

VILNIUS UNIVERSITY

JULIJA ŠARUPIČIŪTĖ

THE IMPACT OF HIGHER EDUCATION INSTITUTIONS RANKINGS'
FUNCTIONS ON UNIVERSITY REPUTATION

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VILNIAUS UNIVERSITETAS

JULIJA ŠARUPIČIŪTĖ

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UNIVERSITETŲ REPUTACIJAI

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INTRODUCTION

Relevance of the research. In recent decades, rapidly expanding globalization processes unavoidably shape national higher education systems and areas of performance particular to higher education institutions, as well as form new challenges in relationships between those institutions and their stakeholders. Modern higher education is not limited by the specifics of national markets, as universities become international market players who compete at attracting international students and scientists, searching for advantageous connections with business entities that become important sources of financial income and pursuing the increase of awareness at regional and global, rather than national, level. Rising levels of internationalization of universities encourage the emergence of new university stakeholders that put high demands on quality of studies and research, communication, publicity and transparency. Different expectations of university stakeholders become an issue for the formation and management of university reputation (Vidaver-Cohen, 2007). In order to meet stakeholder expectations, universities eventually face the need of forming and strengthening their reputation in such way that it allows them to align with widely recognized and world-renowned higher education institutions.

Global trends put higher education institutions into difficult dilemma – to accept the market orientation of universities that is nowadays gaining popularity, or to nurture traditional principles of high-quality studies and research. To a large extent, core changes in universities and higher education world in general, are encouraged by higher education institutions rankings, that, while being a popular, simple and widely accessible sources of university information, use university performance indicators in their methodologies to dictate the new standards of being “the best”. Moreover, they change already established relationships between universities and their stakeholders, and allow evaluation of competitive advantages of universities, or even of national higher education systems, in a global perspective. However, besides university achievements embedded as quantitative measures in rankings, the potential of competitive advantage may also lay in intangible factors such as university brand, image and, undoubtedly, reputation (Morphew and Swanson, 2011). A cure for the above-mentioned dilemma is purposeful strengthening of university reputation that combines the improvement of both, marketing and image

management, and university “products” – studies and research. Such combination is a success factor in order to become established among those that are called “the best”. Therefore, the measurement and management of university reputation become one of the most important directions of university activities that require strategic-level decisions and supporting activities, and become a foundation of interaction with university stakeholders.

Scientific problem and current state of research.

In the recent decade, a growing interest and attention to university reputation is observed (Pérez-Díaz and Rodríguez, 2015). In some scientific literature, university reputation is specifically emphasized (Morley and Aynsley, 2007; Pérez-Díaz and Rodríguez, 2015; Steiner et al., 2013; Suomi and Järvinen, 2013; van Vught, 2008), however, more frequently, university reputation is analyzed based on general principles of corporate reputation (e.g. Ressler and Abratt, 2009; Yang et al., 2010 Vidaver-Cohen, 2007).

Empirical research on university reputation also shows a range of authors’ opinions in terms of a variety of university reputation measurements. In some empirical studies, university reputation is measured based on corporate reputation measurement tools: as uni-dimensional construct (which directly measures perceived reputation) and/or by measurement scales of stakeholder beliefs and attitudes (e.g. studies by Walsh et al., 2009; Helm, 2007; Lydeka and Šontaitė, 2010; Rindova et al., 2005; Ruiz et al., 2014; Schwaiger, 2004). In other studies, dedicated to university reputation, reputation is measured by stakeholder surveys that are quantitatively expressed through rankings’ indicators (e.g. Bowman and Bastedo, 2011; Delgado-Márquez et al., 2013; Volkwein and Sweitzer, 2006; Standifird, 2005). The latter method of university reputation measurement is also used in studies dedicated to the impact of rankings on university reputation (Bowman and Bastedo, 2011; Safón, 2009; Standifird, 2005). In studies of university reputation in relation to stakeholders, authors (e.g. Alter and Reback, 2014; Sung and Yang, 2006; Šontaitė, 2011), analyze perceived university reputation and intentions related to it among students as the biggest university stakeholder group. Other studies focus on pupils (Šontaitė, 2012), representatives of higher education institutions (senior managers, administration, scientists, teaching staff) (Bowman and Bastedo, 2011; Safón, 2009; Standifird, 2005) and business entities (Finch et al., 2013; Safón, 2009).

Disclosed scientific problem of this dissertation in Lithuanian scientific literature reveals that little attention is given to the analysis of higher education institutions rankings (Stonkienė and Matkevičienė, 2014), while studies on university reputation are conducted among pupils, students and alumni (Lydeka and Šontaitė, 2010; Šontaitė, 2011; Šontaitė, 2012).

It should be emphasized that there is a lack of a unified approach to university reputation in Lithuanian and international scientific literature, especially such, that enables analyzing university reputation in terms of stakeholder perceptions and evaluating the impact of university reputation on various stakeholder groups. This dissertation aims at disclosing university reputation through social-constructionist approach and interpreting higher education institutions rankings through their functions as a phenomenon that plays a role of external information source in the relationships between university reputation and university stakeholders.

Social-constructionist approach to reputation gains comparatively less attention in comparison to other approaches to reputation presented in scientific literature. Social-constructionist approach to corporate reputation is a phenomenon of wide context that includes the principles of social psychology, consumer behavior, marketing communication and other scientific disciplines that focus on the disclosure of individual mental and cognitive processes that influence the formation of their reactions on particular objects. Moreover, this dissertation aims at disclosing higher education institutions rankings as a distinct phenomenon of modern higher education world; therefore, it emphasizes the analysis of global higher education institutions rankings, their impact on universities and the disclosure of universities' response to growing attention to rankings.

The aim of the dissertation is to evaluate the impact of higher education institutions rankings' functions on university reputation and the impact of university reputation on active employers' actions towards a university.

The objectives in order to achieve the aim of the dissertation:

1. To analyze the scientific literature discussing approaches to corporate reputation, disclose social-constructionist approach to corporate reputation and distinguish the concept of university reputation.
2. To perform theoretical analysis of higher education institutions rankings, as well as their impact on university activities and stakeholders; to perform the analysis of

empirical studies on higher education institutions rankings, rankings' functions and their connections to university reputation, university reputation and its impact on university stakeholders.

3. To prepare research methodology of the impact measurement of higher education institutions rankings' functions on university reputation and the impact of university reputation on active employers' actions towards a university, according to proposed research model.
4. To perform an empirical evaluation of the impact of higher education institutions rankings' functions on employers' attitudes towards a university that form university reputation, and the impact of employers' attitudes towards a university on active employers' actions towards a university.
5. To perform an empirical evaluation of the moderator effect of the institutionalization of higher education institutions rankings in the relationship between higher education institutions rankings' functions and active employers' actions towards a university.
6. To perform an empirical evaluation of the impact stability of higher education institutions rankings' functions on employers' attitudes towards a university that form university reputation, the impact of employers' attitudes towards a university on active employers' actions towards a university, and the moderator effect of the institutionalization of higher education institutions rankings over time.
7. To disclose the nature and core characteristics of higher education institutions rankings' functions, as well as the relationship between rankings' functions and beliefs towards a university.
8. To present recommendations to Lithuanian higher education institutions on the formation and support of university reputation considering evaluated impact of higher education institutions rankings' functions and the relationship between university reputation and active employers' actions towards a university.

Methods of research and data analysis.

Empirical research of the dissertation was conducted in three phases. In the first phase, the content analysis was performed, disclosing a frequency of manifestation of higher education institutions rankings' functions in the media. In the second phase of

empirical research, a quantitative research was conducted, evaluating relationships between quantitatively expressed higher education institutions rankings' functions, institutionalization of higher education institutions rankings in university strategic plans as a moderator, employers' attitudes towards a university and active employers' actions towards a university. In the third phase of empirical research, the qualitative analysis: in-depth interviews with experts, was performed, disclosing higher education institutions rankings' functions and identifying their relationships with beliefs towards a university.

Content analysis data was processed by performing primary and axis coding; quantitative analysis data was processed using descriptive statistics: calculating means and frequencies, and using methods of statistical analysis: by performing multiple linear regression, moderator analysis (using the method of modified hierarchical equations) and linear regression; document analysis was performed in order to create moderator variable; qualitative analysis data was processed by performing primary and axis coding, grouping, synthesis, systematization and conclusions. Software package Atlas.ti was used for the content analysis; software package IBM SPSS Statistics 23 and PROCESS macro developed by Hayes (2012) were used for quantitative analysis; software package Atlas.ti and interactive keyword network creation and visualization tool Google Fusion Tables were used for qualitative analysis.

The scientific novelty of dissertation and contribution to science:

1. University reputation was analyzed and empirically evaluated based on social-constructivist approach that discloses the formation of university reputation through stakeholders' attitudes supported by their beliefs towards a university.
2. For the first time, the adapted marketing communication model DRIP was used for the analysis of higher education institutions rankings' functions.
3. Higher education institutions rankings' functions were disclosed through positioning against other universities, changes in managerial activities, disclosure of university academic and scientific performance and subjective formation of university image.
4. The results of empirical research showed that universities that do not institutionalize rankings in their strategic plans, face strengthened negative impact

of the disclosure of university's academic and scientific performance on employers' attitudes towards a university.

5. Empirically evaluated impact of higher education institutions rankings' functions on university reputation, moderated by rankings institutionalization in the university strategy and the impact of university reputation on active employer's actions towards a university, are presented in the model that is applicable to the formation and management of university reputation, as well as to the formation and improvement of higher education policies.

The preparation of this dissertation took place during significant changes in Lithuanian higher education system and growing attention to higher education institutions rankings. In recent years, rapidly spreading higher education reform encouraged both, the policy makers and the public, to question the reputation of Lithuanian higher education institutions and their competitiveness, as well as stimulated interest in global positioning of Lithuanian universities. The first Lithuanian university appeared in global rankings in 2008, and in 2012 National Advancement Council, established by Lithuanian Government, presented Lithuanian advancement strategy "Lietuva 2030", where one of the key performance indicators was to have one Lithuanian university ranked in the top 500 of ARWU (Shanghai) rankings. For universities, their stakeholders and general public, this was a first signal indicating a major importance of higher education institutions rankings. In 2017, Lithuanian Governmental programme presented an insight about higher education institutions rankings showing a significant lag behind the EU average, and Lithuanian universities achieving the top 500 in QS rankings were once again named as one of the key performance indicators. Hence, higher education institutions rankings are being raised to the level of national advancement and competitive advantage of national studies.

Structure of the dissertation. The dissertation consists of the introduction, three theoretical parts, two empirical research parts, conclusions and recommendations to universities and higher education policy makers, recommendations for future research, references and appendixes. The volume of the dissertation is 152 pages without appendixes (178 pages with appendixes). The dissertation includes 144 references, 19 tables and 10 figures.

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REVIEW OF THE DISSERTATION CONTENT

1. THE SIGNIFICANCE AND CONTENT OF THE CONCEPT OF UNIVERSITY REPUTATION

Chapter 1.1. “Nature, mechanisms and application of approaches to corporate reputation” analyzes the scientific literature on three approaches to corporate reputation: game theory approach to reputation as a signal (Mahon, 2012; Fischer and Rueber, 2007; Carroll, 2013; Rindova and Martins, 2012), social-constructivist approach to reputation as generalized perceptions (Aula and Mantere, 2013; Chun, 2005; Cole et al., 2013; Da Camara, 2011; Rindova and Martins, 2012) and institutional approach to reputation as position in rankings (Fischer and Rueber, 2007; Wæraas and Maor, 2014). This dissertation applies social-constructivist approach to corporate reputation, because it allows focusing on organization’s stakeholders and their cognition, as well as unifies measurement of reputation in terms of “good” and “bad” reputation. Moreover, it allows analyzing the continuous nature of corporate reputation in contrast to momentum signals and comparisons, applied in other approaches.

