QUALITY CULTURE RESEARCH IN HIGHER EDUCATION – LITERATURE REVIEW

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Abstract: The aim of this article is to identify and discuss research problems, methods and conclusions existing in the studies on quality culture in higher education institutions. A systematic review of literature was used. The study was conducted on the basis of 27 peer-reviewed, English-language scientific articles published in academic journals. These papers were selected based on the list of excluding (i.g. type of the publication, etc.) and including criterions (i.g. keywords, etc.). There are three conclusions. Firstly, there is a need to continue research in the areas of factors affecting quality culture and the development of quality culture. Secondly, although surveys, literature reviews and document analysis are the most often used quality culture research methods, this list might be extended to other methods. Finally, factors promoting and inhibiting the development of quality culture, elements binding structural/managerial and cultural/psychological parts of the concept and effects of quality culture, appear to be interesting, cognitively valuable and worth recognizing in further studies.

Keywords: higher education, research method, quality culture, university.

1. Introduction

The concept of quality culture arises from the issues of organizational culture and quality management (Sułkowski, 2016). Quality culture is associated with organizational culture and is referred to as a model of human habits, beliefs and behaviours regarding quality (Gryna, 2001). It is "all that employees possess, think and do as members of the organization so that the product (service) meets the needs or expectations of customers" (Bugdol, 2008, p. 283; author's translation). It is also defined as "a system of values, norms and other elements of culture that is pro-quality and engages employees in the process of organizational improvement" (Sułkowski, 2013, p. 220; author's translation).

The higher education sector is one of the most promising areas regarding the application of quality culture (Sułkowski, 2013). Especially since the phase development of higher education has resulted in the transition from elite to mass higher education (Trow, 1973) and was

associated with changes in the academic culture (Trow, 1999; Nillsen, 2017). Traditional academic culture could be replaced by quality culture, provided that it would be based on academic tradition (Sułkowski, 2016).

The considerations in this article concern the subject of quality culture in higher education institutions, and more precisely, in what way this concept is being studied. The aim of this paper is to identify and discuss research problems, methods and conclusions existing in the studies on quality culture in higher education institutions. This study uses the systematic review of literature.

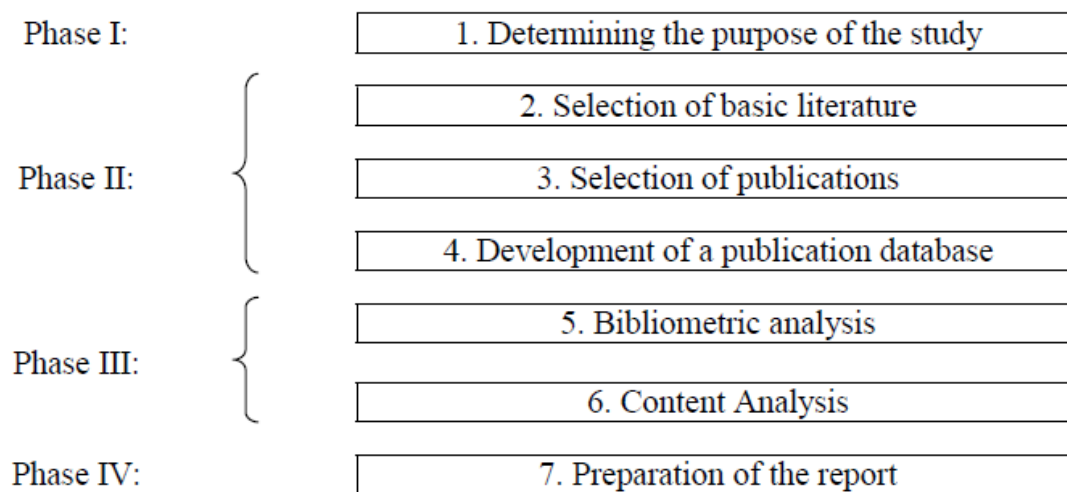## 2. Quality culture in higher education institutions

The most commonly cited definition of quality culture in higher education, is the one formulated by the European University Association (Bendermacher et al., 2017, 2019; Doval, and Bondrea, 2011; Dzimińska, Fijałkowska, and Sułkowski, 2018; Huson, 2015; Militaru, and Pavel, 2013; Ntim, 2014), according to which "quality culture refers to an organisational culture that intends to enhance quality permanently and is characterised by two distinct elements: on the one hand, a cultural/psychological element of shared values, beliefs, expectations and commitment towards quality and, on the other hand, a structural/managerial element with defined processes that enhance quality and aim at coordinating individual efforts" (European University Association, 2006, p. 10).

