VYTAUTAS MAGNUS UNIVERSITY

Rita BENDARAVIČIENĖ

EMPLOYER BRAND DEVELOPMENT MEASURING ORGANIZATIONAL ATTRACTIVENESS IN HIGHER EDUCATION INSTITUTIONS

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Scientific Advisor:

Prof. Dr. Irena BAKANAUSKIENĖ (Vytautas Magnus University, Social Sciences, Management and Administration, 03S)

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Rita BENDARAVIČIENĖ

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TABLE OF CONTENTS

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LIST OF FIGURES

LIST OF TABLES

LIST OF CONCEPTS AND ABBREVIATIONS

1. **Affective commitment –** "affective or emotional attachment to the organization such that the strongly committed individual identifies with, is involved in, and enjoys membership in, the organization" (Allen and Meyer, 1990: 2).

2. **College** – higher education institution which carries out college studies, develops applied research and/or professional art (Republic of Lithuania, Law on Higher Education and Research, 2009).

3. **Economic benefits** – material or monetary rewards offered to employees by employer brand (Ambler and Barrow, 1996).

4. **Employer** – a person or organization that employs people (Oxford Dictionaries, 2013).

5. **Employer attractiveness** – the envisioned benefits that a potential employee sees in working for a specific organization (Berthon et al., 2005: 156).

6. **Employer brand** – a set of particular employment experience attributes that makes an organization distinctive and attractive as an employer to existing and potential employees.

7. **Employer brand equity** – value provided by employment to existing or potential employees (Jiang and Iles, 2011).

8. **Employer branding** – how a business builds and packages its identity, from its origins and values, what it promises to deliver to emotionally connect employees so that they in turn deliver what the business promises to customers (Sartain and Shuman, 2006: vi).

9. **Employer value proposition** – a concept of what particular value company offers to its employees (Backhaus and Tikoo, 2004).

10. **Employment experience** – the totality of tangible and intangible reward features that a particular organization offers to its employees (Edwards, 2010).

11. **Employment-based identity (or labor market identity)** – distinctive human resource and cultural practices in managing employees, or how the organization attracts, secures, manages, and treats its people (Baron, 2004).

12. **External marketing** – activities, primarily designed to market the value proposition to organization's targeted potential employees, recruiting agencies, placement counsellors and to support and enhance the product or corporate brands (Backhaus and Tikoo, 2004).

13. **Functional benefits** – developmental and/or useful activities offered to employees by employer brand (Ambler and Barrow, 1996).

14. **Higher education institution (abbreviated as HEI)** – a legal entity the main activity of which is carrying-out of studies and activities related to studies, and/or research and experimental (social, cultural) development (Republic of Lithuania, Law on Higher Education and Research, 2009).

15. **Instrumental attributes** – objective, concrete and factual attributes inherent in a job or organization (Lievens, 2007).

16. **Internal marketing** – carrying the brand "promise" made to recruits into the firm and existing employees, incorporating it as part of the organizational culture, and developing a workforce that is committed to the set of values and organizational goals (Backhaus and Tikoo, 2004).

17. **Organizational attractiveness** – the degree to which potential applicants/current employees favorably perceive organizations as places to work (Jiang and Iles, 2011). Employer's attractiveness is used as a synonym herein.

18. **Organizational identity** – collective attitude about who the company is as a group (Backhaus and Tikoo, 2004).

19. **Perceived employment experience quality** – perceptions current and prospective employees have about working for an organization (Minchington, 2011).

20. **Psychological benefits** – feelings such as belonging, direction and purpose offered to employees by employer brand (Ambler and Barrow, 1996).

21. **Psychological contract** – a product of mutual expectations that are largely implicit and unspoken, and frequently antedate relationship of person and company (Levinson et al., 1962).

22. **Researcher** – a person having higher education who develops knowledge, conceptualizes or creates new products, processes, methods and systems or directs research and experimental (social, cultural) development projects (Republic of Lithuania, Law on Higher Education and Research, 2009).

23. **Scientist** – a researcher who has a scientific degree (Republic of Lithuania, Law on Higher Education and Research, 2009).

24. **Symbolic attributes** – subjective, abstract, and intangible attributes that describe the job or organization (Lievens, 2007).

25. **Staff of higher education institutions** – teaching staff, research staff, other researchers, the administration and other employees (Republic of Lithuania, Law on Higher Education and Research, 2009).

26. **Teaching staff member** – a person who educates and teaches students in a higher education institution (Republic of Lithuania, Law on Higher Education and Research, 2009).

27. **University** – higher education institution which carries out university studies, conducts research, experimental (social, cultural) development and/or develops high-level professional art (Republic of Lithuania, Law on Higher Education and Research, 2009).

INTRODUCTION

Relevance of the research topic. Developing an effective employer brand it is increasingly essential for organizations to build trust and commitment, become an employer of choice and stay competitive in the marketplace. In modern economies where products and services become very alike, industries get overcrowded and competition for the best employees becomes almost as fierce as competition for customers, organizations are most likely to be heartily investing in distinctive employment practices in order to differentiate themselves from their competitors in the labor market even more so than the product market (Lievens and Highhouse, 2003; Sørensen, 2004; Berthon et al., 2005). It is no longer enough for organizations to manage their human resources effectively. In order to attract and retain the right employees and talents organizations have to immerse themselves in an *employer branding* strategy, i.e. identify what is so special and valuable about them and what exactly current employees or possible candidates love and embrace about a particular work place in order to create a 'package of advantages' and market it both internally and externally, earning the label of 'attractive employer' and, in the same vein, signaling what kind of people the organization is eager to hire. In other words, employer branding refers to "how a business builds and packages its identity, from its origins and values, what it promises to deliver to emotionally connect employees so that they in turn deliver what the business promises to customers" (Sartain and Schuman, 2006: vi).

Therefore, employer branding first and foremost begins with the creation of an employer value proposition, which is a central message to be embedded in the employer brand about unique employment experience offered by the company to the existing and potential employees (Backhaus and Tikoo, 2004; Edwards, 2010). Forasmuch employment practices determining the employment experience "guide the firm in selecting particular types of people with particular kinds of aptitudes and abilities to pursue particular goals in particular kinds of ways, motivated by particular kinds of rewards" (Baron, 2004: 5), an employer value proposition is organization specific and encompasses a complex array of features (Edwards, 2010). Moreover, what works in one industry sector may be quite different from what works in another, therefore a good theory or model should exist of how employer branding should be developed in certain organizations to capture their context and history (Martin, 2007).

In this light, more attention should be given to employer branding in knowledge-intensive industries and knowledge-based organizations (Ewing et al., 2002) that are merely dependent on the expertise, competencies and excellence of their employees and where employment relations form a key facet of organizational identity (Baron 2004). This is extremely important in higher

education case, where realities of changing academic employment worldwide, such as "alterations in working conditions, terms of appointment, and remuneration" (Altbach, 2000: 9) have determined the deteriorating attractiveness of academic workplace (Enders and Weert, 2004). Evidently, search for organizational authenticity, unique employment experience offered to and valued by employees and positioning this distinctiveness in the labor market could enhance the attractiveness of higher education institutions (abbreviated as HEIs therein) as employers.

In this regard, this thesis explores employer branding in higher education with the particular focus on the development of authentic employer brand through identifying the unique characteristics of organizational identity and employment experience that facilitate organizational attractiveness as an employer and enable the organization to differentiate from its competitors in the labor market.

Current status of the theoretical and empirical investigation of the problem. Employer branding, applying marketing principles to human resources management, emerged in the U.S. and the U.K. at the end of the 20th and immediately at the beginning of the 21st as a response to such staffing challenges as the growing importance of intangible assets and intellectual capital, increasing knowledge-based work, specificity of the attitudes of new generation Y, workforce diversity, a war for talent as well as overall brand power and human resources' search for credibility (Jenner and Taylor, 2007; Martin *et al.*, 2005; Ployhart, 2006; EB Insights, 2011).

Since then employer branding has received much attention in practitioner world and has prompted a steady stream of articles, books (Barrow and Mosley, 2011; Sartain and Schumann, 2006), blogs and investigative pieces, as well as a rapid growth of consultancy firms and services, devoted to the topic − e.g., Versant, Universum, People in Business, and Employer Brand International to name a few. Conferences and summits on the employer branding are being organized in the USA, Canada, Italy, France, the UK, etc., but have also spread all over the world, inviting to network and learn from employer branding leaders. International companies are appointing Engagement and Branding, Talent Recruitment, Recruitment Marketing and Employer Branding directors', managers' and specialists' positions to "develop the strategy for and execute and manage solutions for brand insights, research, focus groups, surveys, brand value propositions and positioning"[1] (Gap, 2014).

Employer branding as an influential approach and a new discourse of human resource management (Martin *et al.*, 2005) has also evoked a considerable research attention. The

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[1] Gap, 2014, https://gapinc.taleo.net/careersection/2/jobdetail.ftl?job=755575andsrc=JB-10324

literature examines theoretical foundations and conceptual framework of employer branding (Ambler and Barrow, 1996; Backhaus and Tikoo, 2004; Edwards, 2010; Lievens et al., 2007; Moroko and Uncles, 2009; Mosley, 2007; Wilden et al, 2010; Martin *et al.*, 2005), analyzing its dimensionality (Hillebrandt and Ivens, 2013; Berthon *et al.*, 2005), exploring premises of attraction to an employer (Highhouse et al, 2007; Highhouse et al, 2003; Devendorf and Highhouse, 2008; Schreurs et al, 2009; Zaveri and Mulye, 2010; Nadler et al., 2010; Ehrhart and Ziegert, 2005; Lievens et al, 2001; Lievens, 2007; Lievens and Highhouse, 2003; Yu, 2014; Kausel and Slaughter, 2011; Lievens et al, 2005; Turban, 2001; Jiang and Iles, 2011; Shahzad et al., 2011), and investigates specific aspects of the phenomenon, such as positioning (Sartain, 2005; Sivertzen et al, 2013; Kroustalis and Meade, 2007), employer branding outcomes (Davies, 2008; Cable and Edwards, 2004; Fulmer et al, 2003; Mosley, 2007), effects of corporate social performance (Turban and Greening, 1997; Albinger and Freeman, 2000), and characteristics of successful employer brands (Moroko and Uncles, 2008).

Nevertheless, despite the great popularity of employer branding among practitioners, research in the field still poses a number of critical questions and issues for management scholars, such as the embryonic state of employer branding theory and its conceptual ambiguity (Backhaus and Tikoo, 2004; Moroko and Uncles, 2008, Martin, 2007; Edwards, 2010, Lievens, 2007), the lack of knowledge on how organizations should develop and implement effective employer branding (Backhaus and Tikoo, 2004; Edwards, 2010), unclear link between employer branding and organizational outcomes (Backhaus and Tikoo, 2004) and neglected significant segment of individuals included in attraction research (Ehrhart and Ziegert, 2005; Lievens et al, 2001).

Furthermore, employer branding is – albeit with a few exceptions (Stensaker, 2007; Temple, 2006; Distinct Higher Education, 2012) – yet largely unexplored in higher education. The scarcity of information and knowledge on **how organizations in general and higher education institutions in particular should develop the underlying value proposition of the employer brand** (Backhaus and Tikoo, 2004) is regrettable, because it is the sort of evidence that would enable higher education institutions to achieve many of their strategic goals "through being memorable, authentic, and clearly articulating what it has to offer to the people that are important to it" (Distinct Higher Education, 2012: 4). Moreover, successful employer brand builds *distinctiveness* (Rosethorn and Mensink, 2007), which has been explicitly proven to be beneficial and "crucial for strength of reputation, financial stability, and much more" in higher education (Distinct Higher Education, 2012: 4). **Here the significance and originality of the dissertation lies.**

Therefore, it is the particular ambition of this dissertation to offer a methodological contribution to empirical studies on employer branding in higher education, exploring a framework for employer brand development. The emphasis will be put on the internal perspective of employer branding examining organizational attractiveness from the *current employees' perspective*. It is useful to take this approach since "the role of branding with existing employees is less clear" (Simmons, 2009: 686) and needs more elaboration. Furthermore, "building the employer brand from *inside* the business – with a consistent substance, voice, and authenticity throughout the employment relationship – may be the most powerful tool a business can use to emotionally engage employees" (Sartain and Shuman, 2006: vi). This will primarily entail understanding a number of factors that drive organizational attractiveness as an employer and wrapping them into employment offering to be delivered by the employer brand.

The scientific problem of the dissertation: what are the attributes of employment experience differentiating organizational attractiveness as an employer, how could they be measured and transformed into an employer brand?

The object of the dissertation is employer brand development measuring organizational attractiveness.

The aim of the dissertation is to identify and operationalise dimensions of organizational attractiveness, and to create a framework for employer brand development.

The following objectives of the dissertation will be addressed to fulfill this aim:

1. To reveal theoretical and conceptual foundations for employer branding in order to establish a rationale for the research hypotheses.
2. To discuss methodological approaches to the analysis and justify a research design for the empirical study.
3. To develop an instrument for measuring organizational attractiveness as an employer and to perform a pilot testing.
4. To carry out a national study of organizational attractiveness as an employer and disclose its manifestation in Lithuanian higher education institutions.
5. To synthesize empirical findings on organizational attractiveness and to design an analytical and typological framework for employer brand development.

Research methods. The paper employs a mixed method research approach based on a postpositivistic perspective. The relevant literature on employer branding is critically reviewed, analyzed, compared and generalized. Merely foreign literature study is performed, since no research on employer branding was found available in Lithuania, except for the articles by the author of this dissertation.

Modeling of the conceptual employer brand model and conceptual model for hypotheses testing is undertaken.

Addressing research objectives three empirical studies were conducted: a first stage data collection in one Lithuanian higher education institution for the development of scale to measure organizational attractiveness as an employer; a pilot testing of the tool in two other Lithuanian HEIs; and a national study of organizational attractiveness in the Lithuanian higher education sector. A self-administered survey method for data collection was used. Descriptive statistics, exploratory factor analysis, reliability analysis, multivariate analysis of variance (MANOVA), regression analysis and cluster analysis were carried out testing theory and hypotheses.

Logical analysis, synthesis and designing were used for typological and analytical framework development.

Limitations. This research is not without limitations. First, this study was conducted in Lithuanian higher education. Therefore, future research should examine the applicability of the scale and generalizability of the results in other countries, as well as other industries.

Second, only current employees of Lithuanian universities and colleges were surveyed, therefore examining perceptions of 1) potential employees; 2) employees of higher education institutions in other countries, and 3) employees in business sector would contribute to retesting the validity, generalizability and feasibility of the instrument.

When it comes to statistical analysis, the normality assumption of multivariate analysis was not met, but as far as detrimental effects of nonnormality are reduced in large samples of 200 and more, and other assumptions are not violated, they may be negligible.

Further, the internal structure of the developed measurement scale was not supported by the confirmatory factor analysis (CFA), but the failure of this measure to fit CFA models can be justified by the inherent complexity of employment relations, organizational culture and behavior. As it is explicitly demonstrated by Hopwood and Donnellan (2010), even so widely known and used multiscale instruments as Catell's 16PF, the Six-Factor Personality Questionnaire, the California Psychological Inventory or the Multidimensional Personality Questionnaire were found to be seriously deficient in terms of showing unacceptable model fit. As advocated by authors, exploratory factor analysis methods are an appropriate approach to test the structure of multiscale inventories, which was therefore applied in this case.

Structural outline of the dissertation. Chapter 1 aims to review and integrate different areas of literature linked to employer branding in order to justify the conceptual research model. Given the conceptual ambiguity of employer branding, Section 1.1 reviews terminology of the phenomenon and presents a working definition of an employer brand. Theoretical foundations for employer branding are presented in Section 1.2 examining the underlying relevant theories

and concepts that provide the lens to the understanding of what employer branding is, namely: the theory of psychological contract, a concept of brand equity, signaling theory and the theory of organizational ecology. The organizational attractiveness construct and its relationship to employer branding is also explored. Next, conceptual foundations for employer branding are presented and critically examined in Section 1.3. elaborating on employer brand development and employer branding outcomes with a particular focus on affective commitment, discussing premises for employer branding segmentation and giving the rationale for exploring employer branding in higher education. Finally, the research field is set and conceptual model for hypotheses testing is developed and presented in Section 1.4.

In Chapter 2 the ontological, epistemological and methodological stance of the dissertation is discussed, justifying the suitability of the objectivist ontology, postpositivist epistemology and mixed methods research design in Sections 2.1. and 2.2. Further, the procedure for developing an instrument for measuring organizational attractiveness is described in Section 2.3. Namely, the Organizational Attractiveness Extraction Scale (OAES) comprising 11 dimensions and 67 items is created and piloted to test its applicability before carrying out the research. Finally, the research design is established in Section 2.4., i.e., sampling methods are reviewed, describing how higher education institutions and individuals were selected; online research method with self-completion questionnaire is justified and the sample presented reporting its representativeness and demographic characteristics.

Chapter 3 proceeds with testing a number of assumptions (normality, homoscedasticity, multicollinearity) about the data for multivariate analysis in Section 3.1. Next, the vast results of the national study of employer's attractiveness are analyzed and presented in Section 3.2 starting with the test of factor structure and internal consistency of the measurement instrument for the gathered data and followed by a number of statistical procedures (e.g., exploratory factor analysis, regression analysis, ANOVA and MANOVA) for hypotheses testing and explicit descriptive data discussion.

Eventually, Chapter 4 provides a comprehensive elaboration on research findings, interpreting and profiling clusters, producing attitudinal segments of employees, developing a typology of employment-based identities, and discussing the results of hypotheses testing. Consequently, the analytical and typological framework of employer brand development utilizing OAES methodology is synthesized from the main research results, implications and insights. Finalizing, future research directions are delineated and conclusions are presented.

LIST OF PUBLICATIONS

Sections of this doctoral dissertation have previously appeared in the following double-blind, peer reviewed publications and conference proceedings:

Scientific articles in reviewed periodical, continuous or one time scholarly journals refereed in Thomson Reuters Web of Knowledge and/or Scopus databases

1. Bendaravičienė, Rita; Krikštolaitis, Ričardas; Bakanauskienė, Irena. Generational differences and employer branding segmentation // EuroMed : the 6th annual EuroMed conference : Confronting contemporary business challenges through management innovation, Estoril, Portugal, 23rd-24th, September 2013 : conference readings book proceedings. Bradford : EuroMed Press. ISBN 9789963711161. p. 175-193. Available at: <http://6theuromed2013.webnode.pt/conference-proceedings/>. [Conference Proceedings Citation Index].

Scientific articles in reviewed periodical, continuous or one time scholarly journals refereed in international databases

1. Bendaravičienė, Rita; Krikštolaitis, Ričardas; Turauskas, Linas. Exploring employer branding to enhance distinctiveness in higher education // European scientific journal. Macedonia : European scientific institute. ISSN 1857-7881. Vol. 9, no. 19, 2013, p. 45-77. Available at: <http://www.eujournal.org/index.php/esj/article/view/1542/1549>. [Databases: IndexCopernicus; ProQuest; Gale Academic Databases].

2. Bendaravičienė, Rita; Bakanauskienė, Irena. Determinants of different groups employees' job satisfaction : Lithuania's university case // HRM&E : international scientific journal human resources management and ergonomics. Zvolen, Slovakia : Technical university in Zvolen. ISSN 1337-0871. 2012, vol. 6, no. 1, p. 6-17. Available at: <http://frcatel.fri.uniza.sk/hrme/files/2012/2012_1_01.pdf>. [Databases: Central & Eastern European Academic Source (EBSCO)].

3. Bendaravičienė, Rita. Benchmarking good practices of performance appraisal for Lithuanian universities : United Kingom case analysis // International scientific journal human resources management and ergonomics (HRM&E). Zvolen, Slovakia : Technical university in Zvolen. ISSN 1337-0871. 2010, vol. 4, no. 1, p. 1-9. Available at: <http://frcatel.fri.uniza.sk/hrme/files/2010/2010_1_01.pdf>. [Databases: Central & Eastern European Academic Source (EBSCO)].

Scientific articles in journals published in Lithuania

1. Bakanauskienė, Irena; Bendaravičienė, Rita; Krikštolaitis, Ričardas; Lydeka, Zigmas. Discovering an employer branding : identifying dimensions of employer's attractiveness in University // Organizacijų vadyba : sisteminiai tyrimai. Kaunas : Vytauto Didžiojo universiteto leidykla. ISSN 1392-1142. 59 (2011), p. 7-22. [Databases: Business Source Complete (EBSCO); Central & Eastern European Academic Source (EBSCO); ProQuest; Lituanistika; Lituanistika; VINITI; CEEOL].

2. Bendaravičienė, Rita. Developing a pattern of performance appraisal for higher education institutions in Lithuania // Jaunųjų mokslininkų darbai = Journal of Young

Scientists. Šiauliai : Šiaulių universiteto leidykla. ISSN 1648-8776. ISBN 9786094300202. 2010, Nr. 1(26), priedas [electronic source], p. 28-35. Available at: <http://archive.minfolit.lt/arch/25001/25372.pdf>. [Databases: CEEOL; IndexCopernicus; Lituanistika].

3. Bakanauskienė, Irena; Bendaravičienė, Rita; Krikštolaitis, Ričardas. Empirical evidence on employees' communication satisfaction and job satisfaction : Lithuania's university case // Organizacijų vadyba : sisteminiai tyrimai. Kaunas : Vytauto Didžiojo universiteto leidykla. ISSN 1392-1142. 54 (2010), p. 21-36. Available at: <http://archive.minfolit.lt/arch/26001/26146.pdf>. [Databases: CEEOL; Business Source Complete (EBSCO); Central & Eastern European Academic Source (EBSCO); ProQuest; Lituanistika; VINITI].

4. Bakanauskienė, Irena; Bendaravičienė, Rita; Krikštolaitis, Ričardas. Pasitenkinimo darbu tyrimas universiteto darbuotojų grupių atvejui // Vadybos mokslas ir studijos - kaimo verslų ir jų infrastruktūros plėtrai = Management theory and studies for rural business and infrastructure development: mokslo darbai / Lietuvos žemės ūkio universitetas. Kauno raj. : Akademija. ISSN 1822-6760. 2010, Vol. 22(3), p. 12-24. Available at: <http://vadyba.asu.lt/22/12.pdf>. [Databases: Business Source Complete (EBSCO); Central & Eastern European Academic Source (EBSCO); Lituanistika].

Presentations made at international science events

1. Bendaravičienė, Rita; Bakanauskienė, Irena; Krikštolaitis, Ričardas. Development of a scale to measure organizational attractiveness for employer branding in higher education // EURAM 2014 : 14th waves and winds of strategic leadership for sustainable competitiveness, 4-7 June, 2014, Valencia, Spain: conference proceedings. Valencia : Universitat de Valencia, 2014. ISBN 9788469703779. p. 1-34.

2. Bakanauskienė, Irena; Bendaravičienė, Rita; Krikštolaitis, Ričardas; Lydeka, Zigmas. The development and validation of questionnaire to measure employer's attractiveness in University // Management horizons in changing economic environment: visions and challenges [electronic source] : proceedings of the 11th International Scientific Conference, Kaunas, Lithuania, September 22-24, 2011. Kaunas : Vytauto Didžiojo universitetas. ISSN 2029-8072. 2011, no. 11, p. 7-19.

Dissertation structure and scope. Dissertation is composed of lists of figures, tables and concepts, introduction, 4 chapters comprising 16 sections and 28 subsections, conclusions, references and annexes. Dissertation has 219 pages (261 pages with annexes). Dissertation includes 38 figures, 97 tables and 14 annexes. A reference list consists of 315 sources.

1. LITERATURE REVIEW

Employer branding literature – both scholarly and practitioner – has seen many attempts to define employer branding and this variety, albeit enriching, involves terminological ambiguity and therefore calls for elaboration on this term as well as its framing to represent a perspective about employer branding in current research. This chapter also brings the discussion about theoretical underpinnings upon which employer branding research could be based. Specifically, the theory of psychological contract, the concept of brand equity, signaling theory, literature of organizational ecology and organizational attractiveness construct are reviewed and form the basis for a theoretical model of employer brand development. Then, the discussion moves into the actual employer brand development activities, touches upon generational differences and market segmentation approach, and addresses the importance of employer branding in higher education.

1.1. Defining the employer brand

Employer branding was first coined by Ambler and Barrow (1996: 187) and defined as "the package of functional, economic and psychological benefits provided by employment, and identified with the employing company". Employer branding is also defined as "a targeted, long term strategy to manage the awareness and perceptions of employees, potential employees, and related stakeholders with regards to a particular firm" (Sullivan, 2004: para 1). Furthermore, employer branding "represents organizations' efforts to communicate to internal and external audiences what makes it both desirable and different as an employer" (Jenner and Taylor, 2007: 7). As Rosethorn and Mensink (2007: 6) assert, "employer branding is not a project or a programme. Nor is it a rush to freshen up your recruitment advertising. It's a way of business life. Understanding what engages people and being clear about what an organization offers and does not, means that you are more likely to recruit and therefore retain the right people."

Still and all, the broad but non-finite range of available partially overlapping definitions of employer brand and employer branding, presented in Table 1, displays the existing confusion and profusion of terminology in the employer branding literature.

Table 1. Definitions of employer brand and employer branding

Definitions	Source
"The package of functional, economic and psychological benefits provided by employment and identified with the employing company".	Ambler and Barrow (1996: 187)
"How a business builds and packages its identity, from its origins and values, what it promises to deliver to emotionally connect employees so that they in turn deliver what the business promises to customers".	Sartain and Shuman (2006: vi)
"An employer brand is a set of attributes and qualities – often intangible – that makes an organization distinctive, promises a particular kind of employment experience, and appeals to those people who will thrive and perform to their best in its culture".	Chartered Institute of Personnel and Development (2007)
"Represents organizations' efforts to communicate to internal and external audiences what makes it both desirable and different as an employer".	Jenner and Taylor (2007: 7)
"A targeted , long-term strategy to manage the awareness and perceptions of employees, potential employees, and related stakeholders with regards to a particular firm"	Sullivan (2004: para 1)
„Employer branding is an activity where principles of marketing, in particular the "science of branding", are applied to HR activities in relation to current and potential employees".	Edwards (2010: 6)
"The employer brand establishes the identity of the firm as an employer. It encompasses the firm's values, systems, policies, and behaviors toward the objectives of attracting, motivating, and retaining the firm's current and potential employees".	The Conference Board (2001: 10)
„The term employer branding suggests differentiation of a firm's characteristics as an employer from those of its competitors, the employment brand highlights the unique aspects of the firm's employment offerings or environment". Employer branding is "the process of building identifiable and unique employer identity".	Backhaus and Tikoo (2004: 502)
Employer branding involves managing a "company's image as seen through the eyes of its associates and potential hires".	Martin and Beaumont (2003: 15)
"The image of your organization as a 'great place to work' in the mind of current employees and key stakeholders in the external market (active and passive candidates, clients, customers and other key stakeholders). The art and science of employer branding is therefore concerned with the attraction, engagement and retention initiatives targeted at enhancing your company's employer brand".	Minchington (2011: 28)
„An employer brand is the sum of all the characteristics and distinguishable features that prospective candidates and current employees perceive about an organization's employment experience"	VersantWorks (n.d.: 2)
Employer branding "represents a further extension of branding theory and research, involving efforts to communicate to existing and prospective staff that the organization is a desirable place to work, creating compelling, distinctive employee value proposition".	Jiang and Iles, (2011:98)

Employer branding has emerged as a viable conceptual framework unifying separate disciplines of human resource management and brand marketing and applying brand

management techniques and brand thinking to employment context (Ambler and Barrow, 1996). Therefore, clarifying the essence of employer branding it should be seen **from both management and marketing perspectives.**

In marketing terms *brand* is "a name, symbol, logo, design or image, or any combination of these, which is designed to identify the product or service" (Kotler et al. 2009: 425) and to represent the consumer's experience with an organization, product or services. A brand is intended to differentiate products, services, persons or places and distinguish them from those of competitors. According to Kotler et al. (2009), a brand can also be viewed as a holistic, emotional and intangible experience and be strong enough to "evoke feelings and belongings, love and affection" (p. 426).

As suggested by Aaker (2012) and summarized by Esch (2010; see Figure 1) brand can be seen from four perspectives: 1) brand as a product; 2) brand as an organization; 3) brand as a person, and 4) brand as a symbol, altogether forming *a brand identity*. *The brand as a product* encompasses product-related associations and product-related attributes providing functional and emotional benefits. Product-related attributes create a value proposition, offering unique or better quality and value features and services. Brand as a product may be associated with use occasion, typical users or linked to a country or region. *The brand as an organization* perspective is related to organizational attributes, such as quality or innovativeness that are based on organizational values, culture, programs and people. *The brand as a person* consists of a brand personality concept and customer-brand relationship construct. Eventually, *brand as a symbol* includes audio and visual images, metaphors and brand heritage. All four perspectives should be considered in order to build strong brands; however, for some of them only one perspective will be appropriate.

Brand identity, similarly as a person's identity, provides direction, purpose and meaning for the brand and includes a core and extended identity, where *core identity* embraces the central, timeless *essence of the brand;* whereas the *extended identity* "includes brand identity elements, organized into cohesive and meaningful groupings that provide texture and completeness" (Aaker, 2012: 3). Brand essence can focus on what the brand is, or a rational appeal that emphasizes functional benefits (e.g., *Xerox: "The digital document company"*), or it can focus on what the brand does to its customers, i.e., emotional benefits, such as *Microsoft: "Help people realize their potential"* (Aaker and Joachimsthaler, 2009: 48-49).
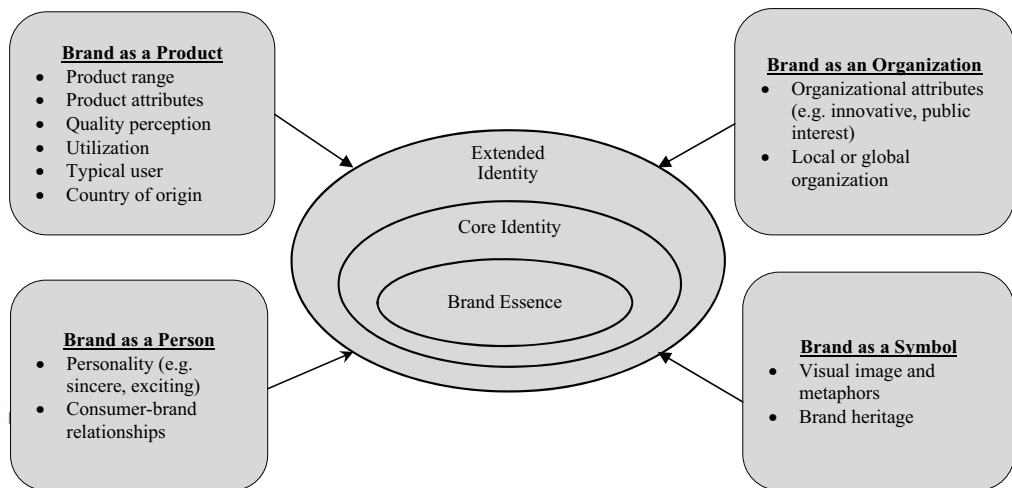
Figure 1. Brand identity model

Source: Esch (2010: 96)

A useful way to think about the brand is offered by Esch et al. (2006: 63) with the *Brand Steering Wheel* (see Figure 2) which is an instrument used to find out how the brand is seen by customers and to create a corresponding brand identity. The Brand Steering Wheel comprises the left objective part including brand competence, brand benefits, and the reason why, and the right subjective or emotional part including brand tonality and brand picture. *Brand competence* asks company "Who are we" and is concerned with organization's history and duration in the market, origin of organization, its role in the market and central brand assets. *Brand benefits* (and the reason why) distinguish between brand attributes (which properties do we have), i.e. attributes of products and services, and characteristics of the company, and *value proposition* (what do we offer) of the brand functional and psycho-social benefits. *Brand tonality* refers to emotions and feelings connected to the brand, its personality traits, brand experiences and brand relations. Finally, *brand picture* reflects all perceptible modalities – specific visual, haptic, olfactory, acoustic and gustatory impressions as an effect of brand awareness and image.

Evidently, these four pillars of brand identity can be easily associated with the mind-set of Aaker (2012), where brand competence can be linked to brand as organization, brand benefits can be linked to brand as a product, brand tonality can be related to brand as a person, and brand picture can be related to brand as a symbol.
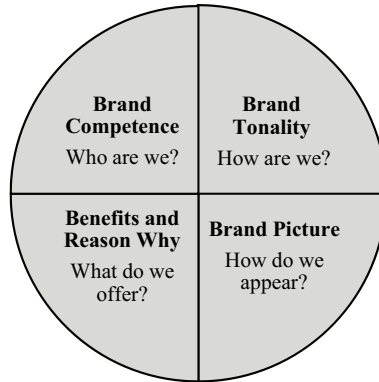
Figure 2. Brand Steering Wheel

Source: adapted from Esch, Kiss and Roth (2006: 63)

Transferring this holistic approach to the context of employer branding, it can be noticed that employer brand could be also perceived as a product, offering "functional, economic and psychological benefits provided by employment" (Ambler and Barrow, 1996: 187), as an organization, encompassing "the firm's values, systems, policies and behaviors" (The Conference Board, 2001: 10), as a symbol involving "the image of ... organization as 'great place to work'" (Minchington, 2011: 28), or as a person with intangible qualities appealing to and emotionally connecting employees (Sartain and Shuman, 2006: vi; Chartered Institute of Personnel and Development, 2007).

For the purpose of this dissertation, the focus will be on the brand as a product or, otherwise, on the brand attributes and value proposition, seeing the existing and potential employees as customers, while conceiving unique and particular employment experience as a branded product (Edwards, 2010; Moroko and Uncles, 2008). Respectively, employer branding will suggest "the differentiation of a firm's characteristics as an employer from those of its competitors" (Backhaus and Tikoo, 2004: 502) and imply that employer experience is an organization-specific employment offering determining organizational attractiveness.

As Table 2 demonstrates, similarly, extending on the assertion from marketing literature that brands play functional, rational and symbolic roles related to the performance or representation of product or service (Kotler et al., 2009), employment experience will therefore encompass the totality of tangible and intangible reward features provided to and valued by employees, such as challenging, stimulating and fulfilling work environment, competitive

27

compensation and benefits, engagement with and positive regard for an employer of choice, cumulatively constituting a compelling employment value proposition (Simmons, 2009).

Table 2. Benefits of aligning external and internal brands

External brand (customers)	Corporate brand Benefits	Internal brand (employees)
High quality goods and services	Functional	Challenging, stimulating and fulfilling work environment
Excellent value for money	Economic	Competitive compensation and benefits
Premium products, preferred supplier	Psychological	Employer of choice, engagement with the organization
Affinity with organization values and belief in its societal contribution	Ethical	Affinity with organization values from perceived congruence of its ethical dealings with employees, customers and wider society
A compelling product value proposition to current and prospective customers	Cumulative	A compelling employment value proposition to current and prospective employees

Source: Simmons (2009: 686)

Summing it up, in this dissertation employer brand is referred to as a set of particular employment experience attributes that makes an organization distinctive and attractive as an employer (to existing and potential employees). This definition could be visualized through a concentric circle model of employer brand as shown in Figure 3, where concentric circles indicate the catalytic outward process of employer brand development and suggest the coherence of its facets.

Figure 3. Concentric circle model of employer brand

With this working definition the emphasis is put on the **internal perspective**, i.e. building employer brand from the inside out: identifying and articulating the experience employees can expect – from training, performance management, compensation to rewards, promotion and communication. This primarily means answering the fundamental question for the employee "What's in it for me?" if I work there and touches every dimension of the employee's relationship with the organization (Sartain and Schuman, 2006: 43).

1.2. Theoretical foundations for employer branding
1.2.1. Theory of psychological contract

Employer branding has its roots in the *psychological contract* literature which can be traced back to the works by Argyris (1960), Levinson *et al.*, (1962) and Schein (1965). These studies evolved in the period of the US transition from manufacturing to a service economy, when most large corporations were still strongly hierarchical, but the issues of social context, leadership as a relationship, and self-actualization as motivators grew in importance. Argyris was the first to coin the term "psychological contract" and referred to it as the implicit understanding between a group of employees and their foreman, based on the idea of reciprocal exchange underlying employee-organization relationship, where employee would maintain high productivity and low grievances in return for guarantees and respect, e.g., adequate wages and job security (Coyle-Shapiro and Parzefall, 2008; Wellin, 2012). The construct of psychological contract became a useful vehicle to conceptualize the relationship between individual and organization, and explain *how that relationship can be different across organizations* and change over time. Later Levinson et al. (1962) stated that the psychological contract is a product of mutual expectations that are largely implicit and unspoken, and frequently antedate the relationship of person and company. Subsequently, Shein (1965) highlighted the importance of collective relationship, understanding and matching of expectations of employee (about salary, working hours, benefits, and so on) and organization (about employee's loyalty, confidence and doing one's best).

As a result of recession of the early 1990s, economic pressures, continuing impact of globalization and recruitment problems, when the employer could no longer offer job security, and therefore meet employee expectations, as indicated in Table 3, psychological contract shifted from an old deal to a new one, from a bureaucratic to adhocracy phase, and from the employee's offer of commitment to the employer's offer of fair pay, fair treatment, and

opportunities for training and development (Wellin, 2012; Martin *et al.*, 2005; Chartered Institute of Personnel and Development, 2005).

Table 3. Changes in the psychological contract

Old bureaucratic psychological contract 1930-1995	New adhocracy psychological contract 1995-
Organization is 'parent' to employee 'child'.	Organization and employee are both 'adult'.
Organization defines employee's worth and identity.	Employee defines their own worth and identity.
Those who stay are good and loyal, others are disloyal.	Regular flow of people in and out of the organization is healthy.
Employees who do as they are told will work until they retire.	Long-term employment is unlikely – expect and prepare for multiple employments.
Promotion is the primary route for growth.	Growth is through personal accomplishment.

Source: Kissler (1994:32)

Simultaneously, new psychological contract literature took departure with Rousseau's (1995:9) reconceptualization and redefinition of psychological contract as: "individual beliefs, shaped by the organization, regarding terms of an exchange agreement between individuals and their organization". As Table 4 shows, this definition rests on the "belief that a promise has been made and a consideration offered in exchange for it, binding the parties to some set of reciprocal obligations" (Rousseau, 1989:123) involving commitment and trust (Rousseau, 1996).

Table 4. Kinds of employee and employer commitments

Employees promise to:	Employers promise to provide:
Work hard	Pay commensurate with performance
Uphold company reputation	Opportunities for training and development
Maintain high levels of attendance and punctuality	Opportunities for promotion
Show loyalty to the organization	Recognition for innovation or new idea
Work extra hours when required	Feedback on performance
Develop new skills and update old ones	Interesting tasks
Be flexible, for example, by taking on a colleague's work	An attractive benefits package
Be courteous to clients and colleagues	Respectful treatment
Be honest	Reasonable job security
Come up with new ideas	A pleasant and safe working environment

Source: Chartered Institute of Personnel and Development (2013:3)

Rousseau (1989) distinguishes between relational and transactional contracts as being two ends of a continuum, where *relational* involves long-term or open-ended employment arrangements based on mutual trust and loyalty, while a *transactional* contract comprises a short-term or limited duration employment relationship trade primarily focused on extrinsic rewards and money for labor (see Table 5). In the medium of these, a *balanced* contract is a dynamic and open-ended employment arrangement, based on mutual contribution from both worker and firm aimed at each other's learning, development and career/performance advantages. Finally, a *transitional* contract reflects the negative consequences of organizational change and transitions.

These four dimensions can be operationalized as stability and loyalty in case of a relational contract, as external employability, internal advancement and dynamic performance in case of a balanced contract, as narrowness and short-termism in case of a transactional contract, and mistrust, uncertainty and erosion in case of a transitional contract. It is nevertheless true that measurement of the psychological contract, assessing mutual obligations/promises and their fulfillment or violation, despite the enormous variation of available instruments, remains a difficult methodological problem (Freese and Schalk, 2008).

Table 5. Nature of transactional and relational contracts

	Transactional contracts	**Relational contracts**
Employment relationship characteristics	'New deal', e.g., outsourcing, contracting, portfolio work, agency or other forms of short-term/temporary relationships	'Old deal': a promise of 'a job for life'
Employee expectations	Financial rewards Enhancement of CV Training Status Financial perks	Job security Quality workplace relationships Broad experience Interesting and challenging work
Organizational expectations	Erosions of specialist work Stress of multi-functional team working Investment of time and energy Knowledge, skills and talents as needed	Commitment Loyalty Sharing of values Quality performance
Key employee outcomes	Immediate financial gain Employment flexibility Employment choice Change and variety	Reduced workplace uncertainty Feelings of self-efficacy and empowerment Reduced workplace stress
Key organizational outcomes	High levels of flexibility: Functional, financial and numerical	Reduced need for direct supervision of workers or other intensive surveillance techniques Attitudinal commitment Social capital
Associated HR strategies	Monetary/financial rewards Remuneration based on performance or measured contribution Rewards for productivity gains Tightly specified job descriptions Professional and managerial development	Induction and socialization practices Intensive in-house training Personal development Promotion Extra-role opportunities Simple and broad job classifications Frequent assignment changes Welfare-focused policies

Source: George (2009: 16)

Importantly, a psychological contract breach has been verified as a solid predictor of quite a number of negative workplace outcomes, including reduced job satisfaction, turnover intentions, absenteeism, diminished organizational citizenship behavior, reduced trust and contribution (Zhao *et al.*, 2007; Johnson and O'Leary-Kelly, 2003; Coyle-Shapiro, 2002; Robinson, 1996). Furthermore, Coyle-Shapiro and Kessler (2002) have found that effects of fulfillment or breach of obligations are reciprocal and govern exchange relationships from both the perspective of employees as well as managers. Chartered Institute of Personnel and Development (2005) research on employee attitudes towards various aspects of their employment has suggested though that organizations are becoming more successful in delivering their promises, but still there are real issues about fairness and trust. Moreover, it was found that 'old' psychological contract is still alive and well, employees still want security, they are still prepared for loyalty and even for a 'job for life' (Chartered Institute of Personnel and Development, 2005).

A useful model of psychological contract is suggested by David Guest who has conceptualized the psychological contract as consisting of three components: trust, fairness and delivery of the deal (George, 2009). As it is shown in Figure 1, the model suggests that the psychological contract is influenced by both organizational and individual characteristics that are in turn influenced by wider societal norms and expectations. The extent to which the organization explores HR policies and practices will also influence the state of the psychological contract. Further, the psychological contract is seen to have consequences again both for the organization and individual in a way that "where the psychological contract is positive, increased employee commitment and satisfaction will have a positive impact on business performance" (Chartered Institute of Personnel and Development, 2013: 2).

| Influencing factors | Psychological contract | Outcomes |
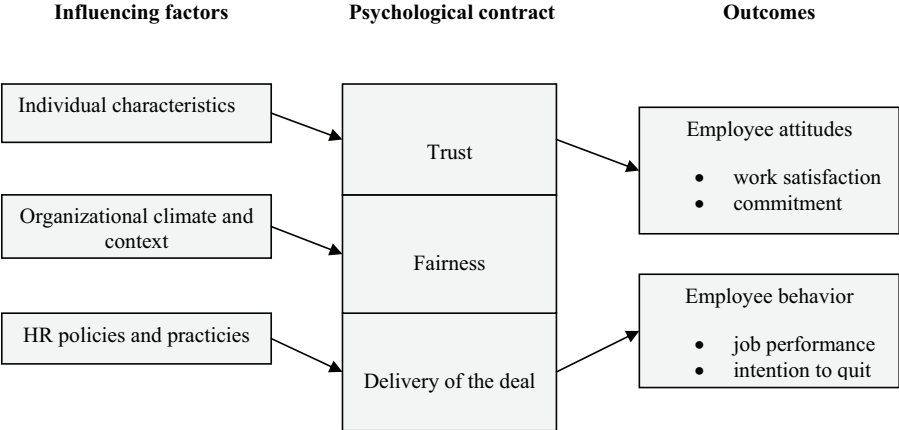
Figure 4. A model of psychological contract

Source: Guest and Conway (2004)

From a practitioner perspective, the need for "changing the deal while keeping the people" (Rousseau, 1996:50) has made the psychological contract a key element of the management toolkit – "increased recognition of the importance of people in delivering business performance, coupled with wider concerns about reputation and 'brand', have pushed the ideas on which it rests into centre-stage on the management agenda. The sheer scale and pervasiveness of change has focused on employers' ability to recruit and retain the people they need and to get – and keep – their workforce fully on board" (Chartered Institute of Personnel and Development, 2005: 2). Companies started to think about recruitment and retention strategies, compete for talented employees and *the employer of choice* has become an increasingly common term (e.g., Ahlrichs, 2000), followed by rankings of the "Best Places to Work" in the US, with the first list issued in 1998[2]. Great Place to Work Trust Index was used to evaluate trust in management, pride in work/company, and camaraderie, thus the underlying essence of the psychological contract. However, for many companies following an employer of choice strategy is narrowed down to more sophisticated recruitment and resourcing practices (Martin *et al*., 2005; Rosethorn and Mensink, 2007).

All in all, psychological contract literature provides a helpful framework for understanding of employer branding, the complexity of employment offering and processes involved in developing a successful employer brand (Edwards, 2010; Backhaus and Tikoo, 2004; Moroko and Uncles, 2008). Furthermore, employer branding can be seen as an attempt to express the psychological contract with employees and to market it internally and externally in recruiting and retaining talent (Chartered Institute of Personnel and Development, 2013). Transactional, relational and, as identified by Martin and Hetrick (2006) – ideological aspects of the psychological contract are also applicable in the context of employer branding, as an employer brand contains values that are transactional (i.e. tangible), relational (i.e. intangible), and sometimes ideological, or related to commitment to particular ideological purpose (Edwards, 2010; Parry and Tyson, 2014). Eventually, the positive outcomes of employer branding such as commitment (Ambler and Barrow, 1996) can be well-founded on the delivery of the deal between organization and employee.

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[2] http://money.cnn.com/magazines/fortune/fortune_archive/1998/01/12/236444/

1.2.2. Concept of brand equity

The concept of employer brand equity has its roots in marketing literature, brand image, and specifically in the area of brand equity, that is defined as "a set of brand assets and liabilities linked to a brand, its name and symbol, that add to or subtract from the value provided by a product or service to affirm and/or to that firm's customers" (Aaker, 1991: 15). In other words, brand equity denotes brand value (beyond its financial interpretation), brand strength or "brand memories", created and sustained in the hearts and minds of consumers and other market players, and translating into purchase and consumption behavior (Crescitelli and Figuiredo, 2009; Ambler, 1997; Wood, 2000). Accordingly, seeing jobs/positions as products in human resource management settings, *employer brand equity* is referred as the value provided by employment or the desired outcome of employer branding activities in terms of the effect of brand knowledge on potential and current employees, attracting the previous to apply and the latter to stay with the company (Backhaus and Tikoo, 2004; Jiang and Iles, 2011).