Chapter 1.2. “Disclosure of social-constructivist approach to corporate reputation” presents and describes in detail social-constructivist approach to corporate reputation, which employs concepts of tripartite theory of attitude (Cole et al., 2013; Ruiz et al., 2014; Syed Alwi and Kitchen, 2014; Grunig and Hung, 2002), theory of reasoned action and theory of planned behavior (Bang et al., 2014; Caruana et al., 2006; Helm and Klobe, 2011; Money and Hillenbrand, 2006; Money et al., 2010; Ressler and Abratt, 2009; Shamma, 2012) to explain the formation of corporate reputation. The generalized model by Caruana et al., 2006 states that indirect corporate reputation, based on stakeholders’ beliefs leads to direct corporate reputation, based on stakeholders’ attitudes, which encourages stakeholders’ intentions towards an organization. Literature on social-constructivist approach to corporate reputation suggests measuring beliefs that form corporate reputation using organizational traits that are relevant to its stakeholders (Fischer and Reuber, 2007); and measuring attitudes that form corporate reputation using uni-dimensional construct, such as goodness/badness of an organization (Brown, 1995). Based on the analysis of the scientific literature, in this dissertation, social-constructivist approach to corporate reputation is summarized as stakeholders’ attitudes, based on their

beliefs towards an organization, that relate to the consequences of corporate reputation, expressed by individuals' or stakeholders' intentions or actions towards an organization.

Chapter 1.3. “Specifics of university reputation” explores the interpretation of the concept of university reputation, as well as its similarities and differences from the overall concept of corporate reputation. A part of scientific literature emphasizes the peculiarities of university reputation that are not presented in general concept of corporate reputation (Morley and Aynsley, 2007; Pérez-Díaz and Rodríguez, 2015; Steiner et al., 2013; Suomi and Järvinen, 2013; van Vught, 2008). However, the bigger part of scientific literature on university reputation is based on the general definition of corporate reputation (i.e. Alessandri et al., 2006; Arpan et al., 2003; Nguyen and LeBlanc, 2001).

The analysis of theoretical and empirical publications on university reputation revealed the absence of homogeneity of university reputation concept: some authors separate university reputation into academic reputation (Conard and Conard, 2000; Suomi and Järvinen, 2013; The student academic..., 2013) and research reputation (Horstschräer, 2012; Jerrams et al., 2008; O’Loughlin et al., 2013; O’Loughlin et al., 2015). It should be noted that the author of this dissertation did not find scientific literature on the third mission reputation of a university. It should be noted that this dissertation supports a view by O’Loughlin et al. (2015), stating that there is a clear, either conscious or unconscious, connection between research and academic reputations, and they are inseparable, similarly as university academic and research activities. Therefore, in this dissertation university reputation is considered as a homogeneous concept.

In summarization of the debate over the need to distinguish the specifics of a university reputation, Alessandri et al. (2006) states that despite of the contextual differences, it is useful to apply basic principles of corporate reputation in the analysis of university. The author of this dissertation supports this statement and emphasizes that while applying basic principles of corporate reputation to university reputation, the specifics of university environment (higher education systems and global higher education market) and university stakeholders should be considered.

Chapter 1.4. “University stakeholders in the context of university reputation” describes university stakeholders and their behavior towards a university. To sum up the scientific literature, the following university stakeholder groups are distinguished: current students (Nguyen and LeBlanc, 2001; Ressler and Abratt, 2009), potential students

(Ressler and Abratt, 2009; Soutar and Turner, 2002), parents of potential students (Soutar and Turner, 2002), university alumni (Arpan and kt., 2003; Ressler and Abratt, 2009; Sung and Yang, 2006; Weerts and Ronca, 2008), academic community (Hazelkorn, 2008) and employers (Arpan et al., 2003; Ressler and Abratt, 2009; Heckman and Guskey, 1998); Rivera, 2011). In the context of university reputation, the above listed stakeholder groups share the intentions and actions towards a university in terms of providing financial support for the university and positive word-of-mouth.

Empirical studies (e.g. Bontis et al., 2007; Syed Alwi and Kitchen, 2014; Walsh et al, 2009) show positive relationship between university reputation and stakeholder intentions and actions towards a university, emphasizing the importance of university reputation in terms of stakeholder loyalty and positive feedback. It should be noted, that stakeholder intentions and actions related to engagement, establishment of new connections with university and positive feedback, can lead to the expansion of university stakeholder groups and growing awareness in short-term perspective. Furthermore, it can contribute to the formation of positive attitudes, and, as a result, strengthened university reputation, based on successful and sustainable partnerships, in long-term perspective.

2. HIGHER EDUCATION INSTITUTIONS RANKINGS AND THEIR IMPACT ON UNIVERSITIES

Chapter 2.1. “Variety of global higher education institutions rankings” describes the evolution of higher education institutions rankings and overviews the specifics of rankings’ methodologies. Five categories of major higher education institutions rankings are defined: rankings that evaluate comprehensive academic and research indicators and rank only leading universities; rankings that evaluate only research indicators; rankings that evaluate comprehensive indicators, but universities are not sorted by positions; rankings that evaluate comprehensive university indicators based on independently collected university data; ranking that evaluates university internet visibility. The analysis of rankings’ methodologies revealed that research indicators have highest weighted scores in three major higher education institutions rankings. Second most popular indicators evaluate university research reputation, basing on surveys of researchers.

Chapter 2.2. “Global higher education institutions rankings’ importance, spread and relationship with university stakeholders” discusses the concept of “world-class” university, which is promoted by various higher education institutions rankings, discloses the spread and communication channels of global higher education institutions rankings and explores the relationships between rankings and major university stakeholders.

Theoretical analysis reveals that the popularity of rankings lays in their comparative simplicity in describing “excellence” and “world-class” levels of universities, and in their accessibility to the general public via internet portals and digital rankings results’ tables. Furthermore, theoretical analysis reveals the key paradox of global higher education institutions rankings: in order to evaluate whether a university is a “world-class”, rankings themselves create the definition of the “world-class”, leading to situations when in some rankings, university is considered a “world-class”, while in other rankings it is not.

The analysis of rankings’ influence on university stakeholders distinguishes the following functions performed by rankings: rankings help arrange universities, i.e. defining which university is more “advantageous”; rankings help compare universities within a certain time frame; rankings help obtain more information about a university; rankings allow trusting in high evaluation of university (that reflects in high rankings positions).

Chapter 2.3. “Impact of global higher education institutions rankings on university strategic decisions, and institutionalization of rankings in university strategic plans” discloses six important areas of university activities that are influenced by higher education institutions rankings. The first area is student attraction: though rankings emphasize benefits for potential students in obtaining information about universities and making decisions on university choice, the theoretical analysis reveals the gap between this statement and the real role of rankings in university choice (Nordal, 2015; Rich, 2015). Nonetheless, the influence of rankings on potential students should not be ignored (Hazelkorn, 2011). The second area is strategic thinking and strategic planning: the analysis of scientific literature reveals the phenomenon of rankings’ institutionalization in university strategic plans, which means incorporating the achievement of certain positions or improvement of certain rankings’ indicators as goals, objectives or performance indicators of universities. Rankings’ institutionalization in

university strategic plans can be illustrated by several examples (i.e. University of Melbourne..., 2015; University of Edinburgh..., 2012). Moreover, it is noted that the levels of institutionalization vary: some universities use rankings in order to define current state and current competitive positions of a university, while others choose rankings or particular positions in rankings as strategic goals, objectives and key performance indicators. The third area is university reorganization and restructuring: in several countries, higher education reforms are focused on consolidating higher education institutions' network to reduce competition between universities at national level and strengthen their competitiveness globally by raising positions in global rankings. The fourth area is researcher profession: as research indicators are used in the majority of global rankings, universities are pushed into seeking not only for the quantity of publications, but also for quality (i.e. citations, impact factors). Firstly, this sends a clear message to researchers about university managements' expectations regarding scientific performance. Secondly, this may lead to certain scientific speculations, such as "buying" top performing researchers in order to improve rankings' research indicators. The fifth area is groups of political influence that implements rankings to national higher education competitiveness programmes, or so called "excellence initiatives" aimed at supporting universities in the achievement of higher positions in rankings. The analysis of changes in rankings' positions of universities in 17 countries (adapted from Salmi, 2015), shows that national excellence initiatives have a positive influence on growing positions in rankings.

Chapter 2.4. "Tactical and operational decisions of universities for the improvement of positions in global higher education institutions rankings" describes tactical and operational measures which universities undertake in order to achieve higher positions in rankings. Such measures include internationalization, marketing and communication, management, human resource management and motivation systems (IHEP, 2009; Hazelkorn, 2011). The analysis of scientific literature reveals that in implementing short-term university decisions, universities must admit the unavoidableness of rankings in the modern higher education world and use them as a tool for identifying university's weaknesses and areas of improvement. It is important however to not overestimate the importance of rankings, especially considering the fact that changes in rankings' positions are rather slow throughout the years, and universities face the need not only to achieve high positions, but also to align internal managerial processes to maintain them. They need

to evaluate whether the costs and benefits of the anticipated managerial changes are relevant in terms of changes in rankings positions, as small fluctuations in rankings' positions may not significantly improve university competitiveness but rather lead to losses and managerial crisis.

3. UNIVERSITY REPUTATION IN THE CONTEXT OF GLOBAL HIGHER EDUCATION INSTITUTIONS RANKINGS

Chapter 3.1. "University reputation indicators in global higher education institutions rankings" presents methods of measuring university reputation in major global higher education institutions rankings, disclosing two stakeholder groups involved in evaluation of university reputation: academic staff and employers. It should be noted that in case of all major rankings analyzed in this chapter, university reputation is measured through stakeholder surveys, where respondents are asked to evaluate the "goodness" of a university, thereby disclosing their attitudes towards university.

Chapter 3.2. "Background of the impact of higher education institutions rankings on university reputation" discusses the relationships between rankings and reputation and distinguishes the areas of the impact of higher education institutions rankings on university reputation. It is stated that the term "reputation" in the context of higher education institutions rankings is perceived rather controversially (O'Loughlin et al., 2013), and depends on rankings compliers' perceptions and availability of university data (Hazelkorn, 2011). Despite of that, rankings widely employ the concept of reputation in promoting their results and, to a certain extent, even define the concept of reputation in global higher education market.

Two areas of rankings' influence on university reputation are distinguished in the analysis of scientific literature: influence through performance improvement and influence through communication. The influence through performance improvement is revealed as a cycle of interrelationships between university performance improvement, rankings and university reputation: lower positions in rankings stimulate managerial decisions of various scope, aimed at improvement of rankings' positions; and successful implementation of such decisions leads to the improvement of rankings' positions, that, in turn, stimulates the improvement of university reputation. Moreover, the improvement of university reputation leads to further raise in rankings' positions (Bowman and Bastedo,

2011; Hazelkorn, 2008; Hazelkorn, 2011). The influence through communication is revealed as a three stage process, where positions in rankings are disseminated through university communication channels, raising university publicity and visibility, that influences stakeholders' beliefs towards a university and reduces uncertainty about a university, that in a long-term perspective leads to strengthening of university reputation (Hazelkorn, 2014; Hazelkorn et al., 2014; Locke, 2011; Locke et al., 2008). However, scientific literature also provides an opposite approach to the role of rankings in information transfer, viewing rankings as external source of information that lays outside of university's control (Hazelkorn, 2014; Salmi and Saroyan, 2007; Sauder and Fine, 2008; Usher and Savino, 2006; Teichler, 2011; Vivader-Cohen, 2007).