In the above, the structural/managerial element mainly refers to institutions, while the cultural/psychological component relates to the role of individuals. Both of these elements ought to collegially support each other, which leads to the continuous development of higher education institutions (Dzimińska, Fijałkowska, and Sułkowski, 2018). They should also be linked through good communication, participation and trust, wherein communication and leadership are being of key importance in binding these elements (Bendermacher et al., 2017).

The concept of quality culture in the field of higher education is gaining more interest from researchers, although Bendermacher et al. (2017) claim that research on the interaction between the cultural/psychological and the structural/managerial element is rare and fragmentary. Sułkowski (2016) adds that there is a lack of methodology for examining quality culture at universities, and Ehlers (2009) mentions that there is a need of fundamental research and conceptual understanding of quality culture. This means that there is a research gap that the author of this paper has decided to address.

3. Research method

In order to achieve the purpose of the article, the method of systematic literature review was used. This can be characterized as "a targeted selection of literature, along with its quantitative analysis carried out according to strictly defined stages" (Czakon, 2015, p. 124; author's translation). The procedure of this method is shown in Figure 2.

Figure 2. Systematic literature review procedure. Source: Own elaboration based on: Czakon, W. (2015). Metodyka systematycznego przeglądu literatury. In W. Czakon (Ed.), Podstawy metodologii badań w naukach o zarządzaniu (p. 124). Warszawa: Oficyna.

The research procedure starts with the determination of the purpose of the study, which is the identification of research problems, methods and conclusions existing in the studies on quality culture in higher education institutions. Achievement of this goal will enable formulating future hypotheses and propositions that contribute to further theory development.

To accomplish the step "Selection of basic literature", publication databases were selected: Business Source Ultimate (EBSCO), Web of Science and ProQuest. Three databases were selected to avoid the journal selection imposed by the database administrator and to gain access to all major international journals published in English (Czakon, 2015).

Next, the publications were selected, based on the keyword criterion. Firstly, the keyword "quality culture" was used and it was searched in the titles of publications. Secondly, the keyword "higher education or university" was applied to the quest in the analysed articles' abstracts and keywords.

Finally, a publication database was developed, based on the criteria for excluding (monographs, books, book reviews, editorials, industry reports were excluded) and including (English-language, full-text and reviewed scientific articles published in academic journals), and removing duplicate items. The four-step selection procedure is shown in Table 1.
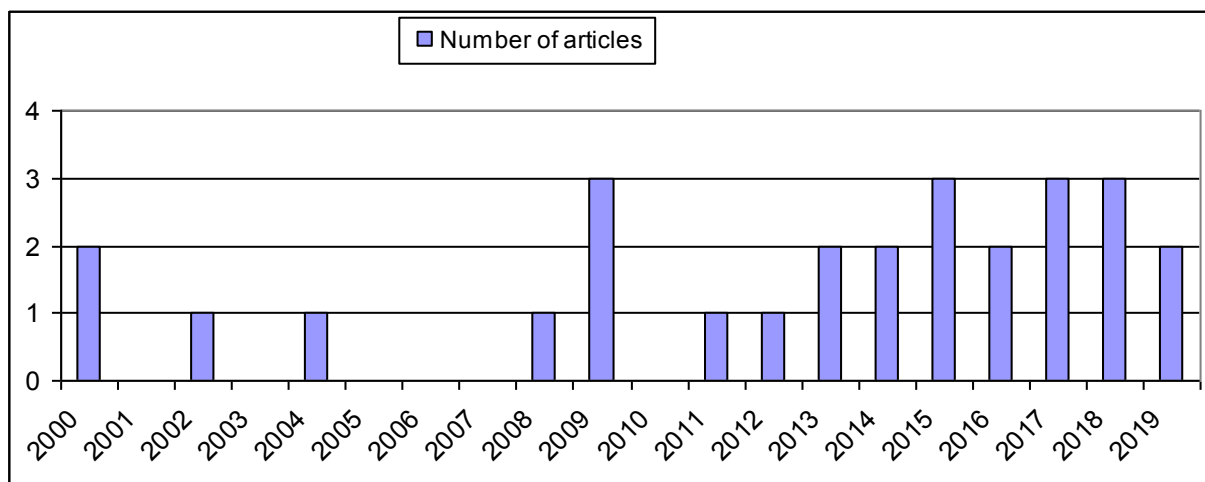
Table 1.