For Aaker and Joachimstaler (2000) brand equity is the intangible asset, comprising four components (see Figure 5):

(1) Brand loyalty – the extent to which people are loyal to a brand.

(2) Brand awareness – the extent to which a brand is known among the public and identified by consumers under different conditions.

(3) Perceived quality – the extent to which a brand is considered to provide good quality products.

(4) Brand associations – associations triggered by a brand.
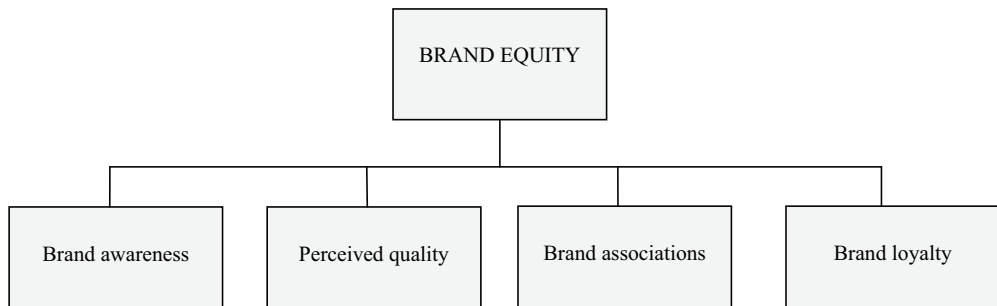
Figure 5. Brand equity model

Source: Aaker and Joachimstaler (2000: 31)

The same model sometimes appeared as a five-dimensional construct with the fifth dimension defined as (5) other proprietary assets, including patents, intellectual property rights and etc. (Aaker, 1991; Aaker and Biel, 1993; Aaker, 1996). Further, Brand Equity Ten (see Table 6) was proposed by Aaker (1996) as a five-dimensional set of ten brand equity measures that could be applied across markets and products, though it was found to be inadequate in explaining the brand equity and additional factors could be established (Gill and Dawra, 2010).

Table 6. Brand Equity Ten

Loyalty Measures	Price Premium
	Satisfaction/Loyalty
Perceived Quality/Leadership Measures	Perceived Quality
	Leadership
Associations/Differentiation Measures	Perceived Value
	Brand Personality
	Organizational Associations
Awareness Measures	Brand Awareness
Market Behavior Measures	Market Share
	Price and Distribution.

Source: Aaker (1996: 105)

Minchington (2011) adapted Brand equity model from marketing and introduced it to employer branding context as a Model of Employer Brand Equity (see Figure 6). Similarly, he extended the definition of brand equity dimensions and described them as follows:

(1) Employer brand loyalty – a person's commitment to join or remain employed with an organization, as a result of positive associations with the organization.

(2) Employer brand awareness – the level of recognition people have about an organization's positive and negative employment attributes.

(3) Perceived employment experience (quality) – the perceptions current and prospective employees have about working for an organization.

(4) Employer brand associations – thoughts and ideas an organization's name evokes in the minds of current and future employees.
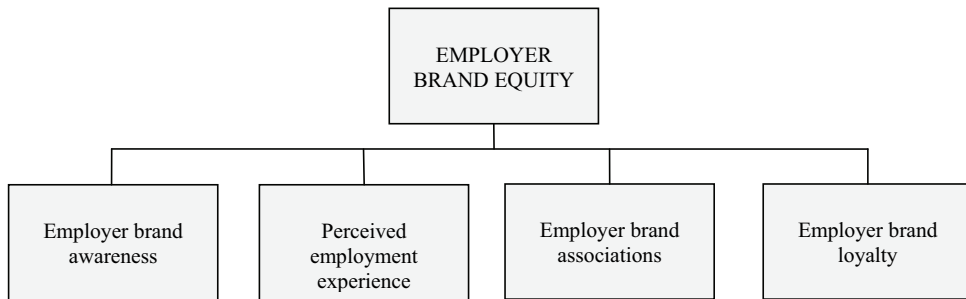
Figure 6. Model of Employer Brand Equity

Source: Minchington (2011)

Additional insights into the conceptual framework of brand equity are provided by Keller's (1993, 2001) study of customer-based brand equity, defined by the author as "a differential effect of brand knowledge on consumer response to the marketing of the brand" (1993: 8). Three key elements of this definition are: (1) *differential effect*, or the differences in consumer response to the marketing of a branded and non-branded product or service; (2) *brand knowledge*, defined in terms of *brand awareness* and *brand image*, that respectively are conceptualized through *brand recall* and *brand recognition* performance, as well as *brand associations* held in consumer memory (see Figure 7); and (3) *consumer response* in terms of "consumer perceptions, preferences, and behavior arising from marketing mix activity" (Ibid.).
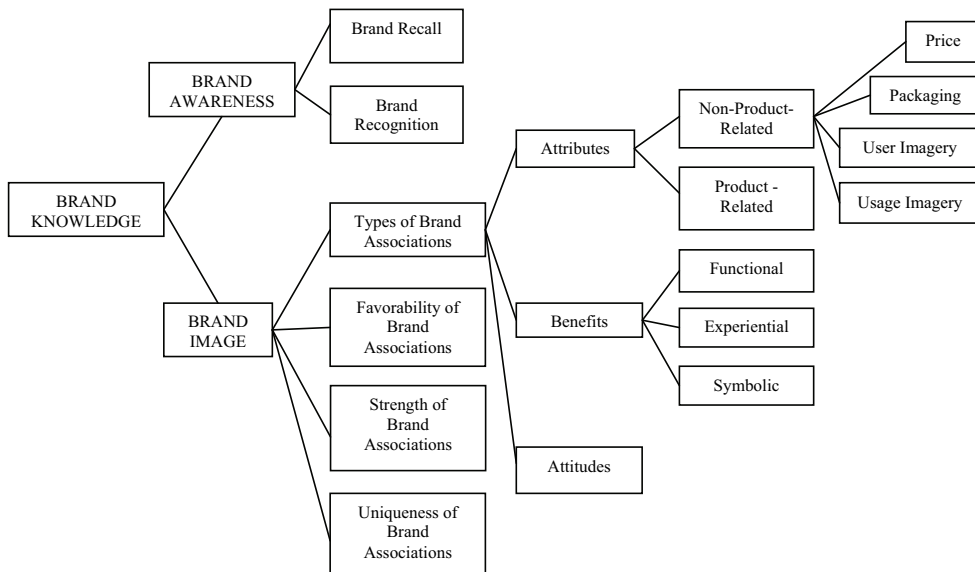
Figure 7. Dimension of brand knowledge

Source: Keller (1993: 7)

Keller (2001) presented a model of brand building called the customer-based brand equity (CBBE) model, which lays out four steps for building a strong brand:

(1) Establishing the proper brand identity and creating brand salience with customers by answering the customers' question "Who are you?"

(2) Creating an appropriate brand meaning (performance and imagery) by answering the customers' question "What are you?"

(3) Eliciting the right brand responses (judgments and feelings) from customers on what they think or feel about you.

(4) Forging intense, active loyalty relationship between customers and the brand (consumer-brand resonance).

In another major study Erdem and Swait (1998) employed information economics, namely signalling perspective to the brand equity phenomenon and, on contrary to the previous research where loyalty (Aaker, 1996), or brand resonance (Keller, 2001) played the central role, found out that *credibility* and *consistency* are the key elements of brand equity management (see Figure 8). These findings are in line with Ambler's (1997) assertions that trust is a part of brand-consumer relationship and therefore part of brand equity. This marketing discourse, focusing on the impact of product/service or corporate brands on consumers' attitudes and their effects for brand equity, was followed by Wilden, Gudergan and Lings (2010) in their analysis on staff recruitment. Authors proposed a modified (from Erdem and Swait, 1998) and in line with their findings revised conceptual framework for employee-based brand equity, and concluded that attractiveness of employers and, consequently, its employee-based brand equity „is influenced by employer brand clarity, consistency, brand investments, and the credibility of brand signals" (Wilden *et al*., 2010: 69). Furthermore, the framework suggests that for an employer brand signal to be effective, the company has to be in the certain industry which potential employees want to work in, and accordingly differentiate and focus their recruitment investments.
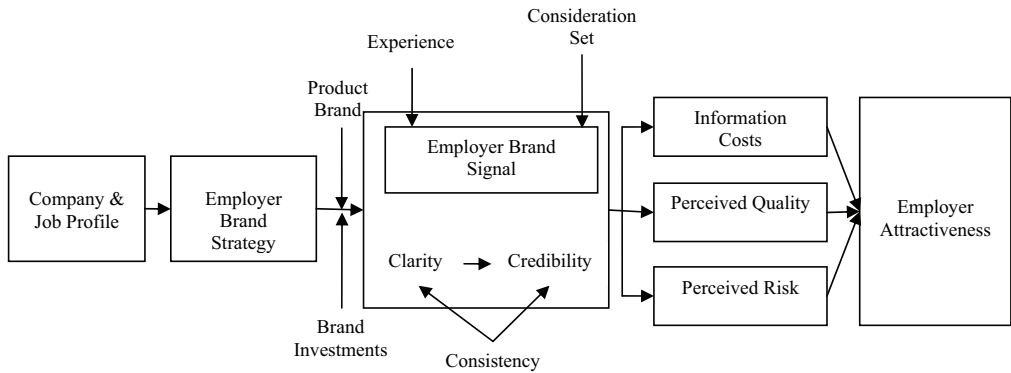
Figure 8. Conceptual framework of employee-based brand equity

Source: Wilden et al. (2010: 61)

Elsewhere, Jiang and Iles (2011) investigated the relationship between employee-based brand equity and organizational attractiveness. Drawing on Ambler and Barrow's (1996) five-factor scale for the measurement of employer attractiveness and earlier research on brand equity in marketing (Aaker, 1991) and human resource (Wilden et al., 2010) literature, the authors propose five-dimensional internal and external employee-based brand equity (economic value, social value, development value, interest value and brand trust) and argue it to be an antecedent, respectively, of internal and external organizational attractiveness (see Figure 9).
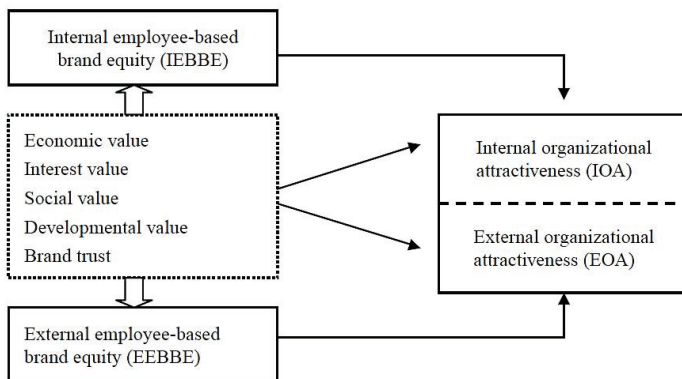
Figure 9. Employee-based brand equity

Source: Jiang and Iles (2011:106)

In summary, research on human resource management has admitted the value of applying marketing perspective to the analysis of employment market and explanation of employee-based

brand equity (e.g., Jiang and Iles, 2011; Backhaus and Tikoo, 2004). It has been found that "in terms of employer branding, brand equity is a strategic asset that can be leveraged on the basis of competitive advantage of the firm's ability to attract, engage and retain talent" (Minchington, 2011:14). It has been also demonstrated that high employee-based brand equity makes organization more attractive to the existing and potential employees (Jiang and Iles, 2011). Moreover, as consistent with consumer branding (Erdem and Swait, 1998; Aaker and Joachimstaler, 2000; Keller, 1993), the suggested perceived characteristics of successful employer brands are attractiveness, underpinned by *awareness*, *differentiation*, and *relevance*; *accuracy*, stemming from *consistency* between employer brand and employment experience (Moroko and Uncles, 2008); *clarity,* and *credibility* (Wilden *et al.*, 2010). Finally, it has conclusively been shown that enhancing company's attractiveness of a prospective employer and its employee-based brand equity it is essential to invest resources in employment-related branding strategies (Wilden *et al.*, 2010).

1.2.3. Signaling theory

The signaling theory, implicitly defined in Spence's (1973) seminal work on labor markets and explained as a hiring investment decision under uncertainty interpreting applicant signals, holds a prominent position in a variety of management literature sources, including human resources management (Connelly *et al.*, 2011), and therefore provides additional foundation to explore the notion of 'employer branding' (Berthon *et al.*, 2005). Specifically, the signaling theory has been applied in recruitment context and argued to have the potential "to explain the role of a number of variables in attraction, as virtually any characteristic observable to individuals can serve as a signal of actual organizational characteristics and can shape perceived organizational characteristics" (Ehrhart and Ziegert, 2005: 904).

Rynes et al. (1980) found that organizational recruiting activities, such as processes of applicant evaluation or the manner in which applicants are processed, do have an impact on applicant attitudes and behaviors towards organization. Moreover, in her influential work Rynes (1989) suggested that in the absence of perfect information, applicants interpret recruitment characteristics and behaviors as signals of unknown positive or negative organizational attributes, making organizations more or less attractive to them. Therefore, Ryan and Ployhart (2000) encouraged deeper research examining applicants' perceptions of a particular characteristic of a recruitment process and understanding the premises of their more or less favorable impressions of a selection process, thus increasing the ability to influence those perceptions and related applicant attitudes.

The signaling theory was also found to be a useful theoretical approach in examining the phenomenon of using company e-recruiting web sites to attract qualified job applicants (Maurer and Cook, 2011;): website design, usability and attractiveness (Braddy *et al.*, 2003; Braddy *et al.*, 2006; Thompson *et al.*, 2008; Braddy *et al.*, 2008) as well as information about organizational policies, specific references to culture dimensions, other content, especially job opening information (Braddy *et al.*, 2006; Allen, *et al.*, 2013) were reported as related to applicants' impressions of organizational culture, attractiveness and its image as employer. Highhouse, Thornbury and Little (2007) contended that "prospective job seekers draw inferences about instrumental and symbolic features from the signals in the marketplace (i.e., via advertising, word-of-mouth, corporate rankings, experience as consumers, etc.)", but "it is inferences about the symbolic features of organizations that allow the job seeker to evaluate the degree to which an organization can serve personal needs for self-expression" (p. 136).
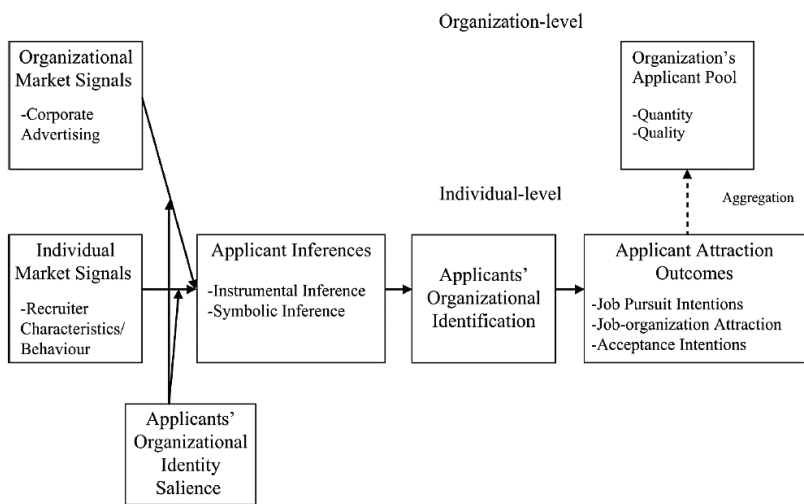
Figure 10. A multi-level model of market signaling

Source: Celani and Singh (2011: 224)

A multi-level model of the association between market signals, instrumental and symbolic inferences, applicant organizational identification, and applicant attraction outcomes in a recruitment contexts, developed by Celani and Singh (2011), suggests that the extent to which applicants believe that membership in the recruiting organization is relevant to their social identity will influence their positive inferences about organization and, in turn, will result in organizational identification and applicant attraction (see Figure 10).

Consequently, the signaling theory provides insight on how companies could gain competitive advantage in recruiting best candidates, through increasing the amount and quality of information available to applicants and improving recruitment practices.

1.2.4. Organizational ecology theory

Organizational ecology introduced by Hannan and Freeman in 1977 by their theoretical inquiry into "why are there so many kinds of organizations?" (p. 956) is "an approach to the macrosociology of organizations that builds on general ecological and evolutionary models of change in populations and communities of organizations" (Hannan and Freeman, 1993: 2). In other words, organizational ecology studies focus on organizational diversity and dynamics, trying to understand how environmental conditions affect the birth, change and mortality of organizations and organizational forms through variation, selection and retention.

Although literature demonstrates that models of employment relationship play a substantial role in contemporary theories of organizations (Baron et al., 2001), yet "organizational ecology has underappreciated the importance of premises governing employment relations as one core feature of organizational identity" (Hannan et al, 2006: 779). Hence, there are strong empirical grounds for extending organizational ecology to the study of human resource management (Welbourne and Andrews, 1996; Baron, 2004) and employer branding. Specifically, the identity-based approach of organizational ecology could be adopted (Hsu and Hannan, 2005; Hannan, 2005; Hannan *et al.*, 2006; Polos et al, 2002; Baron, 2004; Carroll and Khessina, 2005) with a particular focus on employment relations (Baron *et al.*, 2001; Sørensen, 2004; Sørensen and Sorenson, 2007), concept and construction of authenticity (Baron, 2004; Carroll and Wheaton, 2009) and organizational diversity (Nielsen and Hannan, 1977; Huisman, 1998; Birnbaum, 1983; Cameron, 1984; Vught, 2008; Reichert, 2009; Teichler, 2010).

Namely, the following insights and implications facilitating better understanding of employer branding and the development of employer value proposition derive from the studies above:

1) *Organizations in the same industry, covering the same range of occupations and conforming to the same labor law, nevertheless are not homogenous in their organizational designs and blueprints for the employment relation (Hannan, 2005)*. Perhaps the most comprehensive illustration of this phenomenon is provided by the Stanford Project on Emerging Companies (SPEC), launched in 1994 to explore the evolution of employment practices, organizational designs and business strategies of young high-technology companies in California's Silicon Valley (Baron et al., 2001). The study elaborated on three main dimensions

of employment relations – attachment, coordination/control and selection. Blueprint analysis based on the above dimensions resulted in five basic model types for employment relations, namely *Engineering, Star*, *Commitment, Bureaucracy* and *Autocracy,* eventually having different effects on survival and turnover rates (Baron et al., 2001; Hannan, 2005; Hannan et al., 2006).

Organizations obviously differ in the complex array of employment experience features – economic and financial reward packages offered, fulfillment of socio-emotional needs, other tangible and intangible benefits provided to and valued by employees (Edwards, 2010). Accordingly, as Martin (2007: 21) states, "HR managers need to have a good theory or model of how employer branding works in their own organizations. What works in one organization or one industry sector may be quite different from what works in another. Context and the history of an organization matters in telling a novel, compelling, credible and sustainable story about an employer brand image".

2) Although there is no "one best way" to manage employees (Bartram, 2011), nonetheless an organization's survival prospects are enhanced by coherent employment practices fostering reliability and accountability (Hannan et al., 2006; Baron et al., 2001). In other words, "selection favors organizational forms characterized by relatively inert procedures, structures and strategies", those operating "on the basis of routines that guide their functioning", complying with stable rules and procedures and showing high reproducibility (Witteloostuijn et al., 2003: 266). For example, inertia is increased through investments in personnel, encouragement and reward of "collective actions where people work together toward a common goal" (Welbourne and Andrews, 1996: 896), and putting more value on employees. Ecological theories of organizational inertia view organizations as having an identity-based 'core' which constitutes the most difficult organizational elements to alter, namely "mission, form of authority, core technology (including employee skills), and marketing strategy (ways of relating to external constituencies)" (Hannan et al., 2006: 756). When it comes to an organization's identity in the labor market, it is constructed on particular cultural blueprints, employment systems, organizational culture and insiders' expectations about employment relationship (Baron, 2004; Hannan et al., 2006; Hsu and Hannan, 2005). Organizational identity, or its cultural codes and 'core' features, provides relevant audience members with default assumptions, expectations and beliefs about behavior and properties of the respective organization (Hsu and Hannan, 2005; Pólos et al., 2002). Violation of these expectations results in social disapproval, loss of commitment, punishment by devaluation and heightened risk of failure (Hannan, 2005; Carroll and Khessina, 2005). For example, one could imagine "how profound and immediate the effects would be within higher education if Harvard University

were to announce suddenly that it is no longer offering tenure to its faculty members" (Baron, 2004: 11).

The message for employer branding there is that what promised to the existing or potential employees should be delivered. Moreover, leading employer brands are not those that shine, but those that adequately and honestly reflect the internal reality of employment experience in a given organization (Chartered Institute of Personnel and Development, 2008). Successful employer branding messages are focused on certainties and known for sustained and enduring reliability.

3) Strong labor market identities should be sharp/resonant, focused, and authentic (Baron, 2004). Organizational *sharpness and resonance* denote differentiation in cluster analytic terms and distinctiveness along social, ethnic, religious, economic, political or cultural lines. Thinking of the second dimension of employment-based identity, namely *focus*, it increases or decreases "in terms of the sorts of people who can fit" the organization (Baron, 2004: 16). Illustrating this, for some years Hastings College of Law in San Francisco has been hiring a large part of their teaching faculty from retired attorneys and judges, manifesting a highly focused labor market identity. *Authenticity* as an element of organizational identity "carries with it an almost sacred, cultural type of interpretation that conveys value" (Carroll and Wheaton, 2009: 256), "the symbolic playing out of the choices someone inside the organization made with the respect to moral values" (Ibid, 269) and an "explicit articulation and public display of the "philosophy" behind the enterprise" (Ibid, 276). Authenticity in the labor market is relatively low in terms of "how the organization attracts, secures, managers and treats its people is viewed simply as a means to an end" (Baron, 2004: 17). Authenticity provides greater benefits when it is "organizationally constructed – that is, when the social construction is visibly or centrally supported by, and embodied in the structure and operations of a formal organization … Organizationally constructed images of authenticity gain more attention, gather stronger appeal, convey better credibility and persist longer than those which are not effectively organizationally embedded" (Carroll and Wheaton, 2009: 257).

Reverting back to employer branding and particularly to the development of employer value proposition, the key implication is that it should not be created but uncovered. Every organization has its employer brand, irrespective to whether it is actively engaged in building it, or not. The key issue is if the organization is conscious of "who it is" and proactive in communicating the unique benefits it offers (Mosley, 2009), or if it is of an identity 'X' blindly drifting in the 'red oceans' of a labor market. This could hardly help in attracting "right" and talented people, for as S. Winter draws a parallel to the lottery where "you can't win if you don't play" (In Murmann et al., 2003: 35). However, even if an organization has researched its

organizational identity and revealed distinctive features of organizational attractiveness, it still has a long way to go to creating a "message platform that is authentic, compelling, differentiated, and that will be internally embraced, appropriately received in the external market and consistently delivered upon by the organization" (Minchington and Estis, 2009, para. 16). The issue is that an employer brand often suffers from a lack of organizational construction – usually it is too narrowly focused merely on recruitment or resourcing (Rosethorn and Mensink, 2007), too general, too uniform, lost in catchphrases, perfect pictures and "not deeply rooted in how the organization feels" (Mosley, 2009: 9).

4) Organizations dependent on the same scarce inputs, such as skills, intelligence and efforts of human resources are facing recruitment-based competition in the labor market (Sørensen, 2004). In this light "existence of diverse and distinctive labor market identities is likely to facilitate screening and sorting, thereby improving the match between people and employment situations" (Baron, 2004: 19). Variations across organizations in their human resource practices, organizational cultures and kinds of employees they are eager to refer to horizontal differentiation that increases opportunities for good job matches and affects positive employment outcome (Fujiwara-Greve and Greve, 2000; Greve and Fujiwara-Greve, 2003; Sørensen and Sorenson, 2007).

From the employer branding perspective, distinctive labor market identities are predictors of organizational attractiveness for: 1) a priori inform potential candidates about the employment experience and potential benefits they could expect in a specific organization (Berthon et al., 2005), i.e. perceived economic value, interest value, social value, development value and application value (Jiang and Iles, 2011); 2) signal about symbolic-instrumental attributes an organization possesses (Lievens and Highouse, 2003; Lievens et al., 2007); 3) drive person-organization/person-job fit perceptions (Kroustalis and Meade, 2007; Schreurs et al., 2009; Chapman et al., 2005); and, 4) create positive attitudes towards the organization as a desirable place to work (Jiang and Iles, 2011). As Rosethorn and Mensink (2007) argue "understanding what engages people and being clear about what an organization offers and does not, means that you are more likely to recruit and therefore retain the right people." (p. 6).

1.2.5. Organizational attractiveness construct

Organizational attractiveness as an employer denotes "the envisioned benefits that a potential employee sees in working for a specific organization" (Berthon *et al*, 2005: 156), or the degree to which potential and current employees perceive organizations as good places to work (Jiang and Iles, 2011). Organizational attractiveness is also referred to as "the power that

draws applicants' attention to focus on an employer brand and encourages existing employees to stay" (Ibid, p. 101).

Ehrhart and Ziegert (2005: 902) have defined organizational attraction as "getting candidates to view the organization as a positive place to work" and examined it from applicant's perspective. The authors present a theoretical framework of applicant attraction, encompassing three metatheories as summarized in Table 7, i.e. the *environment processing metatheory* which is comprised of the image theory, signalling theory, expectancy theory, etc.; the *interactionist processing metatheory*, based on the idea of *fit* between individual and environmental characteristics (person-job abbreviated as P-J and person-organization abbreviated as P-O fit); and the *self-processing metatheory*, which involves relation between attitudes and views of the self and attraction to organization (e.g., the social learning theory, consistency theory, social identity theory).

Table 7. Organizational attraction metatheories

Metatheories	Theoretical mechanism	Theories	Proposition
Environment processing metatheory	Relationship between the actual environment and the perceived environment: *individuals may hold different perceptions of the same actual environment based on which environment characteristics they attend to and how they process information about the environment.*	Signaling theory (Spence, 1973)	In the absence of complete information, applicants interpret the information they have about an organization as signals of organizational characteristics.
		Image theory (Beach, 1990)	Individuals decide among job and organizational attractiveness by considering how those alternatives fit their image of what is desired.
		Heuristic-systematic model (Eagly and Chaiken, 1984)	Type of cognitive processing that an individual implements depends on characteristics of the message being processed.
	Relationship between the perceived environment and attraction: *the way in which the perceived environment characteristics are processed and why individuals' perceptions of environment influence their attraction.*	Exposure-attitude hypothesis (Zajonc 1968)	Repeated exposure to an object yields increasingly positive evaluations of it.
		Expectancy theory (Vroom, 1964)	Individuals are attracted to jobs or organizations that they perceive to offer valued characteristics.
		Generalizable decision processing model (Soelberg, 1967)	Individuals choose their most preferred job or organization on the basis of their perceptions of the environment characteristics that are important to them (e.g., location, culture, firm size).

Table 7 continued

Metatheories	Theoretical mechanism	Theories	Proposition
Interactionist processing metatheory	Objective fit: *the extent to which actual characteristics of the environment interact with individual differences to predict the objective fit between a person and an organization.*	Need-press theory (Murray, 1938)	Environments have characteristics that either facilitate or inhibit the satisfaction of individual's needs: importance of the match between individual's needs and the actual environment's "positive press", or ability to satisfy those needs.
		Interactional psychology (Lewin, 1935)	Behavior is a function of the interaction between person and situational characteristics: importance of the similarity between person and actual environment characteristics in predicting attraction.
	Subjective fit: *pertain to the process by which individuals determine whether they fit with a particular work environment.*	Theory of work adjustment (Dawis and Lofquist, 1984)	Individuals desire "correspondence" or congruence with their work environment - work adjustment that is related to positive work outcomes (e.g., tenure and satisfaction).
		Attraction-selection-attrition theory (Schneider, 1987)	People are differentially attracted to jobs and/or organizations with certain characteristics that they perceive match their own.
Self-processing metatheory	Influences on the relationship between fit and attraction: *individuals' perceptions about themselves and their own attributes contribute by influencing the relationship between subjective fit and attraction.*	Social learning theory (Bandura, 1977)	People will be attracted to jobs and organizations based on the extent to which they believe they can succeed: individuals with higher self-efficacy are more likely to seek out environments with which they fit, based on their beliefs that they will be successful.
		Consistency theory (Korman, 1966)	Individuals with high self-esteem use cognitions about the self to guide choices, and they prefer work that corresponds to their self-image.
		Social identity theory (Tajfel and Turner, 1986)	Self-concept is influenced by the evaluation of the group(s) with whom individual identifies: when organization is viewed positively, subjective fit should have a stronger influence on attraction.

Source: developed from Ehrhart and Ziegert (2005)

Research on organizational choice and the premises of organizational attractiveness as an employer basically focus on instrumental (job/organization characteristics) and symbolic (trait-based inferences about organization) attributes (e.g., Lievens and Highouse, 2003; Lievens et al., 2005; Lievens et al., 2007, etc.) and interactionist perspective, which refers to organizational

attractiveness as a fit between person characteristics and characteristics of the job/organization (e.g., Lievens et al., 2001; Kroustalis and Meade, 2007; Schreurs et al., 2009; Chapman et al., 2005, etc.).

This stream is based on the concept of corporate personality, where organizations are regarded like people and attributed human characteristics and different personality traits (Berens and Riel, 2004). For example, in her major study Aaker (1997) identified five brand personality dimensions – sincerity, excitement, competence, sophistication and ruggedness, and offered a framework for symbolic use of brands. Another important research by Davies *et al.* (2001) arrived at *Corporate Personality Scale*, encompassing seven dimensions of corporate personality: agreeableness, enterprise, competence, chic, ruthlessness, machismo, and informality.

Further, Lievens and Highouse (2003) developed the instrumental-symbolic framework of organizational attraction and five personality trait-based inferences, i.e. *Sincerity*, *Innovativeness*, *Competence*, *Prestige* and *Robustness* emerged as significant predictors of organizational attractiveness as an employer in their study. Further research in the field (Lievens et al., 2005; Lievens et al., 2007) purified the scale of symbolic attributes to five broad factors which are *Sincerity*, *Excitement*, *Competence*, *Prestige* and *Ruggedness*. Later this scale was applied examining the moderating influence of the Big Five personality factors (i.e. *Extraversion*, *Agreeableness*, *Conscientiousness*, *Neuroticism* and *Openness to Experience*) in the relationship between symbolic attributes and organizational attractiveness (Schreurs et al., 2009). Meanwhile Slaughter et al. (2004) developed their scale of *organization personality perceptions* (OPPS) and also suggested that such personality trait inferences as *Boy Scout* (recently changed to *Trustworthiness* by Kausel and Slaughter, 2011); *Innovativeness*, *Dominance*, *Thrift* and *Style* are related to organizational attraction and explain differences among organizations.

Instrumental attributes signal the applicants about objective, concrete and factual characteristics that a job/organization either has or does not have and, accordingly, determine company's perceived attractiveness as an employer (Lievens and Highhouse, 2003). Instrumental attributes, in order to influence initial assessments of organizational attractiveness, should be visible, salient, manifesting organizational culture and values and, finally, differ across organizations (Lievens et al., 2001). Research on instrumental attributes found empirical evidence that medium-sized and large-sized, multinational and decentralized organizations were more attractive to potential applicants (Lievens et al., 2001); it was also revealed that applicants' attraction to the Belgian Army was mostly related to such instrumental dimensions as team/sports activities, structure and job security (Lievens et al., 2007). The study by Nadler et

al. (2010) suggested that work schedule flexibility positively affects potential employees' perceptions of organizational attractiveness.

It should be noted that personality trait-based inferences have predominantly showed out to be more important organization's attractiveness factor and differentiator than specific job/organization characteristics (e.g., Lievens and Highhouse, 2003; Martin, 2007). That supports evidence from marketing literature, where emotional appeal is given preference over functional benefits in the marketplace with similar products or services.

Organization attractiveness as a recruitment outcome variable has been also explored by Chapman et al. (2005) in their meta-analysis of 667 coefficients from 71 studies on recruitment research examining relationships between recruitment predictors and applicant attraction outcomes. The authors reported that perceptions of person-organization fit and job/organization characteristics were the strongest predictors of various recruitment outcomes (Ployhart, 2006). Interestingly, on contrary to previous research, Kausel and Slaughter's (2011) study from complementarity perspective revealed that organizations should not trust similarity in personality as an attraction strategy of most preferred candidates. For example, such organizational trait as Trustworthiness does not positively correlate with high scores on individual's characteristic Trust as a mediator of organizational attractiveness.

As Table 8 illustrates, organization's attractiveness as an employer was repeatedly measured in employer branding context and concept (e.g., Lievens, 2007; Lievens and Highhouse, 2003; Lievens et al., 2005, etc.). For example, Berthon *et al.* (2005) have extended three-dimensional employer brand structure proposed by Ambler and Barrow (1996) to a five-factor scale for measurement of employer attractiveness (EmpAt) from potential applicants' perspective, comprising Interest value, Social value, Economic value, Development value and Application value. Although the scale demonstrated appropriate reliability (0.96), it was not widely used (Sivertzen et al, 2013), but contributed more as a theoretical model of dimensionality of employer's attractiveness.

Table 8. Measurement of employer brand and organizational attractiveness

Research focus/Authors	Dimensions/Variables	Items
Employer attractiveness: Berthon et al (2005: 159, 162); *Employer attractiveness and social media*:	Interest value	Exciting work environment, Novel work practices, Enhancing employee's creativity to produce high quality, Innovative products and services
	Social value	Fun, happy working environment, Good collegial relationships, Team atmosphere
	Economic value	Above-average salary, Compensation package, Job

Table 8 continued

Research focus/Authors	Dimensions/Variables	Items
Sivertzen et al (2013)		security, Promotional opportunities
	Development value	Recognition, Self-worth and confidence, Career-enhancing experience, Spring-board to future employment
	Application value	Opportunity for the employee to apply what they have learned and to teach others, Customer orientated and humanitarian environment
The employer brand mix: Barrow and Mosley (2011: 150)	Wider organizational context and policy	External reputation, Internal communication, Senior leadership, Values and corporate social responsibility, Internal measurement systems, Service support
	Local context and practice	Recruitment and induction, Team management, Performance appraisal, Learning and development, Reward and recognition, Working environment
Measuring attraction to organizations: Highhouse et al., 2003)	General attractiveness	Five items, e.g., "For me, this company would be a good place to work"
	Intentions to pursue	Five items, e.g., "I would accept a job offer from this company"
	Prestige	Five items, e.g., "Employees are probably proud to say they work at this company"
Organizational attractiveness for prospective applicants: Lievens et al. (2001)	Organizational characteristics	Size, Level of internationalization, Pay mix, Level of centralization
	Attractiveness of organization	Six items, e.g., "I would very much like to work for this organization"
The relation of instrumental and symbolic attributes to organizational attractiveness as an employer: Lievens and Highhouse (2003)	Instrumental attributes	Pay, Advancement, Job security, Task demands, Location, Working with customers, Benefits, Flexible working hours
	Symbolic attributes	Sincerity, Innovativeness, Competence, Prestige, Robustness
	Attractiveness as an employer	Three items, e.g., "This bank is attractive to me as a place for employment"
Employer brand as a package of instrumental and symbolic beliefs: (Lievens, 2007); *Organizational attractiveness and employer knowledge*: Lievens et al. (2005); *Symbolic attributes and organizational attractiveness*: Schreurs et al., (2009)	Instrumental attributes	Social/team activities, Physical activities, Structure, Advancement, Travel opportunities, Pay and benefits, Job security, Educational opportunities, Task diversity
	Symbolic attributes	Sincerity, Cheerfulness, Excitement, Competence, Prestige, Ruggedness
	Attractiveness as an employer	Three items, e.g., "For me, the Army would be a good place to work"

Table 8 continued

Research focus/Authors	Dimensions/Variables	Items
Model of employee-based brand equity and organizational attractiveness: Jiang and Iles (2011)	Economic value	People's evaluation of their economic needs
	Developmental value	People's demands for professional development
	Social value	People's social needs, such as sense of belonging
	Interest value	People's need for self-realization and interesting challenges
	Brand trust	Employer's perceived honesty, credibility and ability to satisfy applicant/employee demands
Managing and measuring employer brand: Ambler and Barrow (1996)	Functional benefits	Developmental and/or useful activities
	Economic benefits	Material or monetary rewards
	Psychological benefits	Feelings such as belonging, direction and purpose
Distinctive employer brand: Edwards (2010)	Transactional	Pay for performance
	Relational	Socio-emotional/cultural features
	Ideological	Ideological purpose in accordance with a particular set of values and principles
	Symbolic personality characteristics	E.g., "doing good"
	Instrumental personality characteristics	Pay, benefits and other reward based features of the employment experience
	Organizational identity	Central enduring distinctive characteristics
	Existing employment reputation	E.g., a particularly good environmentally sustainable reputation
Organizational attractiveness as an employer: Turban (2001)	Organizational attributes	Company image, Compensation and job security, Challenging work
	Company image	Concern for the environment, High ethical standards, Overall public image, Involved in the community, Product quality
	Compensation and job security	Benefits, Compensation, Job security, Financially sound, Treatment of employees, Opportunities for advancement
	Challenging work	Opportunities to learn and develop on the job, Challenging work assignments, Training and development programs, Competence of personnel, Opportunities to use latest technologies
Narrow personality traits and organizational attractiveness: Kausel and Slaughter (2011)	Symbolic attributes	Trustworthiness: organizational regarded as friendly, personal, attentive to people and honest
		Dominance: organization is perceived as being big, successful, popular, active, busy
		Innovativeness: organization being creative, exciting, interesting, unique, original
	Instrumental factors	Power, Working conditions, Flexible working hours, Geographic location, Job security

Table 8 continued

Research focus/Authors	Dimensions/Variables	Items
Person-organization fit effects on organizational attraction: Yu (2014)	Organizational values/suppliers	Cable and Edwards (2004) Work values survey: Relationships, Prestige, Security, Autonomy
	Expected need fulfillment	Value expression, Communication, Predictability, Trust, Reputation
	Organizational attraction	Highhouse et al, 2003 (5-item scale)
Complementary and supplementary fit: Cable and Edwards (2004)	Organizational values/suppliers	Altruism, Relationships, Pay, Security, Authority, Prestige, Variety, Autonomy
Employer branding influence on managers: Davies (2008)	Ruthlessness	Egotism, Dominance (negatively valenced)
	Agreeableness	Warmth, Empathy, Integrity
	Enterprise	Modernity, Adventure, Boldness
	Competence	Conscientiousness, Drive, Technocracy
	Chic	Elegance, Prestige, Snobbery
Employer attractiveness dimensions in the employer branding concept: Tüzüner and Yüksel (2009)	Integrated employer branding	25 variables, e.g., Possibilities for advancement/promotion, Tasks that mean bigger challenges, Good reference for future career, Innovative solutions, Strong clear company culture, Good ethic, Good leadership/management, etc.
	Competitiveness	Competitive working environment, Competitive compensation package, Possibilities to work from home
Employer brand experience framework: Mosley (2007)	Employee 'touch-points'	Recruitment, Orientation, Communication, Shared services, Performance and development, Measurement, Reward and Recognition
	Everyday experience	Values, Management competences, Leadership competences
Person-organization fit and attraction to organization: Kroustalis and Meade (2007)	Organization's culture	Innovation, Team orientation, Diversity
	Organizational attraction	Five-items measure (Highhouse et al., 2003)
Perceptions of organizational attractiveness: Nadler et al (2010)	Flextime	"The company's job offer includes a flextime plan"
	Organizational attractiveness	Five-item measure, e.g., "I would find this company to be an attractive place to work"

According to Jiang and Iles (2011), organizational attractiveness is a two-dimensional construct, where *internal attractiveness* expresses perceptions of existing employees and *external attractiveness* represents perceptions of external applicants. It is a rather novel approach to organizational attractiveness, forasmuch as previous research put an emphasis on

the potential applicants perspective (e.g., Berthon et. al., 2005; Ehrahrt and Ziegert, 2005; etc.) and very few studies involved actual employees (e.g., Turban, 2001; Lievens et al., 2007) which could help to explore an 'experienced' opinion and make an attempt to answer why individuals who were attracted and selected consequently retain. Admitting this limitation organizational attractiveness research scholars (Nadler et al.; 2010; Ehrahrt and Ziegert, 2005; Jiang and Iles, 2011) argue for more studies examining perceptions of workforce population.

Relatedness of employer branding, employer attractiveness and organizational attractiveness concepts have been specifically noted and evidently demonstrated by numerous researches (e.g., Berthon et al., 2005; Jiang and Iles, 2011). As it was argued by Berthon et al. (2005) and later explicitly shown by Jiang and Iles (2011), employer's attractiveness is an antecedent of employer brand equity, and the more attractive an employer, the stronger employer brand equity. Furthermore, Hillebrandt and Ivens (2013: 4) claim that employer value proposition is a reflection of organizational attractiveness and vice versa, therefore "dimensionality of both the employer brand and the organizational attractiveness should be consistent" (p. 4).

Following this approach, organizational attractiveness is conceived herein as an inherent component of employer brand and as a vehicle for employer brand development. **The focus in this dissertation is on the internal organizational attractiveness.**

1.3. Conceptual foundations for employer branding

1.3.1. Employer brand development

"If you need to get the right people on the bus to deliver your strategic intent, you first need to ensure that you make your bus attractive to the right people" (Mosley, 2007).

Illustrating the scope of concepts and contexts, covered by employer branding activities it is useful to consider the 'bigger picture' as it is demonstrated by Minchington's (2012) employer branding eco-system (see Figure 11). Nevertheless admitting a number of limitations of this model, such as unknown causality of its elements and unstructured 'architecture', it though provides with some basic insight into diversity of stakeholders and complexity of functions engaged in building strong employer brand.
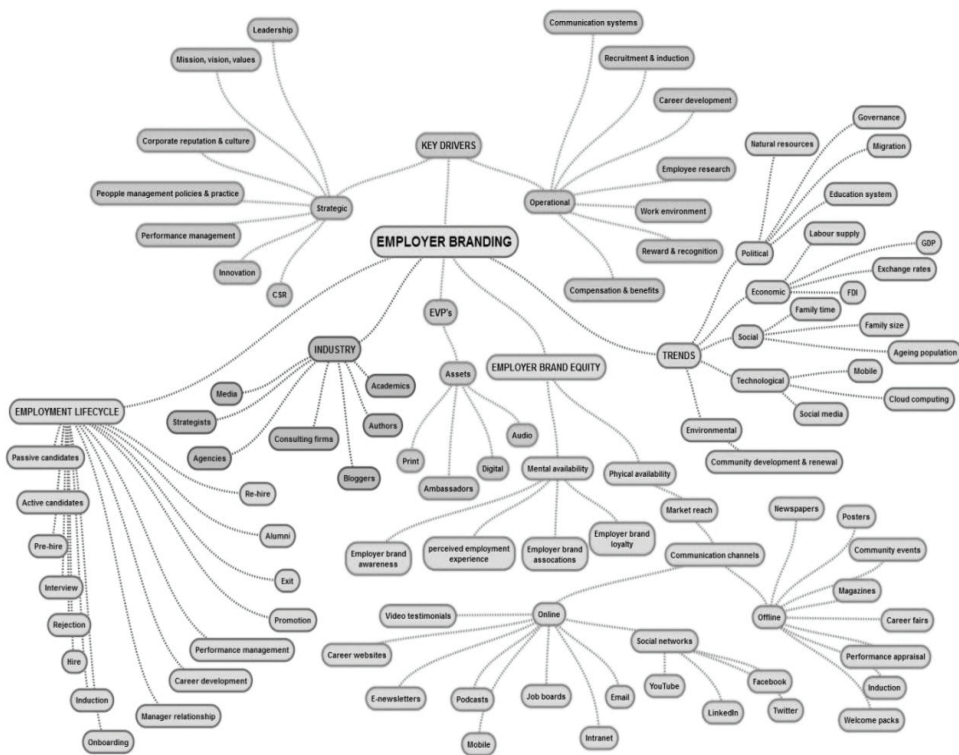
Figure 11. Employer branding eco-system

Source: Minchington (2012)

In their major study Backhaus and Tikoo (2004) presented a theoretical foundation and conceptual framework for employer branding, incorporating marketing and human resource concepts (see Figure 12). Authors suggest that employer branding creates two main assets – employer brand associations and employer brand loyalty. Employer brand associations affect brand image, which in turn enhances attraction to the company. Organizational culture and employer branding have a reciprocal relationship: employer branding reinforces and changes organizational culture, and organizational culture impacts employer branding. Backhaus and Tikoo (2004) see organizational identity as the attitudinal contributor to employer brand loyalty and as a successor of employer branding. Finally, employer brand loyalty is supposed to increase employee productivity. The authors conclude that employer branding is a useful framework for strategic human resource management and provides support for the organizational career management program.
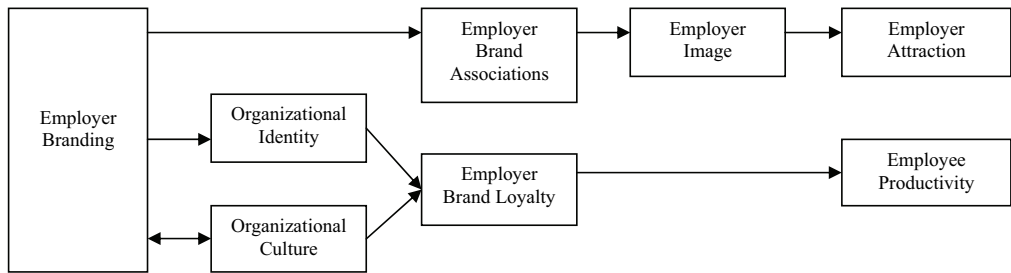
Figure 12. Employer branding framework

Source: Backhaus and Tikoo (2004:505)

As Figure 13 shows, the conceptual framework of employer branding developed by Martin (2007) suggests that employer branding begins with the creation of an employer brand image, encompassing the organization's package of functional, economic and psychological benefits. Two key drivers of employer brand image are corporate identity and organizational identity (in contrast to Backhaus and Tikoo, 2004) that are conceived as products of organizational culture, i.e. "hidden values, assumptions and beliefs that define 'the way we do things around here'" (Ibid, p.19). Corporate identity there is defined as a posture of organization's mission, strategies and culture, expressed through logos, architecture and communication of 'what it is', while organizational identity refers to organizational self-concept of 'who we are', "revealed in its shared knowledge, beliefs, language and behaviors" (Ibid). Further, in this model, employer brand reputation stands for the biographical account of organization instrumental and symbolic attributes offered to and perceived by potential and existing employees. According to Martin (2007), positive employer brand reputation should help attract talented applicants, ensure employees' identification with the organization and, eventually, result in desired organizational performance, in turn enriching organizational identity.
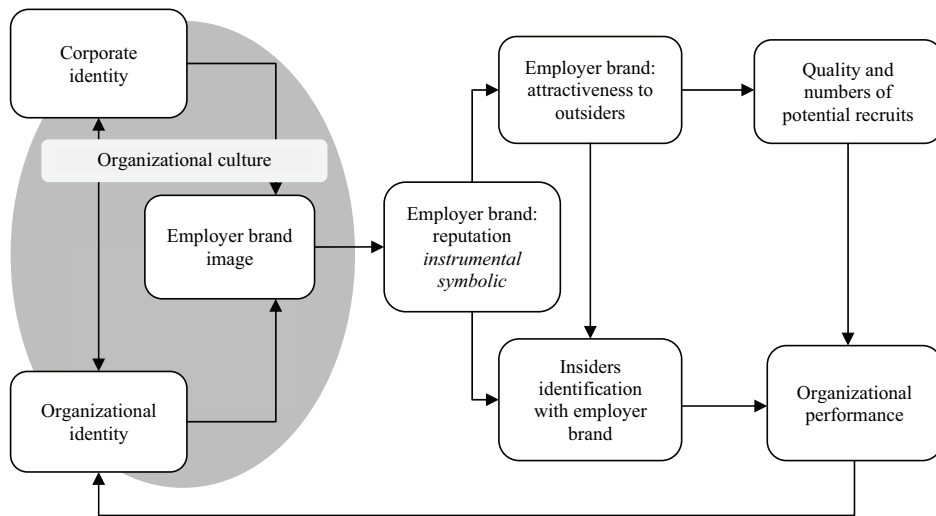
Figure 13. Employer branding framework

Source: Martin (2007:18)

Jiang and Iles (2011) followed Backhaus and Tikoo complementing their model by elaboration on the relationship between organizational attractiveness and employee-based brand equity. First, as mentioned earlier, a broader perspective was adapted to understanding of organizational attractiveness distinguishing between internal attractiveness encouraging existing employees to stay with the company, and external attractiveness encouraging potential employees to apply. Next, intentions to accept a job or stay with the company were analyzed as consequences of organizational attractiveness, which in turn were considered as a consequence of employee-based brand equity. Employee-based brand equity therein is referred as employer brand equity as perceived by employees and assessed by five dimensions: economic value, social value, development value, interest value and brand trust. Employer brand equity is defined as a value provided by employment to existing and potential employees. Interestingly, Wilden *et al*. (2010) have found that employer attractiveness is an antecedent of employee-based brand equity.