Chapter 3.3. “Current state of empirical research on higher education institutions rankings, university reputation and its consequences to university stakeholders” presents the analysis of empirical studies on the impact of higher education institutions rankings, university reputation, rankings' impact on university reputation, consequences of university reputation on university stakeholders. The summarization of empirical studies conducted by Lithuanian and international scientists shows that rankings are mainly analyzed through the interrelationships of rankings' indicators, however, the aspect of understanding the concept of rankings is not fully disclosed. Moreover, there is a lack of agreement in distinguishing the impact of rankings on university reputation. Furthermore, a big number of empirical studies (e.g. Alter and Reback, 2014; Sung and Yang, 2006; Šontaitė, 2011) focus on students as the biggest university stakeholder group in the context university reputation, intentions and actions towards a university. Other empirical studies focus on academic staff (Bowman and Bastedo, 2011; Safón, 2009; Standifird, 2005), alumni (Heckman and Guskey, 1998; Weerts and Ronca, 2008) and businesses (Etzkowitz, 1998; Finch et al., 2013; Safón, 2009). Scientific literature (e.g. Hazelkorn, 2008) suggests that research on university reputation and related concepts should not be limited to studying students and academia as the biggest and most frequently emphasized university stakeholder groups, but also investigating the role of other stakeholder groups in the context of reputation.

Chapter 3.4. “Modelling relationships between higher education institutions rankings, their functions, university reputation and university stakeholders” summarizes previous theoretical chapters and presents three objects of further analysis:

higher education institutions rankings, university reputation and stakeholders' actions towards a university.

Higher education institutions rankings are defined as external source of university information. The DRIP model of marketing communication (Fill, 2006) is adapted for the analysis of rankings as a source of external information, highlighting rankings' differentiative, reminding, informative and persuasive functions. Rankings' differentiative function is anticipated to influence university reputation through distinguishing between "successful" and "unsuccessful" universities, supporting stakeholders' beliefs towards a university and its quality and the widening gap between reputation of "elite" and "mass" universities (Arimoto, 2011; Efimova, 2014; Blanco-Ramírez and Berger, 2014; Hazelkorn, 2014; Salmi, 2013). Rankings' reminding function is anticipated to influence university reputation through strong positive emotional response to increasing university positions (Bastedo and Bowman, 2010; Locke, 2014). Rankings' informative function is anticipated to influence university reputation through changing stakeholders' perceptions on university quality and reputation when information on university performance is otherwise unavailable (Horstschräer, 2012; Sauder and Fine, 2008). Rankings' persuasive function is anticipated to influence university reputation through the formation of stakeholders' perceptions on university strengths and weaknesses and identifying potential gaps between already established university reputation and real performance of universities (Chen and Liao, 2012; Efimova, 2014, Hazelkorn, 2008; Collins and Park, 2016).

Social-constructionist approach to university reputation suggests that in the context of universities, reputation is formed through stakeholders' attitudes, related to stakeholders' actions towards a university (see Chapter 1.2.).

Stakeholders' actions towards a university are analyzed based on previously-discussed insights of studies by Arpan et al., 2003; Hazelkorn, 2008; Nguyen and LeBlanc, 2001; Soutar and Turner, 2002; Ressler and Abratt, 2009; Sung and Yang, 2006 (see Chapter 1.4.).

Based on Ressel and Abbrat (2009) model of university reputation and above-mentioned approaches to objects of future analysis, the following statements are presented:

1. Corporate reputation can be defined as generalized stakeholders' perceptions that are expressed through beliefs, based on university traits, and attitudes, beliefs towards a university.
2. Higher education institutions rankings, as external source of university information, impact university reputation.
3. University reputation is a part of the behavior formation (expressed through intention and/or actions) of university stakeholder groups.

4. METHODOLOGY OF EMPIRICAL RESEARCH ON THE IMPACT OF HIGHER EDUCATION INSTITUTIONS RANKINGS' FUNCTIONS ON UNIVERSITY REPUTATION AND THE IMPACT OF UNIVERSITY REPUTATION ON EMPLOYERS' ATTITUDES TOWARDS A UNIVERSITY

Chapter 4.1. "Grounding of research strategy" presents and justifies the choice of research strategy of the dissertation. The author of this dissertation bases the research on the relationships between higher education institutions rankings' functions, university reputation and active stakeholders' actions towards a university. However, the concept of rankings' functions is not yet fully disclosed in the scientific literature, thus, the author of this dissertation aims at empirically disclosing rankings' functions in a way that they become easier to understand and practically apply in the analysis of rankings' influence on university reputation. Therefore, due to the importance of practical outcomes of this dissertation, the empirical research employs pragmatic research paradigm (Robson and McCartan, 2016) and is based on the mixed methods research strategy that allows combining quantitative and qualitative research methods to obtain relevant information on analyzed objects (Creswell, 2014). Following the mixed methods research strategy, the empirical evaluation of the impact of higher education institution rankings on university reputation and the impact of university reputation on stakeholders' (employers') actions towards a university is performed using quantitative research methods and the disclosure of rankings' functions is performed using qualitative research methods.

Chapter 4.2. "Research model, aim of the research and research hypotheses" states the aim of the empirical research and presents proposed quantitative research model (Figure 1) and research hypotheses.

The aim of the research is to investigate the impact of higher education institutions rankings' functions on university reputation, evaluating moderating effect of the level of rankings' institutionalization in university strategic plans, and the impact of university reputation on active employers' actions towards a university.

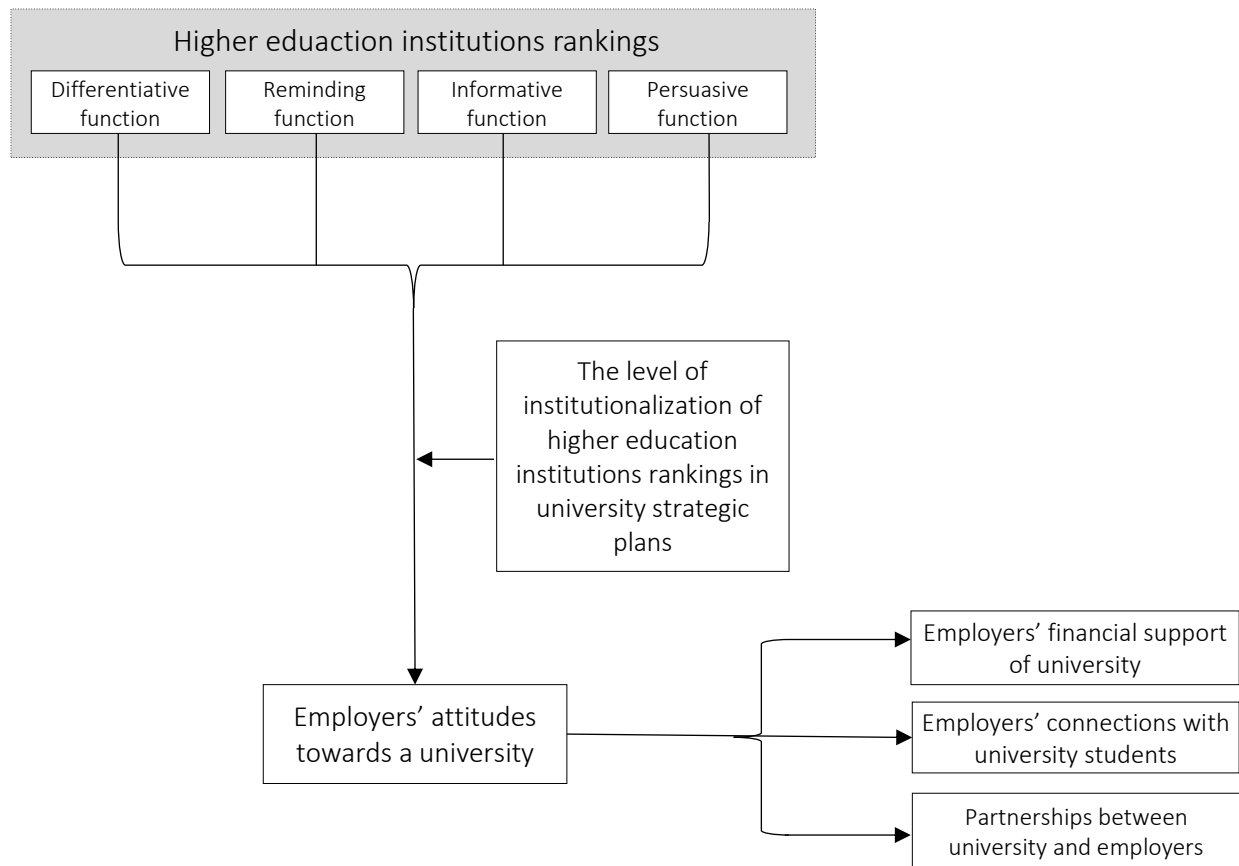


Figure 1. The research model of the dissertation.

Source: created by the author.

The model illustrates the anticipated relationships between rankings' functions and employers' attitudes that form university reputation, moderated by rankings' institutionalization in university strategic plans and the relationship between employers' attitudes and active employers' actions towards a university.

Research hypotheses:

H1: Differentiative function of higher education institutions rankings has a positive impact on employers' attitudes towards a university.

H2: The impact of differentiative function of higher education institutions rankings is moderated by the level of institutionalization of higher education institutions rankings in university strategic plans.

H3: Reminding function of higher education institutions rankings has a positive impact on employers' attitudes towards a university.

H4: The impact of reminding function of higher education institutions rankings is moderated by the level of institutionalization of higher education institutions rankings in university strategic plans.

H5: Informative function of higher education institutions rankings has a positive impact on employers' attitudes towards a university.

H6: The impact of informative function of higher education institutions rankings is moderated by the level of institutionalization of higher education institutions rankings in university strategic plans.

H7: Persuasive function of higher education institutions rankings has a positive impact on employers' attitudes towards a university.

H8: The impact of persuasive function of higher education institutions rankings is moderated by the level of institutionalization of higher education institutions rankings in university strategic plans.

H9: Employers' attitudes towards a university have a positive impact on employers' financial support for the university.

H10: Employers' attitudes towards a university have a positive impact on the employers' connections with university students.

H11: Employers' attitudes towards a university have a positive impact on partnerships between university and employers.

Chapter 4.3. "Research methods and instruments" and its sub-chapters present in detail the methodology and instruments of each stage of the empirical research.

The empirical research is conducted in three stages:

1. In the first phase, the content analysis aiming at investigating the manifestation of rankings' differentiative, reminding, informative and persuasive functions in the media. The results of content analysis justify further analysis of higher education institutions rankings' functions and is used to construct the research instrument of the third phase of empirical research.