The selection procedure used in the study of literature in the field of "quality culture"

Selection criterion	Number of articles: EBSCO	Number of articles: Web of Science	Number of articles: ProQuest
1. Identified scientific articles on quality culture	2 570	39	97
2. English-language, full-text and reviewed scientific articles published in academic journals	207	5	59
3. Non-duplicate publications	110	5	59
4. Sectoral approach: higher education	30	0	18

Note. The selection procedure was conducted in October 2019. Source: own elaboration.

The results obtained from two data bases (EBSCO: 30 and ProQuest: 18) were combined and then duplicates were removed. The number of articles that were eligible for inclusion was 36. The resulting publication database has been validated by reviewing the abstracts. As a result of this action, the database was narrowed to 27 articles[1].

"Bibliometric analysis" is a step in which selected features of the literature are measured. This study uses the analysis of the number of publications in subsequent years. The outcomes of the analysis of 27 articles are displayed in Figure 3.

Note. The time range of the analysis is 2000-2019 (October 2019).

Figure 3. The number of publications concerning quality culture in higher education in subsequent years and predicted trend line. Source: own elaboration.

The time range of the analysis is 2000-2019. The spatial scope of the study is a consequence of the scope of the analysed articles. Most papers (i.e. 10) concern Europe or European countries, 6 publications regard Asian countries, 4 of them refer to Africa or African countries and one to the USA. In other cases, no area is specified or articles are of a general nature. Other stages of research procedure are included in the next section.

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[1] In addition, the keywords "culture of quality" were used, but although the search from three databases resulted in 10 publications (after removing duplicates), additional verification of abstracts resulted in the rejection of all.

4. Research findings

The results of the research on the problems undertaken in the analysed articles, applied research methods and conclusions are presented in Table 2.

Table 2.
Research problems, methods and conclusions on quality culture in higher education –
main results of the literature review

No.	Source	Problem/subject	Method	Conclusions/findings
1.	Akar, and Babadoğan (2018)	Current policies at education faculties and determination of the opinions of academic administrators on constructing a quality culture.	Document analysis and interview	While there were quality policies of universities at their internet sites and as a written document, such policies were not prevalent at faculty level.
2.	Ali, and Musah (2012)	Relationship between the quality culture and workforce performance in Malaysia.	Survey	There is a statistically significant correlation between quality culture and workforce performance.
3.	Badiru, and Wahome (2016)	Creation of a guide for graduate trace studies.	Survey	A seven staged guide for graduate trace studies is developed.
4.	Barbulescu (2015)	Aspects related to the quality culture evolution in Romania.	Content analysis	There has been a shift in the quality culture in Romanian higher education.
5.	Bello, Ibrahim, and Bularafa (2015)	The influence of leadership on internalizing quality culture.	Survey	Strategic and organizational processes significantly influenced internalizing quality culture.
6.	Bendermacher et al. (2019)	Interrelationships between organizational value/ psychological and structural/managerial elements of quality culture development.	Survey	The paramount importance of a 'human relation' value orientation. Rational goal values and ownership are positively related to quality enhancement.
7.	Bendermacher et al. (2017)	Hampering and promoting elements impacting quality culture development. Insights in the outcomes of quality culture.	A realist review	Leadership and communication were identified as being of key importance in binding structural/managerial and cultural/psychological elements.
8.	Doval, and Bondrea (2011)	Exploring how the university understands, manages and improves quality culture.	Interview	Quality culture has to be seen as a system integrated into the quality assurance system.
9.	Dzimińska, Fijałkowska, and Sułkowski (2018)	Elaboration of a Trust-Based Quality Culture Conceptual Model for Higher Education Institutions.	Systematic literature review	Trust-Based Quality Culture Conceptual Model developed.
10.	Ehlers (2009)	Development of understanding of quality in higher education, and an enhanced model for quality culture in educational organizations.	A literature review*	Quality development in higher education is often limited to bureaucratic documentation and disregards the development of quality culture.
11.	Friedrich-Nel, and MacKinnon (2019)	The critical role of doctoral supervisors with regard to contributing to a culture of quality.	Interviews	Nurturing attributes of students and dealing with supervisory challenges impact the quality of doctoral education.

Cont. table 2.