Although being fairly comprehensive, the above models still lack some integrity, depth and rigour, and leave unanswered questions and questionable assumptions. Therefore, incorporating the conceptual employer branding frameworks proposed by Martin (2007), Backhaus and Tikoo (2004), Model of Employer Brand Equity formed by B. Minchington (2011) and encompassing the foregoing theoretical considerations on the employer value proposition, organizational identity and implications stemming from organizational

attractiveness theory and working definition of employer brand, **an integrative employer branding model is developed here and presented in Figure 14 for further elaboration.**
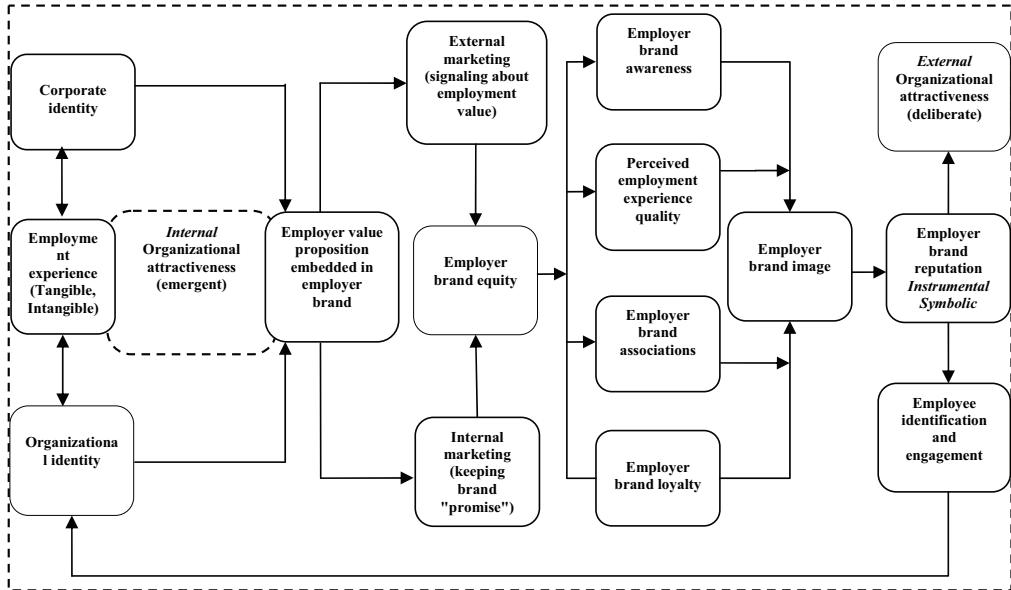
Figure 14. Conceptual employer branding model

As Backhaus and Tikoo (2004) argue, employer branding is a three-step process, starting with the (1) development of the value proposition and followed by its (2) external marketing to potential applicants, and (3) internal marketing to existing employees. **Since the focus of this dissertation is on the first step of employer branding, therefore the development of employer value proposition is discussed more thoroughly next**.

Employer value proposition or otherwise referred to as an employer brand proposition (Barrow and Mosley, 2011) or brand promise (Martin, 2007; Backhaus and Tikoo, 2004) is a central message to be embedded in employer brand about unique employment experience and particular value offered by the company to the existing and potential employees (Backhaus and Tikoo, 2004; Edwards, 2010).

Ambler and Barrow (1996) have suggested that employer brand offers employees: (1) developmental and useful activities (*virtuositas*, or functional benefits); (2) material or monetary rewards (*raritas*, or economic benefits); and (3) feelings such as belonging, direction and purpose (*complacibilitas*, or psychological benefits). Drawing from psychological contract literature (Martin and Hetrick, 2006), employment experience can be also differentiated on ideological benefits, as providing employees the self-fulfillment through "doing good". As

Barrow and Mosley (2011: 123) state, "the proposition statement should try to capture the most compelling advantage offered by the employer", such as trust and respect, an interesting job, the opportunity to get on, and a boss who supports you in *Tesco*; or fair and equitable pay, coaching and development, effective resource management, and pride and belief in values of organization in *Building Society*; or possibility to have a great start, work/life balance, to learn and grow, to be in the know, to make a positive impact, to be recognized, to share rewards and to share great ideas in *Compass Group*.

Furthermore, as Edwards (2010: 7) explicitly argues, "a central element to employer branding involves the identification of elements of the character of the organization itself; features such as the organization's key values and the guiding principles underlying how it operates as a collective entity". To put it in another way, in order to create successful employer value proposition corporate identity and organizational identity should be researched, understood and, ideally, incorporated.

The concept of **corporate identity**, even though grown out from logos and outward presentation of a company to external audiences, "is not merely a projected image in the form of visual design and communication, but is fundamentally concerned with 'what the organisation is' encompassing the strategies and culture specific to the organisation in particular" (Cornelissen *et al.*, 2007: S7).

Meanwhile **organizational identity** can be conceived "as the collective attitude about who the company is as a group" (Backhaus and Tikoo, 2004: 509); it embraces the organizational 'core' and encompasses "key values and the guiding principles underlying how it operates as a collective entity" (Edwards, 2010: 7). Organizational identity reflects organization's purpose and philosophy – what is perceived as central, distinctive and enduring to a focal organization by internal (and external) audiences (Margolis and Hansen, 2002; Lievens *et al.*, 2007). Organizational identity can also be seen as "as an interpretative system, or as a set of shared cognitions, or as shared language and behaviors" (Cornelissen *et al.*, 2007: S6). In this vein, organizational identity can be understood as a 'single organism' or 'human being' with inherent identity of 'who am I as an organization?', or as cognitive self-representation adopted by organizational members, or as a construct of organizational rhetoric, myths, stories and culturally patterned practices. Davies and Chun (2002) offer to define identity as an internal dimension which reflects the employees' feelings and comprehension of the organization by answering the questions "who are we?" and "how do we see ourselves?". These unique and timeless features of the organization are seen as fundamental by its members (Puusa and Tolvanen, 2006).

Nevertheless, organizational identity is regarded as one on the prime inputs of employer value proposition and, accordingly, of the whole employer branding, the research streams focusing on organizational identity, and employer branding has evolved and partly remained apart with few unifying attempts (e.g., Lievens et al, 2007). However, discovery and research of organizational identity allows to understand the common organizational consciousness; it reveals the shared perception of 'who we are', enables uncovering the employment experience it embraces and identifying the features that make organization attractive as an employer. Moreover, "it is crucial to study identity and attractiveness together because organizations typically want to attract talent by developing an attractive employer image while at the same time ensuring that this image is consistent with employee's views of the identity of the organization" (Lievens et al., 2007: 46).

An integrated view of corporate and organizational identity is also presented by van Riel and Balmer (1997), who state that corporate identity indicates "the way in which an organization's identity is revealed through behavior, communications, as well as through symbolism to internal and external audiences" (p. 341). Most significantly, as the authors argue, the alignment, transparency and consonance between organizational identity, corporate identity and, additionally, corporate reputation (the images of organization held by outsiders) should be achieved; otherwise the misalignment will result in employee disengagement, customer dissatisfaction and organizational decline (Cornelissen *et al.*, 2007).

Consequently, as Barrow and Mosley (2011) suggest, starting with corporate vision or mission, or the 'big idea' for organizations existence (corporate identity), proceeding with organizational values providing differentiation, further honestly and authentically describing the personality of organization (organizational identity) – serious, passionate, challenging or fun, and, finally, identifying the range of benefits that drive employee engagement (employment experience) should allow capturing particular attributes of organizational attractiveness and eventuate in a specific employer brand proposition and tailored employee value propositions (see Figure 15).
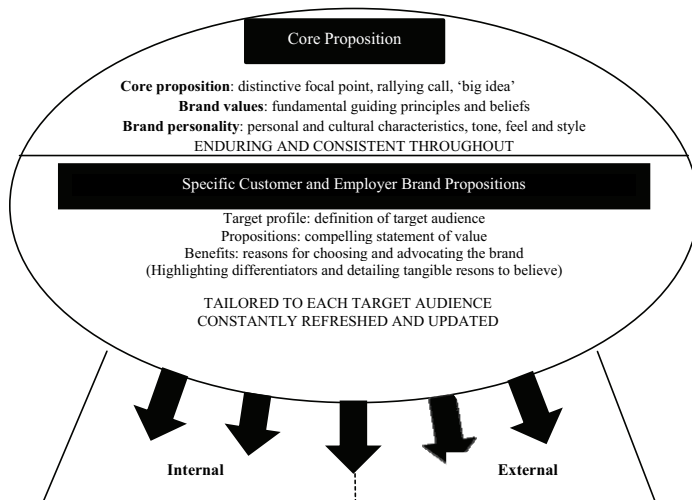
Figure 15. The brand platform

Source: Barrow and Mosley (2011:114)

Furthermore, the authors state that employer brand proposition is an integral part of organization's core proposition along with customer brand proposition, and that they are closely interrelated: the strength of customer brand plays an important role in attracting the right people, and *vice versa*, a positive employer brand helps building and supporting the customer brand (see Figure 16). Referring to employer brand proposition as a most compelling and common reason given for employees' commitment and loyalty to the organization, the authors claim that it should bring "focus and consistency to the employee's experience of the organization" (Ibid, p.117).
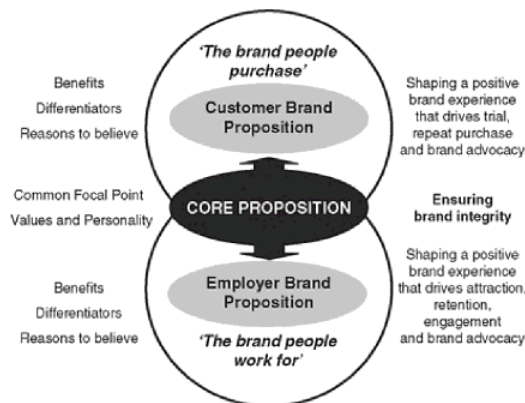
Figure 16. Integrated brand model

Source: Barrow and Mosley (2011: 111)

Further, internal and external employer brand marketing activities should desirably result in employer brand equity that is referred to as a four-dimensional construct of employer brand awareness (the level of knowledge people have about an organization's positive or negative employment characteristics), perceived employment experience quality (the association people have about working for an organization stemming from online, e.g., career website, and offline, e.g., word of mouth source), employer brand associations (thoughts, ideas, imagery, symbols, emotional and rational attributes an organization's name evokes) and brand loyalty, i.e. person's intentions to apply and accept the job as well as remain employed driven by the positive associations with the organization (Minchington, 2011). Employer brand equity and particularly employer brand associations are the determinants of employer brand image (Minchington, 2011a). The employer brand image, as an autobiographical account of who it wants to be forms the employer brand reputation that is the biographical account of who it is perceived through instrumental and symbolic attributes (Martin, 2007). The employer brand image affects employer attractiveness to potential employees and strengthens organizational identification and engagement among existing employees, which in turn strengthens and enriches organizational identity.

1.3.2. Employer branding outcomes

There are sufficient grounds to assert that building a salient employer brand stands for the most important element of finding the right talents (EB Insights, 2011), since people want to work for organizations with strong and positive reputation and prestige (Rousseau, 2008) in preference to higher wages, thus expecting a pride which will be provided by organizational membership (Cable and Turban, 2006). According to Coffman (2000), becoming an employer of choice should deliver five business outcomes: retention, productivity, profitability, customer loyalty and safety. Employer branding also helps organizations to define the kind of the desired applicants, with right abilities and cultural fit, in this way sifting out blank shots and increasing the number of high quality candidates. Next, employer's attractiveness or, simply, being a 'great place to work' helps an organization outperform its competitors and achieve financial success; it creates reputation which attracts talents; it reduces turnover, fosters creativity and innovation of employees, sets a high-quality standard on culture, increases resistance against downturns or market shocks and eventually provides higher levels of customer satisfaction and loyalty (Great Place to Work, 2014). Finally, employer branding helps to build a more consistent *employment experience* and communication (EB Insights, 2011), and retain current employees assuring their

commitment and *engagement* in the culture and strategy of the company they work for (Ambler and Barrow, 1996; Backhaus and Tikoo, 2004; EB Insights, 2011).

The concept of commitment refers to employee attachment and loyalty and is closely related to job satisfaction and engagement (Armstrong, 2003). Mowday, Steers and Porter (1982: 226) define organizational commitment as "the relative strength of an individual's identification with and involvement in a particular organization". It has been found by Porter et al., (1974) to consist of three components: 1) a strong desire to remain a member of the organization; 2) a strong belief in and acceptance of the organization's goals; and 3) willingness to do one's best on behalf of the organization. In addition, Barrow and Mosley (2011) have found the terms of 'commitment' and 'engagement' to be defined as a sense of pride and belonging, belief in the organization's products and services, satisfaction with the immediate job or career opportunities and advocating the employer to others.

Allen and Meyer (1990) have conceptualized commitment as a three-component model, integrating affective, continuance and normative commitment, where *affective commitment* draws largely on Mowday's *et al*. (1982) concept quoted above and is considered as an "affective or emotional attachment to the organization such that the strongly committed individual identifies with, is involved in, and enjoys membership in, the organization" (p. 2). The continuance commitment refers to the perceived costs of leaving the organization and the normative commitment denotes feelings of obligation to remain with the organization.

As summarized by Armstrong (2003), a strong commitment is likely to result in lower labor turnover, high level of effort and employee's intention to stay. An affective commitment was found to be a mediator between job satisfaction and job performance (Zhang and Zheng, 2009), and to have an indirect effect on job performance through commitment to the supervisor (Vandenberghe *et al*., 2004).

Barrow and Mosley (2011) regard engagement as a more immediate state (like weather), and view commitment as a more enduring belief in the company (like climate), though "it is possible for an engaged people to lack longer term commitment, and for a committed employee to feel temporarily disengaged" (p. 89). Furthermore, Saks (2006) suggests that organizational commitment is an attitude and attachment towards organization, whereas engagement is not an attitude but individual's work-related attention, dedication and absorption.

Although the definition and meaning of both the commitment and engagement overlap, for the purpose of this thesis a commitment and more specifically, an *affective commitment* is observed for the effects of employment experience attributes that are packaged and promised by the employer brand "to *emotionally connect* employees so that they in turn deliver what the business promises to customers" (Sartain and Schuman, 2006: vi).

1.3.3. Employer branding and market segmentation

"… the traditional rules of management, motivation, and reward fly out the window. Can this be the essence of the change going on in the workplace today? Can it be as simple, and as complicated, as a change in philosophy about the reason for working? Maybe. Time will prove this theory right or wrong. But many employers say that this is precisely what they're seeing. They describe the tremendous repercussions this change in values and principles is having on management's mode of operations – on the way executives recruit, communicate with, manage, motivate, and retain employees in order to remain competitive in the marketplace" (Marston, 2007: 4).

Most of the approaches for clarifying and uncovering employer brand are aimed at discovering "what is common among employees, their shared needs, motivations, perceptions and values. However, most organizations are diverse" (Barrow and Mosley, 2011: 100) and the simple fact is that different people have different perceptions about the value and importance of different job characteristics (Schokkaert et al., 2009). Even though "different" has many names, after a few decades of coping with gender, racial, ethnical, and cultural diversity, the modern workplace worldwide now is most sharply facing multigenerational challenges (Zemke et al., 2000).

The concept of *generational differences* and the conflicts, collisions, challenges and opportunities this diversity presents is a topic of popular discussion in a vast amount of management practitioner literature. Recent years have witnessed a steady march of studies on the development of generational competencies offering bundles of insights, methods and tools on how to effectively recruit, retain, motivate, manage each generation, and bridge the gap (Marston, 2007; Lancaster and Stillman, 2003; Espinoza et al., 2010; Martin and Tulgan, 2006; Sujansky and Reed, 2009; Lipkin and Perrymore, 2009; Dorsey, 2010; Elliott, 2011). However, only limited and mixed empirical evidence for generational differences in work values is available to reliably demonstrate whether or not and to what extent these differences exist (Smola and Sutton, 2002; Cennamo and Gardner, 2008; Hansen and Leuty, 2012; Parry and Urwin, 2011; Twenge et al, 2010; Tolbize, 2008). Moreover, while organizations are struggling to manage a values-diverse workforce with "different ways of working, talking, and thinking" (Zemke et al., 2000:11), and work hard to attract and retain talent, surprisingly far too little attention to shifting demographics has been paid in the theory of employer branding. It is only lately that some insights about approaching employer branding from a generational perspective have emerged (Gruber, 2012; Employer Branding Today, 2013; Scrivener, 2013; Hubschmid,

2013; Hughes, 2013). But "the problem of generations is important enough to merit serious consideration" (Mannheim, 1952: p.286).

'Generation' is a cohort of people, born around the same time, raised in a unique era and sharing significant social and historical life events and experiences at critical development stages (Parry and Urwin, 2011; Twenge et al., 2010; McCrindle and Wolfinger, 2011). As Kotler et al. (2009: 347) assert, "each generation is profoundly influenced by the age in which it is reared – the music, films, politics and defining events of that period …", and as a result generational behaviors, work values and preferences do differ (Zemke, et al., 2000; Smola and Sutton, 2002; Hansen and Leuty, 2012; Cogin, 2012; Buahene and Kovary, 2007;Schultz et al., 2012; Hu et al., 2004). This "difference of attitudes between people of different generations, leading to a lack of understanding" (Oxford Dictionaries, 2013) termed as a '*generation gap*' has always existed, but as a phenomenon in fields of marketing and business management literature it has attracted increasing attention since the late 1960s when two generations, the *Traditionalist* and *Baby Boomers*, have been fighting and learning how to co-exist (Howe and Strauss, 1992; Simons, 2010). A new generational gap emerged in 1990 when *Generation X* rushed into the labor market with their different visions of society and self (Howe and Strauss, 1992), and, eventually, after *Generation Y* has joined the battle, it is the first time in history when four different generations are working side by side, sharing and dividing the labor market (Hansen and Leuty, 2012; Tolbize, 2008). Furthermore, the near future (or already a new reality) of work demographics brings with it five generations in the workplace at once and "this mixed, multi-generational environment is a new diversity challenge for … organizations everywhere" (Shah, 2011: para. 2).

Nevertheless there is little agreement on the starting and ending points for generations with high discrepancies of time spans (Smola and Sutton, 2002, Crowley and Florin, 2011; Burke, 2004; Tolbize, 2008; McCrindle and Wolfinger, 2011; McCrindle, 2006; Buahene and Kovary, 2007; Simons, 2010. Zemke et al, 2000; Becker, 2012; European Commission, 2011; Hansen and Leuty, 2012), the majority of literature defines *Traditionalists* as those born before 1946, *Baby Boomers* as individuals born between 1946 to 1964, *Generation X* as people born between 1965 and 1980, and *Generation Y* as including members born between 1980 and 1994 (Hansen and Leuty, 2012) (see Table 9). The newest *Generation Z* is reported to begin as early as 1991 or as late as 2001.

Table 9. Generational time spans

Generation	Birth Years
Traditionalists (aka Veterans, Matures, Silent Generation, WWII Generation)	Born before 1943/1945/1946/
Baby Boomers	1943/1945/1946/– 1960/1964/1970
Generation X (aka Baby Bust Generation, Gen Xers, Pragmatic Generation)	1960/1963/1965/1968/1970– 1976/1979/1980/1985
Generation Y (aka Millennials, Nexters, Digital generation, Echo Boomers, Generation www, Generation E, Net Generation, Gen Yers, Generation Me, Unlimited Generation)	1977/1978/1980/1981/1985– 1994/1998/2000
Generation Z	1991/1995/2000/2001 – Present

Admitting that there are some theoretical grounds to consider generational differences across national contexts and cultures (Schewe and Meredith, 2004), "the notion of global generations as the incidence of 'global' events becomes more common" (Parry and Urwin, 2011: 92), providing with comparative approach, and facilitating the process of assigning particular work values to particular generation.

Despite some ambiguity in defining and delineating generations, most researchers agree on the inherent attributes of each generation (Hansen and Leuty, 2012; Twenge, 2010) and argue that generations "can be characterized by a certain set of attitudes and beliefs" (Smith, 2008: 8). Elaborating on this idea further, a qualitative and empirical literature review on generational diversity provides the means to categorize some aspects of each group's behaviors, needs, personality traits, workplace perceptions, perspectives, interaction styles and preferences as summarized below.

− Traditionalists have grown up in the "do without" era, they believe in hard work and sacrifice, honor and compliance, are dedicated, very uncomfortable with change and aim at building a legacy (Buahene and Kovary, 2007). Traditionalists feel appreciated if their experience is respected, perseverance admired and knowledge valued (www.mcfrecognition.com). Characterized by high levels of loyalty, they believed they would (and commonly did) work for the same company their entire career (Marston, 2007). Described as liking structure, authority, formality and hierarchy (Burke, 2004), "averse to risk and strongly committed toward teamwork and collaboration" (Tolbize, 2008: 2), Traditionalists are gradually retiring.

− Baby Boomers are the Post-Second World War generation that lived through, adapted to, and created the incredible change. They are ambitious, loyal to the team, value personal growth, equality and collaboration (Buahene and Kovary, 2007). Having grown up in a healthy

economic era, Baby Boomers strive for status, leadership, career and higher salary. They want their opinion to be heard and valued, and contribution recognized (Cennamo and Gardner, 2008). Baby Boomers are result driven, they give maximum effort (Burke 2004), are described as willing to "go the extra mile" (Zemke et al., 2000) and living to work (Marston, 2007; Smola and Sutton, 2002), which has started the workaholic trend (Tolbize, 2008).

− Generation X is referred to as a "bridge generation" which can easily understand Baby Boomers and, at the same time, connect with Generation Y (McCrindle, 2006). Grown up in the era of distrust for national institutions, members of Generation X tend to be cynical, skeptical, pessimistic, pragmatic, comfortable with change, more independent, self-reliant, autonomous and not overly loyal (Tolbize, 2008; Hansen and Leuty, 2012; Smola and Sutton, 2002). Research has found that Generation X is placing increased importance on compensation, working conditions, security, moral values (Hansen and Leuty, 2012), quick promotion (Smola and Sutton, 2002), flexibility, work-life balance, continuous learning, challenging work and supervisor relationship (Buahene and Kovary, 2007; Tolbize, 2008; Burke, 2004).

− Generation Y, which was raised in the era of financial boom, is the most highly educated generation (Tolbize, 2008). Its members embrace diversity, learn quickly (Burke, 2004), are devoted to their own careers (Marston, 2007), confident, optimistic, innovative, techno-savvy, loyal to peers, not title or company; they expect continuous change, rapid career growth and personalized experiences (Buahene and Kovary, 2007). Generation Y feels comfortable with multitasking, connects responsibility with personal goals, builds parallel careers (www.mcfrecognition.com) and is characterized by productivity, networking and openness (Employer Branding Today, 2012). Besides, several studies have revealed that representatives of Generation Y are more active volunteers but not "more caring, community oriented, and politically engaged than previous generations" (Twenge et al., 2012: 1060).

− Generation Z, commonly referring to people born from the mid-1990s to 2010, seems to be still miles away from the workplace, but it will take a flash of time for those bright, flexible and tech-savvy youngsters to enter the labor market, and some of them are already there. Influenced by the Internet, technology, war, terrorism, the recession and social media, members of Generation Z are connected globally to their peers and knowledge, and "expect to be able to work, learn, and study wherever and whenever they what" (Renfro, 2012, para. 9). By 2020, 36% of the workforce will be made up of this generation of employees, who have specific expertise, create no long-term plans, make no long-term contracts, are not loyal,

expect quick results and quick promotions, are comfortable with and even dependent on technology, more socially responsible, constantly multitasking and always connected.

While generations demonstrate a number of differences in their work-related attitudes, research indicates many points of agreement as well: they all like teamwork; fair, ethical and collaborative/friendly workplace culture; want to be valued, supported and involved (Tolbize, 2008). As Smith (2008: 25) concluded, "all generations basically want and value the same things" – people expect to be respected, recognized, remembered, coached, consulted and connected. However, even though "people may want the same things, but they want them delivered in different packages, depending on when and how they grew up" (Ibid.). As Smith (2008) put it "…organizations of all shapes and sizes have much to learn if we are to attract and keep the talent we need to succeed. And, by the way, it's not all about the millennials … it's really about everyone in the workforce" (p. 5).

Market segmentation, defined as "the process of dividing a market into distinct groups of buyers who have distinct needs, characteristics, or behavior, and who might require separate products or marketing programs" (Kotler and Armstrong, 2010: 73), has been analyzed in marketing since 1970s and remains one of the key elements of its success. Demographic segmentation, which is considered to be the most common one, deals with − among other demographic values − age, generation, and the changing age structure of global population. Referred to as 'generational marketing' (Schewe et al., 2000), it makes a huge impact on today's marketing strategies which attempt to appeal to the consumers' emotions, beliefs, values and attitudes.

In the context of human resource management, segmentation "is a tool used to identify the most significant and meaningful way of dividing people into groups who can be catered for differently according to their specific needs" (Barrow and Mosley, 2011: 100). Although proving to be beneficial and helping companies "to be more efficient and effective in attracting, retaining and motivating both current and potential employees" (Moroko and Uncles, 2009: 181), application of market segmentation approaches to employer branding context is definitely yet unexplored and underappreciated, though idea itself is not entirely new (Hubschmid, 2013; Dahlström, 2011) and "is likely to grow in both frequency and sophistication over the coming years" (Barrow and Mosley, 2011: p. 100). Still, only the top companies which extensively apply employer branding strategies focus their efforts on offering a particular "package of functional, economic and psychological benefits provided by employment" (Ambler and Barrow, 1996: 187) to particular generation. Best practices of multigenerational employer branding include a pharmacy innovation company *CVS Caremark* (www.cvscaremark.com), which sends a message to mature employees saying "Talent is Ageless", or the world's largest

home improvement retailer *Home Depot* (www.homedepot.com), which targets the next Generation Z by "looking for the bold, the dreamers, the innovators and the problem solvers" under the slogan "Who's next?". And similarly, the second largest professional services network *Deloitte* (www.deloitte.com), assuring that "we understand that your personal life and your professional life deserve an equal amount of attention ... and provide a comprehensive array of benefits that can help to provide balance and flexibility". Isn't it exactly what Generation X is looking for?

It is asserted that one of the most useful approaches of segmentation is **to cluster people according to their different attitudes towards employment,** for instance, in such types as 'Work-Life Balancers', 'Want it All' and 'Pleasure Seekers' found by Tesco or 'Ambassadors', 'Career Oriented', 'Company Oriented' and 'Ambivalent' as produced by *TNS* analysis (Barrow and Mosley, 2011).

It should be noted though that for segmentation in employer branding to be necessary and economically feasible, the first thing to determine is whether the wants and the needs of an employee are heterogeneous enough, and whether different groups are not too small, or the total number of them too great (Neely et al., 2002; Barrow and Mosley, 2011).

Nonetheless, the first and the biggest issue to address in relation to generational employer branding is to accept that different generations choose and stay with companies for very different reasons, that generations are not sharing the same definition of 'success' (Marston, 2007), and that they work, think differently and have different sets of priorities (Espinoza et al., 2010). Further, it should be answered what kind of employment experience the organization wants to create, how it may need to vary by generational segment, and "how your employer brand can and should mean different things to different people" (Sartain and Schuman, 2006: 40). All these actions may be defined as 'generational competence' or 'generational perspective' – the ability of organizations to understand various generational identities, to appreciate diverse needs of each generation and to meet them. As Kupperschmidt (2000: 65) asserts, "a generational perspective enables managers to leverage employee uniqueness as a source of learning, productivity, and innovation and to create and role model a shared vision of positive co-worker relationships".

Using internal research, organizations must answer, for the employee, the fundamental question "What's in it for me?" if I work there (Sartain and Schuman, 2006). Clarifying generational expectations should be viewed as a starting point for every employer's branding campaign (Hubschmid, 2013) which assists organizations in developing efficient target group-oriented employer branding strategies to attract, retain and engage key talent and enhance productivity (Fraone et al., 2008).

1.3.4. Importance of employer branding in higher education

> It is rare to find an institution which is at once so uniform and so diverse; it is recognisable in all the guises which it takes, but in no one place is it identical with what it is in any other. This unity and diversity constitute the final proof of the extent to which the university was the spontaneous product of medieval life; for it is only living things which can in this way, while fully retaining their identity, bend and adapt themselves to a whole variety of circumstances and environments". (Durkheim, 1977: 163).

Higher education is a notable exception of an organizational population of ancient lineage that has retained dominance and survived through technological, social and economic change (Hannan, 2005). Characterized by a "Hesburgh paradox", the higher education system is "sluggish, even heavily resistant to change, but somehow also produces virtually revolutionary change" (Clark, 1986: 182), for, presumably, it has already been born with a "successful adaptive mechanism" (Ibid, 184).

However, "transformations unprecedented in scope and diversity" that have taken place in higher education in the past half century (Altbach et al., 2009: iii) - massification, globalisation, internationalisation, marketisation, managerialism, shifts in funding, increased emphasis on relevance of knowledge, diversification of higher education systems, and generation change (Enders and Weert, 2009; Kogan and Teichler, 2007) - have heavily affected academic profession and determined the deteriorating attractiveness of academic workplace (Enders and Weert, 2004). Academic profession, continuously experiencing lowering salaries, increasing work load, loss of status and job security, external scrutiny and accountability, gradual diminution of professional self-regulation, rush towards part-time and short-term contracts and deepening culture of mistrust (Enders and Weert, 2004; Court and Kinman, 2008; Edwards et al., 2009; Altbach, 2000; Tytherleigh *et al.*, 2005; Teichler and Höhle, 2013), is "under stress as never before" (Altbach *et al.*, 2009: 1). Clearly, employment practices in higher education are losing reliability, whereas – as ecological perspective suggests and employer branding literature supports – such violations may increase turnover, reduce job satisfaction, organizational trust and job performance (Backhaus and Tikoo, 2004).

As for the future challenges and trends, it is predicted that higher education will continue to face economic and political pressures, national and international competition, budget cuts, drop in student applications, a changing higher education landscape, and a heightened focus on quality assurance and efficiency (Anyangwe, 2012). Therefore, "in many countries the career patterns and employment conditions of academic staff as well as the attractiveness of the academic workplace for the coming generation are of a major concern" (Enders and Weert,

2004: 12). As Coaldrake and Stedman (1999: 9) point out, „academics remain intrinsically motivated by their work, but many feel they are under growing pressure and disconnection from their universities. Many academic staff feel burdened by the increasing weight of expectations placed upon them, in contrast to their ideal of determining the parameters of their own working lives".

Considering the fact that the demand for highly qualified employees will strongly increase in the years ahead and officially acknowledged potential of higher education to „help deliver jobs, prosperity, quality of life and global public goods" (European Commission, 2011: 2) it is crucial to ensure that academic workplace as a "substantial reservoir of knowledge, talent and energy" (European Commission, 2008: 11) will recover the lost ground offering "working conditions appropriate to the academic environment that encourage creativity and innovation" (Enders and Weert, 2004: 5). As Altbach et al. explicitly argue (2009: 1), "the academic profession must again become a profession-with appropriate training, compensation, and status ... to attract talented young scholars and to keep them in the profession".

Moreover, in the 'reputation race' for scarce resources higher education institutions are seeking to hire the best possible faculty (Geiger, 2004), to recruit and employ scientists with the highest recognition (Vught, 2008), as their prestige, reputation and 'product offering' substantially depend on their ability to develop and retain these core employees (Baron, 2004). Thus, while accommodating the VUCA - volatile, uncertain, complex and ambiguous - environment, higher education institutions should rethink their human resource strategies and look for new approaches to effectively attract and retain the best possible faculty and staff. Commonly higher education institutions have very limited possibilities to foster job attractiveness by financial means; therefore, building their strong employer brands – searching for core strengths and uniqueness of employment experience offered to and valued by employees, creating a 'package of advantages' and positioning this distinctiveness in the labor market – could be a leading strategy earning the label of 'attractive employer'.

It should also be noted there that labor market identities are particularly salient in higher education, forasmuch as its human resources are the key to competitive advantage, prospective labor force is diverse, employment relations are enduring and there is a high degree of social density among employees in the labor market (Baron, 2004). As Stensaker (2007: 15) suggests, "it is strategically important to create images that match the organizational identity of a given institution, and that the challenge for higher education institutions is to balance the need for adjusting to a changing world while maintaining their organizational identities and the inherent characteristics of higher education". Higher education institutions have to take their own path to

employer branding discovering unique characteristics of their organizational identity, making them transparent and building on these strengths (European Commission, 2011).

While "diversification and individual institutional profiling are high on agendas across Europe" (Rauhvargers, 2011: 7), characterizing organizations by their employment relations "provides a more genotypic characterization of forms in the sense that it speaks more directly to issues of identity" (Hannan et al., 2006: 758). Furthermore, as Hazelkorn (2011: 15) suggests, going "beyond macro-level terminology of teaching vs. research, basic vs. applied, comprehensive vs. specialist, school leaver vs. mature, etc." embraces deeper understanding of hidden features of organizational diversity. There is growing evidence that global rankings of higher education institutions increase mimicking behavior and lead to more homogeneity rather than diversity (Vught, 2008) and even produce distortions that have "profound and often pervasive effects on higher education and society..." (Hazelkorn, 2011: 15). In an effort to overcome these limitations a number of attempts have recently been made to introduce more thorough, multi-dimensional classifications of institutional diversity (Vught et al., 2010; Hazelkorn, 2011; Reichert, 2009) paying certain attention to staff profiles and organizational characteristics.

This dissertation takes this effort one step further tackling the task of defining and delineating higher education institutions based on perceptions of employment experience they offer and labor market identities they possess. Consequently, such analysis provides with the evidence of "the internal truths of working life" (Housley, 2007: 16), meaningful insights on particular value offered by the organization to its employees and, therefore, a reasonable take-off for efficient employer branding strategies to attract, retain and engage talented staff.

1.4. Research field and conceptual model for hypotheses testing

Based on the previous systematic review and discussion examining employer branding construct, its concepts and contexts, the research field and its boundaries are delineated next before hypotheses development. First, as Figure 17 illustrates:

- This dissertation focuses on the development of employer value proposition embedded in employer brand.
- Internal organizational attractiveness stemming from the tangible and intangible employment experience (and, partly, from organizational identity) as perceived by current employees and informing the development of employer brand is investigated.

- Employer brand equity conceived through the perceived employment experience quality is analyzed.
- Employee affective commitment (engagement) as an outcome of positive employment experience and healthy employer brand (through mediators) is examined.
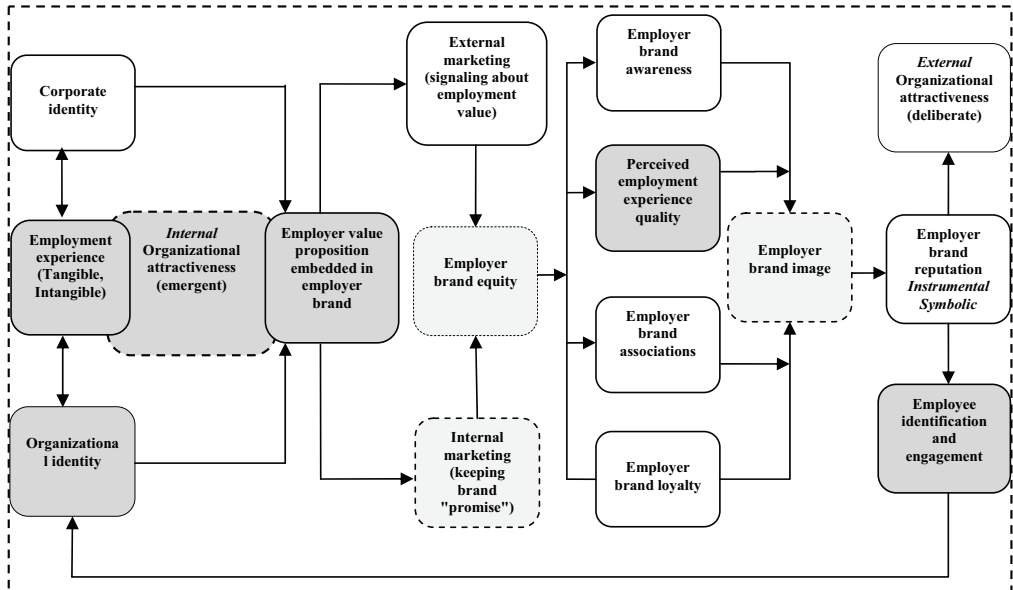
Figure 17. The research field of current dissertation in the conceptual employer branding model

Second, this dissertation has clear boundaries and **is not intended to**:

- Elaborate on the external source of employer value proposition, i.e. corporate identity.
- Analyze the external marketing approaches signaling about employment value.
- Explore employer brand equity components such as employer brand awareness, employer brand associations and employer brand loyalty.
- Research employer brand image, brand reputation and external organizational attractiveness.

Substantially, the ***building a great brand from the inside of a business*** approach, soundly advocated by Sartain and Shuman (2006) is followed and applied in this dissertation capturing the essence of the brand. As the authors argue:

> "Real brand power occurs when the brand reaches you inspirationally; when you connect with the "big idea" the business and brand stand for. When the brand reveals what happens inside the core of a business, giving you a glimpse of what makes a

business tick. What the business believes in. Its values. Its heritage. Its icons. And a bit of its soul" (Sartain and Shuman, 2006: 9).

From a procedural perspective, this dissertation covers the stages of discovery and research, analysis, interpretation, and creation of the employer branding project (Chartered Institute of Personnel and Development, 2008). **Specifically, the purpose of this dissertation is to craft a framework for employer brand development, describe the logic behind it and the process towards it, and suggest its application**.

Structuring research process into the logical sequence, based on the theoretical and conceptual foundations of employer branding, a number of propositions and hypotheses are developed as well as integrated and presented in the conceptual research model below (see Figure 18).

As it is explicitly discussed in Section 1.1, employer brand therein is conceptualized **as a product** comprising an array of unique employment experience attributes composing an organization-specific employment offering or a compelling employment value proposition to current and prospective employees. Accordingly, employer brand embraces and communicates organization's distinctiveness and attractiveness as a place to work:

Hypothesis 1. Organizational attractiveness is a multidimensional construct, comprising a set of employment experience attributes.

On the grounds of the organizational ecology theory, reviewed in Section 1.2.4., it follows that organizations in the same industry, covering the same range of occupations and conforming to the same labor law, nevertheless are not homogenous in their employment experience offerings:

Hypothesis 2. Manifestation of organizational attractiveness dimensions is different across HEIs.

As the employer brand equity conception, presented in Section 1.2.2., suggests, employer brand value or brand strength is revealed through employer brand loyalty, employer brand awareness, employer brand associations and perceived employment experience quality, which is analyzed more in detail herein. One of the possible approaches to operationalize the latter construct is to draw a parallel between employment experience quality and service quality as explored in marketing literature. Specifically, a multiple-item scale for measuring service quality SEVQUAL (e.g., Parasuraman et al., 1988; Parasuraman et al., 2005) suggests that "the key to ensuring good service quality is meeting or exceeding what consumers expect from the service" (Parasuraman et al., 1985: 46). This model is a set of gaps where perceived service quality is viewed "as the degree and direction of discrepancy between consumer's perceptions and expectations" (Parasuraman et al., 1988: 17). Accordingly, the perceived employment

experience quality can be viewed as a function of the gap between the expected employment experience and the actual employment experience, and it could be suggested that:

Hypothesis 3. *There are significant differences of perceived employment experience quality across HEIs.*
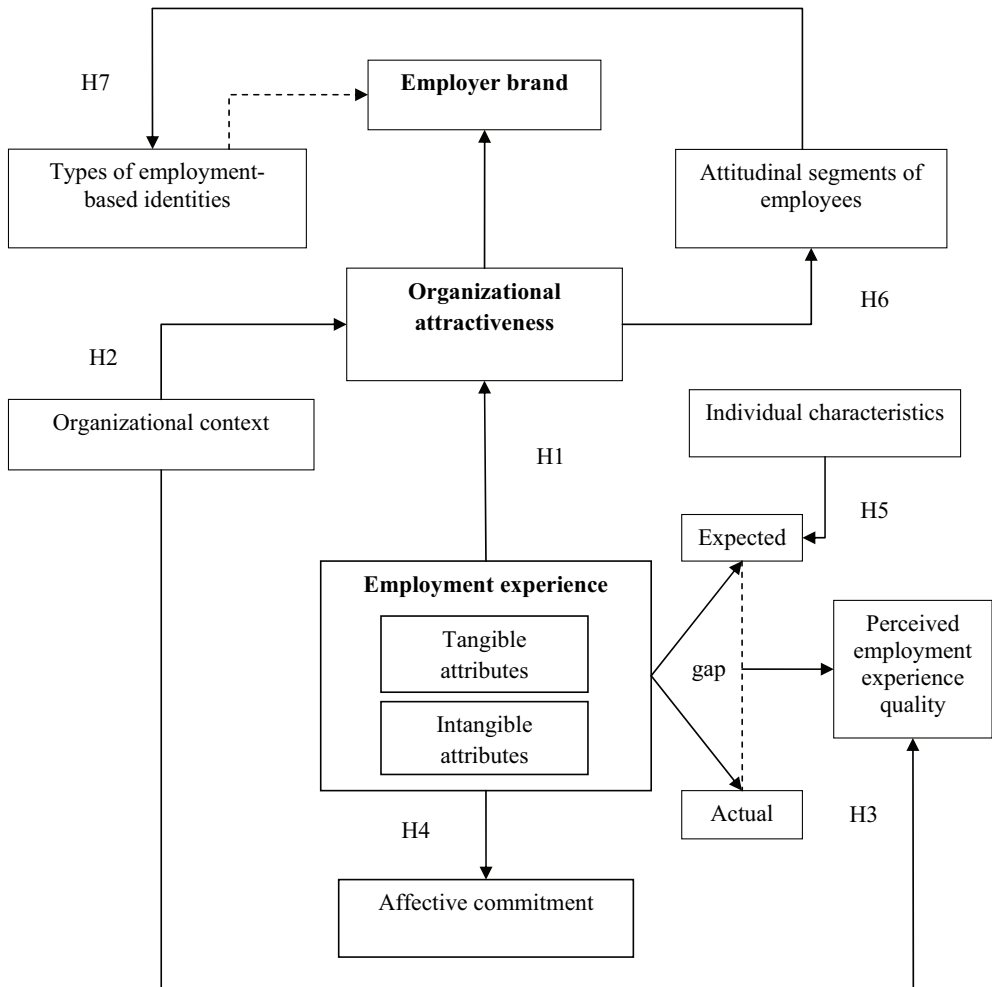
Figure 18. Conceptual research model

As it was shown in Section 1.2.1., employer branding can be seen as an attempt to express a psychological contract with employees, as far as an employer brand contains attributes that are transactional (i.e. tangible) and relational (i.e. intangible). Following psychological contract literature, employer branding allows organizations to build a consistent employment experience through packaging and delivering the particular employment benefits and rewards. Moreover,

keeping the promise should lead to positive attitudinal outcomes, such as affective commitment, which is referred to in Section 1.3.2. as an emotional employee attachment and loyalty to an organization. Hence, affective commitment is a consequence of perceived employment experience making organization attractive as an employer:

Hypothesis 4. *A more positive perception of employment experience will be associated with higher perceived affective commitment.*

Section 1.3.3. provides a comprehensive analysis of generational differences in work-related attitudes and urges for segmentation in employer branding. It is asserted there that different generations choose and stay with companies for very different reasons, and that they have different sets of priorities. Therefore, clarifying generational needs, motivations and work values should be a starting point of multigenerational employer branding:

Hypothesis 5. *Different generations hold different expectations for employment experience.*

Extending on the market segmentation theory and drawing on the model of a psychological contract presented in Section 1.2.1., it could be anticipated that individual characteristics will influence employee perceptions of employment experience and, therefore, different people will have different attitudes towards different employment characteristics:

Hypothesis 6. *Attitudinal segments of employees can be differentiated based on their perceptions towards employment.*

Finally, as the organizational ecology perspective discussed in Section 1.2.4. suggests, characterizing organizations by their employment relations provides a more genotypic characterization of forms and allows capturing the essence of their employment-based identity. Therefore, it could be attempted to define and delineate higher education institutions based on the prevailing perceptions of employment experience they offer as the most salient features of labor market identity:

Hypothesis 7. *Types of employment-based identities can be differentiated based on the employment experience offering.*

1.5. Chapter conclusions

This chapter provides a working definition for employer branding referring to it as a set of particular employment experience attributes that makes an organization distinctive and attractive as an employer. Then, five theoretical perspectives are presented and discussed as lenses for understanding employer branding. First, the theory of psychological contract allows to

see employer branding as an attempt to express a psychological contract with employees; transactional, relational and ideological aspects of a psychological contract are also applicable in the context of employer branding. Next, the applicability of the concept of brand equity to the context of employer branding is demonstrated conceiving employer brand equity as a strategic asset making organization more attractive to existing and potential employees. The signaling theory gives an insight of gaining competitive advantage in recruiting the best candidates through increasing the amount and quality of information available to applicants, where employer brand could be the most effective vehicle to utilize. Organizational ecology suggests a number of implications surfacing from the identity-based approach with the particular focus on employment relations, namely, that 1) organizations even in the same industry differ in their employment experience features; 2) successful employer brands should be focused on certainties and honestly reflect the internal reality of employment experience in a certain organization; 3) employer brand should not be created but uncovered and organizationally constructed going beyond recruitment and resourcing – deeply rooted in how the organization feels; 4) distinctiveness predicts organizational attraction and helps to recruit and retain the right people. Finally, relatedness of organizational attractiveness and employer branding concepts is substantiated, allowing to perceive them as coherent and integrated components. Then, the employer brand development process is briefly reviewed, a conceptual employer branding model developed, elaboration on generational employer branding and importance of employer branding in higher education is presented. Eventually, the research field of the dissertation is delineated and a conceptual model for hypothesis testing is developed based on the theoretical discussion. The literature review presented in this chapter puts a clear focus on the internal perspective of employer branding, examining organizational attractiveness from the current employees' position. In the next chapter the research design is delineated.