2. In the second phase, the quantitative research that includes statistical analysis of secondary data and document analysis, is performed. Document analysis is performed in order to construct additional variable (the moderator). During document analysis, the content of strategic plans of universities is analyzed in order to identify whether rankings are institutionalized in them.
3. In the third phase, the qualitative research: in-depth interviews with experts, is performed, aiming at disclosing rankings' functions and their relationships with beliefs towards a university.

In the first stage of the empirical research, the analysis of media headlines in 4 most visited Lithuanian internet media websites was performed. The headlines that appeared on websites in the period from January 2013 until April 2017, were sorted identifying headlines that included keywords "ranking" and "rankings". Only headlines that are related to higher education institutions rankings were selected for further analysis. Atlas.ti software was used to perform data analysis. Selected headlines were coded with active primary codes describing actions related to words used in the headlines. After this, the secondary coding was performed, combining primary codes to 4 categories matching 4 rankings' functions analyzed in this dissertation. In total, 34 media headlines were found according to the above-mentioned selection criteria.

In the second stage of empirical research, dissertation's author used secondary data obtained from the major global higher education institutions rankings. This approach was used because the author believes that ranking compilers process great amounts of university data directly from universities, as well as from publicly unavailable governmental higher education statistics databases. The data on 50 universities from top 500 universities according to QS rankings (10 universities were selected from each top hundred) was collected for further analysis. Universities were classified according to the following characteristics: university size, age, status (public/private) and research profile. The classification was adopted from QS Intelligence Unit (2017b). Demographic characteristics of universities are presented in table 1:

Table 1. Demographic characteristics of universities analyzed in the quantitative research.

	Characteristic	Percentage of universities (N=50)
Size	Small university (up to 5000 students)	0%
	Medium-sized university (5001-12000 students)	30%
	Large university (12001-30000 students)	42%
	Very large university (more than 30000 students)	28%
Status	State university	80%
	Private university	20%
Age	Young university (up to 25 years)	10%
	Medium-age university (26–100 years)	20%
	Historic university (more than 100 years)	70%
Profile	Specialist university (studies/research in 1–2 areas)	6%
	Focused university (studies/research in 2–4 areas)	6%
	Comprehensive university (studies/research in 5 areas)	30%
	Full comprehensive university (studies/research in 5 areas and medical school)	58%

Source: created by the author, basing on the data from QS World University Rankings.

The variables of higher education institutions rankings' functions were constructed as follows:

- The value of differentiative function variable is constructed from university position in World University Rankings 2018. In cases when university does not hold a certain position, but a range of positions, the higher value of the range is used. For the convenience of further statistical analysis, variables of differentiative function were transformed by multiplying them by -1. After the transformation, a greater value of the variable represents a greater position in ranking;
- The value of reminding function variable is constructed by computing the change in university positions in QS World University Rankings 2018 in comparison to a previous year. The value of -1 is assigned when university position decreased; the value of 0 is assigned when university position did not change and the value of 1 is assigned when university position increased. In order to perform multiple regression analysis, this variable was transformed into two dummy variables: in case of the first dummy variable, the value of 1 was assigned if university positions

decreased, and the value of 0 was assigned to the remaining cases; in case of the second dummy variable, the value of 1 was assigned if university positions increased, and the value of 0 was assigned to the remaining cases;

- The value of informative function variable was constructed by calculating the number of the major global rankings where a university is placed in the top500. The values of informative function variable range from 1 to 4 according to the number of rankings, where a university is ranked in top500;
- The value of persuasive function variable is constructed from the overall score university received in THE World University Rankings 2017. It should be noted that this ranking was used instead of QS ranking in order to avoid potential multicollinearity issue between persuasive function variable and other variables constructed based on the QS rankings results.

The variable of employers' attitudes towards a university is constructed based on QS World University Rankings 2018 employers' survey. The survey includes more than 40 thousand employers from all over the world and explores employers' attitudes towards universities. Values of employers' attitudes variable are represented by scores from 0 to 100, where greater score indicates better employers' attitudes towards a university.

Active employers' actions towards a university are measured by three variables, identified during theoretical analysis of this dissertation:

- The variable of employers' financial support for a university is constructed basing on THE World University Rankings "industry income" indicator that measures the amount of financial support that university receives from employers. Values of the variable are represented by scores from 0 to 100, and greater score indicates greater amount of financial support;
- The variable of employers' connections with university students is constructed based on QS Graduate Employability Rankings 2018 "employer-student connections" indicator that measures employers' engagement into study-related activities at a university, such as guest lectures, spreading information, providing internships, etc. Values of employers' connections with students' variable are represented by scores from 0 to 100, and greater score indicates greater number of study-related activities that employers are engaged into;

- The variable of partnerships between university and employers is constructed based on QS Graduate Employability Rankings 2018 “partnerships with employers” indicator that measures the number of partnerships established between university and employers. Values of the variable are represented by scores from 0 to 100, and greater score indicates greater number of university partnerships with employers.

In order to construct the variable of rankings’ institutionalization in university strategic plans, the document analysis of strategic plans of 50 universities, represented in sample of this research, was performed. For the document analysis, valid¹ long-term strategic plans, strategic action plans or specific strategic plans (strategies of internationalization or research strategies) were obtained. In each document, sentences containing keywords “rankings”, “rank” or “ranked” were identified and analyzed using primary coding that represents the part of strategic plan where those sentences were identified: “current state”; “goal”; “objective”; “measure”; “key performance indicator”. During the secondary coding, primary codes were grouped into three levels of institutionalization (presented in Chapter 2.3). The first primary code represents the level “institutionalized as current state”, the remaining codes represent the level “institutionalized as strategic aim”. In cases when there were no rankings-related codes identified in strategic document, the primary code “rankings not mentioned” and the level “not institutionalized” was assigned.

During the document analysis, 94% of universities from research sample were analyzed, while in case of 6% of universities from research sample, the author of this dissertation was unable to obtain valid strategic plans. Table 2 represents the results of document analysis:

¹ To the 1st of June 2017

Table 2. The percentage of universities by the levels of rankings’ institutionalization in strategic plans, identified during the document analysis.

Primary coding	Percentage of universities by primary codes	Assigned level of rankings’ institutionalization	Percentage of universities by the level of rankings’ institutionalization
Current state	35,3%	Institutionalized as current state	29,8%
Goal	11,8%	Institutionalized as strategic aim	36,2%
Objective	7,8%		
Measure	5,9%		
Key performance indicator	7,8%		
Rankings are not mentioned	31,4%	Not institutionalized	34%

Source: created by the author.

The variable of rankings’ institutionalization in university strategic plans was constructed based on the results of document analysis presented in Table 2: the values of rankings’ institutionalization in university strategic variable are represented by the above levels of institutionalization, ranging from 0 to 2 accordingly.

Quantitative data analysis: the data of quantitative analysis was processed using IBM SPSS Statistics 23 software and SPSS software macro PROCESS by A. F. Hayes (2012). The following data analysis methods were used:

- Descriptive statistics: means and frequencies were calculated for the analysis of demographic characteristics of universities presented in research sample;
- Independent t-tests were used to identify statistically significant differences between variables among different demographic characteristics of universities. Differences were considered statistically significant at significance level $p < 0,05$;
- Multiple linear regression was used to construct regression models of employers’ attitudes towards a university. Multiple linear regression was processed using backward method of variable elimination;
- Linear regression was used to construct regression models of active employers’ actions towards a university;
- Moderator effect analysis was used to identify the influence of moderator variable: rankings’ institutionalization in university strategic plans on the relationships

between rankings' functions and employers' attitudes towards a university. Moderator effect analysis was performed using modified hierarchical equations method (Hayes, 2012).

In order to explore whether the relationships identified in quantitative analysis remain stable over the years, hypothesis testing was performed for the data of year 2016. For the stability analysis, the same variable construction methods as for the main hypothesis testing, were used.

In the third stage of empirical research, in-depth interviews with experts were conducted. Research sample consists of 7 respondents: representatives of higher education institutions; rankings' complier; media representative; higher education monitoring and analysis experts and representative of employers. Interviews were held face-to-face, using semi-structured interview method.

Interview scenario includes three phases:

- First interview phase aimed at exploring experts' opinions on benefits of higher education institutions rankings and their links to university reputation. Interview questions were constructed using modified methodologies from Hazelkorn, 2014; Martins, 2005; Hazelkorn et al., 2014; Locke et al., 2008.
- Second interview phase aimed at identifying respondents' reactions to the real-life manifestation of rankings' functions. For this, media headlines evaluation task was performed using adapted Martins (2005) methodology. Respondents were presented 4 media headlines obtained from the content analysis of this dissertation, each representing one of the rankings' functions.
- Third interview phase aimed at disclosing rankings' functions by evaluating information provided through them. Interview questions were constructed using modified methodologies from Bastedo and Bowman, 2010; Hazelkorn, 2014; Locke et al., 2008; Locke, 2014; Martins, 2005.

Qualitative data analysis: interviews were recorded and transcribed. The data is processed using Atlas.ti software. Data from the first interview phase is systemized, grouped, and described revealing the context of links between rankings and university reputation, as well as disclosing the areas of influence of rankings on university reputation. Data from second interview phase is coded using primary codes that describe whether

respondents identify each of the rankings' functions. The level of rankings' function identification is determined by calculated frequencies of primary codes of rankings' functions identification. Furthermore, primary coding is used to identify the context of rankings' functions identification by respondents. Data from the third interview phase is analyzed in three stages. At stage 1, beliefs towards a university, expressed by respondents during the disclosure of each of the rankings' functions, are identified. At stage 2 those beliefs are coded using active primary coding, adjectives or descriptive sentences that correspond with beliefs expressed by respondents. In stage 3, beliefs identified in the analysis are grouped in larger categories. As a result of procedures performed in stages 1-3, beliefs towards a university that appear due to rankings' differentiative, reminding, informative and persuasive functions, are identified. Google Fusion Tables keyword network visualization tool is used to present connections between rankings' functions and beliefs towards a university.

5. RESULTS OF THE RESEARCH ON THE IMPACT OF HIGHER EDUCATION INSTITUTIONS RANKINGS' FUNCTIONS ON UNIVERSITY REPUTATION AND THE IMPACT OF UNIVERSITY REPUTATION ON EMPLOYERS' ATTITUDES TOWARDS A UNIVERSITY

Chapter 5.1. "Results of the content analysis of manifestation of higher education institutions rankings' functions" presents the results of the content analysis revealing the manifestation of rankings' differentiative, reminding, informative and persuasive functions in Lithuanian internet media headlines in the period from January 2013 to April 2017. The results of the content analysis show that the manifestation of rankings' functions is found in 88,4% of analyzed headlines. Differentiative function is the most frequently manifested (47,4%) in analyzed internet media headlines. This result illustrates previously discussed statement by Hazelkorn (2014): rankings' popularity lays in their ability to provide short and clear message about university belonging to "the best" and being world-class". Moreover, the analysis showed that informative function is the least frequently manifested (5,3%) in analyzed headlines. This result supports the statement discussed in chapter 3.2. of this dissertation: higher education institutions rankings are considered subjective measures rather than neutral sources of information,

therefore informative function, which has comparatively more neutral tone, is manifested rather passively.

Chapter 5.2. “Results of the quantitative research” and its subchapters present the results of quantitative research and the evaluation of the stability of results over the time. Sub-chapters 5.2.1. and 5.2.2. present multiple linear regression model of the impact of higher education institutions rankings’ functions on employers’ attitudes towards a university; moderator effect analysis of the effect of rankings’ institutionalization in university strategic plans on the relationships between rankings’ functions and employers’ attitudes; and linear regression models of the impact of employers’ attitudes on active employers’ actions towards a university.