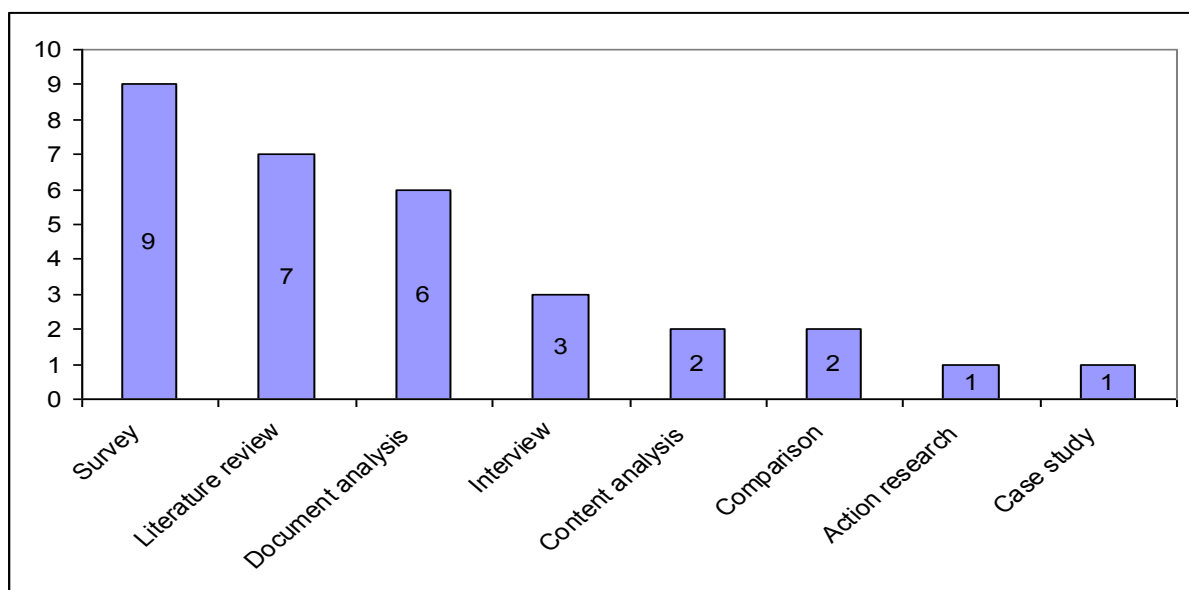|				
12.	Gordon (2002)	Roles of leadership and ownership in building an effective quality culture	A literature review*	There is a need to align leadership with ownership, and internal cultures with quality ones.
13.	Harvey, and Stensaker (2008)	Creation of a better understanding of the concept of quality culture, its boundaries and limitations and its links to teaching and learning.	A literature review*	'Quality culture' can be a tool for asking questions about how things work, how institutions function, who they relate to, and how they see themselves.
14.	Hilman, Abubakar, and Kaliappen (2017)	The effects of quality culture on university performance.	Survey	Quality culture has a significant positive effect on university performance.
15.	Huson (2015)	Presentation of a teaching initiative launched at the German University of Technology in Oman and provision of a good-practice example for enhancement of quality culture.	Survey	It is very desirable not to pay attention solely to formal evaluation results, but to enhance the interrelationship between formal quality assurance processes, quality commitment, responsibility, etc.
16.	Katiliute, and Neverauskas (2009)	Development of quality culture in universities.	A literature review and document analysis	Cultural change is recognized as an important aspect of total quality development.
17.	Lycke, and Tano (2017)	Description of an approach to build a quality culture within a higher education institution.	Action research and the case study	Development and description of the mapped processes of a higher education institution.
18.	Mail et al. (2014)	The influence of the internal quality process on the growth of quality culture.	Survey	The proposed conceptual model affirmed that internal quality audit affects quality culture.
19.	Militaru, and Pavel (2013)	Presentation of quality culture in the Romanian higher education system.	Document analysis*	Significant progress in quality assurance in higher education in Romania has been made.
20.	Ntim (2014)	Examination of the strategies of embedding quality assurance culture in private universities in Ghana.	Survey	Institutional processes and structures that support the development of an internal quality culture were identified.
21.	Popa, Constantinescu, and Ionescu (2013)	Analytical analysis between the quality assurance process and the organizational quality culture.	Analytical analysis	Quality management system and certification help in shaping a quality culture, and support universities' performance.
22.	Šedžiuvienė, and Tamutienė (2016)	Quality culture as a strategic dimension in a higher education institution.	A literature review	To develop quality culture, a strategic approach is needed.
23.	Stamatelos, and Stamatelos (2009)	Experience in applying basic quality principles and practices to the university laboratory environment.	Comparative discussion	Engineering laboratories are a valuable tool in establishing a quality culture in the Greek higher education system.
24.	Taib et al. (2018)	A framework for implementing ISO 9000 quality culture for higher education institutions.	Survey	Awareness training is essential to ensure the quality culture implementation.
25.	Tight (2000)	Exploration of how useful league tables are in the higher education context.	Comparison	League tables can hardly be said to contribute anything to the development of a quality culture.