2. RESEARCH APPROACH

Setting out a general philosophical orientation about the world and the nature of research or the *philosophical worldview* (Creswell, 2014) entails taking the ontological, epistemological and methodological positions that "shape the very questions we may ask in the first place, how we pose them and how we set about answering them" (Grix, 2002: 179).

2.1. Ontological and epistemological stance

The directional interrelationship between the core research assumptions depicted in Figure 19 indicates that research starts from ontology, logically followed by epistemology and methodology.

Ontology	Epistemology	Methodology	Methods	Sources

What's out there to know?

What and how can we know about it?

How can we go about acquiring knowledge?

What procedures can we use to acquire it?

Which data can we collect?
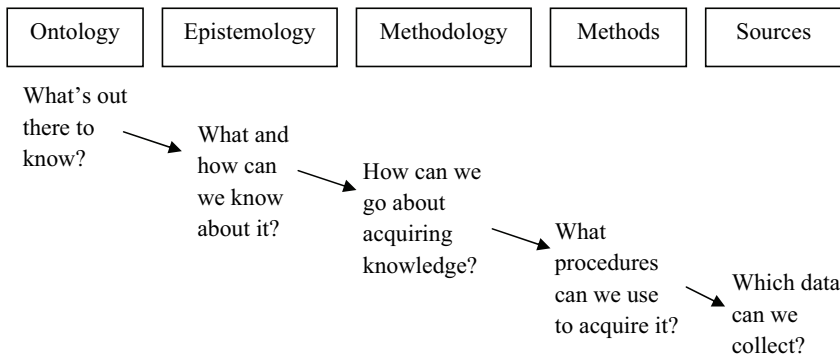
Figure 19. Directional interrelationship between the core research assumptions

Source: adapted from Hay (2002: 64)

Ontology is concerned with the nature of social entities (Bryman, 2008), "the kinds of things the theory is committed to the existence of" (Rosenberg, 2005: 199) or with what there exists to be investigated (Walliman, 2006). Literally, ontology is the theory of 'being' (Marsh and Furlong, 2002). Two opposing ontological positions derive from the theoretical attitudes to the nature of social entities, namely, *objectivism*, considering social entities as objective entities having a reality external to social actors, and *constructivism*, asserting that social phenomena are socially constructed, produced through social interaction and constantly changing (Bryman, 2008). Objectivism guides the researcher to focus on formal properties of organizations or the beliefs and values of their members, meanwhile constructivism invites the researcher to place emphasis on the active involvement of people in reality construction. Evidently, the ontological position leads to a different approach in research, its design and data collection.

Epistemology is the theory of knowledge, examining the nature, sources and justification of knowledge (Ladyman, 2005; Rosenberg, 2005) and is concerned with what is regarded as acceptable knowledge in a discipline (Bryman, 2008). Therefore "if an ontological position reflects the researcher's view about the nature of the world, their epistemological position reflects their view of what we can know about the world and how we can know it" (Marsh and Furlong, 2002: 18-19). The second question regarding the sources of knowledge is the arena of disagreement between rationalists and empiricists, where *rationalism* stands for gaining knowledge *a priori* by deducting from intuited propositions, while *empiricism* claims that knowledge can only be inductively gained by experience or *a posteriori* (Rosenberg, 2005; Walliman, 2006). But the fact is that philosophers and researchers can be both rationalists and empiricists, for "just as deduction entails an element of induction, the inductive process is likely to entail a modicum of deduction" (Bryman, 2008).

Further, a number of theoretical perspectives related to the status of scientific methods and human subjectivity form a continuum of epistemological positions with the two extremes termed *positivism* and *interpretivism* (Walliman, 2006). Positivism is an epistemological position that advocates the application of the natural sciences to the study of social reality (Bryman, 2008), it is "an objective approach that can test theories and establish scientific laws. It aims to establish causes and effects" (Walliman, 2006: 15). Positivism entails five principles: 1) phenomenalism (only knowledge confirmed by the senses can be warranted as knowledge); 2) deductivism (hypotheses are generated from theory and tested to provide explanations of laws); 3) inductivism (knowledge is gained through the gathering of facts); 4) objectivism (research must be value free); and 5) observation (the statements that cannot be confirmed by the senses are not considered genuinely scientific) (Bryman, 2008). *Postpositivism* is the thinking after positivism, which challenges its traditional notion of the absolute truth of knowledge. The key assumptions of postpositivism are: 1) absolute truth can never be found; 2) theory is tested through making claims and then refining or abandoning some of them for other claims more strongly warranted; 3) data, evidence and rational considerations shape knowledge; 4) research seeks to develop relevant true statements that can serve to explain the situation that is of concern or that describes the causal relationship of interest; 5) researchers must be objective, examine their methods and conclusions and identify bias (Creswell, 2014).

Realism shares an ontological position with positivism and has two features in common: it views the world existing independently of our knowledge of it, and beliefs that social phenomena do have causal powers that allow making causal statements (Marsh and Furlong, 2002). The main difference between these epistemologies is that unlike positivists, realists accept that not all social phenomena are directly observable. One of the major forms of realism,

critical realism, argues that conceptualization is simply a way of knowing the reality, categories employed to understand that reality are provisional and terms used to describe it are distinct from objects (Bryman, 2008). Therefore, to realists reality and appearance are dichotomous, and what appears to be is not necessarily so (Marsh and Furlong, 2002).

Interpretivism is a contrasting epistemology to positivism, critical of the application of a scientific model to the study of social world (Bryman, 2008) and recognizing that subjective meanings play a crucial role in social actions, therefore aiming to reveal interpretations and meanings (Walliman, 2006). The interpretivist approach is concerned with *Verstehen* (understanding) needed in the human and social sciences and is contrasted to the explicative approach, focused on causality inherent to the natural sciences.

In this research the objectivist ontology and the postpositivist epistemology are seen as most suitable for several reasons. First, it investigates employment experience as a set of features that are external to the employees and that act on them; therefore, organization therein is viewed as having "characteristics of an object and hence of having an objective reality" (Bryman, 2008: 18). Second, the research problem of **"what process should be used to develop the underlying value proposition of the employer brand"** emanates from the employer branding theory, therefore, putting it in a postpositivist manner of "supreme importance, both for practical and for theoretical science" (Popper, 1983/2003: 33) and prompting "the construction of a theory which solves the problem" (Popper, 1963/2002: 301) and creates new problems contributing to the growth of scientific knowledge. Therefore, this research aims to find empirical evidence for the dimensions of organizational attractiveness, to search for their causes, effects and explanations, testing theories and hypotheses. This implies the principles of deduction, empiricism and *critical rationalism* that are explicitly pointed out by Popper (1935/2005: 317):

> „Scientific theories can never be 'justified', or verified. But in spite of this, a hypothesis *A* can under certain circumstances achieve more than a hypothesis *B*—perhaps because *B* is contradicted by certain results of observations, and therefore 'falsified' by them, whereas *A* is not falsified; or perhaps because a greater number of predictions can be derived with the help of *A* than with the help of *B*. The best we can say of a hypothesis is that up to now it has been able to show its worth, and that it has been more successful than other hypotheses although, in principle, it can never be justified, verified, or even shown to be probable. This appraisal of the hypothesis relies solely upon *deductive* consequences (predictions) which may be drawn from the hypothesis".

Eventually, this thesis follows the Popperian approach of the 'nearer to the truth', thus searching for a true and relevant theory and valid reasons to find out that it is not true

in the present research context or tentative reasons to believe that this theory comes nearer to the truth of its competitors. Whenever the outcome, the research therein is intended for progressing towards the truth (Popper, 1983/2003).

2.2. Methodology

The term *methodology* is used here to refer to the research strategy providing a framework for the use of particular methods linking them to the desired outcomes, whereas *method* is referred to as techniques or procedures for collecting and analyzing data (Crotty, 1998; Bryman, 2008). Following the directional interrelationship between the core research assumptions, as seen above, ontology logically precedes epistemology, epistemological position leads to a different methodology, which logically precedes the research methods and data sources (Grix, 2002). As Kuhn (1962/1996: 96) put it:

> "The man who is striving to solve a problem defined by existing knowledge and technique
> is not, however, just looking around. He knows what he wants to achieve and he designs his
> instruments and directs his thoughts accordingly. Unanticipated novelty, the new discovery,
> can emerge only to the extent that his anticipations about nature and his instruments prove
> wrong".

Hence, a methodological approach reflects specific ontological and epistemological assumptions, and commonly is distinguished by qualitative or quantitative logic of scientific enquiry. Fundamental differences between qualitative and quantitative research strategies are listed in Table 10; however, "the distinction is not a hard-and-fast one: studies that have the broad characteristics of one research strategy may have a characteristics of the other" (Bryman, 2008: 23). Moreover, it was argued (Sechrebatn and Sidan, 1995) that these two approaches are complementary and good science is characterized by *methodological pluralism*.

Table 10. Fundamental differences between qualitative and quantitative research strategies

Characteristics	Qualitative research	Quantitative research
Ontology	Constructionism; social reality regarded as constantly shifting product of perception	Objectivism; social reality regarded as objective fact
Epistemology	Relies on individual interpretation of social reality	Positivist approach inherent to natural sciences
Orientation	Inductive; generation of theory	Deductive; testing of theories

Source: developed from Walliman (2006: 36-37), Bryman (2008: 22)

As noted above, the epistemological position of this thesis is *postpositivism*, which view of research also entails certain pluralism of method as observed by Phillips and Burbules (2000: 86-87):

> "One can study individuals or groups; one can study personal actions or patterns that appear at a higher level of social aggregation or organization; one can study intentions or unintended consequences; one can pursue experimental, interview, observational, statistically oriented, or interpretive research – or some combination of these (even if some will say these can't be combined). The postpositivist approach to research is based on seeking appropriate and adequate *warrants* for conclusions, on hewing to standards of truth and falsity that subject hypotheses (of whatever type) to test and thus potential disconfirmation, and on being open-minded about criticism".

Given the research objective to develop an instrument to measure organizational attractiveness in higher education, a practical consideration also supports the choice of mixed methods research, namely, employing qualitative research to get better wording of a questionnaire and qualitative data to generate hypotheses (Bryman, 2008). Informed by this, the decision to adopt a *mixed methods research strategy* was made including qualitative research with inductive process to develop a questionnaire, scale items and hypotheses, and quantitative research with deductive process for data analysis and hypotheses testing.

For **research design** a *cross-sectional design* with *case study elements* was employed, comprising a *survey research* and an *exemplifying case study* (Bryman, 2008). A cross-sectional design targets at variation and entails a more or less simultaneous collection of quantitative data on more than one case and on more than two variables intended to examine and detect patterns of association. A survey research comprises a cross-sectional research design in relation to which data are collected by means of a *questionnaire*. A case study here is referred to as a detailed analysis of a single case, where an exemplifying case was chosen epitomizing and typifying a broader category of cases. Online research with a self-completion questionnaire, semi-structured interview and multivariate data analysis methods was used.

2.3. Instrument development

As indicated in Figure 20, considering recommendations by Churchill (1979) and implications from the numerous methodological researches (Hinkin, 1995; DeVon *et al.*, 2007; Parasuraman *et al.*, 1988; Fombrun *et al.*, 2000; Newell and Goldsmith, 2001; Ekiz and Bavik, 2008; Berthon *et al.*, 2005; Parsian and Dunning, 2009; Pennington, 2003) **the development of the research instrument was projected as follows**:
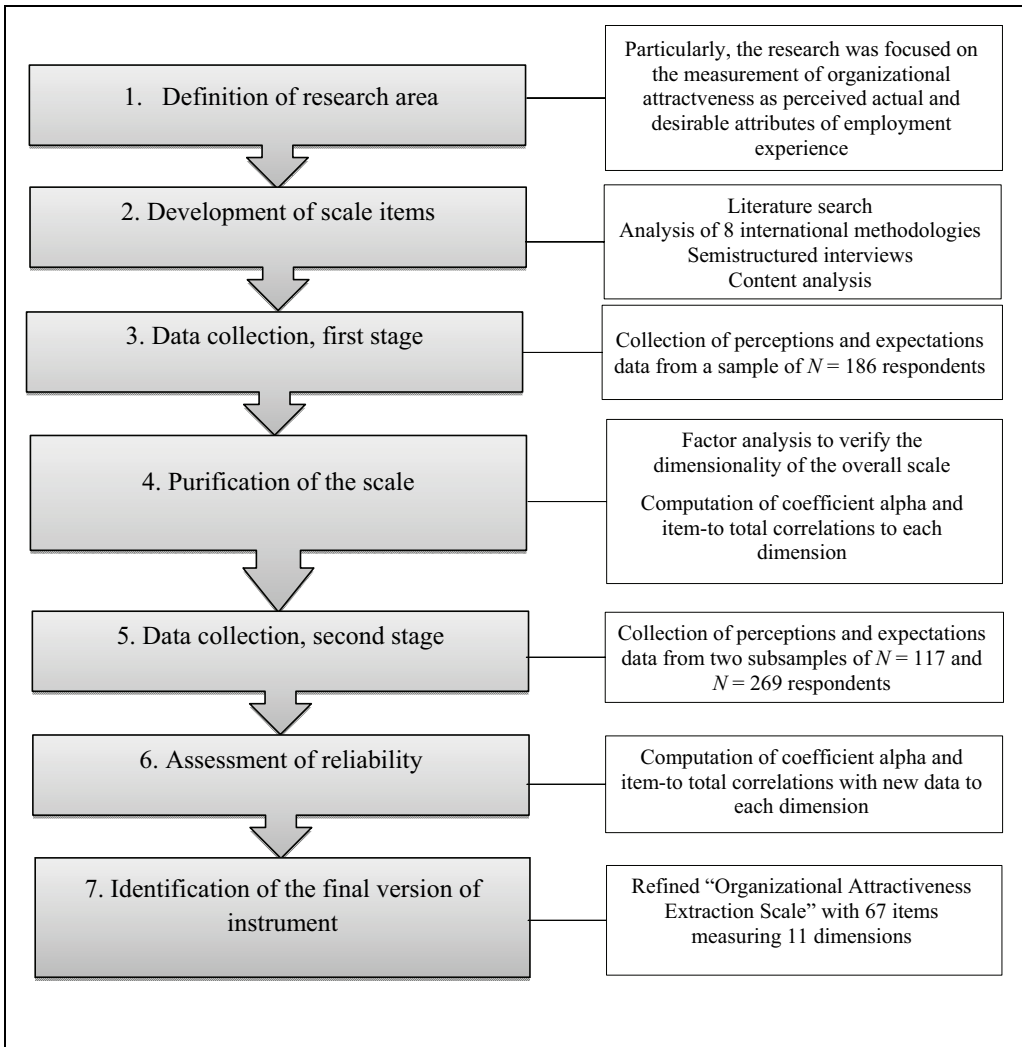
Figure 20. Summary of procedures for developing the measurement instrument

Flowchart boxes (left column → right column):

1. Definition of research area → Particularly, the research was focused on the measurement of organizational attractveness as perceived actual and desirable attributes of employment experience

2. Development of scale items → Literature search / Analysis of 8 international methodologies / Semistructured interviews / Content analysis

3. Data collection, first stage → Collection of perceptions and expectations data from a sample of $N = 186$ respondents

4. Purification of the scale → Factor analysis to verify the dimensionality of the overall scale / Computation of coefficient alpha and item-to total correlations to each dimension

5. Data collection, second stage → Collection of perceptions and expectations data from two subsamples of $N = 117$ and $N = 269$ respondents

6. Assessment of reliability → Computation of coefficient alpha and item-to total correlations with new data to each dimension

7. Identification of the final version of instrument → Refined "Organizational Attractiveness Extraction Scale" with 67 items measuring 11 dimensions

2.3.1. Definition of research area

Based on the theoretical and conceptual framework of employer branding a research area was set up to explore the development of employer brand herein referred to as a set of particular employment experience attributes that make organization distinctive and attractive as an employer. Respectfully, as a means for employer brand development, this research was focused on the measurement of organizational attractiveness as perceived actual and desirable

attributes of employment experience. Particularly, the research sought to identify and operationalise dimensions of organizational attractiveness in higher education institutions.

2.3.2. Development of scale items

Following the best practices of scale development, both deductive and inductive methods were used in item generation (Hinkin, 1995). As for deductive scale development 8 international methodologies of workplace attractiveness assessment (i.e. Great Place to Work ®; The Chronicle of Higher Education, Great Colleges to Work For, ModernThink Modern Education Insight Survey ©; The Scientist, Best Places to Work Academia; Gallup Great Workplace Award, Q12 ©; Canada's Top 100 Employers; Britain's Top Employers; Aon Hewitt Best Employers, Australia and New Zealand and the TNS Gallup's Index of the Most Attractive Employer 2006) were analyzed.

The Great Place to Work. The Great Place to Work**®** Institute, founded in 1991 by Robert Levering and Amy Lyman, carries out probably the most famous assessment of an attractive workplace worldwide. Since launching the Best Companies to Work For® lists in partnership with FORTUNE magazine (in the United States) and with Exame (in Brazil) in 1997, Great Place to Work**®** Institute produces annual research, which is based on data representing more than 10 million employees in 50 countries representing about 6,000 organizations (Great Place to Work, 2014[3]). The election of Best Workplaces is performed using the Great Place to Work **®** survey tool Trust Index© that consists of about 57 positively worded statements and measures the level of Trust, Pride and Camaraderie. Trust is the defining principle of great workplaces, created through management's Credibility (sub-dimensions Communication, Competence and Integrity), the Respect (sub-dimensions Support, Collaborating and Caring) with which employees feel they are treated, and the extent of Fairness (sub-dimensions Equity, Impartiality and Justice) with which employees expect to be treated. The degree of Pride (sub-dimensions Personal Job, Team and Company) and levels of authentic connections and Camaraderie (sub-dimensions Intimacy, Hospitality and Community) are additional essential components.

Accordingly, from the employee's perspective, a great place to work is defined as the place in which they trust the people they work for, have pride in what they do, and enjoy the people they work with (Marrewijk, 2004). From the manager's perspective, a great workplace is

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[3] http://www.greatplacetowork.com/our-approach/what-is-a-great-workplace

one where they achieve organizational objectives with employees who give their personal best, and work together as a team / family in an environment of trust.

The Gallup Workplace Audit. The development of "The Gallup Workplace Audit" or GWA (Q^{12}) was based on more than 30 years of accumulated quantitative and qualitative research (Harter et al, 2013). Q^{12} is based on 12 questions that measure "employee perceptions of the quality of people-related management practices in their business units" (Harter et al, 2013:7).: 1. Knowing What's Expected; 2. Materials and Equipment; 3. Doing One's Best; 4. Recognition and Praise; 5. Supervisor Cares; 6. Encouragement for Development; 7. Opinion Counts; 8. Company's Mission or Purpose; 9. Quality Work; 10. Best Friend at Work; 11. Talking About Progress; 12.Opportunities to Learn and Grow. These Q^{12} questions are grouped into four levels: questions 1 and 2 (level 1) measure "what do I get?", 3, 4, 5 and 6 (level 2) measure "what do I give?", 7, 8, 9 and 10 (level 3) measure the understanding of "do I belong here?" and, finally, questions 11 and 12 (level 4) measure the expectations and intentions of "how can we all grow?" (Forbringer, 2002). The first 6 questions (levels 1 and 2) form the basis for a strong and productive workplace. Q^{12} is administrated in the yearly Gallup Great Workplace Awards that were created to recognize world's top performing companies with an extraordinary ability to create a workplace culture of engagement into four areas: Strategy and Leadership, Accountability and Performance, Communication and Knowledge Management, Development and Ongoing Learning[4]. As a total instrument, the Q12 has a Cronbach's alpha of 0.91 at the business unit level (Harter et al, 2013). The main limitation of this instrument is that organizations must meet the criteria of size, minimum response rate, and minimum results in order to be invited to apply (Gallup Great Workplace Award Criteria, 2013). A tool comprising only 12 questions might also appear to be insufficient to capture more subtle areas of organizational attractiveness.

The ModernThink Modern Education Insight Survey. Since 2008, the newspaper The Chronicle of Higher Education has been conducting research on Great Colleges to Work For[5] in the USA. The ModernThink Higher Education Insight Survey© based on the ModernThink Insight Survey©[6] and tailored for institutions of higher education is used to measure the extent to which employees/faculty are involved/engaged in the organization and the quality of the employees' workplace experience. The instrument consists of sixty statements and provides insight into the following fifteen survey dimensions: 1. Job Satisfaction/Support; 2. Teaching Environment; 3. Professional Development; 4. Compensation, Benefits and Work/Life Balance;

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[4] http://www.gallup.com/strategicconsulting/157031/gallup-great-workplace-award-criteria.aspx
[5] http://chroniclegreatcolleges.com/
[6] http://www.modernthink.com/mtweb/page.html?code=surveys

5. Facilities; 6. Policies, Resources and Efficiency; 7. Shared Governance; 8. Pride; 9. Supervisors/Department Chairs; 10. Senior Leadership; 11.Faculty, Administration, and Staff Relations; 12.Communication; 13.Collaboration; 14.Fairness; 15.Respect and Appreciation (The Chronicle Great Colleges to Work for, 2014).

Best Places to Work in the Federal Government. The Best Places to Work in the Federal Government®[7] rankings use Federal Employee Viewpoint Survey (FedView survey) that was administered for the first time in 2002 and that measures employees' perceptions of whether, and to what extent, conditions characterizing successful organizations are present in their agencies[8]. Survey results provide valuable insight into how well the Federal Government is running its human resources management systems, progress of individual agencies on strategic management of human capital and areas for improvement. Employee satisfaction and commitment are considered as two necessary ingredients in developing high-performing organizations and attracting top talent. A Best Places to Work Index score, which measures overall employee satisfaction, is used to rank agencies. In addition, 10 workplace categories are measured: Employee Skills/Mission Match, Strategic Management, Teamwork, Effective Leadership, Performance Based Rewards and Advancement, Training and Development, Support for Diversity, Family Friendly Culture and Benefits, Pay Work/Life Balance.

***The Scientist's* Best Places to Work Survey.** From 2003 *The Scientist* surveys scientific community to gather their assessments of the places to work and to find out which institutions and companies fostered the most innovative, rigorous, and supportive research environments. Best Places to Work survey results are published for postdocs, industry scientists, and academics. Best Places to Work Academia*[9]* survey asks respondents from the US and non-US organizations to assess their working environment according to 38 criteria in eight different areas: Job Satisfaction, Peers, Infrastructure and Environment, Research Resources, Pay, Management and Policies, Teaching and Mentoring, Tenure and Promotion.

Aon Hewitt Best Employers Survey. Aon Hewitt Best Employers Survey is based on four elements in Asia[10]: Employee Engagement, A Compelling Employer Brand, Effective Leadership and A High Performance Culture. In Australia and New Zealand since 2009 Aon Hewitt Best Employers Survey from traditional research-based approach has been transformed into an accreditation program and is considered as a talent attraction and retention tool, naming

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[7] http://bestplacestowork.org/BPTW/overview/about/
[8] http://www.fedview.opm.gov/2013/What/
[9] http://www.the-scientist.com/bptw/
[10] http://www.aon.com/apac/human-resources/thought-leadership/talent-organization/best-employers/study_benefits.jsp

organizations on the "Best of the Best" list[11]. Organizations' performance is measured by Employee Opinion Survey in the following five areas: Engagement, Leadership Commitment, A Compelling Promise to Employees, Connecting Employees to the Company Strategy, and A Differentiated High Performance Culture. Additionally, organizational audit and inventorisation of people practices are undertaken[12].

The Canada's Top 100 Employers. Since 2000, Canada's employers have participated in a national competition *Canada's Top 100 Employers*[13] to find out which employers lead their industries in offering exceptional workplaces for their employees. Employers are evaluated using eight criteria: (1) Physical Workplace; (2) Work Atmosphere and Social; (3) Health, Financial and Family Benefits; (4) Vacation and Time Off; (5) Employee Communications; (6) Performance Management; (7) Training and Skills Development; and (8) Community Involvement.

The Top Employers Institute. The Top Employers Institute awards The Top Employers certification to world over organizations that achieve the highest standards of excellence in employee conditions and enables them to stand out as employers of choice[14]. *The Guardian*, in association with the Top Employers Institute, announces outstanding companies to work for in the UK. The companies are reviewed by Britain's Top Employer[15] and audited by Grant Thornton on the following five criteria: Pay and Benefits (primary benefits), Working Conditions (secondary benefits), Training and Development, Career Opportunities and Company Culture.

Lithuania's Most Desirable Employer. The survey "Most Desirable Employer" in Lithuania is performed by business daily Verslo Žinios and the career website cv.lt since 2005[16].The most important factors in attracting and maintaining the best employees that have remained consistent over the years as indicated by the respondents are an Attractive Salary, Social Guarantees, Good Management and possibility to have an Interesting Job. Other important features of a desirable employer are Appreciated Employees, Financial Success and Friendly Staff[17].

Other most popular instruments applicable to measuring the construct or just some facets of organizational attractiveness include Reputation Quotient (Fombrun et al, 2000), Corporate Personality Scale (Davies et al, 2001), Corporate Credibility Scale (Newell and Goldsmith,

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[11] https://ceplb03.hewitt.com/bestemployers/anz/pages/index.htm
[12] https://ceplb03.hewitt.com/bestemployers/anz/pages/accreditation_process.htm
[13] http://www.canadastop100.com/national/
[14] http://www.top-employers.com/en/about-us/Top-Employers-Institute/
[15] http://www.britainstopemployers.co.uk/
[16] http://www.cv.lt/darbdavys2013
[17] http://www.swedbank.lt/en/articles/view/800

2001), and numerous job satisfaction surveys (Van Saane et al, 2003; Measuring job satisfaction in surveys – Comparative analytical report, 2007, etc.).

To see the whole but not yet final scale of this phenomenon, the data by the Reputation Institute (2013) shows that the best employers, top brands, most admired, socially responsible companies and corporate reputations have been assessed in more than 180 lists published by magazines and newspapers around the world up to date. There could be added a comprehensive list of global and national rankings of higher education institutions. Though significant, they mainly measure university's reputation for excellence in teaching and research.

Despite or specifically because of this abundance of instruments, there is a sound rationale for the development of a new scale to measure organizational attractiveness in higher education. The existing instruments are diverse and ambiguous, many of them are commercialized, pursuing a priori principles of a universal 'employer of choice' (Rosethorn and Mensink, 2007), too broad or too narrow in scope, using too objective or too subjective indicators and neglecting a simple fact that different people have different perceptions about the value and importance of different job characteristics (Schokkaert et al., 2009), and very few – except for the rankings that are also criticized for criteria and methodology – aim at higher education institutions.

Addressing these limitations but admittedly building on numerous methodological strengths and insights of the available measures, this thesis further reports the development and validation of the Organizational Attractiveness Extraction Scale (OAES) intended to assess organizational attractiveness of higher education institutions as employers and identify particular features of organizational identity and employment experience that are most valued, appreciated and significant to their employees.

Accordingly, a general list of 76 overlapping dimensions of employer's attractiveness was composed (see Annex 1) and, as shown in Table 11, narrowed down to 30 dimensions based on separate features while retaining the maximum possible number of potential dimensions (DeVon et al., 2007).

Table 11. Narrowed-down list of "best-workplaces" dimensions

No	Overarching Dimensions	Number assigned to dimension in the initial list
1	Shared Governance	13
2	Fairness	4; 20
3	Effective Leadership	16; 25; 66
4	Supervisor Relationship	15; 44
5	Job Satisfaction	7; 32; 42; 76
6	Social Security	54; 71
7	Pay	10; 30; 36; 70; 60

Table 11 continued

No	Overarching Dimensions	Number assigned to dimension in the initial list
8	Benefits	10; 29; 54; 60
9	Career Development	39; 50; 62
10	Respect, Recognition and Appreciation	3; 21; 43; 46; 73
11	Organizational Culture	64
12	Organizational Integrity	2; 22; 69
13	Diversity	28
14	Work Atmosphere and Social	6; 17; 49; 53; 75
15	Collaboration and Teamwork	18; 19; 33; 24; 56
16	Training and Development	9; 27; 45; 51; 58; 61
17	Work/Life Balance	10; 31; 55
18	Working Conditions	11; 34; 41; 52; 63
19	Teaching Environment	8; 38
20	Research Resources	35
21	A Compelling Promise to Employees	68
22	Employee Engagement	65
23	Commitment to Quality	48; 67
24	Financial Success	74
25	Pride	5; 14
26	Credibility	2; 72
27	Community Involvement	59
28	Strategic Management	12; 23; 37; 47
29	Performance Management	26; 40; 57
30	Trust	1

Content validity #1. Further, content validity as "the degree to which elements of an assessment instrument are relevant to and representative of the targeted construct for a particular assessment purpose" (Haynes, et al., 1995: 239) was used to verify whether the items in the sample are relevant to the purposes of the study. Additionally, 30 dimensions were detailed to ensure that their perception is equal to a maximal degree. For example, *Fairness* was described as *the extent to which employees believe people are managed fairly, personal favouritism is not tolerated, disputes resolved fairly, reporting illegal activity is comfortable, equity through compensation and benefit programs.*

A panel of 15 purposely chosen expert analysts in the areas of human resource management, marketing, organizational management, organizational psychology and questionnaire design was set up, representing both academic and non-academic staff of Vytautas Magnus University, which was selected because of convenient accessibility.

Even though a 4-point scale is recommended for use in content validity, it is assumed that this scale is not sensitive enough in light of the fact that content experts are often prone to evaluate content items with high marks (DeVon *et al.*, 2007). Because of this, content reviewers were asked to assess the importance of every dimension for the attractiveness of the higher education institution as an employer, evaluating on the scale of 1 to 10, where 1 is "absolutely

irrelevant" and 10 is "extremely relevant" (see Annex 2). In order to achieve a high level of objectivity and distance themselves as far as possible from the evaluation of the *present situation* in their focal higher education institution, the experts were asked to refrain from analyzing a current situation in separate dimensions, but instead base their answers on their own expectations, i.e. points of view, opinions, attitudes and beliefs about the higher education institution as an attractive employer.

For the selection of dimensions the *Content Validity Index for Items (I-CVI)* was calculated as the number of content experts giving an item a relevance rating of 9 or 10, divided by the total number of experts, i.e. 15 (Polit and Beck, 2006). For further analysis, dimensions awarded high marks by 10 or more experts (i.e., two thirds of all experts were in consensus regarding this question) were selected. Using the I-CVI of no less than 0.667 accordingly, a list of 12 dimensions was created encompassing *Fairness*, *Organizational Culture*, *Supervisor Relationship*, *Job Satisfaction*, *Training and Development*, *Working Conditions*, *Trust*, *Strategic Management*, *Compensation and Benefits* (integrating Pay and Benefits), Collaboration and Teamwork labelled *Teamwork*, *Work-Life Balance* and *Academic Environment* (see Table 12).

Table 12. Summary of Content Analysis

No	Potential Dimensions	Content Experts' Ratings															Number in Agreement	I-CVI
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
1	Shared Governance	8	7	5	10	10	7	5	4	9	10	9	9	8	9	10	8	.533
2	Fairness	10	9	10	9	10	10	7	10	10	10	10	10	10	10	10	14	.933
3	Effective Leadership	8	9	5	9	10	7	8	8	8	9	10	10	10	10	10	9	.600
4	Supervisor Relationship	8	10	10	10	10	10	10	10	8	10	10	9	10	9	10	13	.867
5	Job Satisfaction	9	8	10	10	10	8	10	10	9	10	9	10	10	9	10	13	.867
6	Social Security	10	10	8	8	8	8	9	8	6	8	10	10	10	8	9	7	.467
7	Pay	10	9	8	10	9	8	8	8	8	10	9	10	10	9	10	10	.667
8	Benefits	10	9	10	10	9	7	8	9	8	9	8	10	10	8	9	10	.667
9	Career Development	10	9	7	10	9	8	9	6	8	10	8	9	9	8	9	9	.600
10	Respect, Recognition and Appreciation	8	7	6	9	8	9	9	9	9	8	9	8	10	8	9	8	.533
11	Organizational Culture	9	9	6	9	10	9	9	9	10	10	10	10	10	9	10	14	.933
12	Organizational Integrity	7	8	8	8	10	6	8	7	7	9	9	8	9	9	9	6	.400
13	Diversity	9	9	6	7	10	8	8	9	8	8	8	9	10	8	9	7	.467

Table 12 continued

No	Potential Dimensions	Content Experts' Ratings															Number in Agreement	I-CVI
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
14	Work Atmosphere and Social	8	10	4	7	9	9	9	10	6	9	10	7	10	8	8	8533	.
15	Collaboration and Teamwork	8	8	5	8	10	9	10	9	10	10	9	10	10	9	9	11	.733
16	Training and Development	8	10	9	10	10	9	10	7	8	10	9	9	10	10	10	12	.800
17	Work/Life Balance	10	10	10	8	9	8	10	10	7	10	6	8	10	9	10	10	.667
18	Working Conditions	8	10	9	9	9	7	10	9	7	9	9	9	10	9	9	12	.800
19	Teaching Environment	8	10	9	8	10	7	10	10	8	10	9	9	10	9	9	11	.733
20	Research Resources	10	9	8	7	10	7	5	8	9	10	7	9	10	8	8	7	.467
21	A Compelling Promise to Employees	10	9	7	6	8	10	9	6	9	10	9	10	9	8	8	9	.600
22	Employee Engagement	9	9	7	6	8	8	9	10	9	9	7	8	9	8	8	7	.467
23	Commitment to Quality	8	9	9	6	10	8	9	9	10	10	8	10	8	8	9	9	.600
24	Financial Success	8	9	4	6	9	1	6	7	8	9	10	6	9	7	9	6	.400
25	Pride	10	10	8	7	9	7	9	7	10	10	9	8	10	7	9	9	.600
26	Credibility	9	10	4	5	9	7	7	7	10	8	7	7	9	7	8	5	.333
27	Community Involvement	8	10	5	5	10	8	8	5	9	8	8	10	9	8	9	6	.400
28	Strategic Management	8	9	7	7	10	7	9	5	10	9	9	10	10	9	10	10	.667
29	Performance Management	8	10	7	6	10	7	9	7	8	8	8	9	10	9	5	6	.400
30	Trust	10	10	10	8	10	8	8	10	10	8	9	10	10	10	10	11	.733

Seeking to ensure the *face validity* of the tool, experts were also asked to write comments related to the formulation of the dimension and clarity, precision of its elaboration, as well as suitability of the wording and its probable comprehensibility to the respondents.

Semi-structured interviews. In parallel, applying an inductive approach, three semi-structured interviews of Vytautas Magnus University staff (total $N = 70$) and four semi-structured interviews of Vytautas Magnus University undergraduate final course students (total $N = 160$) were conducted with the aim of determining their value attitudes and perceptions about the researched university. The staff were asked *why they are working in the university* and *for what reasons they would leave it*. Individual written answers were summarized according to the

frequency of repetitions, revealing the value attitudes that help form a university's identity in this way (see Annex 3). Example answers would be "informal communication", "nonhierarchical relations", "honesty", "collegiality", "intellectual, stimulating environment", etc.

Student groups tried to explain *why I am in this university*. As in the case of staff members, written answers during the collective talk sessions were pooled into value groups (see Annex 4). Example answers would be "good reputation", "good atmosphere", "students are respected and treated equally as the rest of the university's society", "competent and friendly teachers", etc.

As a summation of the data from the semi-structured interviews, a list of 149 statements made by the respondents was created which demonstrated how they expressed their motivation in view of refined values.

It is noteworthy that this process helped to identify viewpoints of both external (for the students) and internal (for the employees) stakeholders and to ensure their synergy and integrity. **Content validity #2.** The next stage in the development of the instrument began with the expansion of the 12 expert-refined dimensions that make up the attractiveness of the higher education institution as an employer with the statements collected during the semi-structured interviews. Another panel of 13 purposely chosen content experts was formed from the focal University and requested to evaluate the validity of every statement in regard to the dimension to which it was attributed answering the question "*Does the statement measure the dimension to which it has been assigned?*" by *"Yes"* (scale point 4), *"Partly yes"* (scale point 3)*, Neutral"*(scale point 0)*, "Partly no"*(scale point 2) *and "No"* (scale point 1). If the answer to the question *was "No"*, experts were asked to assign the statement to another dimension by marking the field *"Move to the dimension No."* or to choose the option to *"Remove"* the statement*.* In case the list of statements did not include one needed to measure the dimension, the experts were also asked to fill in the field "Other" by writing their opinion or offering a suitable statement. To refine the list of statements the Content Validity Ratio (CVR) was used. Its basic goal is to evaluate how essential a particular item is for the measurement of a dimension. Pennington (2003) argues that the proportion must be greater than 0.54, which corresponds to 10 out of 13 experts assessing a respective element as suitable to the given dimension (see

Annex 5). 75 out of 149 statements were eliminated using this method, some were reassigned (for example, the statement „*Remuneration system is clear and objective*" was moved from dimension 8 *Compensation and Benefits* to dimension 2 *Fairness*) and an initial Organizational Attractiveness Extraction Scale, consisting of 12 dimensions and 74 statements connected to them was framed, as listed in Annex 6.

2.3.3. Piloting

2.3.3.1. Data collection, first stage

After the pool of items was generated an initial data was collected to purify the measure. As it is common in pilot tests, the convenience sampling was used and a primary survey was carried out at Vytautas Magnus University.

A questionnaire was designed to extract both actual and desirable characteristics of university's attractiveness as an employer. Hence a twofold response scale of *Experience* (EXP) and *Importance* (IMP) was applied for evaluation of each item. First, the respondents were asked to think if they "don't have at all, have a little, have a lot of experience or are constantly experiencing" the essence of every statement; second, the respondents were invited to evaluate how important the content of the statement is to them from "not important at all", "not important", "important" and "very important". Additionally "I am uncertain" was put to both scales. Therefore a 4-point response scale with a separated neutral evaluation was employed. The twofold scale was also supposed to contribute to the easier interpretation of the survey results providing with a clear picture of what employees were used to and what they still lacked for.

To collect the data a web-based anonymous survey was conducted in the period from June 2011 until September 2011. Invitations with a reference to the web-based questionnaire were distributed via Vytautas Magnus University intranet, available to all 1000 eligible employees, 391 having read the message and received a survey. The respondents were invited to express their opinion thus taking part in the development of the university strategy and employer brand in particular. Anonymity of the respondents was also stressed. 186 employees were surveyed. Similar sample sizes were used to purify initial instruments, as reported by Parasuraman et al. (1988). The distribution of respondents by gender (67.2% women respondents) and position (50.5% of Academic and 49.5% of Administrative staff) corresponds to the composition of the overall University population, therefore the sample is proportionally allocated and representative (see Table 13).

Table 13. Demographic characteristics of the sample

Characteristics	Frequency	Percentage
		(*N*=186)
Gender		
Females	125	67.2
Males	61	32.8
Age		
<25	7	3.8
26-35	60	32.3
36-45	47	25.3
46-45	45	24.2
>55	27	14.5
Employee group #1		
Academic staff	94	50.5
Administrative staff	92	49.5
Employee group #2		
Subordinate staff	122	65.6
Supervising staff	64	34.4
Tenure		
<5	67	36.0
6-10	45	24.2
11-15	32	17.2
>=16	42	22.6

Purification of the scale was started with a clear-out of the data: responses with neutral meaning labelled "I am uncertain" were excluded from further analysis. Following Parasuraman et al. (1988), the following analyses were based on the *Importance* and *Experience* scales' difference scores.

Aiming at examining the structure and dimensionality of the scale, Exploratory Factor Analysis, as it is common with the first data set (Newell and Goldsmith, 2001; Parasuraman et al, 1988), was conducted prior to 12 conceptually developed dimensions. The difference scores of 74 items were factor analyzed using SPSS with the Principal Component Analysis procedure and Varimax with Kaiser Normalization rotation. The nonparametric bootstrap method was applied for factor analysis purposes (Zientek and Thompson, 2007) and a Kaiser-Meyer-Olkin index of 0.886 indicated the appropriateness of using factor analysis on data (see Table 14). A statistically significant Bartlett's test of sphericity (sig. < .05) indicated that significant correlations exist among the variables to proceed factor analysis (Hair, 2010).

Table 14. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,886
Bartlett's Test of Sphericity	Approx. Chi-Square	55969,595
	df	2701
	Sig.	,000

Having an a priori conception about how items are related, it was decided to project on 12 factors to be extracted. Since the scree test suggested 15 factors, multiple factor analyses were run setting the number of factors extracted at eight to 15 (Costello and Osborne, 2005). The 'cleanest' rotated factor structure yielded an 11 factor solution, where no factors with less than three items and cross-loading items emerged. Table 15. Total Variance Explained

15 shows that the extraction of 11 factors accounts for 65.8% of the common variance, this means that an eleven-factor model is practically significant and a solution is satisfactory (Hair, 2010).

Table 15. Total Variance Explained

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	7,489	10,121	10,121
2	7,467	10,091	20,212
3	5,199	7,026	27,238
4	4,335	5,858	33,096
5	4,292	5,800	38,896
6	4,278	5,781	44,677
7	4,198	5,673	50,351
8	3,451	4,663	55,014
9	3,275	4,426	59,440
10	2,473	3,342	62,782
11	2,241	3,028	65,810

Extraction Method: Principal Component Analysis.

Factor structure and factor loadings of initial organizational attractiveness scale are displayed in Annex 7. As it is visible, 7 poor performing items (No. 4 *My supervisor sets clear goals and objectives for my work*, No. 6 *My supervisor praises me*, No. 14 *I have trust in my colleagues*, No. 26 *I can show initiative there*, No. 36 *Good student-faculty relationship prevail*, No. 45 *Variety of situations, activities and people is being met there*, and No. 55 *Environment is intellectual there*) with loading less than 0.45 were apparent and, having a sample of 186 respondents it was suggested that they be removed from factor matrix (Hair, 2010), resulting in a total row of 67 items.

In order to test reliability and assess the quality of extracted factor structure, the estimates of internal consistency using Cronbach's alpha coefficients were computed separately for each of the 11 factors (Churchill, 1979; Parasuraman et al, 1988) ranging from 0.714 to 0.933 (see Annex 8). Considering the general rule for having coefficient alpha not lower than 0.70 to prove the internal consistency of the scale (e.g., Fombrun et al, 2000; Berthon et al, 2005), the values of Cronbach's alpha showed to be more than sufficient. The descending lists of internal corrected item-to-total correlations did not indicate a sharp drop in the row of alpha weights or

considerable increase in the total factor's Cronbach's alpha score if dropped out. Subsequently no items were eliminated from the scale.

Eventually, the scale purification procedure after the first pilot resulted in 11 factors comprising 10 original dimensions, i.e. *Job Satisfaction, Training and Development, Work-Life Balance, Academic Environment, Organizational Culture, Compensation and Benefits, Teamwork, Supervisor Relationship, Strategic Management* and *Working Conditions*. Meanwhile former dimensions of Fairness and Trust converged into new termed *Fairness and Trust*. Dimensions of OAES and numbers of items assigned to them in the descending order of factor loadings is shown in Table 16.

Table 16. OAES dimensions and items assigned to them in the descending order of factor loadings

Dimensions	Number of items in each dimension	Items
Organizational Culture	11	51; 49; 47; 50; 52; 56; 53; 46; 44; 48; 54
Fairness and Trust	9	9; 8; 13; 12; 16; 17; 11; 10; 15
Teamwork	7	71; 70; 73; 69; 72; 74; 68
Academic Environment	5	38; 35 37; 34; 40
Strategic Management	6	64; 65; 63; 66; 67; 62
Job Satisfaction	8	23; 18; 19; 21; 25; 20; 24; 22
Supervisor Relationship	5	7; 1; 5; 2; 3
Compensation and Benefits	5	58; 60; 57; 59; 61
Training and Development	4	30; 32; 31; 33
Work-Life Balance	3	28; 29; 27
Working Conditions	4	41; 42; 39; 43

At this stage the scale was ready for additional pilot testing for which new sample was used to collect the data (Churchill, 1979; Hinkin, 1995).

2.3.3.2. Data collection, second stage

To further evaluate OAES, its reliability and application potential, two independent convenience samples were used to collect additional data. The scale was administered in Aleksandras Stulginskis University (abbreviated as ASU) during the period of March – June 2012 and in Kaunas University of Technology (abbreviated as KUT) during the May of 2012.