The results of quantitative research confirm that there is a statistically significant positive impact of rankings’ differentiative and persuasive functions on employers’ attitudes towards a university (Table 3). However, no statistically significant impact of reminding function on employers’ attitudes was found. Furthermore, multiple regression model reveals statistically significant negative impact of rankings’ informative function on employers’ attitudes, which was not proposed in the research hypotheses, however the author of this dissertation suggest that this result is important and should be discussed further.

Table 3. Final multiple regression model for employers’ attitudes towards a university.

	B non- standardized coefficients	Beta standardized coefficients	t	p	VIF collinearity statistics
Constant	89,270		4,819	0,000	
Differntiative function	0,104	0,637	3,655	0,001	2,860
Informative function	-9,727	-0,464	-3,212	0,002	1,964
Persuasive function	0,489	0,400	2,549	0,014	2,312

Dependent variable: employers’ attitudes towards a university.

The results of the quantitative research also confirm that moderator effect of rankings' institutionalization in university strategic plans is statistically significant in case of the impact of rankings' informative function on employers' attitudes. The moderator effect analysis shows that moderation effect is statistically significant ($p=0,027$) when rankings are not institutionalized in university strategic plans. Therefore, the negative impact of informative function on employers' attitudes is stronger when moderating effect takes place. Putting it differently, the negative impact of informative function on employers' attitudes towards a university is increasing when rankings are not institutionalized in university strategic plans.

The results of quantitative research also confirm that there is a positive statistically significant impact of employers' attitudes towards a university on employers' connections with university students ($p=0,008$) and on partnerships between university and employers ($p=0,019$) (See Table 4 and Table 5). No statistically significant impact of employers' attitudes towards a university on financial support for a university was found.

Table 4. Linear regression model for employers' connections with university students.

	B non-standardized coefficients	Beta standardized coefficients	t	p
Constant	-61,705		-2,027	0,048
Employers' attitudes towards a university	1,352	0,369	2,752	0,008

Dependent variable: employers' connections with university students.

Table 5. Linear regression model for partnerships between universities and employers.

	B non-standardized coefficients	Beta standardized coefficients	t	p
Constant	-56,435		-1,781	0,081
Employers' attitudes towards a university	1,243	-0,331	2,430	0,019

Dependent variable: partnerships between university and employers.

Evaluation of the stability of quantitative research results, provided in sub-chapter 5.2.3., confirmed that the impact of rankings' differentiative and persuasive functions on employers' attitudes towards a university, moderating effect of rankings'

institutionalization; and the impact of employers' attitudes on partnerships between university and employers remain stable in year 2016. It should be emphasized, that the stability of the impact of employers' attitudes on employers' connections with university students was not confirmed. Therefore, the author of this dissertation suggests critical evaluation of the role of employers' attitudes towards a university in increasing numbers of connections between employers and university students in long-term perspective.

Summarized results of quantitative research are presented in sub-chapter 5.2.4. From 11 hypotheses, 5 were confirmed and 6 were rejected. Table 6 presents the results of hypothesis testing:

Table 6. Results of hypotheses testing.

	Hypothesis	Method of hypothesis testing	Result	Conclusion
H1	Differentiative function of higher education institutions rankings has a positive impact on employers' attitudes towards a university.	Multiple linear regression	Positive statistically significant impact was found (t=4,819; p=0,001)	Confirmed
H2	The impact of differentiative function of higher education institutions rankings is moderated by the level of institutionalization of higher education institutions rankings in university strategic plans.	Moderator effect analysis	Moderation is not statistically significant (p _{INST1} =0,314; p _{INST2} =0,381)	Rejected
H3	Reminding function of higher education institutions rankings has a positive impact on employers' attitudes towards a university.	Multiple linear regression	Impact is not statistically significant (p _{INST1} =0,233; p _{INST2} =0,082)	Rejected
H4	The impact of reminding function of higher education institutions rankings is moderated by the level of institutionalization of higher education institutions rankings in university strategic plans.	Moderator effect analysis	Moderation is not statistically significant (p _{INST1} =0,233; p _{INST2} =0,082)	Rejected
H5	Informative function of higher education institutions rankings has a positive impact on employers' attitudes towards a university.	Multiple linear regression	Negative statistically significant impact was found (t=-3,212; p=0,002)	Rejected
H6	The impact of informative function of higher education institutions rankings is moderated by the level of institutionalization of higher education institutions rankings in university strategic plans.	Moderator effect analysis	Negative statistically significant moderation was found (p _{INST1} =0,044; p _{INST2} =0,026)	Confirmed

H7	Persuasive function of higher education institutions rankings has a positive impact on employers' attitudes towards a university.	Multiple linear regression	Positive statistically significant impact was found (t=2,549; p=0,014)	Confirmed
H8	The impact of persuasive function of higher education institutions rankings is moderated by the level of institutionalization of higher education institutions rankings in university strategic plans.	Moderator effect analysis	Moderation is not statistically significant (p _{INST1} =0,064; p _{INST2} =0,053)	Rejected
H9	Employers' attitudes towards a university have a positive impact on employers' financial support of university.	Linear regression	Impact is not statistically significant (p=0,315)	Rejected
H10	Employers' attitudes towards a university have a positive impact on the employers' connections with university students.	Linear regression	Positive statistically significant impact was found (t=2,752; p=0,008)	Confirmed
H11	Employers' attitudes towards a university have a positive impact on partnerships between university and employers.	Linear regression	Positive statistically significant impact was found (t=2,430; p=0,019)	Confirmed

Source: created by the author.

Chapter 5.4. “Summary of the empirical research on the impact of higher education institutions rankings’ functions on employer attitudes” provides the results of the qualitative research of the dissertation. In-depth interviews with 7 experts were conducted during the qualitative research. In total, experts’ experience in activities, related to higher education sector, is 10 years.

In the discussion of importance of higher education institutions rankings, experts named the issues regarding national higher education rankings in comparison to global rankings (Table 7):

Table 7. Disadvantages of national university rankings in comparison to international rankings.

	Disadvantages of national university rankings	Interview quotes
Methodological weaknesses	Lack of consistency and continuity	<i>“it lacks of <...> consistency and continuity” (E3)</i>
	The lack of persistence and reliability in methodologies	<i>“questionable methodology” (E4); “the methodology is incomplete” (E5); “methodology is unstable, it keeps changing” (E5); “it is often criticized” (E7)</i>
Structural weaknesses	Insufficient sample and too narrow gap between local universities	<i>“we have too few strong players” (E4)</i>

Source: created by the author basing on in-depth interviews and published in Sarupiciute, J., Druteikiene, G. (2018). The influence of university rankings on university reputation through rankings’ functions and stakeholders’ beliefs towards a university. 10th annual International Conference on Education and New Learning Technologies, July 2-4, 2018, Palma de Mallorca (Spain) : conference proceedings.

Interview results reveal that the influence of higher education institutions rankings on university reputation is transmitted through scientific performance, publications, university visibility and recognition. Respondents also distinguish between the areas of influence of university rankings at national and international level. Table 8 presents the areas of influence of university rankings on university reputation, identified in our study:

Table 8. The areas of influence of higher education institutions rankings on university reputation

	Area of influence of university rankings on university reputation	Interview quotes
International context	Advertising	“...use them in their advertising, thus they think it impacts the reputation” (E1)
	Visibility	“when you go to international fairs, this has an impact” (E1) “the more visible you are, and the more you can give to others” (E2)
	Student recruitment	“when they come here through Erasmus” (E1) “when you are ranked high, you recruit students, then you rank even higher, then you may recruit scientists, who would come, and rank even higher, and you would become good” (E5)
	International partnerships	“through interacting and cooperating, and through seeking for new international partners” (E1) “international cooperation, because without the content you would not achieve any results with foreign universities” (E2)
	Academic staff recruitment	“take, for example, one Nobel laureate and employ them” (E5)
National context	Communication	Negative influence: “they do not work to the fullest, because they do not tell among how many <...> they are” (E1)
	Support of university image	“then you know those who have a certain name in Lithuania” (E4)

Source: created by the author basing on in-depth interviews and published in: Sarupiciute, J., Druteikiene, G. (2018). *The influence of university rankings on university reputation through rankings’ functions and stakeholders’ beliefs towards a university. 10th annual International Conference on Education and New Learning Technologies, July 2-4, 2018, Palma de Mallorca (Spain) : conference proceedings*

The task on identification of rankings’ functions, performed by experts during qualitative research, revealed that differentiative function is the most frequently identified (by 6 experts out of 7) and informative function is the least frequently identified (by 1 expert out of 7).

In disclosure of higher education rankings’ functions, experts tend to disclose informative function as quantitative evaluation of universities and university performance in particular areas (namely, studies and research). Overall, despite of the fact, that respondents emphasize the neutrality of informative function, in the third part of the

interviews they name more beliefs towards a university associated with this function in comparison to other rankings' functions. While disclosing rankings' reminding function, experts note that the direction of change in rankings positions creates strong subjectivity: communicating the direction of change in university's positions (in case of positive direction) sometimes is used to hide the fact that the change in positions of particular university was insignificant. Speaking about persuasive function, experts tend to disagree that rankings reflect the real performance and quality of a university and emphasize the subjectivity communicated by both, rankers and universities. In addition, experts note that persuasive function participates in the formation of university image. In disclosure of differentiative function, experts emphasize ambitions and efforts of universities directed towards the need of self-positioning, and as a result, the raise of university competitiveness.

The summarized results of identification and disclosure of rankings' functions are presented in table 9:

Table 9. The disclosure of higher education institutions rankings' functions.

The function of higher education institutions rankings	The level of identification	The disclosure of the function
Differentiative	High identification	Positioning against other universities
Reminding	High identification	Changes in managerial activities
Informative	Low identification	Disclosure of academic and scientific performance
Persuasive	Moderate identification	Subjective formation of university image

Source: created by the author basing on in-depth interviews and published in: Sarupiciute, J., Druteikiene, G. (2018). The influence of university rankings on university reputation through rankings' functions and stakeholders' beliefs towards a university. 10th annual International Conference on Education and New Learning Technologies, July 2-4, 2018, Palma de Mallorca (Spain) : conference proceedings.

The analysis of beliefs towards a university associated with rankings' differentiative, reminding, informative and reminding functions suggest that the majority of beliefs, named by experts during the disclosure of rankings' functions, are beliefs about collaborations, corresponding to the global trends in higher education, high quality studies, competitive advantage, strong scientific performance and effective resource management.

Furthermore, qualitative research of this dissertation revealed that differentiative function has the most relationships with beliefs, while the persuasive function has the least relationships with beliefs towards a university.

Chapter 5.4. “Summary of the empirical research on the impact of higher education institutions rankings’ functions on employer attitudes” summarizes the results of quantitative and qualitative researches and presents the model of impact of higher education institutions rankings’ functions on university reputation (Figure 2). It should be noted that despite of the fact that negative impact of rankings’ informative function on employers’ attitudes that form university reputation was not proposed in empirical research, the author of this dissertation believes that it is important in the context of the results of empirical research and should be discussed in conclusions and recommendations of the dissertation.