Cont. table 2.

26.	Yorke (2000)	Development of a quality culture.	Document analysis*	No conclusions were presented.
27.	Zulu, Murray, and Strydom (2004)	The relationships or tensions between quality, culture and change in higher education institutions in South Africa.	Document analysis*	Higher education institutions need to be more aware of both individual and organizational sources of resistance to change.

Note 1. The names of the methods presented in the table were cited in the wording proposed by their authors. In the case of some publications marked with an asterisk (*), their authors did not indicate the research methods used, therefore the author of this article attempted to define these methods herself.

Note 2. The time range of the analysis is 2000-2019 (October). Source: own elaboration.

Table 2 presents the problems (subjects) undertaken in the 27 articles analysed. It turns out that most often (9 times) the authors bent over factors affecting quality culture. The authors of the six above publications took up the problem of quality culture development. Three times, the links between quality culture and selected issues were examined, in addition, a definition of the concept was proposed. Two papers present models and the evolution of quality culture. Individual articles present the relationship between elements of quality culture and the guide.

The research methods used by the authors of the analysed articles (Table 2) are presented in Figure 4.

Note. The time range of the analysis is 2000-2019 (October).

Figure 4. The number of research methods used by the authors of the analysed articles. Source: own elaboration.

Eight methods used by the authors of the analysed articles were identified. In some publications, several methods were adopted. The most often used were: survey (9 cases), literature review (7 examples) and document analysis (6 samples). The following methods were applied less frequently: interview, content analysis, comparison/comparative discussion, action research and case study.

After analysing the conclusions formulated in the analysed articles, an attempt to formulate future study aims and future hypotheses were made. These are in line with the scientific interests of the author of this article (Table 3).

Table 3.
The future study aims and hypotheses

Study aims	Hypotheses
Identification of factors promoting the development of quality culture	Strategic approach influences internalizing quality culture (Bello, Ibrahim, and Bularafa, 2015) and is needed in quality culture development (Sedžiuvienė, and Tamutienė, 2016)
Identification of factors inhibiting the development of quality culture	Quality development in higher education is limited to bureaucratic documentation and disregards the development of quality culture (Ehlers, 2009)
Recognition of elements binding structural/managerial and cultural/ psychological elements of quality culture	Leadership and communication are identified as being of key importance in binding structural/managerial and cultural/psychological elements (Bendermacher et al., 2017)
Indication of quality culture effects	Quality culture has a positive effect on university performance (Hilman, Abubakar, and Kaliappen, 2017)

Source: own elaboration.

Each of the proposed goals has been assigned an appropriate hypothesis, supported by the research of other authors.

5. Conclusions

Several conclusions can be drawn from the content analysis of the articles.

First, two dominant research perspectives can be identified: factors affecting quality culture and the development of quality culture. Based on this observation, it can be concluded that quality culture researchers see the need to continue research, especially in these areas. This encourages further recognition of the research topic.

Secondly, the most often used methods of research are: surveys, literature reviews and document analysis. This means that until now, researchers of quality cultures have chosen both qualitative and quantitative methods. It seems that so far no interviews in virtual space have been conducted. This can be an interesting tip for future research. It can, therefore, be assumed that provision of virtual space might be interesting for respondents so as to allow them to share their opinions and comments on the subject of quality culture.

Thirdly, propositions contributing to further theory development on quality culture in the higher education area, which, according to the author of the present study, appear to be interesting, cognitively valuable and worth recognizing in further studies were recognized. These are: factors promoting and inhibiting the development of quality culture, elements binding structural/managerial and cultural/psychological parts of quality culture and quality culture effects.

Finally, it should be noted that there are some limitations to this study. They concern the fact that chosen full-text databases give priority to English-language articles, which marginalizes literature written in other languages. Publications not available in the digital version were also omitted (i.e. monographs were excluded). It is therefore worth to include other types of publications in future studies.

Acknowledgements

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