There were some amendments made in the design of the questionnaire, namely, a four-point response scale was changed to a 10-point scale as it was noticed that the former does not give enough discrimination and distribution. Thus, a twofold *Experience* (EXP) and *Importance*

(IMP) 10–point response scale was used for evaluation of each item. Firstly, the respondents were asked to assess whether a statement reflects actual employment experience in the particular higher education institution, with "1" used to indicate "least experienced" (lowest perceived experience), and "10" – "most experienced" (highest perceived experience). Secondly, the respondents were asked to evaluate how important such employment experience was to them, with "1" used to indicate "least important" (lowest perceived value) and "10" – "most important" (highest perceived value).

The list of items was randomly mixed not to provide respondents with a clue as to what dimension is being measured and to avoid inertia and bias. Considering primary survey feedback, items phrased in confusing ways were reworded. As in the first stage of data collection, online anonymous questionnaires were distributed via e-mail.

$N = 117$ completed questionnaires were returned from ASU and $N = 269$ received from KUT. Table 17 shows demographic characteristics of the two samples.

Table 17. Demographic characteristics of two samples

Characteristics	ASU		KUT	
	(*N*=117)		(*N*=269)	
	Frequency	Percentage	Frequency	Percentage
Gender				
Females	54	46,2%	139	53,7%
Males	63	53,8	120	46,3
Age				
<25	4	3,4	8	3,0
26-35	16	13,7	90	33,8
36-45	41	35,0	69	25,9
46-45	33	28,2	44	16,5
>55	23	19,7	55	20,7
Employee group #1				
Academic staff	83	72,2	193	73,1
Administrative staff	32	27,8	71	26,9
Employee group #2				
Subordinate staff	31	27,0	54	20,5
Supervising staff	84	73,0	209	79,5

Note: There are no statistically significant differences between these subsamples, except for age (p= .008).

To assess scale reliability with new data, Coefficients alpha were calculated. Table 18 shows the reliability figures for each of the eleven organizational attractiveness dimensions for the initial data, for the entire database of the second data collection and for the S-University and T-University separately. The reliability levels for both initial data and total second stage data are all above the threshold of 0.70 for acceptance in validating the developed scale. *Work-life Balance* is the only factor which could be questioned from the S-University data, the same could be said about *Training and Development* factor from T-University data. As far as reliability

scores from other columns are acceptably high, this deflection presumably could be affected by a certain organizational context.

Table 18. Cronbach alpha reliability scores for each factor and respondent group

Organizational attractiveness dimension	Reliability for initial data	Reliability for total second stage data $N = 386$	Reliability for ASU data $N = 117$	Reliability for KUT data $N = 269$
Organizational Culture	0.933	0.950	0.940	0.936
Fairness and Trust	0.930	0.937	0.930	0.935
Teamwork	0.902	0.883	0.833	0.853
Academic Environment	0.839	0.823	0.831	0.802
Strategic Management	0.870	0.906	0.875	0.867
Job Satisfaction	0.891	0.857	0.760	0.817
Supervisor Relationship	0.874	0.948	0.825	0.927
Compensation and Benefits	0.922	0.881	0.896	0.879
Training and Development	0.857	0.815	0.837	*0.681*
Work-life Balance	0.714	0.725	*0.661*	0.709
Working Conditions	0.721	0.786	0.806	0.762

Accordingly, it could be concluded that after two pilots Organizational Attractiveness Extraction Scale is valid for the surveyed higher education institutions, and therefore is applicable for broad usage within the higher education sector. The final composition and content of OAES is presented in Table 19.

Table 19. Organizational Attractiveness Extraction Scale

Organizational Culture
Work environment is collegial.
Good atmosphere prevails in University.
Openness and sincerity is encouraged in University.
Ethical standards are followed.
High quality performance culture is being created in University.
Conflicts are harmonized and resolved effectively in University
Environment is community-friendly.
Constructive criticism is appreciated.
Informal communication is frequent.
Creativeness and initiative is fostered in University.
Academic freedom is valued.
Fairness & Trust
Remuneration system is clear and objective.
Procedures promoting transparency are developed.
Equal opportunities are ensured.
Clear standards for promotion and tenure are articulated.
Promises are kept in my University.
I have trust in University leadership.

Table 19 continued

Decisions are made without bias.
Employees are treated fairly.
Words match with actions in my University.

Teamwork

I can rely on my colleagues.
I enjoy working alongside like-minded people.
I have good relationships with my colleagues.
My colleagues are helpful and supportive.
Effective internal communication is developed.
Cooperation is promoted to get the jobs done.
Employees share their ideas and knowledge.

Academic Environment

High study quality is pursued
My peers are best scientists and lecturers.
My students are good and motivated.
Innovative training methods are encouraged in my University.
A favourable research environment is created in my University.

Strategic Management

Organizational, departmental and employee integrity is ensured.
Policies, procedures and responsibilities support strategy implementation.
Sustainability and corporate social responsibility are fostered.
Employee participation in decision making is promoted.
University is building positive reputation and image.
A clear strategy and direction is set and aligned with University vision and values.

Job Satisfaction

I like my job and find it interesting.
My job is intellectually challenging.
I can realize my ideas and potential.
I know what is expected of me at work.
My job meets my experience and abilities.
My job feels meaningful.
I feel that I and my efforts are valued.
I have career opportunities in my University.

Supervisor Relationship

My supervisor gives me feedback about my progress.
My supervisor listens to me and regards my opinion.
My supervisor supports me.
I have trust in my supervisor.
My supervisor gives me guidance.

Compensation and Benefits

Effective employee incentive scheme is functioning in University (for loyalty, achievement, etc.).
Additional benefits are offered to motivate employees.
I am getting paid enough for my job.
Best employees are appreciated in University.
Employee's performance results and competencies are recognized and rewarded.

Training and Development

I receive enough training to do my job in best manner.
I have opportunities for personal growth in University.
Employee training and development meets University aims and objectives.
Talents are nurtured in University.

Table 19 continued

Work-Life Balance
I have enough flexibility in my work.
I may harmonize my work and personal life needs.
My work load is manageable.
Working Conditions
I am provided with all necessary equipment and resources to do my job well.
Safe and comfortable working environment is created in my University.
The consistent administrative support is provided to faculty members.
I am not experiencing stress in my work.

Additionally, the non-parametric Mann-Whitney U test was used to assess whether differences existed between mean values of two subsamples on Experience scale (see Table 20) and on Importance scale (see Table 21).

Table 20. Results of non-parametric Mann-Whitney U test on Experience Scale

	Organizational Culture	Fairness and Trust	Teamwork	Academic Environment	Strategic Management	Job Satisfaction	Supervisor Relationship	Compensation and Benefits	Training and Development	Work-Life Balance	Working Conditions	Experience Index
Mann-Whitney U	10935,000	11968,000	10956,500	10772,000	10456,500	11985,000	12482,500	11082,000	11720,000	13234,000	13129,000	6852,000
Wilcoxon W	17263,000	17854,000	17397,500	17327,000	16897,500	18426,000	18810,500	17523,000	18390,000	20020,000	19684,000	11130,000
Z	-2,324	-1,026	-2,913	-3,641	-3,316	-1,819	-1,370	-2,772	-2,681	-1,404	-,735	-2,197
Asymp. Sig. (2-tailed) p value	,020	,305	,004	,000	,001	,069	,171	,006	,007	,160	,463	,028

Table 21. Results of non-parametric Mann-Whitney U test on Importance Scale

	Organizational Culture	Fairness and Trust	Teamwork	Academic Environment	Strategic Management	Job Satisfaction	Supervisor Relationship	Compensation and Benefits	Training and Development	Work-Life Balance	Working Conditions	Importance Index
Mann-Whitney U	4947,000	5449,000	5547,000	5274,500	5037,500	5655,500	6334,500	6642,500	5457,500	7046,000	5966,000	3015,000
Wilcoxon W	7503,000	8299,000	8550,000	8277,500	7963,500	8356,500	9337,500	9645,500	8460,500	9896,000	8969,000	5361,000
Z	-4,535	-4,226	-4,726	-5,495	-5,410	-4,071	-4,056	-3,319	-5,255	-2,710	-4,311	-4,344
Asymp. Sig. (2-tailed) p value	,000	,000	,000	,000	,000	,000	,000	,001	,000	,007	,000	,000

The results of a Mann-Whitney test indicated significant or highly significant differences on the majority of dimensions, except *Fairness and Trust*, *Supervisor Relationship*, *Work-Life Balance* and *Working Conditions,* i.e. seven out of 11 on Experience scale and on all dimensions on Importance scale. These findings suggest that perceived actual and desirable employment experience differentiates between the two researched higher education institutions as well as presuppose different patterns of organizational attractiveness possessed by ASU and KUT.

Therefore, OAES has proven to be useful in determining employment experiences that are most often met by employees in higher education institutions and unfolding employee work values preferences. Accordingly, it enables to explore organizational attractiveness of higher education institutions, to uncover unique characteristics of their employment-based identity and, therefore, provides the means for building effective employer branding strategy.

2.4. Research design
2.4.1. Sampling

Empirical research requires the selection of individuals or institutions which are to provide the information and as a set are called the sample, coming from the target population (Remenyi *et al.*, 1998). The sampling frame, as a comprehensive list of all units in the population from which the sample is drawn (Bryman, 2008), for current research was set as a totality of Lithuanian higher education institutions – public and private universities and colleges – obtained from Open information consultation and orientation system (AIKOS) www database[18] as of academic year 2011-2012 (see Table 22 and Annex 9).

Table 22. Number of higher education institutions in 2005-2013

	2005-2006	2010-2011	2011-2012	2012-2013
Universities	**21**	**22**	**23**	**23**
public	15	14	14	14
private	6	8	9	9
Colleges	**28**	**23**	**24**	**24**
public	16	13	13	13
private	12	10	11	11

Source: Education 2012 (2013), Statistics Lithuania, http://osp.stat.gov.lt/statistikos-leidiniu-katalogas

The population composing the sampling frame consisted of 47 higher education institutions (23 universities and 24 colleges) totalling 22168 full-time equivalent staff members (Education 2012, 2013) (see Table 23 and Annex 9).

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[18]AIKOS is an open vocational information, counselling, and guidance system providing a wide range of users with information based on public, departmental, and other databases and registers.http://www.aikos.smm.lt/aikos/institutions.htm

Table 23. Number of higher education staff members in Lithuanian higher education institutions (full-time equivalent), 2011-2012

Instructional (Academic) staff	12733
Staff, providing pedagogical, health and social support for students	2146
Management and administrative staff	3291
Maintenance and operations staff	3998

Source: Education 2012 (2013:25), Statistics Lithuania, http://osp.stat.gov.lt/statistikos-leidiniu-katalogas

Therefore, the population to be studied was regarded as being made up of a number of first stage or primary sampling units (higher education institutions) each of them being made up of second stage sampling units (staff members). Respectively, a two-stage sampling design was established:

1) Firstly, higher education institutions were sampled using a non-probability purposive criterion-based technique;

2) Secondly, higher education staff members were sampled using probability random cluster sampling technique.

Stage One. A non-probability purposive criterion-based technique was used to select a sample of higher education institutions. In the non-probability sampling a sample is being selected using non-random means (Walliman, 2006) and is based on some sort of subjective judgements of the researcher in selecting the sample (Remenyi *et al.*, 1998). Even though non-probability sampling implies that some units in the population are more likely to be selected than others (Bryman, 2008) and therefore is prone to the sampling bias, there are times when probability sampling is not appropriate and many situations call for non-probability sampling (Babbie, 2013). Non-probability sampling is particularly relevant in exploratory research (Remenyi *et al.*, 1998).

On the basis of knowledge of higher education institutions' populations, its elements and the purpose of study, the purposive or judgmental sampling was used as an appropriate technique to select a sample (Babbie, 2013). The purposive sampling is a type of non-probability sampling in which the units to be observed are selected with a specific purpose in researcher's mind, such as their likelihood of usefulness and representativeness (Remenyi *et al.*, 1998; Babbie, 2013). Two types of the judging criteria, i.e. objective and subjective, where used to draw a sample:

1) *Objective criterion* was based on the size of the higher education institution in terms of official numbers of students and teachers as indicated in AIKOS. Accordingly, Bishop Vincentas Borisevicius Seminary of Telsiai with 17 students and 34 teachers, Vilnius St.

Joseph's Seminary with 23 students and 32 teachers, as well as St. Ignatius of Loyola College with 131 students and 16 teachers were not included in the sample.

2) *Subjective criterion* was based on the probability of low response rate due to a language barrier and research ethics, ensuring equal right for all employees to participate in the research. As the survey was meant to be administered in Lithuanian, but one-third of LCC International University faculty are Lithuanians while two-thirds are from the Western Europe, Canada and the United States[19], the institution was not included in the sample. Similarly, the Branch of the University of Bialystok "Faculty of Economics and Informatics", where the majority of academic community are the Poles, and European Humanities University, where the majority of academic community are Byelorussians, were excluded.

Accordingly, 6 institutions were excluded and a sample of 41 higher education institutions, consisting of 18 universities and 23 colleges was selected. Further, individual requests for survey approval were sent to the rectors and directors of all 41 higher education institutions on 27-29 June 2012 by official e-mail addresses available on institutional websites (see Annex 10). The statement about the purpose of the survey and justification for the survey request (reason why data are needed, specific objectives and how data will be used), format of the survey (web survey), target population, a copy of the proposed survey questionnaire, preferred dates for when the proposed survey would be made available, information of institutional benefits, planned distribution of the survey results, and contact details of the researcher were indicated in the request letters. The requests for conducting the surveys were followed by telephone or e-mail conversations answering specific questions or hearing particular requests directly with the rectors and directors of higher education institutions or responsible employees who were assigned to serve as the coordinators of the survey. Unfortunately, methodological constrains were not avoided, namely:

- 15 requests for the survey remained unanswered, even though were repeated twice each time keeping a 10-day interval.
- The highest managers of Lithuanian Academy of Music and Theatre, ISM University of Management and Economics, and Klaipeda Business Higher School reclined a request for the survey.

Eventually, 23 written or oral permissions to conduct a research in higher education institutions were obtained (see Table 24). However, even though the approval for conducting a higher education institution survey was received from Lithuanian Sports University,

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[19] http://www.lcc.lt/facts-figures

International Business School at Vilnius University, and Lithuania Business University of Applied Sciences, not a single completed questionnaire from these institutions was returned at all.

Table 24. Higher Education Institutions' participation in survey

No	Higher Education Institution	Survey start date	Survey end date	Returned questionnaires	Data analysis
Universities					
1	The General Jonas Zemaitis Military Academy of Lithuania	2012.10.09	2012.10.19	23	Included
2	Lithuanian University of Health Sciences	2012.11.16	2012.11.26	20	Included
3	Kaunas University of Technology	2012.05.11	2012.05.24	269	Included
4	Klaipeda University	2012.11.07	2012.11.23	98	Included
5	*Lithuanian Sports University*	*2012.10.04*	*-*	*0*	*Excluded*
6	Aleksandras Stulginskis University	2012.03.30	2012.06.02	117	Included
7	Siauliai University	2012.10.06	2012.22.28	69	Included
8	*Vytautas Magnus University*	*2011.06.28*	*2011.09.27*	*186*	*Excluded*
9	Kazimiero Simonaviciaus University	2012.10.05	2012.10.25	19	Included
10	*International Business School at Vilnius University*	*2012.10.04*	*-*	*0*	*Excluded*
11	Vilnius University	2012.10.04	2012.10.25	119	Included
Colleges					
1	Kaunas College of Forestry and Environmental Engineering	2012.11.05	2012.11.12	21	Included
2	Klaipeda State College	2012.11.06	2012.11.21	13	Included
3	University of Applied Social Sciences	2012.10.05	2012.10.15	30	Included
4	Kolping College	2012.10.04	2012.11.09	15	Included
5	Lithuanian Higher Naval School	2012.11.09	2012.11.30	65	Included
6	Marijampole College	2012.10.18	2012.11.14	50	Included
7	Siauliai State College	2012.10.04	2012.10.26	42	Included
8	North Lithuania College	2012.10.08	2012.11.01	44	Included
9	*Lithuania Business University of Applied Sciences*	*2012.10.04*	*-*	*0*	*Excluded*
10	Vilnius College	2012.10.09	2012.10.21	61	Included
11	Vilnius Co-operative College	2012.10.08	2012.10.31	12	Included
12	Zemaitija College	2012.10.08	2012.10.24	18	Included

Consequently, 20 higher education institutions were omitted from the initial purposive sample. Vytautas Magnus University, which was surveyed for the purposes of instrument development, following statistical rules, was not included in the sample. The data from Aleksandras Stulginskis University and Kaunas University of Technology, which was obtained in the piloting stage, was included in the data analysis as far as no further scale amendments were made. **Accordingly, the final sample for the study was modified and reduced to 19 higher education institutions – 8 universities and 11 colleges.**

Stage Two. In the next stage, forasmuch as the identified sample of higher education institutions was made up of separate organizations or naturally formed groups, called clusters (Remenyi *et al.*, 1998), probability random cluster sampling technique was employed and all staff members in each cluster were included in the sample (Bryman, 2008). A probability sample is made using some random procedure ensuring for each member of population a nonzero probability of selection, even though different members may have different probabilities (Babbie, 2013). However, in social research it is common that some people, who are in the sample refuse to participate, or cannot be contacted, inducing non-response (Bryman, 2008). Non-response is a source of non-sampling error, increasing the potential for a biased sample. Moreover, as reported by American Academy of Political and Social Science (Social Science Space, 2013) the survey non-response problem is likely going to continue to worsen due to "the lack of public recognition of the importance of statistical and scientific surveys in the world today" (para. 6). As far as respondents' participation in the survey was driven purely by motivation and willingness, the non-response bias could reduce a probability sample to a non-probability sample convenience sample. **As it is shown in Table 24, the survey was carried out during the period of March – November, 2012.** A total of 1105 participants responded to the invitation and filled in the questionnaire – $N = 734$ from 8 universities and $N = 371$ from 11 colleges. Table 25 below shows demographic characteristics of the sample ($N = 1105$).

Table 25. Demographic characteristics of the sample

Characteristics	Total sample		Universities		Colleges	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Gender						
Females	636	59.6	378	53.0	258	72.9
Males	431	40.4	335	47.0	96	27.1
Age						
<=25	25	2.30	20	2.7	5	1.4
26-35	317	28.9	219	30.0	98	26.8
36-45	308	28.1	203	27.8	105	28.8
46-55	239	21.8	144	19.7	95	26.0
>55	206	18.8	144	19.7	62	17.0
Employee group #1						
Academic staff	808	74.1	559	77.0	249	68.0
Administrative staff	282	25.9	165	22.7	117	32.0
Employee group #2						
Subordinate staff	837	77.3	575	79.6	262	72.2
Supervising staff	246	22.7	145	20.1	101	27.8
Tenure						
<5	294	26.9	158	21.8	136	37.2
6-10	255	23.4	168	23.1	87	23.8
11-15	189	17.3	143	19.7	46	12.6
>=16	354	32.3	256	35.3	97	26.5

On-line research methods allow sample size calculation only hypothetically and, usually, having information about population, a confidence interval with a chosen confidence level is calculated after the survey. According to the information of Statistics Lithuania (2013), there were 22168 full-time equivalent staff members in Lithuanian higher education as of academic year 2011-2012. It should be noted there that it was not possible to obtain information about staff members in separate higher education institutions. Therefore the population from which the sample was made was $N = 22168$. Altogether, $n = 1105$ questionnaires were returned, from which $n_1 = 715$ with proportion of $p = 0.65$ represented universities, and $n_2 = 390$ with proportion of $p = 0.35$ represented colleges. In this way, the confidence interval was calculated using the online sample calculator by Raosoft®[20]. The calculation was based on the following formulas:

$$E = \sqrt{\frac{(N-n)\cdot x}{n\cdot(N-1)}},$$

$$n = \frac{N\cdot x}{\left((N-1)\cdot E^2 + x\right)},$$

$$x = Z(c/100)^2 \cdot r \cdot (100-r),$$

Where: N is the population size, n is the sample size, E is the confidence interval, r is the fraction of responses, c is the confidence level, and $Z(c/100)$ is the critical value for the confidence level.

Calculations were performed using a confidence level of 95 and showed that the confidence interval with a sample size of $n = 1105$ would be ± 2.87%. **Therefore, the sample size of $n = 1105$ allows to generalize to the whole population with the confidence level of 95 % and the confidence interval of ± 2.87%.**

2.4.2. Questionnaire design

As it is depicted in Figure 21, an eleven-dimensional Organizational Attractiveness Extraction Scale (OAES) specifically developed for this research was used to measure the perceived actual and desirable characteristics of employment experience in 19 higher education institutions.

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[20] http://www.raosoft.com/samplesize.html?tfrm=5
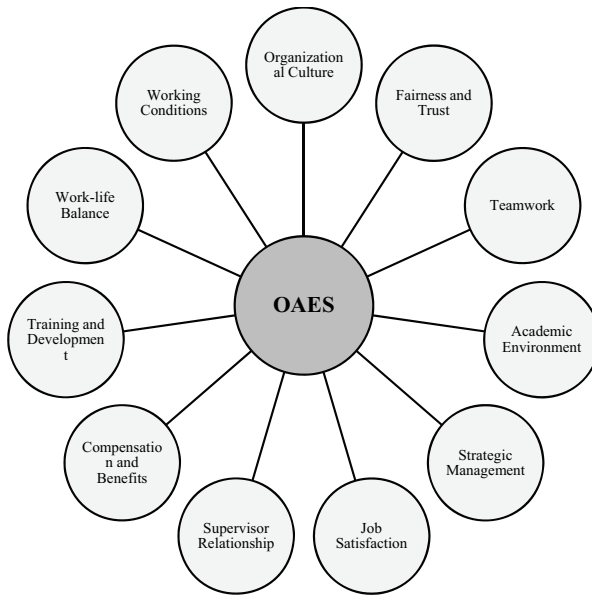
Figure 21. Dimensions of OAES

All 67 instrument statements were positively worded. As it is shown in Table 26, the list of scale items was randomly mixed not to provide the respondents with a clue as to what dimension is being measured and to avoid inertia and bias.

Table 26. Mixed list of OAES items by dimension

Dimensions	Items
Organizational Culture	6; 19; 23; 26; 34; 35; 37; 42; 50; 63; 64
Fairness and Trust	24; 25; 43; 44; 47; 53; 60; 66; 67
Teamwork	3; 5; 18; 33; 55; 62; 65
Academic Environment	1; 21; 27; 28; 38
Strategic Management	7; 11; 16; 30; 32; 52
Job Satisfaction	2; 20; 22; 31; 39; 48; 57; 58
Supervisor Relationship	12; 45; 46; 54; 56
Compensation and Benefits	9; 10; 15; 36; 59
Training and Development	8; 13; 49; 51
Work-Life Balance	4; 17; 41
Working Conditions	14; 29; 40; 61

A twofold *Experience* (EXP) and *Importance* (IMP) 10–point response scale was used for evaluation of each item capturing both employees' expectations about HEI's employment offering and their perceptions about the actual employment experience in the particular HEI.

Firstly, the respondents were asked to assess whether the statement reflects actual employment experience in the particular higher education institution, with "1" used to indicate "least experienced" (lowest perceived experience), and "10" – "most experienced" (highest perceived experience). Secondly, the respondents were asked to evaluate how important such employment experience was to them, with "1" used to indicate "least important" (lowest perceived value) and "10" – "most important" (highest perceived value).

Conceptualizing the employment experience as a product and employees as consumers of this product (Moroko and Uncles, 2008) a questionnaire was also designed to measure a facet of employer brand equity, namely perceived as ***employment experience quality (EEQ)***, which, making a shift from marketing literature, **is a function of the magnitude and direction of the gap between expected employment experience and perceived employment experience** (Parasuraman et al., 1985):

$$EEQ = IMP – EXP$$

The original eight-item *Affective Commitment Scale* developed by Allen and Meyer (1990) was included to measure employees' "emotional attachment to, identification with, and involvement in the organization" (Meyer et al., 2002: 21). In alignment with the authors' recommendations (Meyer and Allen, 2004), a 7-point disagree-agree scale of response options was converted to a 10-point scale, with negatively keyed items being reversed avoiding potential confusion. The scale was also translated into Lithuanian. Evaluation of items, such as "I would be very happy to spend the rest of my career with this organization", or "This organization has a great deal of personal meaning for me" ranged from "1 = strongly disagree" to "10 = strongly agree".

Additionally, demographics of age, gender, tenure in organization, job position (supervising and subordinate) and group (academic and administrative staff) were examined. **The final questionnaire is available in Annex 11.**

An internet-based survey was preferable to mail or telephone surveys and was used as a research tool considering a number of conditions (Schonlau et al, 2002), scilicet:

- The survey was conducted in organizations that had lists of e-mail addresses for the target population.
- The sample size was moderately large (more than 500).
- The survey contained questions of sensitive nature (employment experience perceptions and loyalty).

- Data had to be collected from a geographically scattered sample.

Although Internet surveys are no longer a subject for debate, relative advantages and disadvantages of these surveys should be considered. Specifically, Internet-based surveys are argued to be faster, cheaper and easier than conventional methods (Simsek and Veiga, 2001; Schonlau, *et al.*, 2002). On the other hand, there are a number of unfavourable natures, such as low response rate, difficulties in sampling (representativeness, sampling frames, and sampling control) that influence the quality of the survey results (Luo, 2009; Simsek and Veiga, 2001). However, it is still the most effective method to reach respondents in scattered faculties, departments and divisions of higher education institutions.

Following best practices of online research (Fielding *et al*., 2008; Schonlau, *et al.*, 2002; Simsek and Veiga, 2001), computerized, self-administered questionnaires tailored to each institution were posted on the World Wide Web site (Survey engine publika.lt). To collect the data, e-mail invitations with a hyperlink embedded were sent directly to individual recipients who were solicited to access and complete the questionnaire and simply directed to click through to World Wide Web instrument. Additionally, the spelled-out URL was included in case if some programs do not enable hyperlinks. E-mail invitations to web survey were distributed to all eligible employees of 19 higher education institutions either directly by researcher using official e-mail addresses available on the institutional websites, or by the responsible staff members inside the particular higher education institutions who were assigned to serve as the coordinators of the survey. The survey email invitation also contained information about the survey approval expressed by the higher education institution's management, the purpose of the survey as well as benefits of participating in the survey, duration of the survey, deadline for survey completion, a priori appreciation for the participation, and assurance of confidentiality of responses.

2.5. Chapter conclusions

In this chapter the philosophical worldview is set out for this dissertation taking the ontological position of objectivism, the epistemological position of postpositivism and choosing a mixed methods research strategy. The result of two pilot tests is a valid and reliable istrument to measure organizational attractiveness - Organizational Attractiveness Extraction Scale (OAES), comprising 67 items measuring 11 dimensions. Then, through the two-stage sampling design, the final sample of 1105 respondents from 19 Lithuanian higher education institutions is identified, and its representativeness reported. Cross-sectional research design is employed and

Internet-based survey with self-completion questionnaire is used to collect the data. Next chapter reports data analysis and aims at finding empirical evidence for the dimensions of organizational attractiveness, searching for their causes, effects and explanations, and testing research hypotheses.

3. RESEARCH RESULTS

This chapter reports the results of hypothesis testing applying multivariate data analysis. *Hypothesis 1* stating that organizational attractiveness is a multidimensional construct, comprising a set of employment experience attributes is tested using exploratory factor analysis and reliability analysis. *Hypothesis 2* stating that manifestation of organizational attractiveness dimensions is different across HEIs is tested with descriptive statistics and nonparametric Kruskal-Wallis and Mann-Whitney tests. *Hypothesis 3* presuming that there are significant differences of perceived employment experience quality across HEIs is tested with analysis of variance (ANOVA) and multivariate analysis of variance (MANOVA), post-hoc analyses (Fisher's LSD) and Cohen's *d*. *Hypothesis 4* stating that a more positive perception of employment experience will be associated with higher perceived affective commitment is tested in simple linear regression and multiple regression models. *Hypothesis 5* saying that different generations hold different expectations for employment experience in HEIs is tested calculating descriptive statistics and using nonparametric Kruskal-Wallis test. Finally, both Hypothesis 6 proposing that attitudinal segment of employees can be differentiated based on their perceptions toward employment, and Hypothesis 7 arguing that types of employment-based identities can be differentiated based on the employment experience offering, are tested using cluster analysis and cross tabulation.

3.1. Testing the Assumptions of Multivariate Analysis

The multivariate statistical techniques which were used therein for data analysis require a number of assumptions about the data:

- Normality assumption, which presupposes that distribution of the sample data is approximately normal (Hanneman *et al.*, 2013);
- Homoscedasticity assumption, which related to dependence relationships between dependent and independent variables (Hair, 2010).
- Multicollinearity assumption, which states that no near linear dependencies among variables exist (Hanneman *et al.*, 2013).

The data was also checked for missing values and outliers were identified.

Missing data. Missing data is a common occurrence, but it has to be decided how to deal with it. Following Hair (2010), a four step process for identifying missing data and applying remedies was employed. First, the type of missing data was determined as not ignorable, since

missing data was not a part of research design and real causes for the missing data were unknown – it could be a refusal to answer certain questions, or the respondent may have no opinion. Second, since the missing data was classified as non ignorable, the extent and patterns of the missing data were examined on both scales of Experience (EXP) and Importance (IMP) by tabulating the percent of missing data for each variable and the percent of variables with missing data for each case.

The percent of missing data for variables on EXP scale was fluctuating from .0 for two categorical variables *Type of HEI* and *Name of HEI* with a sample size of $N = 1105$ to 5.5 percent for variable *Academic freedom is valued* with a sample size of $N = 1044$. Since the missing data did not exceed 10 percent, it could be ignored (Ibid.); however, 55 cases with the missing data above 10 percent were found and were candidates for deletion. In the next stage, as a substantial extent of the missing data was determined, randomness of the missing data processes were diagnosed using Little's chi-square statistical test of the MCAR (or Missing Completely At Random) assumption. A significant value ($p = .000$; Chi-Square = 17695.560; $DF = 14465$) indicated that the data are not MCAR, thus a non-random or MAR missing data process was found.

The percent of missing data on IMP scale was more than 10 percent on 34 variables but no one exceeded 15 percent to be outright considered for deletion (Hair, 2010). Again, two categorical variables *Type of HEI* and *Name of HEI* with a sample size of $N = 1105$ had no missing data. 129 cases were found with the missing data above 10 percent. Little's MCAR test was statistically significant ($p = .000$; Chi-Square = 20583.736; $DF = 17770$) and indicated that the missing data are MAR (Missing at Random).

As far as imputation of a MAR missing data process is limited to the complex specifically designed modelling approach (Hair, 2010), missing data problems were handled with the most common technique of listwise deletion analyzing only those cases for which data was available on all variables (Newman, 2003). Admittedly, this approach severely reduces the effective sample size.

Outliers. Outliers are cases that have data values that are very different from the data values for the majority of cases in the data set (Bryman, 2008). To address this issue Mahalanobis D^2 measure as a multidimensional version of a z-score was used to measure the distance of each case from the centroid of the distribution of all observations (Hair, 2010) on EXP and IMP scales. Given a large sample, the criterion for identifying an outlier is $D^2 \pm 4.0$.

Accordingly, 27 cases were found having a z-score value outside this range and identified as outliers on EXP scale, namely 19 on the variable *My job is intellectually challenging* (-6.32220; -5.55261; -5.55261; -5.55261; -5.55261; -4.78302; -4.78302; -4.78302; -4.78302; -

4.78302; -4.78302; -4.78302; -4.78302; -4.78302; -4.78302; -4.01343; -4.01343; -4.01343; -4.01343) and 8 on the variable *I have good relationship with my colleagues* (-5.08376; -5.08376; -5.08376; -5.08376; -4.42360; -4.42360; -4.42360; -4.42360). These outliers having unusually low scores for the variables could represent the class of extraordinary observations possibly determined by job specificity and conflict situations. Therefore outliers were considered as representative and the decision on their retention was made.

Similarly, all variables on IMP scale were examined and quite a number of outliers were found. Since no consistent patterns were observed, the non-normality of the data was assumed where the outliers were a common occurrence (Cribbie and Keselman, 2003).

Normality. Consequently, the normality assumption was tested in the next stage. Statistical tests and graphical procedures are available for assessing normality (Rencher, 2002). Initially, the distribution of data was investigated using skewness and kurtosis empirical measures. Positive kurtosis indicates how peaked, and negative kurtosis indicates how flat a distribution is compared with a normal distribution. Skewness describes the balance of distribution: a positive skew shows the shift of the central tendency off the center to the left, or toward lower values. A negative skew denotes a distribution shifted to the right, or toward higher values (Hanneman et al., 2013). The skewness and kurtosis are calculated as:

$$g = \frac{\sum_{i=1}^{n}(x_i - \bar{x})^3}{(n-1)\cdot s^3},$$

where: g is sample skewness, $\bar{x}$ sample mean, n is sample size, s is sample standard deviation.

$$k = \frac{\sum_{i=1}^{n}(x_i - \bar{x})^4}{(n-1)\cdot s^4},$$

where: k is sample kurtosis, $\bar{x}$ sample mean, n is sample size, s is sample standard deviation.

By statistical convention, skewness and kurtosis values within the range from +2 to –2 are generally considered normal (Beck et al., 2004). Using this benchmark on EXP scale one item exhibited significant negative skewness (*I like my job and find it interesting,* Skewness = -2.132; *SE* = .075) and five items demonstrated positive kurtosis (*My job is intellectually challenging*, Kurtosis = 9.537, *SE* = .149; *My job feels meaningful,* Kurtosis = 2.283, *SE* = .149; *My job meets my experience and abilities,* Kurtosis = 3.700, *SE* = .149; *I like my job and find it interesting,* Kurtosis = 5.370, *SE* = .150; *I have good relationship with my colleagues,* Kurtosis = 4.860, *SE* = .150) with the rest falling in the range.

Meanwhile, almost all variables significantly deviated from normality on IMP scale at least on one or both characteristics. Therefore the skewness and kurtosis are the source of nonnormality rather than the extensive presence of the outliers on this scale.

Additionally, the assumption of normality of metric independent variables and dependent variable Affective Commitment (AFFCOM) was investigated (see Table 27).

The dependent variable AFFCOM satisfies the criteria for a normal distribution. The skewness (-0.860, *SE* = .075) and kurtosis (0.059, *SE* = .149) were both between -1.0 and +1.0. The independent variables Working Condition (WORKC), Organizational Culture (ORGC), Fairness and Trust (FAIRT), Teamwork (TEAMW), Academic Environment (ACADE), Strategic Management (STRATM), Job Satisfaction (JOBS), Compensation and Benefits (COMPB), Training and Development (TRAIND) and Work-Life Balance (WORKLB) satisfied the assumption of normality. In evaluating the normality of independent variable Supervisor Relationship (SUPR), the kurtosis (0.793) was between -1.0 and +1.0, but skewness (-1.254) was outside the range from -1.0 to +1.0. Transformation was necessary.

Table 27. Test of normality of independent and dependent variables

		WORKC	ORGC	FAIRT	TEAMW	ACADE	STRATM	JOBS	SUPR	COMPB	TRAIND	WORKLB	AFFCOM
N	Valid	1032	960	998	1013	1037	996	997	1035	1011	1038	1059	1069
	Missing	73	145	107	92	68	109	108	70	94	67	46	36
Skewness		-.539	-.569	-.451	-.784	-.610	-.467	-.901	-1.254	-.159	-.541	-.601	-.860
Std. Error of Skewness		.076	.079	.077	.077	.076	.077	.077	.076	.077	.076	.075	.075
Kurtosis		-.385	-.248	-.553	.568	.122	-.421	.743	.793	-.853	-.370	-.316	.059
Std. Error of Kurtosis		.152	.158	.155	.154	.152	.155	.155	.152	.154	.152	.150	.149

However, as Table 28 indicates, the square root transformation did not improve the normality.

Table 28. Square root transformation statistics for Supervisor Relationship

N	Valid	1035
	Missing	70
Skewness		-1.726
Std. Error of Skewness		.076
Kurtosis		2.554
Std. Error of Kurtosis		.152

Both the logarithmic transformation and inverse transformation (see Table 29 and Table 30) have values of skewness and kurtosis in the acceptable range from -1.0 to +1.0.

Table 29. Logarithmic transformation statistics for Supervisor Relationship

N	Valid	1035
	Missing	70
Skewness		.230
Std. Error of Skewness		.076
Kurtosis		-.984
Std. Error of Kurtosis		.152

Table 30. Inverse transformation statistics for Supervisor Relationship

N	Valid	1035
	Missing	70
Skewness		.596
Std. Error of Skewness		.076
Kurtosis		-.930
Std. Error of Kurtosis		.152

Additionally, the Kolmogorov-Smirnov test which is preferred to Shapiro-Wilk's test for variables that have more than 50 cases was performed to test normality (Razali and Wah, 2011). Interestingly, the probability values were significant (less than 0.05) for all variables and dimensions on both EXP and IMP scales as well as for AFFCOM and the null hypothesis of normality was rejected, concluding that data follows the nonnormal distribution. Therefore since none of the transformations offer an improvement, the original form of the variables in the analysis was retained.

Although Kolmogorov-Smirnov test was found to be not the most powerful normality test detecting statistically significant but unimportant deviations from normality, and graphical techniques with skewness and kurtosis coefficients are advisable for normality inspection (Ibid.), it should be concluded that normality assumption is not met. It should be noted though that detrimental effects of nonnormality are reduced in large samples of 200 and more, which is the case in the current research, and may be negligible if other assumptions are not violated (Hair, 2010). Respectively, the assumption of homoscedasticity is examined next.

Homoscedasticity. Homoscedasticity refers to the assumption that the dependent variable exhibits similar amounts of variance across the range of values for an independent variable (Hair, 2010, Hanneman et al, 2013). Homoscedasticity is desirable for probability of obtaining significant results; optimality of Ordinary Least Squares regression relies heavily on the homoscedasticity assumption and heteroscedasticity complicates analysis because many methods in regression analysis are based on the assumption of equal variance (Salkind, 2010).

Forasmuch as only the data from EXP scale is projected for regression analysis, IMP scale was not analyzed for homoscedasticity. For non-metric independent variables and metric dependent variable Affective Commitment (AFFCOM) both graphical (boxplot) and statistical methods (Levene statistic) for evaluating homoscedasticity were applied since visualization is informative but does not support results in a statistically significant way.

For the AGE variable, the F value for Levene's test is 2.317 with a Sig. (p) value of .055. Because Sig. value is greater than alpha of .05 ($p > .05$), the null hypothesis for the assumption of homogeneity of variance is retained and the assumption of homogeneity of variance is met. Investigation of the boxplot indicated the similar high of boxes, assuming that the variance across the groups is equal.

For the GENDER variable, the F value for Levene's test is .767 with a Sig. (p) value of .381. Because Sig. value is greater than alpha of .05 ($p > .05$), the null hypothesis for the assumption of homogeneity of variance is retained and the assumption of homogeneity of variance is met.

For the EMPLOYEE GROUP #1 variable, the F value for Levene's test is 1.693 with a Sig. (p) value of .184. Because Sig. value is greater than alpha of .05 ($p > .05$), the null hypothesis for the assumption of homogeneity of variance is retained and the assumption of homogeneity of variance is met.

For the EMPLOYEE GROUP #2 variable, the F value for Levene's test is 11.462 with a Sig. (p) value of .000 ($< .001$). Because Sig. value is less than alpha of .05 ($p > .05$), the null hypothesis for the assumption of homogeneity of variance is rejected and the assumption of homogeneity of variance is **not** met. Investigation of the boxplot indicated that the subordinate group is more spread out than supervisor group, suggesting unequal variance.

For the TENURE variable, the F value for Levene's test is 3.675 with a Sig. (p) value of .012. Because Sig. value is less than alpha of .05 ($p > .05$), the null hypothesis for the assumption of homogeneity of variance is rejected and the assumption of homogeneity of variance is **not** met. Investigation of the boxplot indicated that the tenure group from 6 to 10 years is more spread out than the other groups, suggesting unequal variance.

For the TYPE OF HEI variable, the F value for Levene's test is .058 with a Sig. (p) value of .809. Because Sig. value is greater than alpha of .05 ($p > .05$), the null hypothesis for the assumption of homogeneity of variance is retained and the assumption of homogeneity of variance is met.

For metric independent and dependent variables the assumption of homoscedasticity was evaluated as a part of the residual analysis in multiple regressions and demonstrated graphically in scatterplots (Hair, 2010).
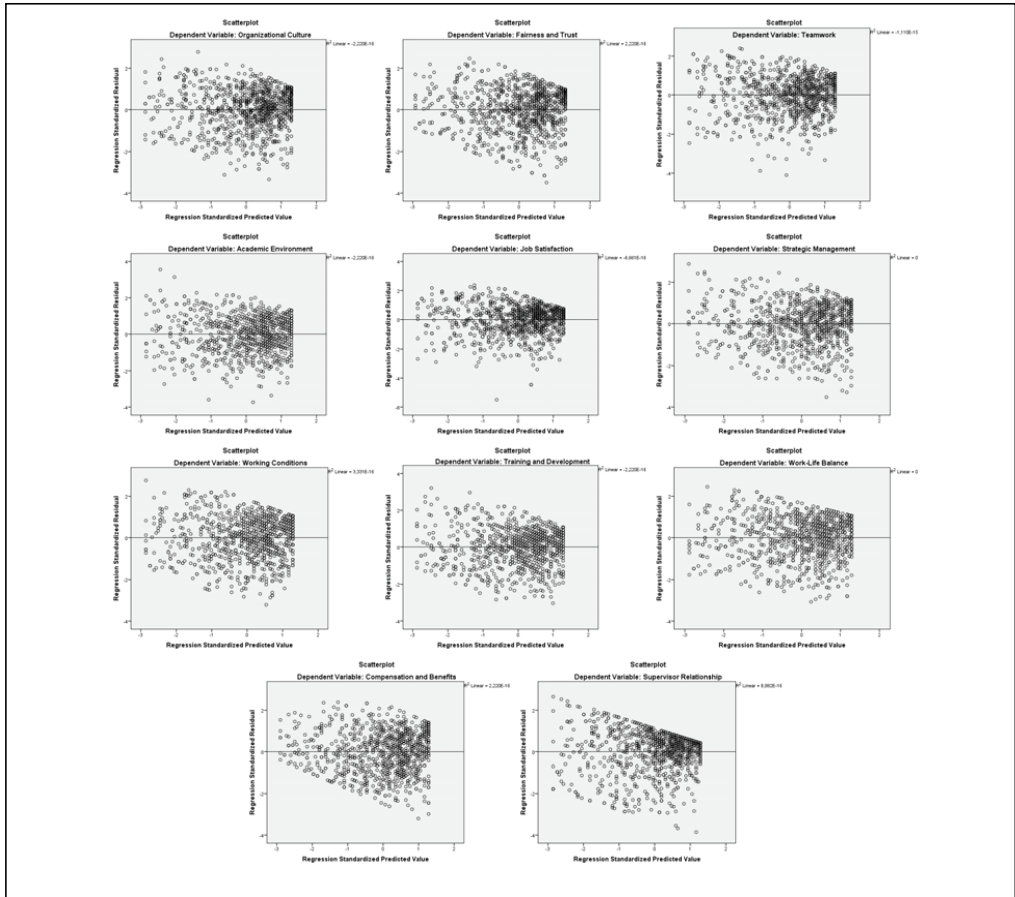
Figure 22. Scatterplots between each independent variables and the dependent variable

These scatterplots in Figure 22 reveal a linear relationship between X and Y: for a given value of X, the predicted value of Y will fall on a line. None of the relationships in these scatterplots show any serious problem with *linearity* or heteroscedasticity; the scatterplots reveal that the relative dispersion in scores on Y is about the same ($\pm$ 2 units) across all levels of X. Therefore, it could be concluded that the assumption of homoscedasticity was not violated and

the data is homoscedastic, although the variance of variables TENURE and EMPLOYEE GROUP#2 is not homogeneous, and these variables should be used with caution.

Multicollinearity. In multiple regression there should be no multicollinearity, meaning that independent variables are not highly intercorrelated (Hanneman *et al*, 2013; Rencher, 2002). When multicollinearity occurs, the assumptions of multivariate statistical techniques are not violated, but the generalizability of the model is affected (Schroeder et al., 1990). The Variance Inflation Factor (*VIF*) and tolerance (the inverse of the *VIF)* are both widely used as most reliable measures to examine multicollinearity in a regression model (O'Brien, 2007).

$$VIF = \frac{1}{1 - R_i^2},$$

where R_i^2 is the coefficient of determination of the regression equation in step one, but with X_i on the left hand side, and all other predictor variables (all the other X variables) on the right hand side.

Most commonly, a *VIF* greater than 10 and tolerance level less than 0.10 are used as an evidence of multicollinearity, though these are informal rules of thumb applied to *VIF* (O'Brien, 2007). Iterative procedure of collinearity diagnostics (see Annex 12) suggested that variable *Organizational Culture* (ORGC) exceeded these threshold levels indicating multicollinearity. Fundamentally, multicollinearity can be remedied through elimination of multicollinear predictive variable or data transformations generating a new variable (Miller and Yang, 2007). Since the removal of multicollinear variables could lead to a model that is not theoretically well motivated (O'Brien, 2007), a methodologically sounder method of variable transformation was employed to alleviate multicollinearity (Miller and Yang, 2007). Square root transformation for ORGC was computed and collinearity diagnostics repeated (see Annex 13), indicating that multicollinearity was no more a concern and assumption of noncollinearity was met.

Common method bias. The common method variance is a potential problem in behavioral research, especially in studies employing self-reports such as questionnaires, surveys, and interviews (Podsakoff et al., 2003; Reio, 2010). The common method variance refers to variance partially attributable to the measurement method and the common method bias refers to the degree to which correlations are altered due to a methods effect. Although the evidence on the common method variance effects is controversial (Reio, 2010; Meade et al, 2007; Conway and Lance, 2010), most researchers agree it could have a serious inflating or deflating influence on empirical results, yielding potentially misleading conclusions (Podsakoff et al., 2003).