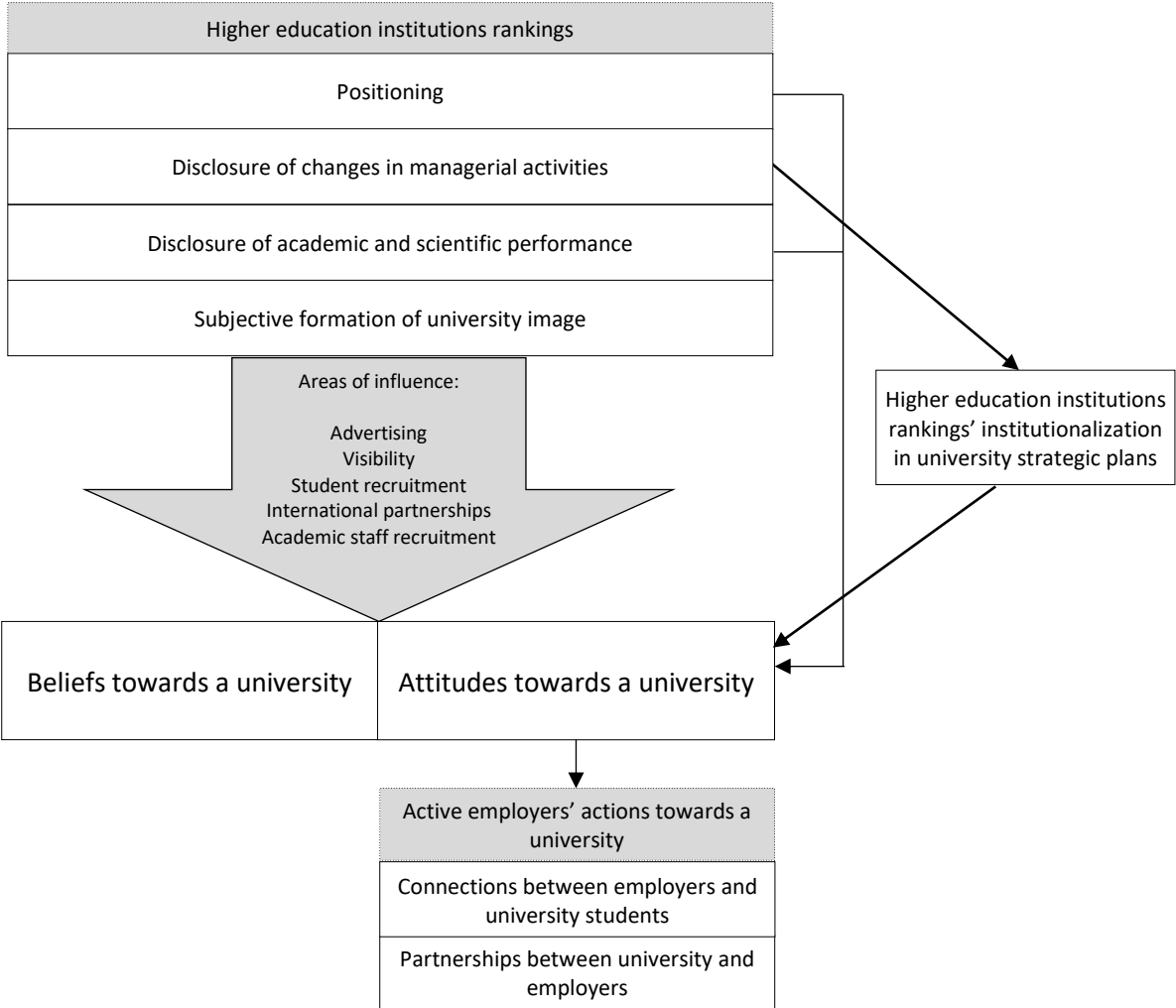


Figure 2. The model of higher education institutions rankings’ functions on university reputation.

CONCLUSIONS

1. According to the social-constructionist approach, corporate reputation is formed through stakeholders' attitudes, based on their beliefs towards an organization. Stakeholders' attitudes towards an organization are related to the consequences of corporate reputation, expressed by individuals' or stakeholders' intentions or actions towards an organization. The analysis of scientific literature revealed that insights disclosing the phenomenon of corporate reputation can be applied to the concept of university reputation. However, it is emphasized that in case of university reputation, the relationships between university and its stakeholders are more complicated, due to especially tight links between university stakeholders and university activities. University reputation is interpreted as a part of the formation of stakeholders' behavior (that is expressed through stakeholders' intentions and actions towards a university). In the context of university reputation, the following scope of stakeholder engagement into university activities can be distinguished: direct engagement into university activities; impact on other stakeholders' intentions to engage into university activities; engagement into already-established university activities; and active stakeholders' actions towards a university.
2. The importance of higher education institutions rankings to universities and higher education system in general is observed when rankings become a part of the strategic planning of universities, as well as the part of countries' higher education systems and their political tool. Rankings can be treated as the source of university information that distinguishes between "successful universities" and "the others", reflects changes in university performance over time, presents relatively unavailable information on universities to its stakeholders and general public, and participates in the formation in university image. The impact of higher education institutions rankings on university reputation is related to university performance improvement, which in turn influences both, university reputation, expressed through stakeholders' beliefs and attitudes, and university positions in rankings.
3. Results of the analysis of empirical studies on higher education institutions rankings, university reputation, the relationships between rankings and university reputation and stakeholders' actions towards a university, show that higher

education institutions rankings are frequently analyzed through trends in interrelations between rankings' indicators, however, the aspect of perceptions of rankings is not fully disclosed. Moreover, there is a lack of a unified approach to university reputation, especially such, that enables analyzing university reputation in terms of stakeholder perceptions and evaluating the impact of university reputation on various stakeholder groups.

4. Research model of the dissertation includes the impact of higher education institutions rankings' functions on university reputation, expressed through employers' attitudes towards a university, and the impact of university reputation on active employers' actions towards a university. Furthermore, due to the importance of rankings' institutionalization in university strategic plans, revealed in the theoretical analysis of this dissertation, as well as its impact in the context of the improvement of rankings' positions and formation of university image, in this dissertation, rankings' institutionalization is chosen as a moderator between rankings' functions and employers' attitudes towards a university.
5. According to the research model, 11 hypotheses about the impact of higher education institutions rankings' functions on employers' attitudes towards a university, and the impact of employers' attitudes on active employers' actions towards a university were raised. The results of the quantitative research confirmed five hypotheses and rejected six hypotheses. Furthermore, the quantitative analysis provided an unexpected result: rankings' informative function has a statistically significant negative impact on employers' attitudes towards a university, and this impact is strengthened by the absence of rankings' institutionalization in university strategic plans. This result is important in the context of this dissertation; therefore, it is included into the presented model of the impact of higher education institutions rankings' functions on university reputation.
6. The results of empirical research show that rankings impact employers' attitudes towards a university, that are the part of university reputation, by positioning university among other higher education institutions, disclosing university academic and scientific performance, and by subjectively forming university image. This impact is made through university advertising, visibility and possibilities to attract students and researchers. In turn, employers' attitudes

towards a university determine closer connections between employers and university students and the expansion of partnerships between employers and university.

7. The negative impact of the disclosure of academic and scientific performance on employers' attitudes towards a university becomes even stronger when university does not institutionalize rankings' in its strategic plans. This shows that the absence of university ambitions in terms or rankings creates a situation when a university is ranked by many rankings, but does not achieve high positions in any of them, that leads to difficulties in the formation of employers' beliefs on university study and research quality, and employers' positive attitudes towards a university.
8. The results of empirical research reveal that rankings' functions are disclosed as positioning university among other higher education institutions, disclosure of changes in managerial activities, disclosure of university academic and scientific performance, and subjective formation of university image. Rankings' positioning of universities against others influences beliefs on high quality of studies and research, university advancement, and university's efforts to improve. The disclosure of changes in managerial activities influences beliefs on proper planning, improvement and communication of university activities. The disclosure of university academic and scientific performance influences beliefs on strength of university studies and research. Subjective formation of university image influences beliefs on university leadership characteristics and beliefs on university's manipulative actions with data, provided to rankings' compliers.

Recommendations for universities

In order to form good reputation among employers, it is recommended for universities to utilize the importance of rankings' functions in the context of employers' attitudes and beliefs, by communicating university's achievements in rankings and emphasizing university's positional advantage against other higher education institutions, as well as rankings' ability to create a positive image. Moreover, it is recommended to take into consideration the fact that participation in large number of rankings, without clearly stated aims regarding certain achievements in rankings, may have a negative

impact on university reputation. Therefore, it is recommended to use more focused approach to participation in various rankings and university's positions in them.

As rankings impact university reputation through university advertising, visibility and possibilities to attract students and researchers, it is recommended for universities to take proactive measures in strengthening these areas when university's current positions in rankings are comparatively low or has a tendency to decrease. Such actions allow anticipating further improvement of university's positions in rankings and further improvement of university reputation.

In the formation of strategic and operational actions related to public relations and communication, it is recommended for universities to take into account rankings' influence on employers' beliefs on good university study and research quality; advantage; modernity; efforts to improve; good internal organization; proper planning, improvement and communication of university activities; university leadership characteristics, as well as beliefs on university's manipulative actions with data, provided to rankings' compliers. It is recommended to form the above-mentioned beliefs using public relations, communication and marketing tools before rankings are published, and to ground rankings' results based on those beliefs after rankings are published and communicated in mass media.

Recommendations for higher education policy makers and monitoring institutions

To promote and support the improvement of areas, through which higher education institutions rankings influence university reputation, among national universities in order to form employers' positive attitudes towards universities that help increase employers' engagement into mutual activities with universities. This enables to support and develop cooperation between science and business, which allows disclosing practical application of research potential of universities and possibilities for business development in the area of innovations.

To take into account universities that have achieved or strive to achieve high positions in rankings in comparison to other higher education institutions, as the ones that have a potential to become significant players in higher education market. By their high positions in rankings and good reputation, such universities inform the world about the

overall strength of national higher education system and its attractiveness to international stakeholders.

To support universities' purposeful aims to achieve and sustain high positions in rankings as a tool for strengthening employers' positive attitudes towards universities that determine growing employers' engagement in study process, which in turn helps strengthening practical value of studies and their compliance with national labour market.

Recommendations on future research on higher education institutions rankings on university reputation

Future empirical researches should include the analysis of other important university stakeholders: higher education policy makers, academic community, pupils and their parents and focus on the disclosure of the impact of rankings' functions on university reputation, represented by beliefs and attitudes of these stakeholders. Further development of the impact on employers' beliefs and attitudes towards a university may specify employers' attitudes that are influenced by rankings and investigate potential relationships between beliefs and attitudes towards a university. Future researches on employers may also reveal the relationship between university reputation and broader range of employers' intentions and actions towards a university. Further analysis of higher education institutions rankings may explicate peculiarities of rankings' communication strategies developed by universities, taking into account the impact of rankings and their functions on university reputation. Moreover, future researches may include the role of national higher education policies in the relationships between higher education institutions rankings' functions and university reputation. The topic of university strategic planning may also be developed, evaluating the efficiency and effectiveness of rankings' institutionalization in university strategic plans in aspects as changes in rankings positions, changes in university reputation, changes in stakeholders' actions towards universities, etc.

