation

Weak statistical relationship between the way of certification exploitation and applicants' commitment are observed by the data within the post-certification period (chi-square= 2,2917,  $p = 0,68229$ , Table 6).

The data show that the indicators of competitiveness and applicants' commitment within the certification period have been improved in the case of careful preparation and responsible using the ISO 9001 standard as a management tool. This thesis can also be supported by the fact that the vast majority of universities that have stopped certification (8 out of 12 or 66.7%) continue to use information about the ISO certification for PR purposes.

Table 6: Correspondence analysis between the way of certification exploitation and the applicants' commitment within the post-certification period (source: own calculation)

	Not enough data	Management tool	PR tool	TOTAL
The applicants' commitment has declined	0	0	2	2
The applicants' commitment has increased	1	0	3	4
Not enough data	2	1	3	6
TOTAL	3	1	8	12

Source: own calculation

The data within the post-certification period did not demonstrate dependencies that can confirm or refute the hypothesis of the study: some universities improved their indicators in the post-certification period, while others declined them. This disorder in the post-certification period data is caused by different factors, one of which is disappointment of the certification results. The disappointment primarily stems from the substantial financial, time, and other investments required (Kartikasari et al., 2018). Discrepancies in expectations and actual results of the ISO 9001 implementation discourages the staff and leads to the certification termination. The reasons for disappointment are, on the one hand, a formal treatment to the implementation of a quality management system, and on the other — misconceptions about certification results. The most common of them are summarized on the basis of the research papers (Haman, 2012; Zaplotynskyi and Tupkalo, 2017; Hussein et al., 2017; Vitkin, 2018; Amer et al., 2021) in the Table 7.

## Discussion

There are ongoing discussions among the scientific community about the effectiveness of the implementation of the ISO 9001 standard in higher education institutions. Previous studies do not provide a definitive conclusion on whether the ISO 9001 certification improves academic quality in universities, while the decision to implement it largely depends on the evaluation of the effectiveness of this management tool. To address the question, this study focuses on the assessment of such quality indicators as the competitiveness of higher education institutions and the commitment of their applicants (on the example of Ukrainian universities). The choice of these indicators is based on the results of the earlier research findings (Tavlui, 2011; Haman, 2012). Consequently, the hypothesis of the study is that HEIs with certified quality management systems increase the competitiveness and the applicants' commitment, or at least do not worsen these indicators.

Comparison of the indicators of competitiveness and commitment of applicants within the certification period and the post-certification period did not

Table 7: Misconceptions about ISO 9001 certification results and their rebuttals

Misconceptions	Realities
The implementation of the standard ensures the improvement of the products and/or services quality	The standard aims to improve the organization’s management system, not the products and/or services quality
Certification guarantees the quality of products and services	Even if organization has effective management, product specifications or service level may not meet consumer requirements
Work on QMS development is completed after certification	QMS needs constant improvement and support, QMS recertification is carried out every three years, supervisory audits are conducted annually
Certification guarantees the improvement of organization management quality	The presence of a certificate does not guarantee an effective QMS

Source: own elaboration

provide convincing arguments to confirm or refute this hypothesis. The majority of ever certified universities is in the first hundred of the TOP-200 2022 ranking (Euroeducation, 2022), but the majority of universities that discontinued the certification is in the first hundred of the ranking too. Within the certification period, the rating of 55,1% universities did not deteriorate, while the rating of 44.9% experienced a decline (according to data from 2013–2022). Among the universities discontinued the certification the majority improved on competitiveness. During the certification period, 40.4% of higher education institutions observed an increase in the indicator of applicant commitment, while 23.1% experienced a decline and conclusive data for 36.5% of HEIs could not be collected currently.

Notably, Haman (2012), Zaplotynsky and Tupkalo (2017), Vitkin (2018) have warned that the presence of a certified QMS does not guarantee a truly effective quality system in HEI. Correspondence analysis of data from the current study, examining the relationship between the ways of certification exploitation (as a management tool or PR tool) and changes in competitiveness and applicants’ commitment, confirmed these caveats. The data within the certification period testify to the positive correlation between the way of certification exploitation and the competitiveness of universities (as well as the applicants’ commitment). This means that the patterns in data of the correspondence tables are statistically significant: most universities that apply the ISO 9001 standard as a management tool have improved their competitiveness and applicants’ commitment within the certification period, while among the universities that have implemented the standard mainly for the purpose of PR the number of those which have improved these indicators and those which have declined them is almost the same.

The data in the post-certification period do not show a statistical dependence between the way of certification exploitation and chosen quality indica-

tors (the statistical error exceeding 0,05 ( $p=0,30773$  and  $p=0,68229$ ). It could be explained by the difficulties of sample differentiation, as some universities continue to use references to the ISO 9001 certification of their QMS in the interests of PR, at the time they have actually discontinued it. The indicator of applicants' commitment has a stronger relationship with the way of certification exploitation than the indicator of competitiveness for data within the certification period ( $p=0,03318$  is compared to  $p=0.2351$  respectively). This phenomenon reflects the large number of the indicators incorporated into the ranking which was used for assessing the competitiveness. Due to this complexity of rating structure the result of sample differentiation by competitiveness has appeared a quite blurred.

That is, the research hypothesis is confirmed: universities with certified quality management systems on the ISO 9001 standard do not decline the competitiveness and the applicants' commitment if the implementation procedure is proper and responsible. In this context, the data of the certification period testify to reliability of conclusions of the supporters of the ISO 9001 management principles (Bruieva, 2017; Vitkin, 2018; Ivata and Komyshnyk, 2019; Kotvitska and Nazarko, 2020; Grabovenko, 2020).

To improve the effectiveness of the implementation of the standard, it is necessary to avoid not only the mistakes highlighted in previous studies (Haman, 2012; Zaplotynskyi and Tupkalo, 2017; Hussein et al., 2017; Vitkin, 2018; Aamer et al., 2021), but also to cope with the misconceptions identified in this article, which discourage the staff and force to discontinue the certification.

In order to reduce the statistical error the results of this study based on open data could be clarified by the survey of universities. It could help to better investigate reasons for termination of certification and differentiate the sample data. In addition, scientific interest may be directed to study the practice of implementing the ISO 21001: 2018 standard focused on unique interaction between the stakeholders in the field of education.

## Conclusions

The article explores the influence of quality management systems certification according to ISO 9001 on the competitiveness (rating) of the universities and the applicants' commitment. The results of the study based on the data collected from the Ukrainian universities websites, indicate that formally obtaining a certificate does not solve quality problems.

Comparative analysis of data during the certification period and in the post-certification period shows that there is no reason to assert the significant influence of ISO 9001 certification on the competitiveness and the applicants' commitment. But if the standard is responsibly prepared and implemented, its efficiency is evident. Correspondence analysis between the way of certification exploitation (as a management tool or PR tool) and chosen indicators (the competitiveness and the applicants' commitment) has confirmed the hypothesis of the research: high education institutions with certified quality management systems do not decline the competitiveness and the applicants' commitment under the condition of proper implementation of the ISO 9001 standard.

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