The foremost recommendation for controlling the common method variance is to obtain measures of dependent and independent variables from different sources (Podsakoff et al., 2003), which is not the case in this study due to its inside out approach and focus on employees'

employment experience perceptions and their affective commitment to the focal organization. Therefore, based on recommendations by Chang et al. (2010), Reio (2010), Podsakoff et al. (2003) the following procedures were undertaken to strengthen the research design and minimize the likehood of common method variance before collecting data: 1) response anonymity and confidentiality was guaranteed ensuring psychological separation; 2) scale items were systematically examined to avoid double-barrelled questions, vague, ambiguous terms and efforts to formulate items clearly and concisely were made; 3) the order of the questions was counterbalanced mixing the order of the questions using a software procedure; 4) different verbal labels were anchored to scale endpoints ("least experienced"−"most experienced" on EXP scale, "last important"−"most important" on IMP sale for independent variables, and "strongly disagree"−"strongly agree" for dependent variable); 5) participants were asked for honest appraisal of the items and encouraged to answer all questions.

Evaluating the common method bias the most widely used technique is Harman's single-factor test which requires loading all of the study variables into an exploratory factor analysis and examining the unrotated factor solution. According to this approach, results are biased by the common method variance if a single factor emerges from the factor analysis or if one factor accounts for the majority of the total variance (Podsakoff et al., 2003). Following this technique from 81 variables 13 components with an eigenvalue greater than 1.00 were extracted; a single component loaded on 45% at the highest on EXP scale, and 38% on IMP scale. This analysis suggested that the data sample was likely not threatened by the common method bias.

3.2. Results of national study of organizational attractiveness in HEIs
3.2.1. Results of measurement instrument testing

A Principal Component Analysis with a Varimax with Kaiser Normalization rotation of the 67 OAES questions was conducted on the data gathered from 1105 survey participants. The factor structure was checked as well as reliability statistics calculated for each dimension separately.

As Table 31 shows, the examination of the Kaiser-Meyer Olkin measure of sampling adequacy suggested that the sample was factorable for the measurement model Organizational Culture (KMO=.958). The exploratory factor analysis resulted in one component extracted and all variables loading high on one factor only. The extracted common variance of 68% suggests that the solution is satisfactory. Factor loadings were greater than ±.50, therefore sufficient for practical significance (Hair, 2010). Model's reliability score as measured by Cronbach's alpha is

.953, which exceeds a threshold of 0.70 and, according to George and Mallery (2003), is excellent. Item-to-total correlations range from .588 to .855, indicating that all items do correlate very well with the scale overall, and none should be eliminated.

Table 31. Results for employment experience Organizational Culture

ORGC items	Exploratory factor analysis			Scale reliability analysis	
	KMO	Factor loadings	Common variance	Cronbach's alpha	Item-to-total correlations
Work environment is collegial.		.802			.758
Openness and sincerity is encouraged in HEI.		.846			.809
Constructive criticism is appreciated.		.851			.814
Environment is community-friendly.		.852			.817
Ethical standards are followed.		.828			.786
Good atmosphere prevails in HEI.		.885			.855
Informal communication is frequent.	.958	.642	68%	.953	.588
Creativeness and initiative is fostered in HEI.		.826			.785
High quality performance culture is being created in HEI.		.834			.795
Academic freedom is valued.		.844			.805
Conflicts are harmonized and resolved effectively in HEI		.861			.826

As Table 32 indicates, the examination of the Kaiser-Meyer Olkin measure of sampling adequacy suggested that the sample was factorable for the measurement model Fairness and Trust (KMO = .964). The exploratory factor analysis resulted in one component extracted and all variables loading high on one factor only. The extracted common variance of 72% suggests that the solution is satisfactory. Factor loadings were greater than ±.50, therefore sufficient for practical significance (Hair, 2010). Model's reliability score as measured by Cronbach's alpha is .950, which exceeds a threshold of 0.70 and, according to George and Mallery (2003), is excellent. Item-to-total correlations range from .639 to .869, with no values less than .40, indicating that all items do correlate very well with the scale overall, and none should be eliminated.

Table 32. Results for employment experience Fairness and Trust

FAIRT items	Exploratory factor analysis			Scale reliability analysis	
	KMO	Factor loadings	Common variance	Cronbach's alpha	Item-to-total correlations
I have trust in HEI leadership.	.964	.825	72%	.950	.775
Remuneration system is clear and objective.		.784			.730
Decisions are made without bias.		.899			.864
Promises are kept in my HEI.		.863			.821
Words match with actions in my HEI.		.897			.863
Equal opportunities are ensured.		.852			.806
Clear standards for promotion and tenure are articulated.		.701			.639
Employees are treated fairly.		.901			.868
Procedures promoting transparency are developed.		.890			.854

As it is summarized in Table 33, the examination of the Kaiser-Meyer Olkin measure of sampling adequacy suggested that the sample was factorable for the measurement model Teamwork (KMO = .886). The exploratory factor analysis resulted in one component extracted and all variables loading high on one factor only. The extracted common variance of 61% suggests that the solution is satisfactory. Factor loadings were greater than ±.50, therefore sufficient for practical significance (Hair, 2010). Model's reliability score as measured by Cronbach's alpha is .887, which exceeds a threshold of 0.70 and, according to George and Mallery (2003), is good. Item-to-total correlations range from .638 to .767, with no values less than .40, indicating that all items do correlate very well with the scale overall, and none should be eliminated.

Table 33. Results for employment experience Teamwork

TEAMW items	Exploratory factor analysis			Scale reliability analysis	
	KMO	Factor loadings	Common variance	Cronbach's alpha	Item-to-total correlations
I enjoy working alongside like-minded people.	.886	.777	61%	.887	.688
Cooperation is promoted to get the jobs done.		.697			.617
Employees share their ideas and knowledge.		.795			.710
Effective internal communication is developed.		.721			.638
I can rely on my colleagues.		.861			.767
My colleagues are helpful and supportive.		.859			.766
I have good relationships with my colleagues.		.757			.645

As it is shown in Table 34, the examination of the Kaiser-Meyer Olkin measure of sampling adequacy suggested that the sample was factorable for the measurement model Academic Environment (KMO = .821). The exploratory factor analysis resulted in one component extracted and all variables loading high on one factor only. The extracted common variance of 59% suggests that the solution is satisfactory. Factor loadings were greater than ±.50, therefore sufficient for practical significance (Hair, 2010). Model's reliability score as measured by Cronbach's alpha is .821, which exceeds a threshold of 0.70 and, according to George and Mallery (2003), is good. Item-to-total correlations range from .493 to .779, with no values less than .40, indicating that all items do correlate very well with the scale overall, and none should be eliminated.

Table 34. Results for employment experience Academic Environment

ACADE items	Exploratory factor analysis			Scale reliability analysis	
	KMO	Factor loadings	Common variance	Cronbach's alpha	Item-to-total correlations
Students are good and motivated in my HEI.	.821	.659	59%	.821	.493
Innovative training methods are encouraged in my HEI.		.778			.631
High study quality is pursued		.883			.779
A favourable research environment is created in my HEI.		.779			.633
My peers are best scientists and lecturers.		.718			.559

As Table 35 indicates, the examination of the Kaiser-Meyer Olkin measure of sampling adequacy suggested that the sample was factorable for the measurement model Strategic Management (KMO = .900). The exploratory factor analysis resulted in one component extracted and all variables loading high on one factor only. The extracted common variance of 67% suggests that the solution is satisfactory. Factor loadings were greater than ±.50, therefore sufficient for practical significance (Hair, 2010). Model's reliability score as measured by Cronbach's alpha is .912, which exceeds a threshold of 0.70 and, according to George and Mallery (2003), is excellent. Item-to-total correlations range from .644 to .815, with no values less than .40, indicating that all items do correlate very well with the scale overall, and none should be eliminated.

Table 35. Results for employment experience Strategic Management

STRATM items	Exploratory factor analysis			Scale reliability analysis	
	KMO	Factor loadings	Common variance	Cronbach's alpha	Item-to-total correlations
Sustainability and corporate social responsibility are fostered.	.900	.860	67%	.912	.788
University is building positive reputation and image.		.744			.644
Organizational, departmental and employee integrity is ensured.		.835			.755
Policies, procedures and responsibilities support strategy implementation.		.880			.815
Employee participation in decision making is promoted.		.809			.722
A clear strategy and direction is set and aligned with University vision and values.		.870			.799

As Table 36 shows, the examination of the Kaiser-Meyer Olkin measure of sampling adequacy suggested that the sample was factorable for measurement model Job Satisfaction (KMO = .876). The exploratory factor analysis resulted in one component extracted and all variables loading high on one factor only. The extracted common variance of 50% suggests that the solution is satisfactory. Factor loadings were greater than ±.50, therefore sufficient for practical significance (Hair, 2010). Model's reliability score as measured by Cronbach's alpha is .852, which exceeds a threshold of 0.70 and, according to George and Mallery (2003), is good. Item-to-total correlations range from .402 to .686, with no values less than .40, indicating that all items do correlate well with the scale overall, and none should be eliminated.

Table 36. Results for employment experience Job Satisfaction

JOBS items	Exploratory factor analysis			Scale reliability analysis	
	KMO	Factor loadings	Common variance	Cronbach's alpha	Item-to-total correlations
I can realize my ideas and potential.	.876	.752	50%	.852	.668
My job is intellectually challenging.		.521			.402
I feel that I and my efforts are valued.		.766			.686
I know what is expected of me at work.		.709			.603
My job feels meaningful.		.722			.608
My job meets my experience and abilities.		.724			.602
I like my job and find it interesting.		.725			.606
I have career opportunities in my HEI.		.721			.627

As Table 37 illustrates, the examination of the Kaiser-Meyer Olkin measure of sampling adequacy suggested that the sample was factorable for the measurement model Supervisor Relationship (KMO = .890). The exploratory factor analysis resulted in one component extracted and all variables loading high on one factor only. The extracted common variance of 81% suggests that the solution is satisfactory. Factor loadings were greater than ±.50, therefore sufficient for practical significance (Hair, 2010). Model's reliability score as measured by Cronbach's alpha is .938, which exceeds a threshold of 0.70 and, according to George and Mallery (2003), is excellent. Item-to-total correlations range from .768 to .894, with no values less than .40, indicating that all items do correlate very well with the scale overall, and none should be eliminated.

Table 37. Results for employment experience Supervisor Relationship

SUPR items	Exploratory factor analysis			Scale reliability analysis	
	KMO	Factor loadings	Common variance	Cronbach's alpha	Item-to-total correlations
I have trust in my supervisor.		.860			.785
My supervisor gives me feedback about my progress.		.847			.768
My supervisor gives me guidance.	.890	.925	81%	.938	.875
My supervisor listens to me and regards my opinion.		.918			.863
My supervisor supports me.		.937			.894

As Table 38 displays, the examination of the Kaiser-Meyer Olkin measure of sampling adequacy suggested that the sample was factorable for the measurement model Compensation and Benefits (KMO = .872). The exploratory factor analysis resulted in one component extracted and all variables loading high on one factor only. The extracted common variance of 71% suggests that the solution is satisfactory. Factor loadings were greater than ±.50, therefore sufficient for practical significance (Hair, 2010). Model's reliability score as measured by Cronbach's alpha is .896, which exceeds a threshold of 0.70 and, according to George and Mallery (2003), is good. Item-to-total correlations range from .647 to .815, with no values less than .40, indicating that all items do correlate very well with the scale overall, and none should be eliminated.

Table 38. Results for employment experience Compensation & Benefits

COMPB items	Exploratory factor analysis			Scale reliability analysis	
	KMO	Factor loadings	Common variance	Cronbach's alpha	Item-to-total correlations
I am getting paid enough for my job.	.872	.844	71%	.896	.749
Additional benefits are offered to motivate employees.		.763			.647
Effective employee incentive scheme is functioning in HEI (for loyalty, achievement, etc.).		.878			.796
Best employees are appreciated in HEI.		.826			.721
Employee's performance results and competencies are recognized and rewarded.		.894			.815

As Table 39 indicates, the examination of the Kaiser-Meyer Olkin measure of sampling adequacy suggested that the sample was factorable for the measurement model Training and Development (KMO = .816). The exploratory factor analysis resulted in one component extracted and all variables loading high on one factor only. The extracted common variance of 67% suggests that the solution is satisfactory. Factor loadings were greater than ±.50, therefore sufficient for practical significance (Hair, 2010). Model's reliability score as measured by Cronbach's alpha is .837, which exceeds a threshold of 0.70 and, according to George and Mallery (2003), is good. Item-to-total correlations range from .634 to .690, with no values less than .40, indicating that all items do correlate well with the scale overall, and none should be eliminated.

Table 39. Results for employment experience Training & Development

TRAIND items	Exploratory factor analysis			Scale reliability analysis	
	KMO	Factor loadings	Common variance	Cronbach's alpha	Item-to-total correlations
Employee training and development meets HEI aims and objectives.	.816	.835	67%	.837	.690
I have opportunities for personal growth in HEI.		.835			.692
Talents are nurtured in HEI.		.794			.634
I receive enough training to do my job in best manner.		.817			.664

As Table 40 shows, the examination of the Kaiser-Meyer Olkin measure of sampling adequacy suggested that the sample was factorable for the measurement model Work-life Balance (KMO = .643). The exploratory factor analysis resulted in one component extracted and

all variables loading high on one factor only. The extracted common variance of 61% suggests that the solution is satisfactory. Factor loadings were greater than ±.50, therefore sufficient for practical significance (Hair, 2010). Model's reliability score as measured by Cronbach's alpha is .661, which is less than 0.70 and, according to George and Mallery (2003), is questionable. The primary reason for the low reliability value is that the scale has only three variables, thus additional items could be considered for inclusion (Hair, 2010). Item-to-total correlations range from .450 to .550, with no values less than .40, indicating that all items do correlate very well with the scale overall, and none should be eliminated.

Table 40. Results for employment experience Work-Life Balance

WORKLB items	Exploratory factor analysis			Scale reliability analysis	
	KMO	Factor loadings	Common variance	Cronbach's alpha	Item-to-total correlations
I have enough flexibility in my work.		.759			.450
My work load is manageable.	.643	.747	61%	.661	.451
I may harmonize my work and personal life needs.		.829			.550

As Table 41 indicates, the examination of the Kaiser-Meyer Olkin measure of sampling adequacy suggested that the sample was factorable for the measurement model Working Conditions (KMO = .764). The exploratory factor analysis resulted in one component extracted and all variables loading high on one factor only. The extracted common variance of 65% suggests that the solution is satisfactory. Factor loadings were greater than ±.50, therefore sufficient for practical significance (Hair, 2010). Model's reliability score as measured by Cronbach's alpha is .806, which exceeds a threshold of 0.70 and, according to George and Mallery (2003), is good. Item-to-total correlations range from .495 to .750, with no values less than .40, indicating that all items do correlate very well with the scale overall, and none should be eliminated.

Table 41. Results for employment experience Working Conditions

WORKC items	Exploratory factor analysis			Scale reliability analysis	
	KMO	Factor loadings	Common variance	Cronbach's alpha	Item-to-total correlations
I am provided with all necessary equipment and resources to do my job well.		.825			.639
Safe and comfortable working environment is created in my HEI.	.764	.887	65%	.806	.750
The consistent administrative support is provided to faculty members.		.814			.644
I am not experiencing stress in my work.		.682			.495

Cronbach's Alpha reliability for the total of the 67 items was .985, which indicates appropriate instrument internal consistency. The results summarized in Tables 32–41 indicate that the measurement instrument meets all requirements and therefore can be accepted without alterations.

3.2.2. Results of descriptive statistics

For data analysis, ensuring confidentiality, the list of higher education institutions was randomly mixed and whereupon encoded from HEI 1 to HEI 19 as shown in Table 42, still allowing to trace the type of higher education institution, i.e. university or college.

Table 42. Labels assigned to higher education institutions

Higher education institution	Label
University 1	HEI 1
University 2	HEI 2
College 1	HEI 3
University 3	HEI 4
University 4	HEI 5
University 5	HEI 6
College 2	HEI 7
College 3	HEI 8
College 4	HEI 9
University 6	HEI 10
College 5	HEI 11
College 6	HEI 12
University 7	HEI 13
College 7	HEI 14
College 8	HEI 15
College 9	HEI 16
College 10	HEI 17
University 8	HEI 18
College 11	HEI 19

The data of the survey was analyzed applying IBM SPSS Statistics 19 for Windows software package. The first set of analysis **was intended to observe the manifestation of**

organizational attractiveness as an employer and to capture the main tendencies in the whole Lithuanian higher education sector.

Analysis of data included means and standard deviations for each of the items and dimensions on both scales of *Experienc*e (EXP) and *Importance* (IMP). Additionally, total mean of responses on Experience scale ($M = 6.88$) and total mean of responses on Importance scale ($M = 8.95$) were calculated to see the means falling above and below the threshold and to facilitate results interpretation. It is evident from Table 43 that *Job Satisfaction* ($M = 7.92$; $SD = 1.503$), *Supervisor Relationship* ($M = 7.74$; $SD = 2.325$), *Teamwork* ($M = 7.20$; $SD = 1.715$), *Academic Environment* ($M = 6.97$; $SD = 1.683$), and *Work-Life Balance* ($M = 6.87$; $SD = 2.079$) are most intense facets of employment experience in higher education, while *Compensations and Benefits* ($M = 5.63$; $SD = 2.321$) as well as *Fairness and Trust* ($M = 6.45$; $SD = 2.291$) are perceived as least manifested.

Table 43. Descriptive statistics for OAES dimensions on Experience scale

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Organizational Culture	960	1	10	6.72	2.020
Fairness and Trust	998	1	10	6.45	2.291
Teamwork	1013	1	10	7.20	1.715
Academic Environment	1037	1	10	6.97	1.683
Strategic Management	996	1	10	6.59	2.045
Job Satisfaction	997	1	10	7.92	1.503
Supervisor Relationship	1035	1	10	7.74	2.325
Compensation and Benefits	1011	1	10	5.63	2.321
Training and Development	1038	1	10	6.54	2.122
Work-Life Balance	1059	1	10	6.87	2.079
Working Conditions	1032	1	10	6.68	2.120

As Table 44 presents, employees in higher education place most emphasis on *Supervisor Relationship* ($M = 9.22$; $SD = 1.079$), *Job Satisfaction* ($M = 9.18$; $SD = .993$), *Fairness and Trust*, ($M = 9.18$; $SD = 1.012$), *Academic Environment* ($M = 9.13$; $SD = 1.107$), and *Working Conditions* ($M = 9.10$; $SD = 1.080$).

Table 44. Descriptive statistics for OAES dimensions on Importance scale

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Organizational Culture	874	3	10	8.92	1.061
Fairness and Trust	892	2	10	9.18	1.012
Teamwork	912	2	10	8.91	1.129
Academic Environment	949	1	10	9.13	1.107
Strategic Management	901	2	10	8.73	1.315
Job Satisfaction	893	3	10	9.18	.993
Supervisor Relationship	928	2	10	9.22	1.079
Compensation and Benefits	923	2	10	8.99	1.116
Training and Development	947	2	10	8.87	1.199
Work-Life Balance	962	1	10	8.75	1.302
Working Conditions	946	2	10	9.10	1.080

To investigate the perceived employment experience quality or gaps between actual and desired employment experience in the surveyed higher education institutions, *EEQ* scores were calculated as a difference between dimensions' means on Importance and Experience scales, fluctuating from -9 to 9 with a total mean of $M = 2.04$ (see Table 45). Data analysis has revealed the gaps unexceptionally in each and every item and dimension of OAES. The most demanding organizational aspects, indicating that actual employment experience did not meet individual values and needs, as perceived by higher education employees, are *Compensation and Benefits* ($M = 3.16$), *Fairness and Trust* ($M = 2.64$), *Working Conditions* ($M = 2.35$), *Training and Development* ($M = 2.33$), and *Academic Environment* ($M = 2.14$).

Table 45. Descriptive statistics for EEQ scores

	N	Minimum	Maximum	Mean	Std. Deviation
JOBS	876	-2	9	1.28	1.383
SUPR	922	-4	9	1.42	2.075
TEAMW	895	-2	8	1.70	1.645
WORKLB	956	-4	9	1.89	2.153
MEAN	**533**	**-.91**	**8.01**	**2.0394**	**1.73409**
STRATM	880	-3	9	2.05	1.998
ORGC	844	-2	9	2.11	1.971
ACADE	939	-3	8	2.14	1.662
TRAIND	936	-2	9	2.33	2.142
WORKC	933	-3	9	2.35	2.233
FAIRT	875	-2	9	2.64	2.395
COMPB	910	-2	9	3.16	2.466

The Kruskal-Wallis test, which is the nonparametric test allowing the comparison of more than two independent groups, was used to compare sets of scores coming from 19 higher education institutions and indicated that some higher education institutions were significantly different from each other on the perceived actual and desirable employment experience (see Table 46 and Table 47).

Table 46. Kruskal-Wallis test for HEIs scores on Experience scale

	ORGC	FAIRT	TEAMW	ACADE	STRATM	JOBS	SUPR	COMPB	TRAIND	WORKLB	WORKC
Chi-Square	115.625	104.161	91.600	129.663	152.183	66.427	49.211	116.689	122.540	77.100	151.212
df	18	18	18	18	18	18	18	18	18	18	18
Asymp. Sig.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Table 47. Kruskal-Wallis test for HEIs scores on Importance scale

	ORGC	FAIRT	TEAMW	ACADE	STRATM	JOBS	SUPR	COMPB	TRAIND	WORKLB	WORKC
Chi-Square	86.558	118.992	135.495	154.131	164.464	140.367	92.077	148.445	143.166	177.263	134.499
df	18	18	18	18	18	18	18	18	18	18	18
Asymp. Sig.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Again, the Kruskal-Wallis test indicated that some higher education institutions were significantly different from each other on the perceived employment experience quality (see Table 48).

Table 48. Kruskal-Wallis test for HEIs scores on EEQ

	ORGC	FAIRT	TEAMW	ACADE	STRATM	JOBS	SUPR	COMPB	TRAIND	WORKLB	WORKC
Chi-Square	169.634	206.401	184.820	190.891	246.755	145.388	79.013	214.627	184.457	137.195	256.646
df	18	18	18	18	18	18	18	18	18	18	18
Asymp. Sig.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Considering these statistically significant differences, the second set of analyses was **intended to explore the manifestation of employers' attractiveness across Lithuanian higher education institutions**. Table 49 reports descriptive statistics – means and standard deviations for OAES dimensions' scores on *Experience scale* for each higher education institution.

Table 49. Descriptive statistics for OAES dimensions' scores on Experience scale for each HEI

		ORGC	FAIRT	TEAMW	ACADE	STRATM	JOBS	SUPR	COMPB	TRAIND	WORKLB	WORKC
HEI 1	M	6.15	6.06	6.68	6.31	5.70	7.54	7.34	5.01	6.22	6.92	6.54
	SD	1.927	2.062	1.673	1.546	1.929	1.488	2.417	2.052	1.957	1.992	1.921
HEI 2	M	7.12	6.38	7.52	6.98	6.60	7.58	8.16	5.59	6.60	6.50	6.93
	SD	1.359	1.892	1.150	1.648	1.942	1.553	2.066	2.407	1.994	1.834	1.812
HEI 3	M	6.78	6.09	7.31	6.71	6.56	8.29	8.32	5.42	6.14	7.07	6.50
	SD	2.054	2.614	1.480	2.096	2.264	1.485	2.024	2.653	2.381	2.065	2.431
HEI 4	M	6.67	6.29	7.20	6.94	6.47	7.85	7.72	5.68	6.83	7.20	6.69
	SD	1.846	2.034	1.613	1.576	1.905	1.414	2.204	2.125	1.831	1.916	1.936
HEI 5	M	7.33	7.49	7.75	7.53	7.41	8.68	8.52	6.44	7.21	7.48	7.49
	SD	1.702	2.158	1.491	1.488	1.491	1.040	1.636	1.657	1.611	1.720	2.009
HEI 6	M	6.31	5.83	6.80	6.45	6.03	7.83	7.48	4.88	5.49	6.20	5.76
	SD	2.070	2.138	1.836	1.675	1.918	1.435	2.528	2.304	2.092	2.254	2.024
HEI 7	M	5.92	6.07	6.78	6.58	5.59	7.27	6.29	5.02	5.63	5.41	5.79
	SD	2.367	2.714	2.027	1.912	2.319	2.118	2.965	2.533	2.438	2.342	2.200
HEI 8	M	7.92	7.30	7.94	7.53	7.59	8.03	7.64	6.73	7.64	7.13	7.54
	SD	2.297	2.458	2.161	2.279	2.087	2.116	3.109	2.444	2.443	2.163	2.341
HEI 9	M	7.65	7.76	8.19	7.81	7.97	8.35	8.54	6.87	7.55	7.45	7.90
	SD	1.832	2.105	1.448	1.401	1.753	1.360	2.018	2.177	2.072	2.009	1.536
HEI 10	M	5.54	5.64	6.44	6.59	5.62	7.78	7.32	4.81	5.29	6.08	5.03
	SD	2.564	2.677	1.891	2.109	2.491	1.286	2.864	2.755	2.658	2.471	2.492
HEI 11	M	4.93	5.03	6.14	5.84	5.42	6.88	6.82	4.31	5.28	5.46	5.37
	SD	2.074	2.516	1.842	1.618	2.075	1.882	2.571	2.087	2.121	2.020	2.175
HEI 12	M	8.21	7.66	7.94	8.21	8.00	8.53	8.39	7.54	8.12	7.74	8.15
	SD	1.448	2.283	1.278	1.166	1.365	1.218	1.730	1.800	1.221	1.820	1.286
HEI 13	M	6.97	6.63	7.42	7.33	6.27	8.04	8.12	5.81	6.97	6.70	6.99
	SD	1.620	2.009	1.498	1.477	1.844	1.448	2.000	2.155	1.878	1.745	1.788
HEI 14	M	7.54	7.83	8.13	7.83	7.98	8.71	8.54	7.08	7.60	6.99	7.92
	SD	1.929	2.067	1.621	1.569	1.748	1.187	1.597	2.332	2.153	2.309	1.837
HEI 15	M	8.12	7.91	7.86	8.07	8.18	8.49	8.43	7.25	7.39	7.98	8.53
	SD	1.581	2.120	1.556	1.237	1.436	1.243	1.646	1.954	2.129	1.715	1.444
HEI 16	M	6.60	6.42	7.08	7.29	6.89	7.93	7.24	5.46	6.23	6.53	6.23
	SD	2.206	2.529	1.900	1.554	2.039	1.601	2.849	2.290	2.078	1.948	2.300
HEI 17	M	6.53	6.27	7.13	7.04	6.62	8.23	7.53	6.18	6.64	7.18	6.48
	SD	1.258	1.798	.996	.898	.989	1.003	1.227	1.655	1.329	1.224	1.358
HEI 18	M	6.68	6.18	7.11	6.81	6.48	7.94	7.65	5.21	6.02	6.64	6.29
	SD	2.008	2.387	1.713	1.713	2.020	1.494	2.545	2.400	2.193	2.258	2.304
HEI 19	M	6.87	6.52	7.27	7.23	6.93	8.32	7.95	4.95	6.83	7.33	6.48
	SD	1.883	2.429	1.533	1.755	2.059	1.478	1.629	2.252	2.211	2.055	2.216

Bar diagrams were developed and analyzed next. The total means of responses were calculated for each dimension to facilitate the interpretation of results.
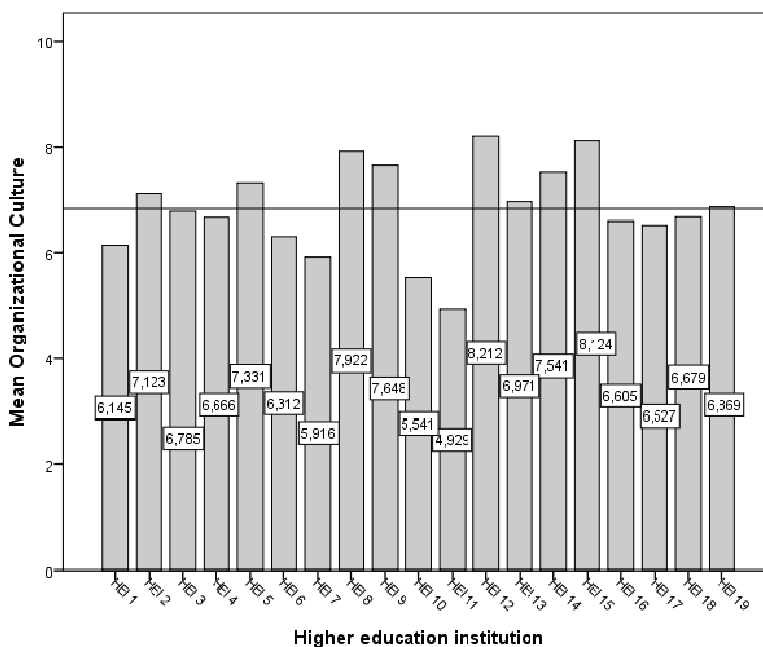
Figure 23. Total HEIs means for dimension Organizational Culture

As Figure 23 demonstrates, organizational culture (ORGC) is most appreciated in HEI 12 (M = 8.21), followed by HEI 15 (M = 8.12) and HEI 8 (M = 7.92). As the reference line for the total mean of ORGC (M = 6.83) indicates, 9 institutions (additionally HEI 9, HEI 14, HEI 5, HEI 2, HEI 13 and HEI 19) are found above the average and, presumably, can be characterized by most distinctive and positive workplace climate. Interestingly, though, it appears that this **distinctiveness of organizational culture originates from different sources** as the analysis of 11 items of ORGC reveals. The most salient features in HEI 12 are creativeness and initiative (M = 9.30), and good atmosphere (M = 8.53), in HEI 15, similarly as in HEI 14 compliance with ethical standards is kept (M = 8.58; M = 8.00) and creativeness is fostered (M = 8.55; M = 7.98). HEI 8 is distinguished for collegial (M = 8.67) and community-friendly (M = 8.33) work environment, while HEI 9 celebrates academic freedom (M = 8.00) and high quality performance culture (M = 7.97). It should be noted that HEI 11, which is found with the lowest mean scores for ORGC, still has its employees valuing informal communication which is frequent there (M = 6.27).
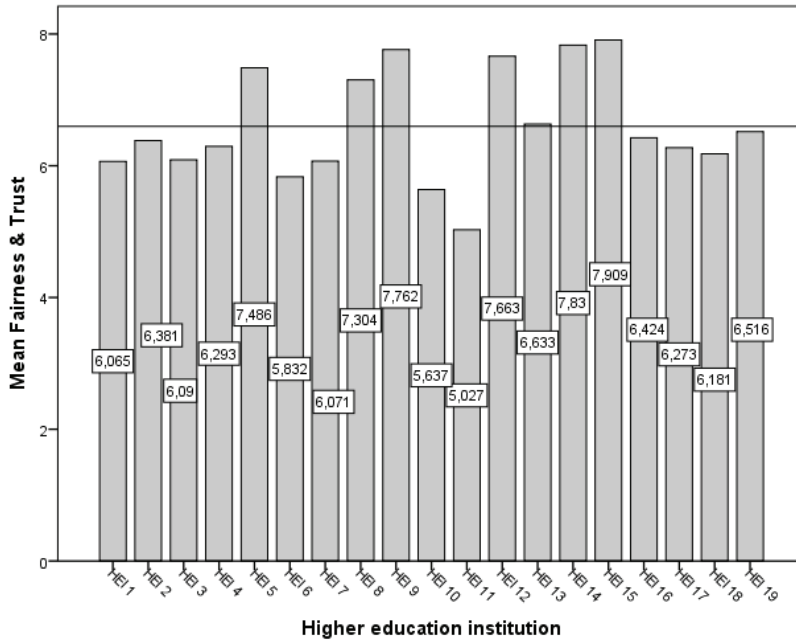
Figure 24. Total HEIs means for dimension Fairness and Trust

When it comes to another OAES dimension Fairness and Trust (FAIRT) (see Figure 24), only 7 higher education institutions are found above the total mean of FAIRT (M = 6.60), namely HEI 15 (M = 7.91), HEI 14 (M = 7.83), HEI 9 (M = 7.76), HEI 12 (M = 7.66), HEI 5 (M = 7.49), HEI 8 (M = 7.30) and HEI 13 (M = 6.63). Obviously, employment experience FAIRT is expressed lower than ORGC in all surveyed higher education institutions and **could pose a possible risk to perceived organizational attractiveness**. Meanwhile, as the investigation of the highest means on 9 items composing FAIRT dimension across above mentioned institutions suggests, there could be found a number of robust areas as well, such as trust in HEI's leadership in HEI 8 (M = 8.00), clear standards for promotion and tenure in HEI 5 (M = 7.83), procedures promoting transparency in HEI 9 (M = 8.22), or keeping promises in HEI 14 (M = 8.32).
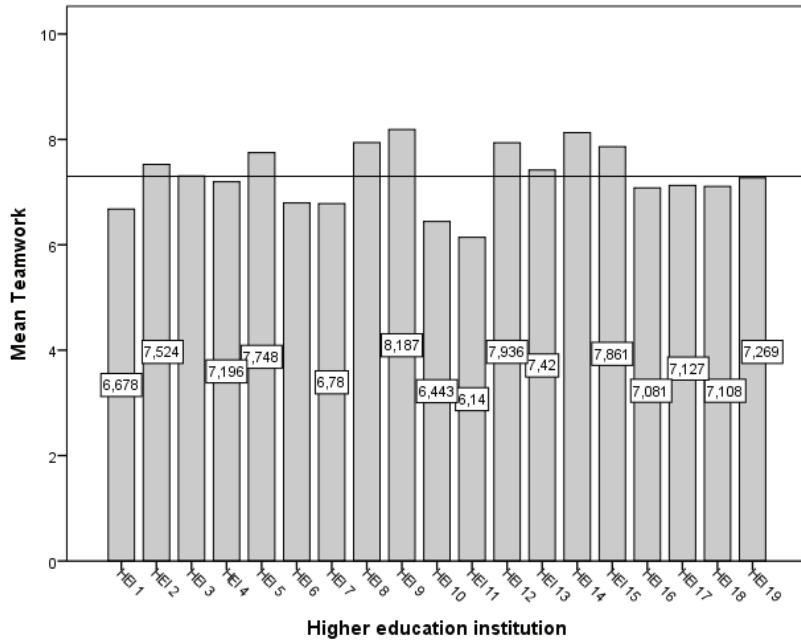
Figure 25. Total HEIs means for dimension Teamwork

As Figure 25 illustrates, OAES dimension Teamwork (TEAMW) is most experienced in HEI 9 (M = 8.19), then in HEI 14 (M = 8.13), HEI 8 (M = 7.94), HEI 12 (M = 7.94), HEI 15 (M = 7.86), HEI 5 (M = 7.75), HEI 2 (M = 7.52), HEI 13 (M = 7.42), and HEI 3 (M = 7.31), as the TEAMW index of M = 7.30 partitions. 7 item-level analysis indicates that **employees enjoy having good relationship with their colleagues most in all highly evaluated institutions** (HEI 9 (M = 9.05); HEI 14 (M = 9.03); HEI 8 (M = 8.73); HEI 12 (M = 9.03); HEI 15 (M = 9.10); HEI 5 (M = 9.00); HEI 2 (M = 9.14); HEI 13 (M = 8.81); HEI 3 (M = 9.10)). For the second most appreciated TEAMW feature are *helpful and supportive colleagues* in HEI 15 (M = 8.41), HEI 12 (M = 8.53), HEI 9 (M = 8.67), HEI 8 (M = 8.27), HEI 2 (M = 8.73), and *reliable colleagues* in HEI 5 (M = 8.39), HEI 3 (M = 7.95), HEI 13 (M = 8.07) and HEI 14 (M = 8.57). As for the least experienced TEAMW components there could be mentioned *effective internal communication* with the lowest mean in HEI 3 (M = 5.71), HEI 8 (M = 7.13) or HEI 12 (M = 6.87), *promotion of cooperation* in HEI 2 (M = 5.57), HEI 5 (M = 6.39), or *sharing ideas and knowledge* in HEI 15 (M = 7.17).
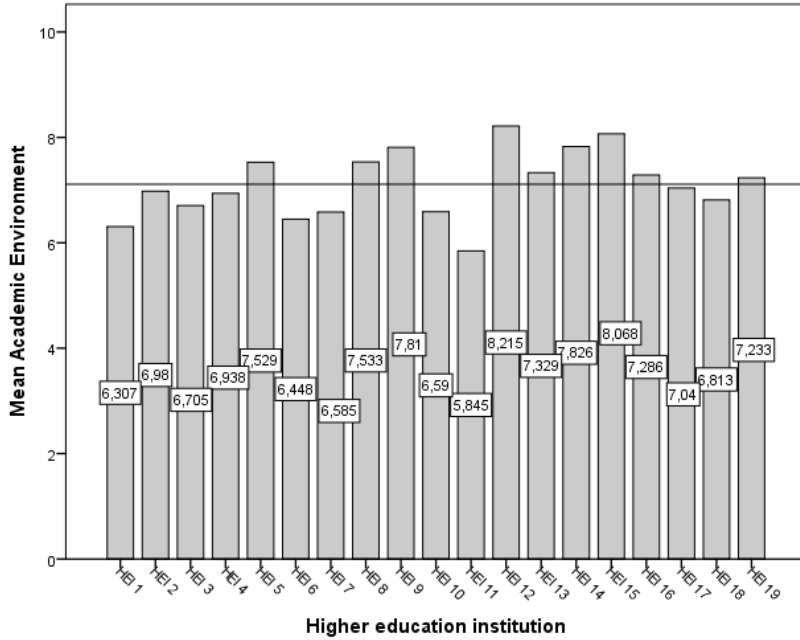
Figure 26. Total HEIs means for dimension Academic Environment

As can be seen from Figure 26, the best performing higher education institutions in the area of Academic Environment (ACADE) are those 9 found above the total mean of dimension (M = 7.11), i.e. HEI 12 (M = 8.21), HEI 15 (M = 8.07), HEI 14 (M = 7.83), HEI 9 (M = 7.81), HEI 8 (M = 7.53), HEI 5 (M = 7.53), HEI 13 (M = 7.33), HEI 16 (M = 7.29), and HEI 19 (M = 7.23). The highest means are observed mainly on two items from 5 forming ACADE dimension: *innovative training methods encouraged* (HEI 5 (M = 8.17); HEI 9 (M = 8.55); HEI 12 (M = 9.00)) and *peers being best scientists and lecturers* (HEI 13 (M = 8.32); HEI 14 (M = 8.56); HEI 16 (M = 8.42). *Pursuit of high study quality* is a distinctive characteristic of HEI 19, with the second largest inner mean (M = 8.57).
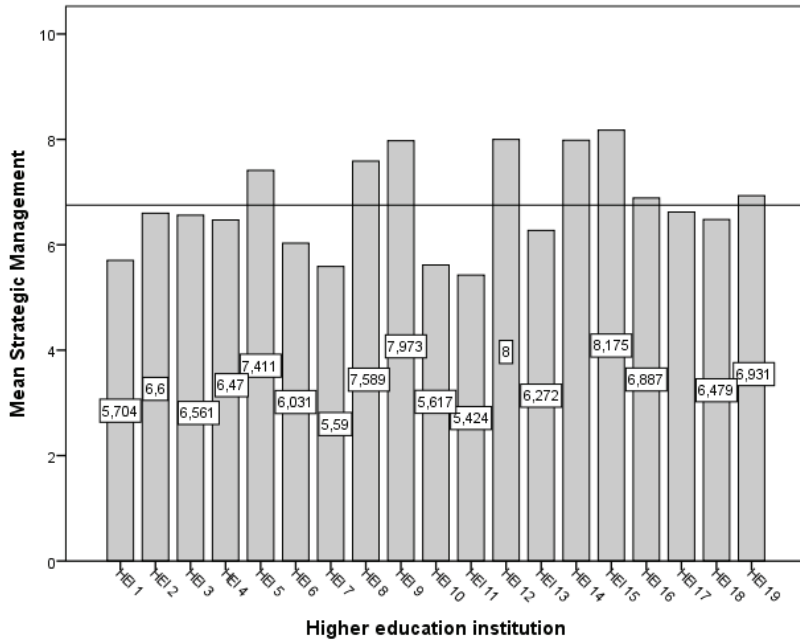
Figure 27. Total HEIs means for dimension Strategic Management

As Figure 27 above shows, Strategic Management (STRATM) with the total mean $M =$ 6.75 is most experienced in HEI 15 ($M = 8.18$), HEI 12 ($M = 8.00$), HEI 14 ($M = 7.98$), HEI 9 ($M = 7.97$), HEI 8 ($M = 7.59$), HEI 5 ($M = 7.41$), HEI 19 ($M = 6.93$) and HEI 16 ($M = 6.89$). The analysis of separate institutions' results indicates that *positive reputation and image* is perceived as the key strength of HEI 14 ($M = 8.60$), HEI 16 ($M = 8.42$), HEI 5 ($M = 9.06$), and HEI 9 ($M = 8.78$). HEI 8 ($M = 8.20$) and HEI 19 ($M = 7.72$) are distinguished by *fosterage of sustainability and corporate social responsibility*, whereas HEI 12 ($M = 8.59$) and HEI 15 ($M = 8.80$) demonstrate and implement *a clear strategy and direction aligned with institution's vision and values*.
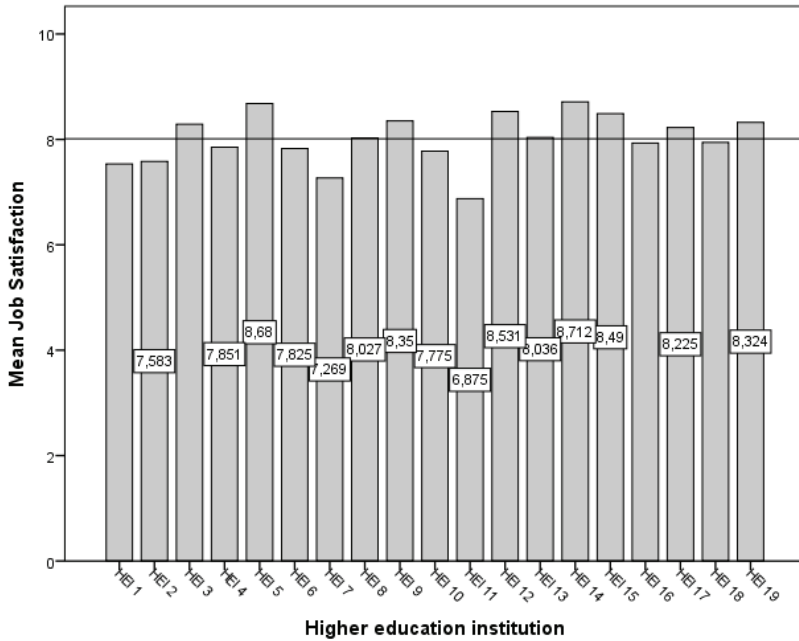
Figure 28. Total HEIs means for dimension Job Satisfaction

As Figure 28 illustrates, Job Satisfaction (JOBS) is highly expressed in all surveyed higher education institutions, nevertheless 10 of them are providing superior experience being above the threshold of the total JOBS mean ($M = 8.01$). Thus, the highest means are observed in HEI 14 ($M = 8.71$), HEI 5 ($M = 8.68$), HEI 12 ($M = 8.53$), HEI 15 ($M = 8.49$), HEI 9 ($M = 8.35$), HEI 19 ($M = 8.32$), HEI 3 ($M = 8.29$), HEI 17 ($M = 8.23$), HEI 13 ($M = 8.04$), and HEI 8 ($M = 8.03$). The investigation of 8 JOBS items' means in each higher education institution reveals that quite naturally *intellectually challenging job* is an employment experience featured most (HEI 3 ($M = 9.70$); HEI 5 ($M = 9.53$); HEI 8 ($M = 9.07$); HEI 9 ($M = 9.17$); HEI 13 ($M = 9.30$), HEI 15 ($M = 9.53$) and HEI 19 ($M = 9.72$)). *Interesting and well-liked job* stands for the first most salient employment experience in HEI 12 ($M = 9.40$) and HEI 17 ($M = 9.00$), and for the second most appreciated attribute in the aforementioned higher education institutions.
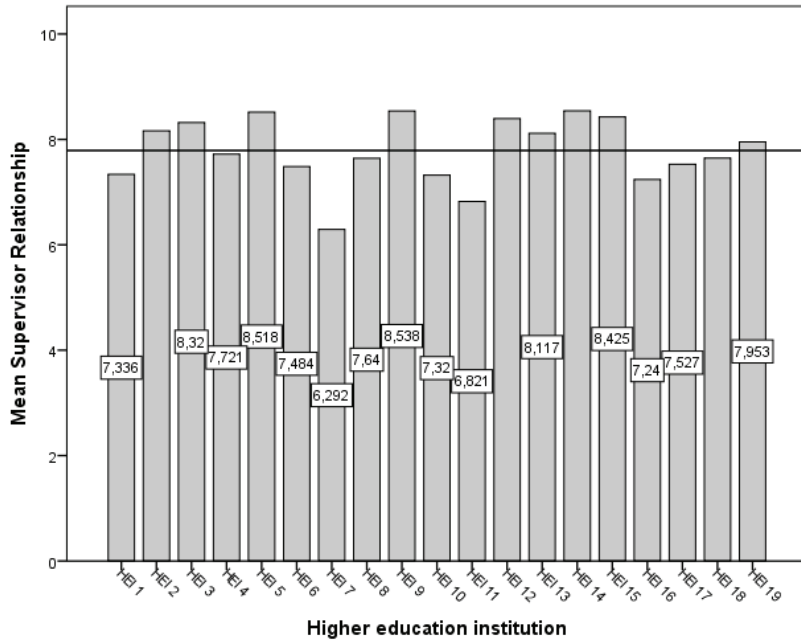
Figure 29. Total HEIs means for dimension Supervisor Relationship