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REZIUMĖ

Temos aktualumas. Pastaraisiais dešimtmečiais spartėjantys globalizacijos procesai nuolat keičia nacionalines aukštojo mokslo sistemas, konkrečių aukštojo mokslo institucijų veiklos kryptis, formuoja šioms institucijoms naujus santykių su vidinėmis ir išorinėmis įtakos grupėmis iššūkius. Šiuolaikinis aukštasis mokslas neapsiriboja vien tik valstybinių rinkų specifika. Universitetai, norėdami pritraukti užsienio studentų ir mokslininkų, ieškodami naudingų ryšių su verslo organizacijomis, galinčiomis tapti svarbiais finansavimo šaltiniais, ir siekdami didinti žinomumą ne tik nacionaliniu, bet ir regioniniu bei pasauliniu lygmeniu, tampa tarptautinės rinkos žaidėjais. Dėl didėjančių universitetų tarptautiškumo mastų ima atsirasti naujos universitetų įtakos grupės, kurios kelia aukštus studijų ir mokslo kokybės, komunikacijos, viešumo ir skaidrumo reikalavimus. Skirtingi universitetų įtakos grupių lūkesčiai universitetams tampa reputacijos formavimo ir valdymo iššūkiu (Vidaver-Cohen, 2007). Universitetams, siekiantiems įgyvendinti įtakos grupių lūkesčius, anksčiau ar vėliau atsiranda poreikis formuoti ir stiprinti savo reputaciją, kuri leistų pasiekti tokį patį, kaip plačiai pripažįstamų ir pasaulyje gerą vardą pelniusių aukštojo mokslo institucijų, lygį.

Dėl pasaulinių tendencijų universitetams iškyla sudėtinga dilema – ar laikytis vis populiarėjančios universitetų rinkos orientacijos, ar puoselėti tradicinius aukštos mokslo ir studijų kokybės principus. Daugumą esminių pokyčių universitetuose ir aukštojo mokslo pasaulyje paprastai skatina aukštojo mokslo institucijų reitingai – populiarus, paprastas ir labai paplitęs informacijos apie universitetus šaltinis. Jų metodologijose akcentuojami universitetų veiklos rodikliai nustato naujus būvimo „geriausiais“ standartus, keičia nusistovėjusius universitetų ir jų įtakos grupių santykius ir suteikia galimybę pažvelgti į konkurencinį universitetų ar net nacionalinių aukštojo mokslo sistemų pranašumą pasauliniu mastu. Visgi, be reitinguose apibrėžtų universitetų pasiekimų, išreikštų kiekybiniais matais, konkurencinio pranašumo potencialas gali slypėti ir tokiuose neapčiuopiamuose veiksmuose, kaip universiteto prekės ženklas, įvaizdis ir, neabejotinai, reputacija (Morphew ir Swanson, 2011). Šios dilemos sprendimas – kryptingas reputacijos stiprinimas, apimantis tiek rinkodaros ir įvaizdžio valdymo, tiek universitetų „produkto“ – mokslinės ir studijų veiklos – tobulinimą. Šis derinys yra sėkmės veiksnys, padedantis įsitvirtinti tarp tų, kurie vadinami „geriausiais“. Dėl šios priežasties

universitetų reputacijos matavimas ir valdymas yra viena svarbiausių universitetų veiklos krypčių, kuriai reikia strateginio pobūdžio sprendimų ir palaikomųjų veiksmų, ir, kuri tampa universitetų sąveikos su įtakos grupėmis pagrindu.

Mokslinė problema ir esamas jos ištirtumo lygis.

Pastarąjį dešimtmetį mokslinėje literatūroje pastebimas vis didėjantis susidomėjimas universitetų reputacija ir dėmesys jai (Pérez-Díaz ir Rodríguez, 2015). Dalyje mokslinės literatūros pabrėžiama universitetų reputacijos specifika (Morley ir Aynsley, 2007; Pérez-Díaz ir Rodríguez, 2015; Steiner ir kt., 2013; Suomi ir Järvinen, 2013; van Vught, 2008), nors universitetų reputacija yra dažniau nagrinėjama pagal bendruosius organizacijų reputacijos principus (pvz.: Ressler ir Abratt, 2009; Yang ir kt., 2010; Vidaver-Cohen, 2007).

Empiriniuose universitetų reputacijos tyrimuose taip pat pastebimas ir autorių nuomonių išsiskyrimas, sietinas su universitetų reputacijos matavimo įvairove. Vienuose empiriniuose tyrimuose universiteto reputacija yra matuojama organizacijų reputacijos matavimo instrumentais – vienmačiu konstruktų (kai tiesiogiai matuojama suvokiama reputacija) ir (arba) įtakos grupių įsitikinimų ir nuostatų matavimo skalėmis (pvz.: Walsh ir kt., 2009; Helm, 2007; Lydeka ir Šontaitė, 2010; Rindova ir kt., 2005; Ruiz ir kt., 2014; Schwaiger, 2004 tyrimai). Kituose empiriniuose universiteto reputacijai skirtuose tyrimuose reputacija matuojama įtakos grupių apklausomis, kiekybiškai išreikštomis reitingų reputacijos rodikliais (pvz.: Bowman ir Bastedo, 2011; Delgado-Márquez ir kt., 2013; Volkwein ir Sweitzer, 2006; Standifird, 2005 atlikti tyrimai). Pastarasis universiteto reputacijos matavimo būdas taip pat taikomas ir tiriant aukštojo mokslo institucijų reitingų poveikį reputacijai (Bowman ir Bastedo, 2011; Safón, 2009; Standifird, 2005). Tirdami universiteto reputaciją įvairių įtakos grupių kontekste, autoriai (pvz.: Alter ir Reback, 2014; Sung ir Yang, 2006; Šontaitė, 2011) nagrinėja, kaip studentai, būdami didžiausia įtakos grupe, suvokia reputaciją ir su ja sieja savo ketinimus universiteto atžvilgiu. Kituose tyrimuose analizuoti moksleiviai (Šontaitė, 2012), aukštojo mokslo institucijų atstovai – vadovai, administracija, mokslininkai, dėstytojai (Bowman ir Bastedo, 2011; Safón, 2009; Standifird, 2005) ir verslo įmonės (Finch ir kt., 2013; Safón, 2009).

Analizuojant, kaip nagrinėjama problema atskleidžiama Lietuvos mokslinėje literatūroje, pastebima, kad aukštojo mokslo institucijų reitingų nagrinėjimui skiriama mažai dėmesio (Stonkienė ir Matkevičienė, 2014), kai tuo tarpu universiteto reputacijos

tema jau yra atlikta nemažai moksleivių, studentų ir absolventų tyrimų (Lydeka ir Šontaitė, 2010; Šontaitė, 2011; Šontaitė, 2012).

Pastebėtina, kad empiriniuose Lietuvos ir užsienio autorių tyrimuose stinga vieningo požiūrio į universitetų reputaciją, ypač tokio, kuris suteiktų galimybę analizuoti universiteto reputaciją įtakos grupių suvokimo kontekste ir vertinti universiteto reputacijos poveikį įvairioms įtakos grupėms. Šioje disertacijoje siekiama atskleisti reputaciją sociokonstrukciniu požiūriu, o aukštojo mokslo institucijų reitingus interpretuoti naudojant jų funkcijas kaip reiškinių, universiteto reputacijos ir universiteto įtakos grupių santykiuose atliekantį išorinio informacijos šaltinio vaidmenį.

Sociokonstrukciniam požiūriui į reputaciją mokslinėje pastarojo dešimtmečio literatūroje sąlyginai skiriama mažiau dėmesio negu kitiems literatūroje įvardintiems požiūriams į organizacijų reputaciją. Sociokonstruktinis požiūris į organizacijos reputaciją yra plataus konteksto reiškiny, apimantis socialinės psichologijos, vartotojų elgsenos, rinkodaros komunikacijos ir kitų mokslo krypčių principus, atskleidžiančius individo mentalinius ir kognityvinius procesus, kurie nulemia ir formuoja jo reakciją į tam tikrą objektą. Be to, šioje disertacijoje siekiama atskleisti aukštojo mokslo institucijų reitingus kaip išskirtinį šiuolaikinio aukštojo mokslo pasaulio fenomeną. Dėl šios priežasties ypatingas dėmesys skiriamas tarptautinių aukštojo mokslo institucijų reitingų analizei, reitingų poveikio universitetams ir pastarųjų atsako į vis didėjantį susidomėjimą šiais reitingais išskyrimui.

Darbo tikslas: Darbo tikslas: įvertinti aukštojo mokslo institucijų reitingų funkcijų poveikį universiteto reputacijai ir universiteto reputacijos poveikį su universitetu susijusiems aktyviems darbdavių veiksams.

Darbo tikslui pasiekti keliami uždaviniai:

1. išanalizuoti mokslinėje literatūroje nagrinėjamus požiūrius į organizacijos reputaciją, atskleisti sociokonstrukcinį požiūrį į organizacijos reputaciją ir išskirti universiteto reputacijos specifiką;
2. atlikti teorinę aukštojo mokslo institucijų reitingų, pastarųjų poveikio universitetų veiklai ir universiteto įtakos grupėms analizę, empirinių aukštojo mokslo institucijų reitingų, reitingų funkcijų, jų sąsajų su universiteto reputacija, universiteto reputacijos ir jos poveikio universiteto įtakos grupėms tyrimų analizę;

3. remiantis sudarytu tyrimo modeliu, parengti aukštojo mokslo institucijų reitingų funkcijų poveikio universiteto reputacijai ir universiteto reputacijos poveikio su universitetu susijusiems aktyviems darbdavių veiksams matavimo tyrimo metodiką;
4. empiriškai įvertinti aukštojo mokslo institucijų reitingų funkcijų poveikį darbdavių nuostatomis dėl universiteto, formuojančioms universiteto reputaciją, bei darbdavių nuostatų poveikį su universitetu susijusiems jų aktyviems veiksams;
5. empiriškai įvertinti aukštojo mokslo institucijų reitingų institucionalizavimo strateginiuose universitetų planuose kaip moderuojančio veiksnio poveikį ryšiui tarp aukštojo mokslo institucijų reitingų ir darbdavių nuostatų dėl universiteto;
6. empiriškai įvertinti aukštojo mokslo institucijų reitingų funkcijų poveikio darbdavių nuostatomis dėl universiteto, formuojančioms universiteto reputaciją, darbdavių nuostatų poveikio su universitetu susijusiems jų aktyviems veiksams, ir moderatoriaus, aukštojo mokslo institucijų reitingų institucionalizavimo strateginiuose universitetų planuose, sąveikos stabilumą laikui bėgant;
7. atskleisti aukštojo mokslo institucijų reitingų funkcijų esmę ir pagrindines charakteristikas, taip pat su reitingų funkcijomis susijusius įsitikinimus dėl universiteto;
8. Lietuvos aukštojo mokslo institucijoms pateikti rekomendacijas dėl universitetų reputacijos formavimo ir palaikymo, įvertinus aukštojo mokslo institucijų reitingų poveikį ir universiteto reputacijos ryšį su darbdavių aktyviais veiksmais, susijusiais su universitetu.

Tyrimo ir rezultatų analizės metodai:

Empirinis disertacijos tyrimas buvo atliekamas trimis etapais. Pirmajame etape atlikta turinio analizė, kurios metu buvo nustatyta, kaip dažnai viešojoje erdvėje pasireiškia aukštojo mokslo institucijų reitingų funkcijos, nagrinėjamos disertacijoje. Antrajame tyrimo etape atliktas kiekybinis tyrimas, kurio metu buvo empiriškai įvertinti ryšiai tarp kiekybine išraiška pateiktų aukštojo mokslo institucijų reitingų funkcijų, aukštojo mokslo institucijų reitingų institucionalizavimo strateginiuose universitetų planuose, kaip moderuojančio veiksnio, darbdavių nuostatų dėl universiteto ir su universitetu susijusių darbdavių aktyvių veiksmų. Trečiajame etape atliktas kokybinis

tyrimas – giluminis interviu su ekspertais. Jo metu išgrynintos aukštojo mokslo institucijų reitingų funkcijos ir identifikuotas jų ryšys su įsitikinimais dėl universiteto.