As it is visible from Figure 29 above, Dimension Supervisor Relationship (SUPR) with the total mean index of $M = 7.79$ is manifested most intensively in HEI 14 ($M = 8.54$), HEI 9 ($M = 8.54$), HEI 5 ($M = 8.52$), HEI 15 ($M = 8.43$), HEI 12 ($M = 8.39$), HEI 3 ($M = 8.32$), HEI 2 ($M = 8.16$), HEI 13 ($M = 8.12$) and HEI 19 ($M = 7.95$). Specifically, positive supervision relationship in these institutions is expressed through *listening to subordinates and regarding their opinion* (e.g., HEI 13 ($M = 8.79$); HEI 14 ($M = 8.93$); HEI 15 ($M = 8.76$)), and *employee support* (HEI 9 ($M = 8.81$); HEI 2 ($M = 8.68$)). Evidently, *feedback about the progress* is the laggard of employment offering with the lowest mean load in HEI 2 ($M = 7.09$), HEI 19 ($M = 6.65$), or in HEI 13 ($M = 7.22$), but a matter of great concern is the *lack of trust in supervisor* in HEI 7 ($M = 5.46$) and HEI 10 ($M = 6.75$).
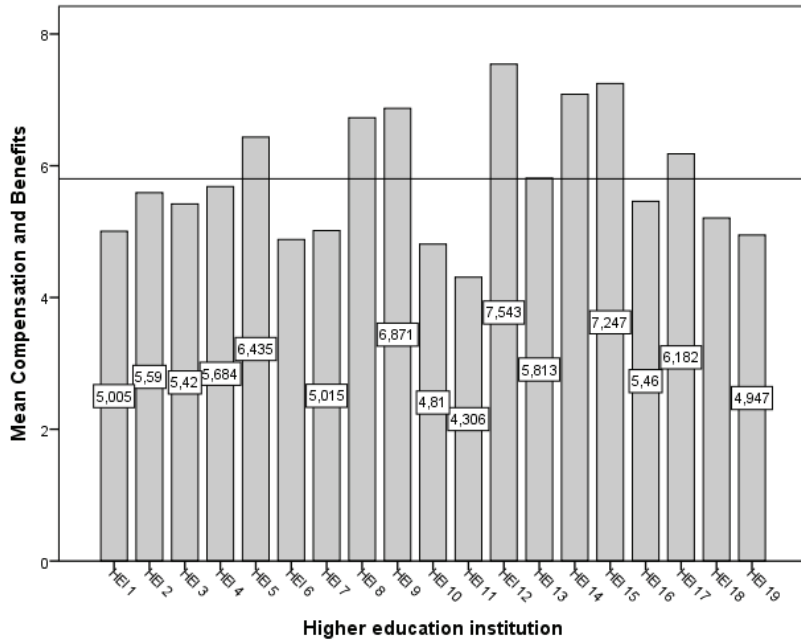
Figure 30. Total HEIs means for dimension Compensation and Benefits

Clearly, Compensation and Benefits (COMPB; $M = 5.80$) is the area where employees expressed least confidence, assigning similarly low mean values as in the case of FAIRT (see Figure 30). Yet, a few institutions are providing satisfactory rewards, namely HEI 12 ($M = 7.54$), HEI 15 ($M = 7.25$), HEI 14 ($M = 7.08$), HEI 9 ($M = 6.87$), HEI 8 ($M = 6.73$), HEI 5 ($M = 6.44$), HEI 17 ($M = 6.18$), and HEI 13 ($M = 5.81$). Non-monetary compensation such as *appreciation of best employees* in HEI 5 ($M = 7.67$), HEI 8 ($M = 7.73$), HEI 9 ($M = 7.75$), and *additional benefits offered to motivate employees* in HEI 17 ($M = 7.08$) dominates.
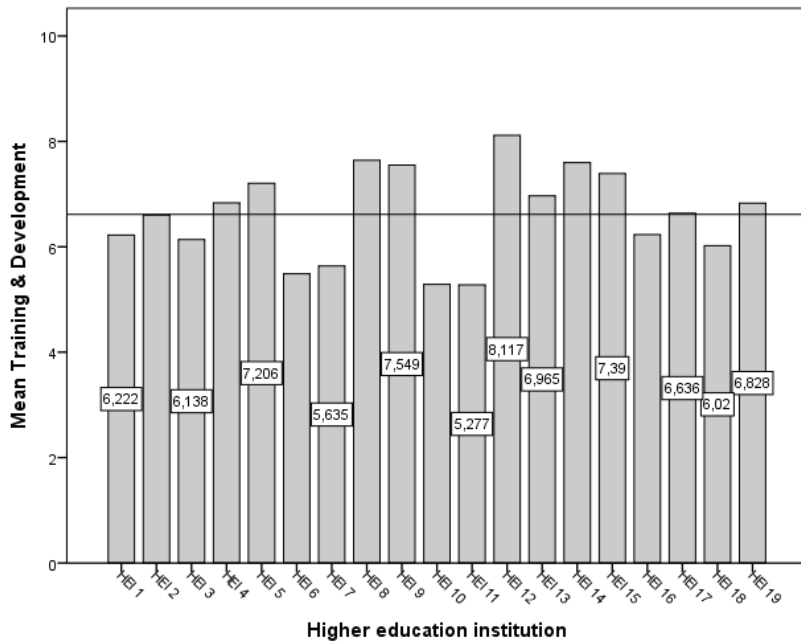
Figure 31. Total HEIs means for dimension Training and Development

Figure 31 shows the manifestation of Training and Development (TRAIND) attribute in higher education institutions. The TRAIND index of the total mean (M = 6.61) allows to see which institutions are providing better than an average TRAIND experience as perceived by employees. There could be noticed that HEI 12 (M = 8.12) is in a fairly visible distance from the other institutions found above the threshold, i.e. HEI 8 (M = 7.64), HEI 14 (M = 7.60), HEI 9 (M = 7.55), HEI 15 (M = 7.39), HEI 5 (M = 7.21), HEI 13 (M = 6.97), HEI 4 (M = 6.83), HEI 19 (M = 6,.83), and HEI 17 (M = 6.64). Basically TRAIND experience in these institutions derives from the *opportunities for personal growth* employee state having in their workplace (e.g., HEI 4 (M = 7.50); HEI 5 (M = 7.72); HEI 8 (M = 7.93)), but as distinct from them HEI 9 (M = 7.97) and HEI 12 (M = 8.70) are seen as offering *training and development meeting institutions aims and objectives*.
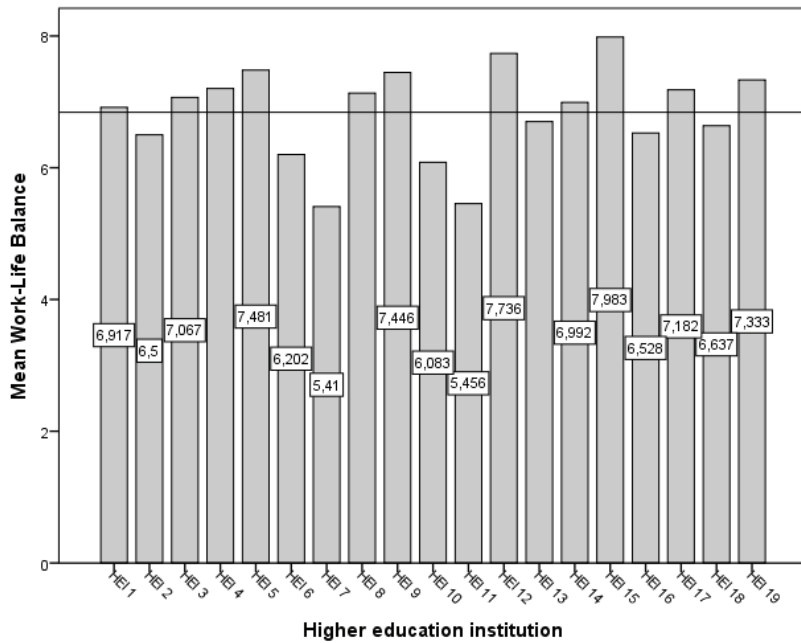
Figure 32. Total HEIs means for dimension Work-life Balance

It can be seen from the data in Figure 32 that Work-Life Balance (WORKLB) is the feature of employment experience met in the majority of the researched higher education institutions. Above the line indicating the total mean of WORKLB (M = 6.84) appear HEI 15 (M = 7.98), HEI 12 (M = 7.74), HEI 5 (M = 7.48), HEI 9 (M = 7.45), HEI 19 (M = 7.33), HEI 4 (M = 7.20), HEI 17 (M = 7.18), HEI 8 (M = 7.13), HEI 3 (M = 7.07), HEI 14 (M = 7.99), and HEI 1 (M = 6.92). Work-life balance is mainly achieved through the possibility to *harmonize work and personal life needs* (e.g., HEI 19 (M = 8.61); HEI 15 (M = 8.51) or HEI 14 (M = 8.10)), but a few institutions also allow enough flexibility in their employees' work as HEI 3 (M = 8.38) and HEI 8 (M = 8.27).
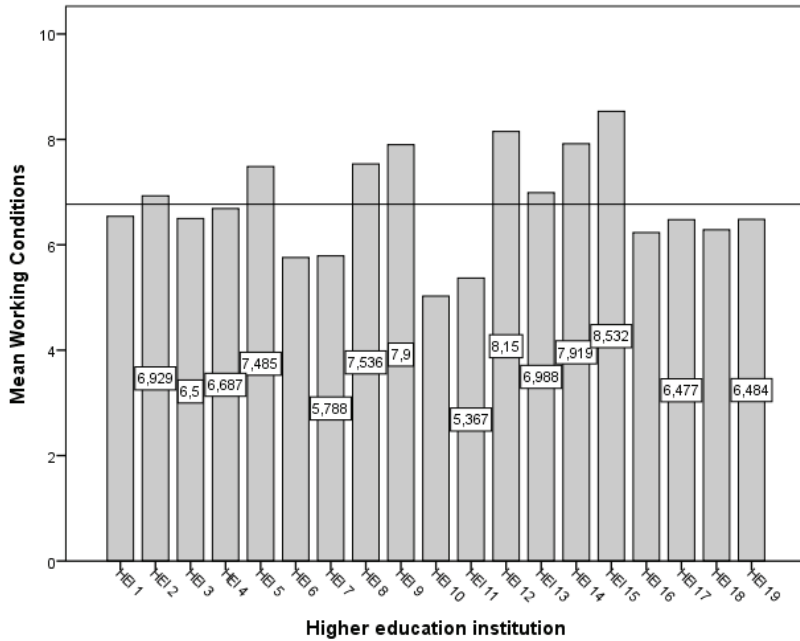
Figure 33. Total HEIs means for dimension Teamwork

As Figure 33 shows, the last dimension of OAES Working Conditions (WORKC; $M =$ 6.77) is most positively perceived in HEI 15 ($M = 8.53$), HEI 12 ($M = 8,15$), HEI 14 ($M = 7.92$), HEI 9 ($M = 7.90$), HEI 8 ($M = 7.54$), HEI 5 ($M = 7.49$), HEI 13 ($M = 6.99$), HEI 2 ($M = 6.93$), and HEI 4 ($M = 6.69$). Employees enjoy having *safe and comfortable working environment* in HEI 2 ($M = 7.48$), HEI 5 ($M = 7.68$), HEI 9 ($M = 8.51$), HEI 15 ($M = 9.20$) and HEI 13 ($M = 7.85$), or say being provided with all necessary equipment and resources to do their job well in HEI 8 ($M = 8.07$) and HEI 14 ($M = 8.38$) as item level mean value analysis for each institution indicates.

Further, evaluating the perceived employment experience quality across higher education institutions, it could be observed from Table 50 that overall gaps between the expected and actual employment experience are larger in some higher education institutions and smaller in others. Besides, higher education institutions demonstrate different relative strengths and weaknesses. For example, HEI 2 compared to HEI 1 has higher EEQ means on all dimensions except TEAMW ($M = 1.39$; $M = 1.41$ respectfully) and STRATM ($M = 1.79$; $M = 2.03$ respectfully), indicating that these two employment experience facets are of better quality in HEI 2, but the rest are of better quality in HEI1. Another example could be the comparison of HEI 2 and HEI 3 means, showing that HEI 3 has better EEQ than HEI 2 in JOBS ($M = 1.28$; M

= 1.52 respectfully) and WORKLB (M = 1.48; M = 2.13 respectfully). Further, HEI 4 has worse EEQ in the area of ORGC (M = 2.29), JOBS (M = 1.45), SUPR (M = 1.52) and WORKLB (M = 1.94) if compared to HEI 3, and so on.

Table 50. Means for OAES dimensions' EEQ scores for each HEI

HEIs	Total	ORGC	FAIRT	TEAMW	ACADE	STRATM	JOBS	SUPR	COMPB	TRAIND	WORKLB	WORKC
HEI 1	**1.75**	1.93	2.08	1.41	1.85	2.03	0.99	0.85	2.88	1.72	1.59	1.76
HEI 2	**1.98**	1.95	2.48	1.39	2.04	1.79	1.52	1.14	3.38	2.21	2.13	2.12
HEI 3	**2.39**	2.25	3.11	1.93	2.74	2.36	1.28	1.46	3.93	3.01	1.48	3.05
HEI 4	**2.25**	2.29	2.91	1.81	2.38	2.36	1.45	1.52	3.39	2.12	1.94	2.47
HEI 5	**1.49**	1.43	1.86	1.31	1.77	1.29	0.81	0.83	2.77	1.97	1.04	1.58
HEI 6	**2.77**	2.68	3.45	2.17	2.89	2.81	1.50	1.83	4.34	3.61	2.57	3.48
HEI 7	**2.55**	2.65	3.05	1.95	2.20	2.74	1.53	2.66	3.31	2.75	2.87	2.83
HEI 8	**1.76**	1.36	2.16	1.13	1.76	1.63	1.51	1.66	2.97	1.80	2.24	1.91
HEI 9	**1.10**	1.09	1.22	0.76	1.27	0.98	0.82	0.62	1.94	1.24	1.50	1.03
HEI 10	**3.23**	3.44	3.89	2.72	3.01	3.39	1.69	2.23	4.58	4.03	2.67	4.32
HEI 11	**3.73**	4.11	4.69	3.07	3.57	3.97	2.49	2.63	4.95	3.90	3.44	3.98
HEI 12	**1.30**	1.08	1.84	1.21	1.22	1.28	0.97	1.12	2.05	1.01	1.27	1.33
HEI 13	**2.10**	2.01	2.76	1.64	2.00	2.68	1.26	1.22	3.36	2.09	2.04	2.27
HEI 14	**1.39**	1.58	1.54	1.22	1.63	1.11	0.71	0.74	2.09	1.59	1.98	1.62
HEI 15	**1.26**	1.11	1.65	1.42	1.34	1.03	0.84	0.97	2.00	1.77	1.06	0.90
HEI 16	**2.49**	2.51	3.05	2.16	2.04	2.21	1.42	2.27	3.84	2.94	2.32	3.12
HEI 17	**1.76**	1.90	2.33	1.41	1.81	1.88	0.90	1.18	2.23	2.05	1.43	2.34
HEI 18	**2.44**	2.30	3.06	1.97	2.46	2.23	1.42	1.79	4.05	3.03	2.18	2.98
HEI 19	**2.14**	2.01	2.96	1.75	2.10	2.13	1.14	1.47	3.59	2.10	1.88	2.58
Total	**2.03**	**2.06**	**2.58**	**1.63**	**2.07**	**1.97**	**1.24**	**1.45**	**3.13**	**2.29**	**1.84**	**2.26**
Universities total	**2.06**	**2.10**	**2.66**	**1.61**	**2.13**	**2.03**	**1.24**	**1.44**	**3.20**	**2.34**	**1.79**	**2.31**
Colleges total	**1.97**	**1.98**	**2.44**	**1.66**	**1.95**	**1.87**	**1.23**	**1.47**	**2.99**	**2.21**	**1.94**	**2.17**

The differences of EEQ across higher education institutions could be more visibly observed in Figure 34. EEQ means of higher education institutions where the total EEQ scores are plotted and the total EEQ index (M = 2.03) is inserted. Obviously, some higher education institutions are found slightly or considerably above this threshold (e.g., HEI 3 with M = 2.39 or HEI 11 with M = 3.73), others meanwhile are located quite below it (e.g., HEI 9 with M = 1.75 or HEI 10 with M = 1.10). Accordingly, it could be interpreted as having a better perceived employment experience quality in the latter case and worse EEQ in the former case.
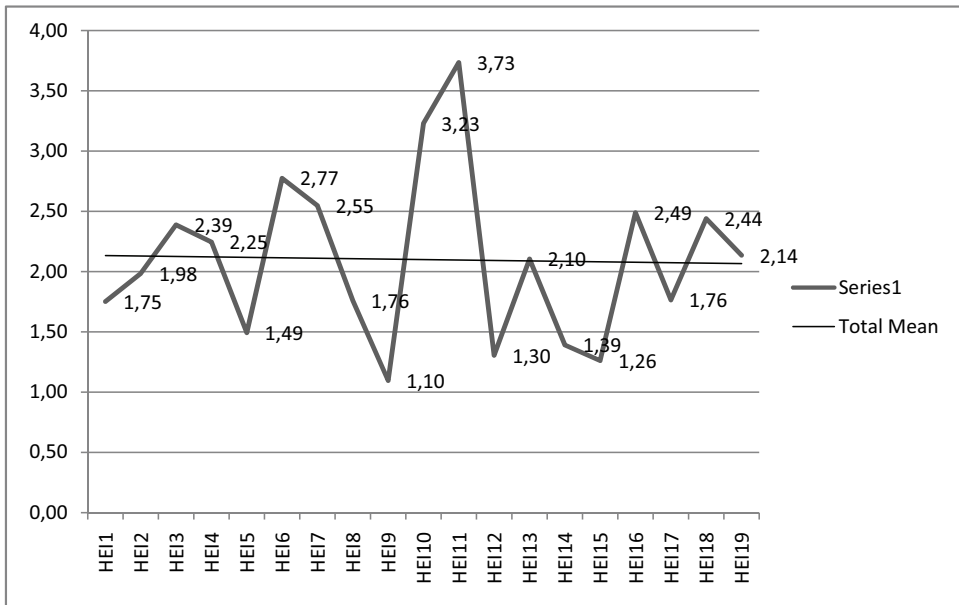
Figure 34. EEQ means of higher education institutions

Eventually, the non-parametric Mann-Whitney U test was used to explore whether differences existed between mean values of the perceived actual and desirable employment experience in universities and colleges subsamples. As Table 51 and Table 52 show, the two groups differed highly significantly from each other ($p < .001$) on all dimensions on *Importance scale* and highly significantly ($p < .001$) or statistically significantly ($p < .05$) on all dimensions except *Work-Life Balance* ($U = 121762$, $p = .429$) on *Experience Scale*.

Table 51. Results of non-parametric Mann-Whitney U test on Experience Scale

	ORGC	FAIRT	TEAMW	ACADE	STRTM	JOBS	SUPR	COMPB	TRAIND	WORKLB	WORKC
Mann-Whitney U	85500.5	88995.5	95974.5	94121.5	79582.0	95866.5	111272.5	92247.0	101992.5	121762.0	96345.5
Wilcoxon W	286795.5	304491.5	323449.5	332516.5	293113.0	315319.5	344175.5	319722.0	341078.5	367813.0	329931.5
Z	-4.386	-5.364	-4.159	-5.628	-7.515	-3.499	-2.001	-4.873	-3.930	-.791	-5.045
Asymp. Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.045	.000	.000	.429	.000

Table 52. Results of non-parametric Mann-Whitney U test on Importance Scale

	ORGC	FAIRT	TEAMW	ACADE	STRTM	JOBS	SUPR	COMPB	TRAIND	WORKLB	WORKC
Mann-Whitney U	72745.0	75237.0	76776.0	92250.5	67107.0	77767.5	84443.0	83820.0	85363.5	93219.0	86196.5
Wilcoxon W	231511.0	240262.0	245847.0	277386.5	231558.0	241645.5	261753.0	260535.0	269284.5	283255.0	268302.5
Z	-4.151	-4.412	-5.085	-2.855	-7.181	-3.831	-3.846	-3.612	-4.485	-3.258	-4.331
Asymp. Sig. (2-tailed)	.000	.000	.000	.004	.000	.000	.000	.000	.000	.001	.000

Given these results it could be presumed that different patterns of organizational attractiveness correlating with different missions of universities and colleges could be delineated. It should be noted that colleges' employees are prone to higher overall estimations of all measured employment facets.

3.2.3. Results of Multivariate Analysis of Variance

Multivariate analysis of variance (MANOVA) is a way to test the hypothesis that one or more categorical independent variables have an effect on a set of two or more metric dependent variables. MANOVA is an extension of analysis of variance (ANOVA) and is concerned with differences between groups. In terms of basic dependence model ANOVA and MANOVA can be expressed as follows (Hair, 2010):

$$Y_1 = X_1 + X_2 + X_3 + ... + X_n,$$

$$Y_1 + Y_2 + Y_3 + ... + Y_m = X_1 + X_2 + X_3 + ... + X_n.$$

MANOVA is used instead of a series of one-at-a-time ANOVAs to reduce the experiment-wise level of Type I error denoting the probability of rejecting the null hypothesis when it is in fact true, and to increase the meaningfulness of variables when taken together but not considered separately.

OAES is intended to measure organizational attractiveness identifying the particular set of employment experiences that make up HEI's employer brand. **Therefore the assumption is that the manifestation of eleven employment experience attributes will differ across 19 HEIs and the research task is to identify whether significant differences exist**. As such, the MANOVA is used to determine the effect of multi-level independent variable HEI (HEI1, HEI2,

HEI3…HEI19) on a set of dependent variables ORGC, FAIRT, TEAMW, ACADE, STRATM, JOBS SUPR, COMPB, TRAIND, WORKLB, and WORKC.

MANOVA assumes that the covariance matrices of the dependent variables are the same across groups (determined by levels of the independent variable) in the population. Box's M tests this assumption. M should not be significant in order to conclude there is insufficient evidence that the covariance matrices differ. As Table 53 indicates, in this case M is significant, thus an assumption of MANOVA has been violated. That is, ORGC, FAIRT, TEAMW, ACADE, STRATM, JOBS SUPR, COMPB, TRAIND, WORKLB, and WORKC actually differ in their covariance matrices. The assumption of equality of covariance matrices may be affected by the unequal sample sizes.

Table 53. Box's Test of Equality of Covariance Matrices

Box's M	1931.953
F	1.578
df1	990
df2	36792.256
Sig.	.000

The Multivariate Tests (Pillai's, Wilks', Hotelling's, and Roy's) all test the MANOVA null hypothesis − that the mean on the composite variable is the same across groups. Wilks' Lambda is commonly used if there are more than 2 groups, but Pillai's Trace is more useful as the multivariate test statistic for unequal sample sizes. As Table 54 demonstrates, a statistically significant MANOVA effect was obtained, Pillai's Trace = .700, $F(198, 7975) = 2.737$, $p < .001$. Therefore, it could be concluded that employment experiences are significantly dependent on a particular HEI in which they are manifested ($p < .0005$). While significance still represents the chance of making a Type I error (thinking of having found some effect when it is not true), the Power is checked for the chance of making a Type II error (thinking of not having found some effects when it is false). Power level should be high (above .90), thus there it is satisfied.

Table 54. Multivariate Tests

	Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power
Intercept	Pillai's Trace	.958	1464.688	11.000	715.000	.000	.958	16111.565	1.000
	Wilks' Lambda	.042	1464.688	11.000	715.000	.000	.958	16111.565	1.000
	Hotelling's Trace	22.534	1464.688	11.000	715.000	.000	.958	16111.565	1.000
	Roy's Largest Root	22.534	1464.688	11.000	715.000	.000	.958	16111.565	1.000
HEI	Pillai's Trace	.700	2.737	198.000	7975.000	.000	.064	541.867	1.000
	Wilks' Lambda	.471	2.842	198.000	6773.445	.000	.066	480.094	1.000
	Hotelling's Trace	.814	2.932	198.000	7845.000	.000	.069	580.585	1.000
	Roy's Largest Root	.259	10.417	18.000	725.000	.000	.205	187.511	1.000

Additionally, the homogeneity of variance assumption was tested for all eleven organizational attractiveness subscales (see Table 55). Based on a series of Levene's F tests, the homogeneity of variance assumption is considered satisfied for TEAMW, JOBS, COMPB and WORKLB, but it was not met on ORGC, FART, ACADE, STRATM, SUPR, TRAIND and WORKLB ($p > .05$).

Table 55. Levene's Test of Equality of Error Variances

	F	df1	df2	Sig.
ORGC	1.966	18	725	.010
FAIRT	1.911	18	725	.013
TEAMW	1.168	18	725	.282
ACADE	1.677	18	725	.038
STRATM	1.925	18	725	.012
JOBS	1.035	18	725	.417
SUPR	3.328	18	725	.000
COMPB	1.504	18	725	.081
TRAIND	2.721	18	725	.000
WORKLB	1.562	18	725	.064
WORKC	2.614	18	725	.000

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

However, as Table 56 reports, all univariate ANOVA effects for the HEI are significant: for ORGC, $F(18, 725) = 6.196$, $p < .001$, partial eta square = .133, power = 1.000; for FAIRT, $F(18, 725) = 4.839$, $p < .001$, partial eta square = .107, power = 1.000; for TEAMW, $F(18, 725)$

= 4.700, $p < .001$, partial eta square = .105, power = 1.000; for ACADE, $F(18, 725) = 5.861$, $p <$ .001, partial eta square = .127, power = 1.000; for STRAT, $F(18, 725) = 7.548$, $p < .001$, partial eta square = .158, power = 1.000; for JOBS, $F(18, 725) = 3.110$, $p < .001$, partial eta square = .072, power = 1.000; for SUPR, $F(18, 725) = 1.916$, $p < .001$, partial eta square = .045, power = .975; for COMPB, $F(18, 725) = 5.564$, $p < .001$, partial eta square = .121, power = 1.000; for TRAIND, $F(18, 725) = 5.954$, $p < .001$, partial eta square = .129, power = 1.000; for WORKLB, $F(18, 725) = 3.697$, $p < .001$, partial eta square = .084, power = 1.000; for WORKC, $F(18, 725)$ = 7.512, $p < .001$, partial eta square = .157, power = 1.000. Accordingly, since the overall multivariate test is significant, it can be concluded that the HEI effect is significant. The highest effect accounted for by HEI was found on STRATM (15.8% of the variance), WORKC (15,7% of the variance), ORGC (13.3% of the variance) and TRAIND (12.9% of the variance). The least effect accounted for by HEI was found on SUPR (4.5% of the variance).

Table 56. Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power
Corrected Model	ORGC	400.868	18	22.270	6.195	.000	.133	111.513	1.000
	FAIRT	426.007	18	23.667	4.839	.000	.107	87.105	1.000
	TEAMW	227.223	18	12.624	4.700	.000	.105	84.604	1.000
	ACADE	273.560	18	15.198	5.861	.000	.127	105.500	1.000
	STRATM	486.849	18	27.047	7.548	.000	.158	135.857	1.000
	JOBS	115.142	18	6.397	3.110	.000	.072	55.980	1.000
	SUPR	180.883	18	10.049	1.916	.012	.045	34.489	.975
	COMPB	486.965	18	27.054	5.564	.000	.121	100.148	1.000
	TRAIND	430.292	18	23.905	5.954	.000	.129	107.172	1.000
	WORKLB	267.119	18	14.840	3.697	.000	.084	66.540	1.000
	WORKC	524.163	18	29.120	7.512	.000	.157	135.211	1.000
Intercept	ORGC	18123.380	1	18123.380	5041.526	.000	.874	5041.526	1.000
	FAIRT	16636.727	1	16636.727	3401.681	.000	.824	3401.681	1.000
	TEAMW	20402.648	1	20402.648	7596.696	.000	.913	7596.696	1.000
	ACADE	19354.018	1	19354.018	7464.036	.000	.911	7464.036	1.000
	STRATM	17611.096	1	17611.096	4914.430	.000	.871	4914.430	1.000
	JOBS	24890.043	1	24890.043	12101.054	.000	.943	12101.054	1.000
	SUPR	23337.413	1	23337.413	4449.702	.000	.860	4449.702	1.000
	COMPB	12944.642	1	12944.642	2662.156	.000	.786	2662.156	1.000
	TRAIND	16881.313	1	16881.313	4204.592	.000	.853	4204.592	1.000
	WORKLB	17902.950	1	17902.950	4459.683	.000	.860	4459.683	1.000
	WORKC	17399.604	1	17399.604	4488.336	.000	.861	4488.336	1.000
HEI	ORGC	400.868	18	22.270	6.195	.000	.133	111.513	1.000
	FAIRT	426.007	18	23.667	4.839	.000	.107	87.105	1.000
	TEAMW	227.223	18	12.624	4.700	.000	.105	84.604	1.000
	ACADE	273.560	18	15.198	5.861	.000	.127	105.500	1.000
	STRATM	486.849	18	27.047	7.548	.000	.158	135.857	1.000
	JOBS	115.142	18	6.397	3.110	.000	.072	55.980	1.000
	SUPR	180.883	18	10.049	1.916	.012	.045	34.489	.975
	COMPB	486.965	18	27.054	5.564	.000	.121	100.148	1.000
	TRAIND	430.292	18	23.905	5.954	.000	.129	107.172	1.000

Table 56 continued

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power
	WORKLB	267.119	18	14.840	3.697	.000	.084	66.540	1.000
	WORKC	524.163	18	29.120	7.512	.000	.157	135.211	1.000
Error	ORGC	2606.245	725	3.595					
	FAIRT	3545.784	725	4.891					
	TEAMW	1947.152	725	2.686					
	ACADE	1879.903	725	2.593					
	STRATM	2598.072	725	3.584					
	JOBS	1491.216	725	2.057					
	SUPR	3802.417	725	5.245					
	COMPB	3525.288	725	4.862					
	TRAIND	2910.853	725	4.015					
	WORKLB	2910.440	725	4.014					
	WORKC	2810.554	725	3.877					
Total	ORGC	36762.174	744						
	FAIRT	35011.259	744						
	TEAMW	40789.429	744						
	ACADE	38330.000	744						
	STRATM	35384.972	744						
	JOBS	48423.734	744						
	SUPR	48663.600	744						
	COMPB	27909.720	744						
	TRAIND	35576.438	744						
	WORKLB	38554.333	744						
	WORKC	36621.750	744						
Corrected Total	ORGC	3007.112	743						
	FAIRT	3971.791	743						
	TEAMW	2174.375	743						
	ACADE	2153.462	743						
	STRATM	3084.921	743						
	JOBS	1606.357	743						
	SUPR	3983.300	743						
	COMPB	4012.253	743						
	TRAIND	3341.145	743						
	WORKLB	3177.559	743						
	WORKC	3334.717	743						

In order to examine individual mean difference comparisons across HEIs, three groups of approximately equal size (HEI 9, HEI 11 and HEI 16) were selected for further analysis (see Table 57). The number of dependent variables was also reduced splitting into two groups for the easiness of modelling and interpretation.

Table 57. Between-Subjects Factors

		Value Label	N
HEI	9	HEI 9	48
	11	HEI 11	37
	16	HEI 16	42

A MANOVA was used to compare the means of three HEIs for the five dimensions of OAES namely: ORGC, FAIRT, TEAMW, ACADE and STRATM (see Table 58).

Table 58. Descriptive Statistics

	HEI	Mean	Std. Deviation	N
ORGC	HEI 9	7.68	1.815	48
	HEI 11	5.11	1.958	37
	HEI 16	6.47	2.271	42
	Total	6.53	2.258	127
FAIRT	HEI 9	7.76	2.075	48
	HEI 11	5.04	2.538	37
	HEI 16	6.16	2.767	42
	Total	6.44	2.683	127
TEAMW	HEI 9	8.16	1.542	48
	HEI 11	5.98	1.712	37
	HEI 16	7.06	1.943	42
	Total	7.16	1.935	127
ACADE	HEI 9	7.80	1.401	48
	HEI 11	5.72	1.644	37
	HEI 16	7.07	1.645	42
	Total	6.95	1.763	127
STRATM	HEI 9	7.94	1.768	48
	HEI 11	5.36	2.063	37
	HEI 16	6.80	2.113	42
	Total	6.81	2.221	127

The Box's M value of 34.773 was associated with a p value of .335, which was non-significant. Thus, the covariance matrices between the groups were assumed to be equal for the purposes of the MANOVA. As Table 59 shows, the multivariate result was significant for HEI, Pillai's Trace = .318, $F(10,242) = 4.580$, $p < .001$. The multivariate effect size was estimated at .159, which implies that 15.9% of the variance in the canonically derived dependent variable was accounted for by HEI.

Table 59. Multivariate Tests

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power
Intercept	Pillai's Trace	.963	617.278	5.000	120.000	.000	.963	3086.392	1.000
	Wilks' Lambda	.037	617.278	5.000	120.000	.000	.963	3086.392	1.000
	Hotelling's Trace	25.720	617.278	5.000	120.000	.000	.963	3086.392	1.000
	Roy's Largest Root	25.720	617.278	5.000	120.000	.000	.963	3086.392	1.000
HEI	Pillai's Trace	.318	4.580	10.000	242.000	.000	.159	45.804	.999
	Wilks' Lambda	.695	4.783	10.000	240.000	.000	.166	47.835	1.000
	Hotelling's Trace	.419	4.985	10.000	238.000	.000	.173	49.845	1.000
	Roy's Largest Root	.366	8.847	5.000	121.000	.000	.268	44.236	1.000

As it is listed in Table 60, the Levene's F test suggested that the variances associated with the ORGC, FAIRT, TEAMW, ACADE and STRATM were homogenous, suggesting that the ANOVA would be robust in this case.

Table 60. Levene's Test of Equality of Error Variances

	F	df1	df2	Sig.
ORGC	3.036	2	124	.052
FAIRT	3.121	2	124	.048
TEAMW	.861	2	124	.425
ACADE	1.237	2	124	.294
STRATM	2.066	2	124	.131

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

Given the significance of the overall test, the univariate main effects were examined (see Table 61). Significant univariate main effects for HEI were obtained for ORGC, $F(2,124)$ =17.007 , $p<.001$, partial eta square = .215, power = 1.000; FAIRT, $F(2,124)$ =13.187 , $p<.001$, partial eta square = .175, power = .997; TEAMW, $F(2,124)$ =16.607 , $p<.001$, partial eta square = .211, power = 1.000; ACADE, $F(2,124)$ =18.776 , $p<.001$, partial eta square = .232, power = 1.000; STRATM, $F(2,124)$ =17.744 , $p<.001$, partial eta square = .223, power = 1.000. The highest effects for HEI were observed for ACADE (23.2% of the variance).

Table 61. Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power
Corrected Model	ORGC	138.309	2	69.154	17.007	.000	.215	34.014	1.000
	FAIRT	159.128	2	79.564	13.187	.000	.175	26.373	.997
	TEAMW	99.680	2	49.840	16.607	.000	.211	33.214	1.000
	ACADE	90.988	2	45.494	18.776	.000	.232	37.552	1.000
	STRATM	138.294	2	69.147	17.744	.000	.223	35.489	1.000
Intercept	ORGC	5181.565	1	5181.565	1274.289	.000	.911	1274.289	1.000
	FAIRT	5014.400	1	5014.400	831.070	.000	.870	831.070	1.000
	TEAMW	6268.760	1	6268.760	2088.793	.000	.944	2088.793	1.000
	ACADE	5910.360	1	5910.360	2439.296	.000	.952	2439.296	1.000
	STRATM	5639.313	1	5639.313	1447.158	.000	.921	1447.158	1.000
HEI	ORGC	138.309	2	69.154	17.007	.000	.215	34.014	1.000
	FAIRT	159.128	2	79.564	13.187	.000	.175	26.373	.997
	TEAMW	99.680	2	49.840	16.607	.000	.211	33.214	1.000
	ACADE	90.988	2	45.494	18.776	.000	.232	37.552	1.000
	STRATM	138.294	2	69.147	17.744	.000	.223	35.489	1.000
Error	ORGC	504.214	124	4.066					
	FAIRT	748.175	124	6.034					
	TEAMW	372.141	124	3.001					
	ACADE	300.449	124	2.423					
	STRATM	483.206	124	3.897					
Total	ORGC	6065.744	127						
	FAIRT	6170.272	127						
	TEAMW	6982.061	127						
	ACADE	6525.160	127						
	STRATM	6515.306	127						
Corrected Total	ORGC	642.523	126						
	FAIRT	907.302	126						
	TEAMW	471.821	126						
	ACADE	391.437	126						
	STRATM	621.500	126						

Finally, a series of post-hoc analyses (Fisher's LSD) were performed to examine individual mean difference comparisons across all three HEIs and all five OAES dimensions (see Table 62). The results revealed that all post-hoc mean comparisons were statistically significant ($p < .05$). In all cases, on average, HEI 9 is offering better employment experiences than HEI 11 and HEI 16 is offering better employment experiences than HEI 11.

Table 62. Multiple Comparisons

LSD

Dependent Variable	(I) HEI	(J) HEI	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
ORGC	HEI 9	HEI 11	2.57	.441	.000	1.70	3.44
		HEI 16	1.21	.426	.005	.37	2.05
	HEI 11	HEI 9	-2.57	.441	.000	-3.44	-1.70
		HEI 16	-1.36	.455	.003	-2.26	-.46
	HEI 16	HEI 9	-1.21	.426	.005	-2.05	-.37
		HEI 11	1.36	.455	.003	.46	2.26
FAIRT	HEI 9	HEI 11	2.72	.537	.000	1.65	3.78
		HEI 16	1.60	.519	.003	.57	2.62
	HEI 11	HEI 9	-2.72	.537	.000	-3.78	-1.65
		HEI 16	-1.12	.554	.045	-2.22	-.03
	HEI 16	HEI 9	-1.60	.519	.003	-2.62	-.57
		HEI 11	1.12	.554	.045	.03	2.22
TEAMW	HEI 9	HEI 11	2.18	.379	.000	1.43	2.93
		HEI 16	1.10	.366	.003	.38	1.82
	HEI 11	HEI 9	-2.18	.379	.000	-2.93	-1.43
		HEI 16	-1.08	.391	.007	-1.85	-.30
	HEI 16	HEI 9	-1.10	.366	.003	-1.82	-.38
		HEI 11	1.08	.391	.007	.30	1.85
ACADE	HEI 9	HEI 11	2.08	.341	.000	1.40	2.75
		HEI 16	.73	.329	.028	.08	1.38
	HEI 11	HEI 9	-2.08	.341	.000	-2.75	-1.40
		HEI 16	-1.35	.351	.000	-2.04	-.65
	HEI 16	HEI 9	-.73	.329	.028	-1.38	-.08
		HEI 11	1.35	.351	.000	.65	2.04
STRATM	HEI 9	HEI 11	2.57	.432	.000	1.72	3.43
		HEI 16	1.14	.417	.007	.31	1.96
	HEI 11	HEI 9	-2.57	.432	.000	-3.43	-1.72
		HEI 16	-1.44	.445	.002	-2.32	-.56
	HEI 16	HEI 9	-1.14	.417	.007	-1.96	-.31
		HEI 11	1.44	.445	.002	.56	2.32

Based on observed means.
The error term is Mean Square(Error) = 3.897.

To estimate the effect sizes, Cohen's *d* was calculated by dividing the mean difference by the standard deviation:

$$\text{Cohen's } d = \frac{M_1 - M_2}{s_{pooled}},$$

$$\text{where } s_{pooled} = \sqrt{\frac{s_1^2 - s_2^2}{2}}.$$

According to Cohen's guidelines (1992), a *d* value up to 0.2 is a small effect size, if it is around 0.5 it is a moderate effect size and an effect size bigger than 0.8 is a large effect size. The effect sizes as estimated by Cohen's d are reported in Table 63.

Table 63. Cohen's d

Dependent Variable		HEI	Cohen's *d*
ORGC	HEI 9	HEI 11	1.36
		HEI 16	0.59
	HEI 11	HEI 16	-0.64
FAIRT	HEI 9	HEI 11	1.18
		HEI 16	0.66
	HEI 11	HEI 16	-0.42
TEAMW	HEI 9	HEI 11	1.34
		HEI 16	0.63
	HEI 11	HEI 16	-0.59
ACADE	HEI 9	HEI 11	1.37
		HEI 16	0.47
	HEI 11	HEI 16	-0.82
STRATM	HEI 9	HEI 11	1.34
		HEI 16	0.59
	HEI 11	HEI 16	-0.69

It can be observed that the largest effects tended to be associated with HEI 9 as compared with HEI 11 with average Cohen's *d* values equal from 1.18 to 1.37, which means that the difference between HEI 9 and HEI 11 means is larger than one standard deviation. Overall, the results indicate that HEI 9 is more attractive as an employer than HEI 11.

3.2.4. Results of Regression Analysis

Regression analysis builds on the idea of statistical association and is the most widely used technique in social sciences presenting a tool for testing hypotheses. Linear regression analysis is a statistical technique that is used to analyse the relationship between a dependent (criterion) and one or more independent (predictor) variables (Hair, 2010; Hanneman *et al.*, 2013). In other words, regression concentrates on predicting an outcome or value of the dependent variable on the basis of values of one or more independent variables (Hanneman *et al.*, 2013; Babbie, 2013).

Simple linear regression is used when problem involves a single independent variable and summarizes the linear dependence of one variable *Y* on another variable *X*. A simple regression model is based on the equation for a straight line:

$$Y = a + bX,$$

where *Y*, the dependent variable, is a linear function of *X*, the predictor variable with two parameters (*a* – constant; *b* – regression coefficient).

Multiple regression technique is applied when two or more variables are included in the equation. Each independent variable is weighed by the multiple regression analysis procedure and their set forms the regression variate, or the linear combination of the independent variables used jointly to predict the dependent variable. The basic multiple regression formulation is:

$$Y = a + b_1X_1 + b_2X_2 + \cdots + b_nX_n,$$

where Y is the dependent variable, X are predictor variables, a is constant, b are regression coefficients.

The method of *Ordinary Least Squares (OLS)* is used in regression analysis as a set of mathematical procedures that takes into account the imperfection of real-world situations and calculates estimates by minimizing the sum of squared residuals:

$$\sum e_i^2 = \sum (Y - a - b_1X_1 - b_2X_2 - ... - b_nX_n)^2.$$

Both simple and multiple regression analyses begin with the global null hypothesis about goodness of fit, testing that there is no association between one or more independent variables and the dependent variable (Hanneman *et al.*, 2013):

$$H_0 : R^2 = 0$$

R^2 (coefficient of determination) value ranges from 1.0 (perfect prediction) to 0.0 (no prediction). F-test is performed to find out if the obtained R^2 is statistically significant. The second hypothesis to be tested with t-tests is whether the slope of the relationships is different from zero:

$$H_0 : b = 0$$

or

$$H_0 : b_i = 0, \ i = 1, 2,.. ,n.$$

A series of simple linear regressions were used to predict Affective Commitment (AFFCOM) from employment experience attributes Organizational Culture (ORGC), Fairness & Trust (FAIRT), Teamwork (TEAMW), Academic Environment (ACADE), Strategic Management (STRATM), Jobs Satisfaction (JOBS), Supervisor Relationship (SUPR), Compensation and Benefits (COMPB), Training & Development (TRAIND), Work-Life Balance (WORKLB) and Working Conditions (WORKC).

As Table 64 indicates, ORGC statistically significantly predicted AFFCOM, $F(1,939) = 536.345$, $p < .05$, $R^2 = .364$. ORGC added statistically significantly to the prediction, $p < .05$, the regression equation can be presented as:

AFFCOM = 2.825 + 0.652·ORGC.

Table 64. Simple Regression Results Using Organizational Culture as the Independent Variable

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.825	.198		14.278	.000
ORGC	.652	.028	.603	23.159	.000

As table 65 shows, FAIRT statistically significantly predicted AFFCOM, $F(1,976) = 490,897$, $p < .05$, $R^2 = .335$. FAIRT added statistically significantly to the prediction, $p < .05$, the regression equation can be presented as:

$$AFFCOM = 3.729 + 0.541 \cdot FAIRT.$$

Table 65. Simple Regression Results Using Fairness and Trust as the Independent Variable

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.729	.168		22.249	.000
FAIRT	.541	.024	.578	22.156	.000

As Table 66 demonstrates, TEAMW statistically significantly predicted AFFCOM, $F(1,988) = 500.646$, $p < .05$, $R^2 = .336$. TEAMW added statistically significantly to the prediction, $p < .05$, the regression equation can be presented as:

$$AFFCOM = 1.843 + 0.743 \cdot TEAMW.$$

Table 66. Simple Regression Results Using Teamwork as the Independent Variable

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.843	.246		7.492	.000
TEAMW	.743	.033	.580	22.375	.000

As Table 67 informs, ACADE statistically significantly predicted AFFCOM, $F(1,1006) = 471.444$, $p < .05$, $R^2 = .319$. ACADE added statistically significantly to the prediction, $p < .05$, the regression equation can be presented as:

$$AFFCOM = 2.072 + 0.734 \cdot ACADE.$$

Table 67. Simple Regression Results Using Academic Environment as the Independent Variable

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.072	.243		8.535	.000
ACADE	.734	.034	.565	21.713	.000

As Table 68 depicts, STRATM statistically significantly predicted AFFCOM, $F(1,972) = 484.029$, $p < .05$, $R^2 = .332$. STRATM added statistically significantly to the prediction, $p < .05$, the regression equation can be presented as:

$$AFFCOM = 3.215 + 0.611 \cdot STRATM.$$

Table 68. Simple Regression Results Using Strategic Management as the Independent Variable

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.215	.192		16.760	.000
STRATM	.611	.028	.577	22.001	.000

As it is shown in Table 69, JOBS statistically significantly predicted AFFCOM, $F(1,973) = 652.431$, $p < .05$, $R^2 = .401$. JOBS added statistically significantly to the prediction, $p < .05$, the regression equation can be presented as:

$$AFFCOM = -0.099 + 0.921 \cdot JOBS.$$

Table 69. Simple Regression Results Using Jobs Satisfaction as the Independent Variable

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.099	.291		-.342	.733
JOBS	.921	.036	.634	25.543	.000

As Table 70 indicates, SUPR statistically significantly predicted AFFCOM, $F(1,1009) = 296.703$, $p < .05$, $R^2 = .227$. SUPR added statistically significantly to the prediction, $p < .05$, the regression equation can be presented as:

$$AFFCOM = 3.729 + 0.450 \cdot SUPR.$$

Table 70. Simple Regression Results Using Supervisor Relationship as the Independent Variable

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.729	.211		17.668	.000
SUPR	.450	.026	.477	17.225	.000

As Table 71 lists, COMPB statistically significantly predicted AFFCOM, $F(1,987) = 515.178$, $p < .05$, $R^2 = .343$. COMPB added statistically significantly to the prediction, p < .05, the regression equation can be presented as:

$$AFFCOM = 4.158 + 0.546 \cdot COMPB.$$

Table 71. Simple Regression Results Using Compensation and Benefits as the Independent Variable

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	4.158	.147		28.312	.000
COMPB	.546	.024	.586	22.698	.000

As it is set in Table 72, TRAIND statistically significantly predicted AFFCOM, F(1,1012) = 599.092, $p < .05$, $R^2 = .372$. TRAIND added statistically significantly to the prediction, p < .05, the regression equation can be presented as:

$$AFFCOM = 3.130 + 0.625 \cdot TRAIND.$$

Table 72. Simple Regression Results Using Training and Development as the Independent Variable

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.130	.176		17.783	.000
TRAIND	.625	.026	.610	24.476	.000

As Table 73 shows, WORKLB statistically significantly predicted AFFCOM, $F(1,1029) = 230.739$, $p < .05$, $R^2 = .183$. WORKLB added statistically significantly to the prediction, p < .05, the regression equation can be presented as:

$$AFFCOM = 4.168 + 0.445 \cdot WORKLB.$$

Table 73. Simple Regression Results Using Work-life Balance as the Independent Variable

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.168	.210		19.819	.000
	WORKLB	.445	.029	.428	15.190	.000

As Table 74 informs, WORKC statistically significantly predicted AFFCOM, $F(1,1009) = 383.335$, $p < .05$, $R^2 = .275$. WORKC added statistically significantly to the prediction, $p < .05$, the regression equation can be presented as:

$$AFFCOM = 3.601 + 0.539(WORKC).$$

Table 74. Simple Regression Results Using Working Conditions as the Independent Variable

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.601	.193		18.631	.000
	WORKC	.539	.028	.525	19.579	.000

Overall, the results of simple linear regression indicated that a dependent variable AFFCOM can be explained by all independent variables to a certain extent. The most important predictors are found to be JOBS ($R = .634$; $R^2 = .401$) and TRAIND ($R = .610$; $R^2 = .372$), the least important predictors are found to be WORKLB ($R = .428$; $R^2 = .183$) and SUPR ($R = .477$; $R^2 = .227$).