Disertacijos turinio analizės rezultatai apdoroti naudojant pirminį ir ašinių kodavimą; kiekybinio tyrimo duomenys apdoroti aprašomosios statistikos metodais – skaičiuojant vidurkius ir dažnius, taip pat statistinės analizės metodais – atliekant daugianarę tiesinę regresinę analizę, moderacijos analizę (modifikuotų hierarchinių lygčių metodu) ir tiesinę regresinę analizę; moderuojantysis kiekybinio tyrimo veiksnys sudarytas naudojant dokumentų analizę; kokybinio tyrimo rezultatai apdoroti atliekant pirminį ir ašinių kokybinių duomenų kodavimą, grupavimą, sintezę, sistemimą ir apibendrinimą. Turinio analizė atlikta naudojant kompiuterinę programą *Atlas.ti*, kiekybinio tyrimo rezultatai analizuoti naudojant kompiuterinę duomenų analizės ir statistikos įrangą *IBM SPSS Statistics 23* bei A. F. Hayes (2012) SPSS paketo makrokomandą PROCESS, kokybinio tyrimo rezultatai analizuoti naudojant kompiuterinę programą *Atlas.ti* ir interaktyvų raktažodžių tinklų kūrimo ir grafinio vaizdavimo įrankį *Google Fusion Tables*.

Disertacijos mokslinis naujumas

1. Universiteto reputacija nagrinėta ir empiriškai tirta remiantis sociokonstrukciniu požiūriu, kuris atskleidžia, kad universiteto reputacija formuojasi per įsitikinimais pagrįstas įtakos grupių nuostatas dėl universiteto.
2. Empirinio aukštojo mokslo institucijų reitingų tyrimo metu pirmą kartą pritaikytas adaptuotas rinkodaros komunikacijos DRIP modelis.
3. Aukštojo mokslo institucijų reitingų funkcijos atskleistos kaip universiteto pozicionavimas, vadybinės veiklos pokyčių atskleidimas, mokslo ir studijų rezultatų atskleidimas, subjektyvus universiteto įvaizdžio formavimas.
4. Empirinio tyrimo rezultatai atskleidžia, kad neigiamas universiteto mokslo ir studijų rezultatų atskleidimo poveikis darbdavių nuostatoms dėl universiteto sustiprėja kai reitingai yra neinstitutionalizuoti universiteto strategijoje.
5. Empiriškai ištirtas aukštojo mokslo institucijų reitingų funkcijų poveikis universiteto reputacijai, esant moderuojančiajam veiksniai – reitingų institucionalizavimui universiteto strategijoje, ir universiteto reputacijos poveikis su universitetu susijusiems aktyviems darbdavių veiksams, pateikiami modelyje, kuris taikytinas

ties universitetų reputacijai formuoti ir valdyti, ties aukštojo mokslo politikai formuoti ir tobulinti.

Šios disertacijos rengimas sutapo su reikšmingais Lietuvos aukštojo mokslo sistemos pokyčiais ir dėmesio, skiriamo aukštojo mokslo institucijų reitingams, didėjimu. Pastaraisiais metais pagreitį įgavusi aukštojo mokslo reforma paskatino tiek politikos formuotojus, tiek plačiąją visuomenę kvestionuoti Lietuvos universitetų reputaciją, jų konkurencingumą bei paspartino susidomėjimą Lietuvos universitetų padėtimi tarptautiniu mastu. Pirmasis Lietuvos universitetas tarptautiniuose aukštojo mokslo institucijų reitinguose buvo įvertintas 2008 m., o 2012 m. LR Vyriausybės sudaryta Valstybės pažangos taryba pristatė Lietuvos pažangos strategiją „Lietuva 2030“, kurioje nurodomas ir pažangos rodiklis – vieno iš Lietuvos universitetų patekimas į ARWU (Šanchajus) reitingo 500-uką. Universitetams, jų įtakos grupėms ir plačiajai visuomenei tai buvo pirmasis signalas, kad aukštojo mokslo institucijų reitingai universitetams yra labai reikšmingi. 2017 m. LR Vyriausybės programos plane pateikiama įžvalga, kad pagal tarptautinius reitingus pastebimas didelis atsilikimas net ir nuo vidutinių ES rodiklių, o Lietuvos universitetų, patenkančių į QS reitingo 500-uką, skaičius ir vėl yra nurodomas kaip pažangos rodiklis. Taigi, aukštojo mokslo institucijų reitingai ima reikšti aukštą valstybės pažangos ir mokslo, taip pat ir studijų konkurencinio pranašumo lygmenį.

Disertacijos struktūra. Disertaciją sudaro išvadas, iš trijų skyrių sudaryta teorinės analizės dalis, tyrimo metodikos skyrius, empirinių duomenų analizės ir jos rezultatų skyrius, bei išvadų ir rekomendacijų skyrius.

Pirmajame teorinės analizės skyriuje aptariama universitetų reputacijos koncepcijos reikšmė ir turinys. Šiame skyriuje išsamiai aptariama ir nagrinėjama požiūrių į organizacijos reputaciją prigimtis, mechanizmai ir jų taikymas, atskleidžiamas sociokonstrukcinis požiūris į organizacijos reputaciją, išskiriama universiteto reputacijos specifika ir analizuojamos universiteto įtakos grupės reputacijos kontekste. Antrajame skyriuje analizuojami aukštojo mokslo institucijų reitingai ir jų poveikis universiteto reputacijai. Šiame skyriuje pristatoma tarptautinių aukštojo mokslo institucijų reitingų įvairovė, jų svarba, sklaida, ryšys su universiteto įtakos grupėmis, poveikis strateginiams, taktiniams ir operatyviniams universitetų valdymo sprendimams bei reitingų

institucionalizavimas universitetų strateginiuose planuose. Trečiajame skyriuje analizuojama universitetų reputacija aukštojo mokslo institucijų reitingų kontekste. Pirmasis ir antrasis šio skyriaus poskyriai skirti universitetų reputacijos matavimo rodiklių tarptautiniuose reitinguose ir reitingų poveikio universitetų reputacijai prielaidų aptarimui. Trečiajame skyriaus poskyryje analizuojamas empirinis aukštojo mokslo institucijų reitingų, universiteto reputacijos ir jos pasekmių universiteto įtakos grupėms iširtumo lygis, o ketvirtajame šio skyriaus poskyryje, remiantis mokslinės literatūros analize bei esamais tyrimais, modeliuojamos sąsajos tarp aukštojo mokslo institucijų reitingų, universiteto reputacijos ir universiteto įtakos grupių.

Tyrimo metodikos skyriuje pagrindžiamas tyrimo metodikos pasirinkimas, pristatomi disertacijos tyrimo etapai, tyrimo modelis, keliamos hipotezės, disertacijoje atliekamos turinio analizės, kiekybinio tyrimo ir kokybinio tyrimo metodikos ir duomenų apdorojimo instrumentai.

Empirinių duomenų analizės skyriuje pristatomi kiekvieno iš disertacijos empirinio tyrimo etapų rezultatai. Pirmajame empirinių duomenų analizės poskyryje pateikiami aukštojo mokslo institucijų reitingų funkcijų pasireiškimo Lietuvos žiniasklaidoje turinio analizės rezultatai. Kiekybinio tyrimo poskyris suskirstytas į bendrų rezultatų dalį, kurioje pristatomi aukštojo mokslo institucijų reitingų poveikio darbdavių nuostatoms apie universitetą daugianarės regresinės analizės rezultatai bei reitingų institucionalizavimo universitetų strateginiuose planuose moderacijos analizės rezultatai; darbdavių nuostatų apie universitetą poveikio aktyviems darbdavių veiksams universiteto atžvilgiu tiesinės regresinės analizės rezultatų dalį; kiekybinės analizės rezultatų stabilumo vertinimo rezultatų dalį ir kiekybinio tyrimo rezultatų apibendrinimo dalį. Kokybinio tyrimo poskyryje pateikiami giluminių interviu su ekspertais rezultatai, kuriuose pateikiamas aukštojo mokslo institucijų reitingų funkcijų ir jų charakteristikų atskleidimas bei šių funkcijų ryšys su įsitikinimais apie universitetą. Ketvirtajame empirinių duomenų analizės poskyryje pateikiamas atliktų empirinio tyrimo etapų rezultatų apibendrinimas.

Paskutinis disertacijos skyrius pristato disertacijos išvadas ir rekomendacijas universitetams ir aukštojo mokslo politikos formuotojams praktiškai taikant disertacijos rezultatus.

Disertacijoje panaudoti 144 literatūros šaltiniai, pateikta 19 lentelių ir 10 paveikslų.

APROBATION AND DISSEMINATION OF THE RESEARCH RESULTS

Publications in peer-reviewed proceedings of international scientific conferences indexed in DB Clarivate Analytics Web of Science:

1. Šarupičiūtė, J., Drūteikienė, G. (2016). Global university rankings and strategic planning in higher education institutions. *EDULEARN 16 : 8th international conference on education and new learning technologies, July 4-6, 2016, Barcelona, Spain. Book series: EDULEARN proceedings*, p. 6472-6478.
2. Šarupičiūtė, J., Drūteikienė, G. (2014). University and college image: student perceptions. *EDULEARN14 : 6th international conference on education and new learning technologies, July 7th-9th, 2014 Barcelona (Spain). Book series: EDULEARN proceedings*, p. 7357-7365.

Publications in other peer-reviewed proceedings of international scientific conferences:

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2. Šarupičiūtė, J., Drūteikienė, G. (2017). A view towards the influence of global university rankings on university reputation. *INTED2017 : 11th International technology, education and development conference, 6-8 March, 2017, Valencia, Spain: conference proceedings*, p. 9301-9307.
3. Šarupičiūtė, J., Drūteikienė, G. (2016). Enhancing student mobility through strategic projects: the case of Vilnius University. *QS Asia-Pacific Professional Leaders in Education – QS-APPLE conference, 22-24 November 2016, Putrajaya, Malaysia*.

INFORMATION ABOUT THE AUTHOR

Education:

Date of graduation	Institution	Qualification acquired
2011	Vilnius University	Master of Human Resource Management
2009	Vilnius University	Bachelor of Management and Business Administration

Professional experience:

Period	Place	Position
2011 till now	Vilnius University, Faculty of Economics, Department of Management	Assistant lecturer
2018 till now	Vilnius University, Communications and Marketing Department	International marketing specialist
2015 - 2018	Vilnius University	Senior specialist
2015 - 2017	Project "PROMOTE – Promoting and validating key competences in mobility and traineeships in Europe"	Junior researcher
2015	Project "Development of modern museum specialist competencies"	Lecturer
2013 - 2015	Vilnius University, Faculty of Economics	International relations administrator
2007 - 2013	Vilnius University, Faculty of Economics, Department of Management	Administrator
2007 - 2008	ERGO Insurance SE Lithuanian branch	Insurance consultant
2007	JSC "Skriptas"	Sales manager

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