Next, in order to reach conclusions not only about the precision of the prediction and the size of effect separate independent variables have on the dependent variable, but also about the simultaneous contribution of eleven predictors to AFFCOM and the relationship between the dependent variable and the independent variables, controlling for the other independent variables, the simple regression models are extended to multiple regression. Combined influence of all independent variables on the dependent variable as well as the individual influence of each independent variable while controlling for the other independent variable.

According to the reported R-squared statistics, R^2 of AFFCOM predicted by combination of eleven employment experience attributes is 0.477, therefore it is possible to explain 47.7 percent of the total variance in affective commitment by taking into consideration a combination of these predictors. This indicates that regression model predictions are quite precise. Additionally, the assumption that the residuals are not correlated serially from one observation to the next was checked using Durbin-Watson Statistic ranging from 0 to 4, where value close to

0 indicates a strong positive correlation, a value of 4 indicates strong negative correlation, and a value close to 2 indicates that residuals are not correlated. For this analysis, the value of Durbin-Watson is 1.957 (see Table 75) and it falls into the interval of critical values (1.83; 2.17) indicating no serial correlation.

Table 75. Affective commitment and Employment experience attributes: Model Predictions

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.691	.477	.469	1.596	1.957

Determining whether the model is a good fit for the data F-value was examined in ANOVA and indicated that it is because p is less than .05 and the R^2 result is statistically significant ($F(11,719) = 59.6$, $p < .05$) (see Table 76). Accordingly, this leads to the rejection of null hypothesis that no independent variable has an effect on Y.

Table 76. Affective commitment and Employment experience attributes: Goodness of Fit

	Model	Sum of Squares	df	Mean Square	F	Sig.
	Regression	1671.068	11	151.915	59.641	.000
1	Residual	1831.406	719	2.547		
	Total	3502.475	730			

Having passed the global hypothesis test, partial effects are examined in a multiple regression model. Based on unstandardized coefficients for each predictor the equation for the regression line is:

$$Y(\text{AFFCOM}) = 0.052 - 0.010 \cdot (\text{ORGC}) + 0.011 \cdot \text{FAIRT} + 0.198 \cdot \text{TEAMW} + 0.070 \cdot \text{ACADE} -$$
$$0.187 \cdot \text{STRATM} + 0.507 \cdot \text{JOBS} - 0.023 \cdot \text{SUPR} + 0.139 \cdot \text{COMPB} + 0.246 \cdot \text{TRAIND} -$$
$$0.035 \cdot \text{WORKLB} + 0.067 \cdot \text{WORKC}$$

Using Student t-tests it could be seen from Table 77 though that only five partial effects are statistically significant ($p < .05$). Further, assessing the degree and impact of multicollinearity VIF of 10,409 for ORGC indicates the linear dependence of this independent variable on other independent variables. If collinearity is a problem, the first choice solution is the elimination of independent variables with large VIF from the analysis (Hair, 2010). However, this method is misguided if the variable is selected due to the theory of the model which is the case with ORGC. Therefore the model is left as it is, despite multicollinearity, while the lowered level of

overall predictive ability is acknowledged and more emphasis is placed on simple correlations (Ibid.).

Table 77. Affective commitment and Employment experience attributes: Partial Effects and Collinearity Diagnostics

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.052	.385		.135	.893					
	ORGC	-.010	.096	-.009	-.101	.920	.596	-.004	-.003	.096	10.409
	FAIRT	.011	.075	.012	.151	.880	.579	.006	.004	.119	8.416
	TEAMW	.198	.070	.152	2.822	.005	.577	.105	.076	.250	4.001
	ACADE	.070	.069	.054	1.015	.310	.566	.038	.027	.259	3.865
	STRATM	-.187	.082	-.172	-2.283	.023	.576	-.085	-.062	.128	7.804
	JOBS	.507	.072	.336	7.083	.000	.637	.255	.191	.323	3.094
	SUPR	-.023	.040	-.024	-.564	.573	.475	-.021	-.015	.415	2.408
	COMB	.139	.052	.147	2.679	.008	.592	.099	.072	.241	4.152
	TRAIND	.246	.057	.237	4.344	.000	.620	.160	.117	.245	4.085
	WORKLB	-.035	.043	-.033	-.826	.409	.441	-.031	-.022	.450	2.224
	WORKC	.067	.053	.064	1.254	.210	.532	.047	.034	.276	3.627

In determining which independent variables contribute significantly to explaining the variability in the dependent variable, a sequential search method of *stepwise estimation* was employed. This procedure enables to examine the contribution of each independent variable by selecting the independent variable having the highest correlation with the dependent variable first, testing whether the percent variation explained is statistically significant, adding next independent variable, recomputing the regression equation and continuing this procedure by examining all independent variables. Variables that do not make a significant contribution are eliminated until the best model is determined.

Table 78. Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	JOBS	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050. Probability-of-F-to-remove >= .100).
2	TRAIND	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050. Probability-of-F-to-remove >= .100).
3	TEAMW	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050. Probability-of-F-to-remove >= .100).
4	COMPB	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050. Probability-of-F-to-remove >= .100).
5	STRATM	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050. Probability-of-F-to-remove >= .100).

Table 78 tells which variables were included in the model at each step: "JOBS" was the single best predictor (step 1), and "TRAIND" was the next best predictor (added the most) after "JOBS" was included in the model (step 2), and "TEAMW" was another best predictor after "JOBS" and "TRAIND" were included in the model (step 3), and "COMPB" was another best predictor after "JOBS", "TRAIND' and "TEAMW" were included in the model (step 4), and (STRATM) was the last best predictor, after "JOBS", "TRAIND", "TEAMW" and "COMPB" were included in the model (step 5). Variables ORGC, FAIRT, ACADE, SUPR, WORKLB and WORKC were excluded from the model.

Table 79. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.637[a]	.405	.404	1.69049	
2	.676[b]	.457	.456	1.61590	
3	.683[c]	.466	.464	1.60380	
4	.686[d]	.471	.468	1.59744	
5	.689[e]	.475	.471	1.59318	1.921

a. Predictors: (Constant), JOBS
b. Predictors: (Constant), JOBS, TRAIND
c. Predictors: (Constant), JOBS, TRAIND, TEAMW
d. Predictors: (Constant), JOBS, TRAIND, TEAMW, COMPB
e. Predictors: (Constant), JOBS, TRAIND, TEAMW, COMPB, STRATM

R-squares in Table 79 inform that with "JOBS" alone (step 1), 40.5% of the variance in AFFCOM was accounted for, and 47.5% of the variation in AFFCOM is explained by having JOBS, TRAIND, TEAMW, COMPB and STRATM in the model. Five F-tests (see Table 80), one for each step of the procedure, had overall significant results ($p < .05$).

Table 80. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1419.173	1	1419.173	496.605	.000[a]
	Residual	2083.302	729	2.858		
	Total	3502.475	730			
2	Regression	1601.569	2	800.784	306.681	.000[b]
	Residual	1900.906	728	2.611		
	Total	3502.475	730			
3	Regression	1632.498	3	544.166	211.558	.000[c]
	Residual	1869.977	727	2.572		
	Total	3502.475	730			
4	Regression	1649.847	4	412.462	161.634	.000[d]
	Residual	1852.628	726	2.552		
	Total	3502.475	730			
5	Regression	1662.259	5	332.452	130.978	.000[e]
	Residual	1840.216	725	2.538		
	Total	3502.475	730			

a. Predictors: (Constant), JOBS
b. Predictors: (Constant), JOBS, TRAIND
c. Predictors: (Constant), JOBS, TRAIND, TEAMW
d. Predictors: (Constant), JOBS, TRAIND, TEAMW, COMPB
e. Predictors: (Constant), JOBS, TRAIND, TEAMW, COMPB, STRATM

Unstandardized coefficients that determine the least-squares regression line indicate how AFFCOM is predicted to increase for a one-unit change in four independent variables JOBS, TRAIND, TEAMW and COMP. Interestingly, AFFCOM is predicted to decrease for a one-unit change in STRATM. Thus, the prediction equation found in the regression model step 5 is:

$$Y(\text{AFFCOM}) = 0.168 + 0.495 \cdot \text{JOBS} + 0.263 \cdot \text{TRAIND} + 0.204 \cdot \text{TEAMW} + 0.153 \cdot \text{COMPB} - 0.144 \cdot \text{STRATM}$$

Identifying which independent variable has the bigger effect controlling for affective commitment, standardized coefficients were analyzed (see Table 81). The standardized coefficient for JOBS is 0.328, indicating that increase of one standard deviation in AFFCOM is associated with increase of 0.328 standard deviation in JOBS.

Table 81. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
5	(Constant)	.168	.364		.462	.645		
	JOBS	.495	.067	.328	7.363	.000	.366	2.733
	TRAIND	.263	.055	.253	4.797	.000	.261	3.825
	TEAMW	.204	.059	.157	3.472	.001	.355	2.815
	COMPB	.153	.047	.161	3.225	.001	.291	3.441
	STRATM	-.144	.065	-.133	-2.211	.027	.201	4.978

Observing standardized coefficients of other independent variables, it could be said that predictive substantive role of JOBS is greater than of TRAIND (beta = 0.253) and almost twice greater than of TEAMW (beta = 0.157), COMPB (beta = 0.161) and STRATM (beta = -0.133).

3.2.5. Results for Generational Differences

To explore generational differences in higher education, the respondents were categorized into four generations based on the age intervals used in the survey, as they approximately pertain to the generational birth frames. Age intervals used in the questionnaire to cluster the respondents into age groups were adapted (with one year start-date and end-date error) from the Statistics Lithuania (2012), which commonly follows them to report about research and development personnel by age.

Only 25 respondents indicated being younger than 25 years old and presumably composing a mix of late Generation Y and early Generation Z members. This group was not

included in further analysis. The group of respondents born between 1977-1986 and aged 26-35 in 2012 was labelled as Generation Y; the group of those who were born between 1967-1976 and were aged 36-45 in 2012 was labelled as Generation X; the group of people born between 1957-1966 and aged 46-55 in 2012 was labelled Baby Boomers; and finally, the group of those who were born before 1956 was labelled as Traditionalists. The latter group is likely to contain some Baby Boomers as well, however, since the number of employees aged 65 and older was low and accounted for almost 8 percent of the total academic workforce in Lithuania (Statistics Lithuania, 2012), the highest margin of above 55 years old was employed to facilitate data analysis.

The data of the survey was analyzed using the IBM SPSS Statistics 19 for Windows software package. The aim of this study was to explore and describe generational differences in the preferences for work values and employment experience in academic workplace, consequently, only the data from *Importance* scale, which indicated the employees' needs, wants and expectations, was used in further analysis. Table 83 reports descriptive statistics – the means (*M*), standard deviations (*SD*) and ranks for OAES item scores for each generational group.

The Kruskal-Wallis test was used to determine whether the generational groups' distributions were identical. The results of the Kruskal–Wallis test were significant ($H(3)=16.727$, $p=.001$); the mean ranks of importance values are significantly different among the four generations. Accordingly, considering statistically significant differences, analysis of rank ordered data was performed, exploring the most wanted employment experience facets for each generation. Additionally, the total mean of responses, referred to as *Importance Index* ($M =$ 8.960), was calculated to facilitate the interpretation of results.

It can be seen from the data in Annex 14 that Generation Y places most importance on an interesting job ($M = 9.60$; $SD = .914$), supervisor guidance ($M = 9.44$; $SD = 1.154$), supervisor attention and respect ($M = 9.43$; $SD = 1.107$), recognition of performance results and competencies ($M = 9.40$; $SD = 1.056$), job meeting one's experiences and abilities ($M = 9.38$; $SD = 1.059$); supervisor support ($M = 9.37$; $SD = 1.060$), study quality assurance ($M = 9.36$; $SD = 1.253$), keeping promises ($M = 9.34$; $SD = 1.198$), possibility to combine work and personal life needs ($M = 9.33$; $SD = 1.388$), and help and support from colleagues ($M = 9.32$; $SD = 1.133$). Other generations also have a fairly high regard for these work values, except Traditionalists, who were found to value recognition for performance results ($M = 8.95$; $SD = 1.614$) and proper prioritizing between work and life ($M = 8.91$; $SD = 1.565$) much lower than Generation Y, and below the Importance Index.

162

Analyzing the preferences of work values of Generation X, it could be concluded that an interesting job ($M = 9.50$; $SD = 1.224$) which meets one's abilities and experience ($M = 9.45$; $SD = 1.000$) is the first priority as in the case of Generation Y. Further, "walk the talk" is most appreciated by Generation X ($M = 9.42$; $SD = 1.133$), fairness of treatment ($M = 9.40$; $SD = 1.116$) is considered as very important, keeping promises ($M = 9.40$; $SD = 1.189$) is most valued, and good atmosphere is embraced ($M = 9.38$; $SD = 1.059$). Generation X also places more importance on consistent administrative support provided to faculty members ($M = 9.37$; $SD = 1.091$), appreciation of best employees ($M = 9.35$; $SD = 1.232$), attentive supervision ($M = 9.35$; $SD = 1.122$), and study quality assurance ($M = 9.32$; $SD = 1.53$). It should be noted that, again, Traditionalists do not perceive consistent administrative support ($M = 8.87$; $SD = 1.502$) as a must, with scores falling below the total average.

When it comes to the work values of Baby Boomers, echoing the previous groups' results, they place the highest emphasis on an interesting job ($M = 9.43$; $SD = 1.144$), fairness of treatment ($M = 9.41$; $SD = .899$), job and experience match ($M = 9.32$; $SD = 1.210$) and reward of achievements ($M = 9.29$; $SD = 1.198$). Good relationship with colleagues ($M = 9.26$; $SD = 1.040$) and procedures promoting transparency ($M = 9.29$; $SD = 1.257$) are also most valued by Baby Boomers. However, further preferences of attentive supervision ($M = 9.24$; $SD = 1.247$), study quality assurance ($M = 9.23$; $SD = 1.391$) and keeping one's word ($M = 9.21$; $SD = 1.130$) overlap with both Generation Y's and Generation X's priorities. In agreement with Generation X, Baby Boomers place increased importance on faculty support ($M = 9.22$; $SD = 1.056$). The largest discrepancies are observed in the Traditionalists' case, where three of ten highest work value preferences of Baby Boomers, i.e. recognition of results ($M = 8.95$; $SD = 1.614$, faculty support ($M = 8.87$; $SD = 1.502$) and procedures promoting transparency ($M = 9.96$; $SD = 1.464$), are found below Importance Index.

It is apparent from Annex 14 that Traditionalists are consistent with other generations above on three aspects of employment experience, which are a job that is interesting ($M = 9.31$; $SD = 1.063$) and meets one's experience ($M = 9.31$; $SD = 1.063$), and attentive supervision ($M = 9.17$; $SD = 1.194$). Similarly to Baby Boomers, Traditionalists embrace good relationship with colleagues ($M = 9.23$; $SD = 1.135$), just like Generation Y, they value helpful colleagues ($M = 9.20$; $SD = 1.128$), and, like both these groups, place much emphasis on fair treatment of employees ($M = 9.19$; $SD = 1.171$). Traditionalists also agree with Generation Y on high importance of supervisor guidance ($M = 9.11$; $SD = 1.526$). In contrast to other generations, Traditionalists express their appreciation for trusty supervisors ($M = 9.15$; $SD = 1.337$), leaders ($M = 9.13$; $SD = 1.126$), and the institution's positive reputation and image ($M = 9.11$; $SD = 1.649$).

Eventually, the data of *Affective Commitment Scale* was checked and strong evidence for significant differences between generations ($F(3,1033) = 22.587$, $p< .001$) was found, supporting previous findings (AON Hewitt, 2012) and showing declining employee loyalty with each younger generation with Traditionalists being most loyal ($M = 8.00$; $SD = 1.909$), Baby Boomers ($M = 7.66$; $SD = 2.031$) and Generation X ($M = 7.11$; $SD = 2.111$) getting less loyal and, finally, Generation Y representing the least loyal group ($M = 6.58$; $SD = 2.202$).

Further analysis was performed on the level of overarching values, i.e. eleven OAES dimensions. To determine whether the identified generational work value preferences are universally applicable, the non-parametric Mann-Whitney U test was used to compare the mean values of universities and colleges and indicated statistically significant differences ($p<.001$) between generations in these two subsamples on all dimensions on *Importance scale*, without exceptions. Given these statistically significant differences, the remaining analyses were performed separately for universities and colleges, but only the data from 10 higher education institutions – five universities ($N = 672$), and five colleges ($N = 262$) – was analyzed, as the samples of the remaining 9 institutions did not exceed 30 respondents, which is considered too small for segmentation.

Kruskal-Wallis non-parametric test was used to compare generational groups inside higher education institutions. As Table 82 shows, the results indicated that there were statistically significant differences in attitudes between generations within all universities, except University B ($H(3)=5.664$, $p=0.129$), and in all colleges, except College D ($H(2)=2.071$, $p=0.355$), where no evidence of significant differences between generations was found.

Table 82. Results of non-parametric Kruskal-Wallis test for ten higher education institutions

	Universi ty A (N=119)	Universi ty B (N=69)	Universi ty C (N=98)	Universi ty D (N=268)	Universi ty E (N=118)	College A (N=65)	College B (N=50)	College C (N=42)	College D (N=44)	College E (N=61)
Chi-square	13.935	5.664	10.409	21.052	13.286	16.705	21.528	22.438	2.071	30.815
df	3	3	3	3	3	3	3	3	2	3
Asymp. Sig.	.003	.129	.015	.000	.004	.001	.000	.000	.355	.000

In order to identify the most preferable work values and to determine whether any group-preferential pattern could be observed in the subsamples of five universities and five colleges, three dimensions with the highest mean values and ranks, perceived as the most important by employees, were listed and summarized in Table 83 for each generational group with indicated frequency.

Table 83. Work values perceived as most important by employees of universities and colleges

Work values:	Generation Y	Generation X	Baby Boomers	Traditionalists
perceived as most important by Universities' employees	Supervisor Relationship 5/5 Job Satisfaction 4/5 *Academic Environment 2/5 Fairness and Trust 2/5 Working Conditions 1/5 Organizational Culture 1/5*	Fairness and Trust 5/5 Job Satisfaction 3/5 Compensation and Benefits 2/5 Academic Environment 2/5 Supervisor Relationship 2/5 *Organizational Culture 1/5*	Academic Environment 4/5 Fairness and Trust 4/5 *Job Satisfaction 3/5 Supervisor Relationship 2/5 Teamwork 1/5 Organizational Culture 1/5*	Job Satisfaction 5/5 Fairness and Trust 4/5 *Supervisor Relationship 3/5 Academic Environment 2/5 Working Conditions 1/5*
perceived as most important by Colleges' employees	Working Conditions 4/5 Fairness and Trust 4/5 Supervisor Relationship 3/5 Compensation and Benefits 2/5 *Academic Environment 1/5 Work-Life Balance 1/5*	Supervisor Relationship 3/5 Job Satisfaction 3/5 Fairness and Trust 3/5 Teamwork 3/5 *Working Conditions 1/5 Compensation and Benefits 1/5 Academic Environment 1/5*	Supervisor Relationship 4/5 Academic Environment 3/5 Job Satisfaction 2/5 Fairness and Trust 2/5 Working Conditions 2/5 *Strategic Management 1/5 Training and Development 1/5*	Supervisor Relationship 4/5 Fairness and Trust 4/5 *Strategic Management 1/5 Academic Environment 2/5 Job Satisfaction 1/5*

This analysis is quite revealing in several ways. First, it is apparent from Table 83 above that all or most of the generational groups across the surveyed universities and colleges agree on one or two highest priorities in work values. Namely, *Supervisor Relationship* and *Job Satisfaction* are embraced by Generation Y, *Fairness and Trust* is most valued by Generation X, *Academic Environment* and *Fairness and Trust* are most appreciated by Baby Boomers, and *Job Satisfaction* and *Fairness and Trust* are most desired by Traditionalists in the universities' subsample. In the same way, *Working Conditions* and *Fairness and Trust* are most appreciated by Generation Y, *Supervisor Relationship* is most valued by Baby Boomers, and *Supervisor Relationship* and *Fairness and Trust* are most expected as employment experience by Traditionalists in the colleges' subsample. Interestingly, no clear pattern emerged for Generation X in the colleges' subsample. Secondly, it is evident that certain employment facets are given the highest importance only in particular institutions, therefore revealing their specificity.

3.2.6. Results of Cluster Analysis

Facilitating the process of identifying, articulating and describing similarities and differences between and among higher education institution, classification of respondents into homogenous groups (segments) based on their perceptions of actual employment experience was undertaken. As Vught et al. (2010: 13) point out, "classifying is an activity inextricably related to the human desire to create order out of chaos. The general purpose of a classification is to increase transparency in complex systems, to grasp the diversity within such systems and – consequently – to improve our understanding of phenomena and systems and to support effective communication" (Vught et al., 2010: 13).

Cluster analysis as a convenient technique for segmentation was applied. 11 OAES dimensions − *Organizational Culture*, *Fairness and Trust*, *Teamwork*, *Academic Environment*, *Strategic Management*, *Job Satisfaction*, *Supervisor Relationship*, *Compensation and Benefits*, *Training and Development*, *Work-Life Balance*, and *Working Conditions,* as well as *Loyalty* derived from Affective Commitment Scale were included as clustering variables in the analysis. As far as the aim of this study was to explore attitudes towards actual employment experience in higher education, only the data from *Experience scale* was used in further analyses.

Because of the large sample size and many clustering variables, Quick Cluster (SPSS) *K-means* non-hierarchical method was used (Mooi and Sarstedt, 2011). Considering previous research (e.g., TNS, 2003) four clusters were pre-specified to retain from the data. The final cluster centers and mean profiles for constructed segments are displayed in Table 84 and Table 85. Accordingly, 11% of respondents were classified in Cluster 1, 28% were assigned to Cluster 2, while 22% in Cluster 3 and 39% in Cluster 4.

Table 84. Final Cluster Centers

	Cluster			
	1	2	3	4
Organizational Culture	3	9	5	7
Fairness and Trust	3	9	5	7
Teamwork	4	9	6	7
Academic Environment	4	9	6	7
Strategic Management	3	9	5	7
Job Satisfaction	6	9	7	8
Supervisor Relationship	4	10	7	8
Compensation and Benefits	2	8	4	6
Training and Development	3	9	5	7
Work-Life Balance	4	9	6	7
Working Conditions	3	9	5	7
Loyalty	4	9	6	8

Table 85. Table of Mean Profiles

	Cluster			
	1	2	3	4
Organizational Culture	3.21	8.89	5.29	7.07
Fairness and Trust	2.64	9.03	4.74	6.73
Teamwork	4.46	8.91	6.21	7.37
Academic Environment	4.35	8.65	5.90	7.17
Strategic Management	3.22	8.81	5.15	6.82
Job Satisfaction	5.66	9.30	6.94	8.20
Supervisor Relationship	3.86	9.53	6.51	8.33
Compensation and Benefits	2.16	8.26	3.98	5.82
Training and Development	3.10	8.71	5.18	6.90
Work-Life Balance	3.98	8.52	5.64	7.31
Working Conditions	3.24	8.76	5.30	7.02
Loyalty	4.09	8.87	6.21	7.50

As Table 86 shows, a one-way ANOVA indicated the overall significant difference in group means ($p < .001$). F values suggested that *Organizational Culture* (1011.7), *Fairness and Trust* (922.9) and *Strategic Management* (817.1) are most important variables in clustering. Since the assumption of equal variances on the dependent variable across groups defined by the independent variable was not satisfied ($p<.001$), consequently, a Games-Howell *post-hoc* test was carried out to confirm where differences occurred between groups and showed that all variables significantly differentiate four clusters through their cluster means at the .05 level.

Table 86. ANOVA table

		Sum of Squares	df	Mean Square	F	Sig.
Organizational Culture	Between Groups	2333.735	3	777.912	1011.743	.000
	Within Groups	558.978	727	.769		
	Total	2892.712	730			
Fairness and Trust	Between Groups	3045.741	3	1015.247	922.985	.000
	Within Groups	799.671	727	1.100		
	Total	3845.412	730			
Teamwork	Between Groups	1378.194	3	459.398	477.218	.000
	Within Groups	699.853	727	.963		
	Total	2078.048	730			
Academic Environment	Between Groups	1334.225	3	444.742	436.879	.000
	Within Groups	740.084	727	1.018		
	Total	2074.309	730			
Strategic Management	Between Groups	2289.920	3	763.307	817.146	.000
	Within Groups	679.101	727	.934		
	Total	2969.021	730			
Job Satisfaction	Between Groups	984.397	3	328.132	431.689	.000
	Within Groups	552.602	727	.760		
	Total	1536.999	730			
Supervisor Relationship	Between Groups	2228.120	3	742.707	342.434	.000
	Within Groups	1576.794	727	2.169		
	Total	3804.914	730			
Compensation and Benefits	Between Groups	2842.167	3	947.389	648.012	.000
	Within Groups	1062.869	727	1.462		
	Total	3905.036	730			

Table 86 continued

		Sum of Squares	df	Mean Square	F	Sig.
Training and Development	Between Groups	2258.268	3	752.756	558.706	.000
	Within Groups	979.502	727	1.347		
	Total	3237.771	730			
Work-Life Balance	Between Groups	1542.439	3	514.146	241.078	.000
	Within Groups	1550.470	727	2.133		
	Total	3092.909	730			
Working Conditions	Between Groups	2192.877	3	730.959	500.913	.000
	Within Groups	1060.878	727	1.459		
	Total	3253.754	730			
Loyalty	Between Groups	1546.282	3	515.427	191.554	.000
	Within Groups	1956.192	727	2.691		
	Total	3502.475	730			

Evaluating cluster solution's stability the file was split by higher education institution type as presented in Table 87 and two solutions' cluster centroids compared (Mooi and Sarstedt, 2011). As far as no significant differences were observed, a high degree of overall solution stability was presumed. Additionally, the difference of frequency distribution in each cluster was considered. Accordingly, universities' employees distributed as follows: 11% in Cluster 1, 22% in Cluster 2, 24% in Cluster 3 and 43% in Cluster 4. Meanwhile, in colleges 8% were found in Cluster 1, 39% in Cluster 2, 20% in Cluster 3 and 33% in Cluster 4. Therefore, Cluster 2 dominates in colleges and Cluster 4 - in universities.

Table 87. Final Cluster Centers for universities and colleges subsamples

Type of HEI	University				College			
	Cluster				Cluster			
OAES dimensions	1	2	3	4	1	2	3	4
Organizational Culture	3	9	5	7	3	9	5	7
Fairness and Trust	3	9	5	7	2	9	4	7
Teamwork	4	9	6	7	4	9	6	7
Academic Environment	4	9	6	7	4	9	6	7
Strategic Management	3	9	5	7	3	9	5	7
Job Satisfaction	6	9	7	8	5	9	7	8
Supervisor Relationship	4	9	7	8	3	10	6	8
Compensation and Benefits	2	8	4	6	2	8	4	6
Training and Development	3	9	5	7	3	9	5	7
Work-Life Balance	4	9	6	8	4	8	5	7
Working Conditions	3	9	5	7	3	9	5	7
Loyalty	4	9	7	8	5	9	5	7

Relating clusters to demographic variables a cross tabulation procedure was run and a Chi-square test was performed to determine statistically significant differences. The four clusters significantly differentiated between *age*, χ^2 (9, $N = 703$) = 17.70, p =.039, with employees aged

from 36 to 45 concentrated in Cluster 1 (15.3%), employees above 55 more related to Cluster 2 (34.6%), Cluster 3 again represented by employees from 36 to 45 years old (25.1%), and Cluster 4 most often found among members aged from 26 to 35 (44.2%). *Employee group* also produced significant associations, χ^2 (6, N = 725) = 12.80, p =.046, with *academic staff* more related to 1 (12.7%) and 3 (22.3%), and *administrative staff* more concentrated in 2 (33.1%) and 4 (40.3%). Similarly, *employee position* significantly differentiated through the clusters, χ^2 (3, N = 720) = 13.12, p =.004. *Subordinates* were most often found in Cluster 1 (13.2%) and 4 (39.4%), while *supervisors* produced significant associations with Cluster 2 (34.9%) and 3 (23.4%). Finally, the type of higher education institutions also produced significant relationships, χ^2 (3, N = 731) = 29.55, p<.001). Cluster 2 was most often found in *colleges* (39.8%), whereas 1 (11.7%), 3 (23.6%) and 4 (43.4%) in universities.

However no relationship was found between clusters and *gender*, χ^2 (3, N = 709) = 2.57, p =.462. Looking for associations between clusters and *job tenure*, the Chi-square test was not used for statistical significance, as far as more than 20% of the cells had the expected count less than 5.

An analysis of variance also showed a significant effect of loyalty, $F(3,727)$ = 191.55, p< .001. A Games-Howell *post-hoc* test revealed that loyalty level was statistically significantly lower for Cluster 1 (M = 4.09, SD = 1.873, p< .05) with statistically significant difference of 4.785 between Cluster 2 (M = 8.87, SD = 1.076, p < .05), statistically significant difference of 2.128 between Cluster 3 (M = 6.21, SD = 2.006, p< .05), and statistically significant difference of 3.415 with Cluster 4 (M = 7.50, SD = 1.674, p< .05).

3.3. Chapter conclusions

In this chapter the manifestation of organizational attractiveness as an employer in and across Lithuanian higher education institutions was analyzed: dimensionallity of OEAS was explored; employees' perceptions of actual and desirable employment experience, perceived employment experience quality, employees' affective commitment to the organization and its antecedents were studied; differences in the perceptions of actual employment across HEIs were identified; generational work values were compared and classification of the respondents into attitudinal segments undertaken.

4. DISCUSSION

This Chapter will discuss and elaborate on the main findings of this research and interpret the hypotheses tests results. The synthesis of the findings results in analytical and typological framework of employer brand development. Eventually, implications for future research are considered and conclusions drawn.

4.1. Results of hypotheses testing
4.1.1. Interpretation of Hypothesis 1 tests results

It was a particular aim of this dissertation to create a framework to measure organizational attractiveness for employer brand development contributing to the knowledge on how organizations should develop the underlying value proposition of the employer brand. It was also a particular ambition to promote the yet largely unexplored field of employer branding in higher education institutions enhancing their distinctiveness and enabling to "establish what exactly sets (them) apart from others, and what makes (them) memorable and attractive to (their) audiences" (Distinct Higher Education, 2012: 15) of existing employees.

Specifically, an 11 dimensional 67 item Organizational Attractiveness Extraction Scale (OAES) was developed and validated in this dissertation for measuring employees' perceptions of the actual and desirable employment experience in higher education institutions (see Annex 11).

The exploratory factor analysis checking the factor structure and the reliability analysis determining the internal consistency of the items in a survey instrument were performed and indicated that:

- the *Organizational Culture* subscale consisted of 11 items (Cronbach alpha = .953);
- the *Fairness and Trust* subscale consisted of 9 items (Cronbach alpha = .950);
- the *Teamwork* subscale consisted of 7 items (Cronbach alpha = .887);
- the *Academic Environment* subscale consisted of 5 items (Cronbach alpha = .821);
- the *Strategic Management* subscale consisted of 6 items (Cronbach alpha = .912);
- the *Job Satisfaction* subscale consisted of 8 items (Cronbach alpha = .852);
- the *Supervisor Relationship* subscale consisted of 5 items (Cronbach alpha = .938);
- the *Compensation and Benefits* subscale consisted of 5 items (Cronbach alpha = .896);
- the *Training and Development* subscale consisted of 4 items (Cronbach alpha = .837);
- the *Work-life Balance* subscale consisted of 3 items (Cronbach alpha = .661), and

- the *Working Conditions* subscale consisted of 4 items (Cronbach alpha = .806).

The organizational attractiveness inventory was found to be highly reliable (67 items; Cronbach alpha = .985).

Accordingly, **Hypothesis H1** suggesting that organizational attractiveness is a multidimensional construct, comprising a set of employment experience attributes **was supported.**

4.1.2. Interpretation of Hypothesis 2 tests results

The findings of this dissertation suggest that higher education institutions embody some default models of employment relations, complemented, enriched and differentiated by a number of unique features. It can therefore be assumed that the OAES application enables delineating distinct patterns for employment relations followed by higher education institutions, though it is not intended for benchmarking and is not supposed to be for interpretation in terms of "better" or "worse" higher education institutions. As Rosethorn and Mensink (2007) put it "No organization should be aiming to be all things to all people – different types of people are right for different types of companies" (p. 4). Therefore the key idea behind OAES is distinctiveness, i.e. it allows for pinpointing unique features of organizational identity and employment experience in every researched higher education institution. Thus eventually the application of OAES could be pointed at enhancing diversity that "has been identified in the higher education literature as one of the major factors associated with the positive performance of higher education systems" (Vught, 2008: 154).

More specifically, the current research indicates that work in academia appears to be predominantly driven by *Job Satisfaction* (M = 7.92), i.e. interesting, intellectually challenging and meaningful work, a possibility to realize one's ideas and potential, and being valued. These findings support the idea that higher education institutions have preserved a continuous identity that is bound by "love", settled by academic men of ideas and ruled by personal autonomy, collegial self-governing and altruistic commitment (Clark, 1986). Moreover, "academia seems to operate according to its own principles of labor regulation" and "demarcates a separate social field, in which not only skill requirements but also professional conventions and expectations differ from other occupations" (Bauder, 2006: 232).

The findings of the current study, revealing that *Fairness and Trust* (M = 9.18) (e.g., "employees are treated fairly") and *Supervisor Relationship* (M = 9.22) (e.g., "my supervisor listens to me and regards my opinion") are highly appreciated by higher education employees, are consistent with the previous research showing that trust is among the key universal values

and defining principles of great workplace (www.greatplacetowork.com) as well as interpersonal relationships (especially in the area of supervisor-subordinate relationship) foster psychological growth, development and long-term satisfaction (Montana and Charnov, 2000; Sachau, 2007). Interestingly, *Strategic Management* (M = 8.73) (e.g., "organizational, departmental and employee integrity is ensured") was not given much importance, which could be explained by particularity of academic workplace, which is "built on a culture of individualism and academic personal autonomy" (Coaldrake and Stedman, 1999: 1).

However, as far as OAES is intended to measure organizational attractiveness identifying a particular set of employment experiences that make up higher education institution's employer brand, the **Hypothesis 2 that the manifestation of organizational attractiveness dimensions is different across HEIs** was tested. Namely, the results of multivariate analysis of variance indicated that employment experiences are significantly dependent on a particular higher education institution in which they are manifested (Pillai's Trace = .700, F(198,7975) = 2.737, p< .001) and that the highest differences across HEIs can be found in Strategic Management (15.8% of variance), Working Conditions (15.7% of variance), Organizational Culture (13.3% of variance) and Training and Development (12.9% of variance) areas. The test comparison of three higher education institutions (HEI9, HEI11 and HEI16) for selected five organizational attractiveness dimensions supported the OAES application power to capture the differences of employment offering (Pillai's Trace = .318, F(10,242) = 4.580, p< .001) that was found to be significantly better in HEI9. The highest effects for HEI in this case was observed for Academic Environment (23.2% of variance). **The results support Hypothesis 2.**

Next, a detailed analysis of descriptive statistics for all 11 OAES dimensions of 19 higher education institutions clearly exhibited the differences across higher education institutions and distinctiveness of each higher education institution's identity as an employer. As it is listed in Table 88 and checked in Table 89, summarizing these results the perceived actual *organizational attractiveness mix* can be produced for each higher education institution observing their mean ranks across all OAES dimensions and among all surveyed institutions (see Table 49).

Table 88. Organizational attractiveness mix of HEIs

HEIs	Organizational Attractiveness Mix
HEI 1	Work-life Balance; Working Conditions
HEI 2	Organizational Culture; Teamwork; Supervisor Relationship
HEI 3	Jobs Satisfaction; Supervisor Relationship
HEI 4	Training and Development; Work-life Balance
HEI 5	Jobs Satisfaction; Supervisor Relationship; Work-life Balance
HEI 6	Jobs Satisfaction; Supervisor Relationship
HEI 7	Fairness and Trust; Compensation and Benefits
HEI 8	Organizational Culture, Teamwork; Training and Development
HEI 9	Teamwork; Supervisor Relationship
HEI 10	Academic Environment; Job Satisfaction
HEI 11	Supervisor Relationship; Work-life Balance; Working Conditions
HEI 12	Organizational Culture, Academic Environment; Compensation and Benefits; Training and Development
HEI 13	Fairness and Trust; Academic Environment; Training and Development; Working Conditions
HEI 14	Fairness and Trust; Teamwork
HEI 15	Fairness and Trust; Strategic Management; Work-life Balance; Working Conditions
HEI 16	Academic Environment; Strategic Management
HEI 17	Compensation and Benefits; Work-life Balance
HEI 18	Organizational Culture; Jobs Satisfaction; Supervisor Relationship
HEI 19	Job Satisfaction; Work-life Balance

Table 89. Most salient employment experience attributes in HEIs

HEIs	ORGC	FAIRT	TEAMW	ACADE	STRATM	JOBS	SUPR	COMPB	TRAIND	WORKLB	WORKC
HEI 1										�	▓
HEI 2	▓		▓				▓				
HEI 3						▓	▓				
HEI 4									▓	▓	
HEI 5						▓	▓			▓	
HEI 6						▓	▓				
HEI 7		▓						▓			
HEI 8	▓		▓						▓		
HEI 9			▓				▓				
HEI 10				▓		▓					
HEI 11							▓			▓	▓
HEI 12	▓			▓				▓	▓		
HEI 13		▓		▓					▓		▓
HEI 14		▓	▓								
HEI 15		▓			▓					▓	▓
HEI 16				▓	▓						
HEI 17								▓		▓	
HEI 18	▓					▓	▓				
HEI 19						▓				▓	

It should be added here that actually *the same* dimensions displayed in several higher education institutions *are not the same* but often originate from different sources at item-level analysis. For example, highly evaluated *Organizational Culture* most powerfully emanates from collegial and community-friendly work environment in HEI 8, creativeness, initiative and good atmosphere in HEI 12 and compliance with ethical standards in HEI 14.

Moreover, as non-parametric statistics indicated, the data does differentiate between types of higher education institutions, namely universities and colleges. Thus different patterns of organizational attractiveness, which correlate with different missions, might be delineated. To mention the main discrepancies, first, colleges' employees are prone to higher overall estimations of all measured employment facets. Second, *Work-life Balance* is typical employment experience in universities but less common to colleges, whereas *Strategic Management* is successfully implemented in colleges and lags behind in universities. Third, *Academic Environment,* though interestingly, does not meet the expectations of employees in universities, while colleges' are satisfied with its manifestation.

4.1.3. Interpretation of Hypothesis 3 tests results

Additionally, OAES was utilized in the context of employment experience as a product and, applying SERVQUAL (Parasuraman et al. 1988) methodological approach, perceived employment experience quality as a facet of employer brand equity was evaluated. **Hypothesis 3** suggested that there will be significant differences of perceived employment experience quality across HEIs**.** This was tested by measuring employment experience quality (which, more broadly in this dissertation is conceived as a *demand*) as a function of a gap between the expected employment experience and the actual employment experience fluctuating from -9 to 9, where the higher (more positive) the score, the lower level of the perceived employment experience quality.

The data analysis revealed the gaps unexceptionally in each and every item and the dimension of OAES that echoes a relevant issue of employer branding having almost inherent gap between employer brand reality and brand vision, where the first is "describing the brand as it is currently perceived and experienced, warts and all …, and the second describing how the company would like to be perceived and experienced" (Barrow and Mosley, 2011: 64). Given this tendency to have idealized expectations towards employment, yet only least and peak discrepancies are suggested for further consideration.

The aggregated results indicate that the largest gaps between the expected and actual employment experience, or otherwise the most demanding aspects of organizational attractiveness as perceived by higher education employees are *Compensation & Benefits* (items "effective employee incentive scheme is functioning in my institution", "I am getting paid enough for my job", and "employee performance results and competencies are recognized and rewarded") as well as *Fairness& Trust* (e.g., "remuneration system is clear and objective", "equal opportunities are ensured"). These findings are consistent with the previous research

showing that academic workplace is facing the issues of remuneration, low salaries (Altbach, 2000; Enders and Weert, 2004) and is characterized by the culture of mistrust (Court and Kinman, 2008). This study also corroborates the previous research findings (Coaldrake and Stedman, 1999; Altbach et al., 2009) that academic profession is suffering from stress at work (*Working Conditions*) and faces pressures on time, workload and morale.

The Kruskal-Wallis test was used to determine if the surveyed 19 higher education institutions significantly differ from each other based on the perceived employment experience quality levels amongst their employees. The results in Tables 46 and 47 **support Hypothesis 3**. They show statistically significant differences between the different higher education institutions in perceived quality of Organizational Culture ($H(18) = 169.634, p < .001$), Fairness and Trust ($H(18) = 206.401, p < .001$), Teamwork ($H(18) = 184.820, p < .001$), Academic Environment ($H(18) = 190.891, p < .001$), Strategic Management ($H(18) = 246.755, p < .001$), Job Satisfaction ($H(18) = 145.388, p < .001$), Supervisor Relationship ($H(18) = 79.013, p < .001$), Compensation and Benefits ($H(18) = 214.627, p < .001$), Training and Development ($H(18) = 184.457, p < .001$), Work-life Balance ($H(18) = 137.195, p < .001$), and Working Conditions ($H(18) = 256.646, p < .001$).

As descriptive statistics indicates, the least gap between the expected and actual employment experience is found in HEI 9 ($M = 1.10$) and the largest gap is observed in HEI 11 ($M = 3.73$). Adapting SERVQUAL methodology which differentiates between "excellent", "good" and "fair/poor" service quality, employment experience quality can be contracted into two categories of "excellent/good" and "fair/poor" as the total mean index of EEQ ($M = 2.03$) separates. Accordingly, 9 higher education institutions (HEI 9, HEI 15, HEI 12, HEI 14, HEI 5, HEI 1, HEI 8, HEI 17 and HEI 2) can be assigned to the "excellent/good" EEQ group, and 10 (HEI 13, HEI 19, HEI 4, HEI 3, HEI 18, HEI 16, HEI 7, HEI 6, HEI 10 and HEI 11) appear in the "fair/poor" EEQ group (see Table 90).

Table 90. Employment experience quality of Higher education institutions

EEQ	EXCELLENT/GOOD										FAIR/POOR									
HEI	HEI 9	HEI 15	HEI 12	HEI 14	HEI 5	HEI 1	HEI 8	HEI 17	HEI 2	Total	HEI 13	HEI 19	HEI 4	HEI 3	HEI 18	HEI 16	HEI 7	HEI 6	HEI 10	HEI 11
Mean	1.1	1.26	1.3	1.39	1.49	1.75	1.76	1.76	1.98	2.03	2.1	2.14	2.25	2.39	2.44	2.49	2.55	2.77	3.23	3.73

All in all, the most demanding areas, if not dealt with timely, may trigger employees' disillusions about their institution, and reduce their loyalty or, at least, hinder employees from engagement. Time management techniques, de-bureaucratization, review and adjustment of job duties and responsibilities, alternate career paths, leaders' motivating language, development of

effective incentive scheme, and eventually, internal communication improvements and many other improvements of human resource management systems would facilitate better appreciation of employment experience and eventually should allow shortening the gaps.

4.1.4. Interpretation of Hypothesis 4 tests results

Considering one of the key named benefits of employer branding which is a power to build employee commitment (e.g., Ambler and Barrow, 1996) a series of simple linear regressions and multiple regression analysis was used to test **Hypothesis 4** if employment experience attributes significantly predicted affective commitment levels.

All eleven OAES dimensions were used in the analysis and it was found that Organizational Culture ($F_{(1,939)} = 536.345$, $p < .05$, $R^2 = .364$), Fairness and Trust ($F_{(1,976)} = 490.897$, $p < .05$, $R^2 = .335$), Teamwork ($F_{(1,988)} = 500.646$, $p < .05$, $R^2 = .336$), Academic Environment ($F_{(1,1006)} = 471.444$, $p < .05$, $R^2 = .319$), Strategic Management ($F_{(1,972)} = 484.029$, $p < .05$, $R^2 = .332$), Job Satisfaction ($F_{(1,973)} = 652.431$, $p < .05$, $R^2 = .401$), Supervisor Relationship ($F_{(1,1009)} = 296.703$, $p < .05$, $R^2 = .227$), Compensation and Benefits ($F_{(1,987)} = 515.178$, $p < .05$, $R^2 = .343$), Training and Development ($F_{(1,1012)} = 599.092$, $p < .05$, $R^2 = .372$), Work-life Balance ($F_{(1,1029)} = 230.739$, $p < .05$, $R^2 = .183$) and Working Conditions ($F_{(1,1009)} = 383.335$, $p < .05$, $R^2 = .275$) significantly predicted affective commitment. The most important predictors were found to be Job Satisfaction and Training and Development, the least important predictors were found to be Work-life Balance and Supervisor Relationship.

These findings are consistent with previous research (e.g., Allen and Meyer, 1990) that found affective commitment to be a consequence of following experiences of employment: job challenge, role clarity, goal clarity, goal difficulty, management receptiveness, peer cohesion, organizational dependability, equity, personal importance, feedback and participation. In addition, commitment was found to be affected by supportive business strategies, investment in training and development, compensation reinforcing cooperation, participation and contribution, employee involvement, teamwork, climate of cooperation and trust, etc. (Armstrong, 2003).

Further, the combined influence of all OAES dimensions on affective commitment was evaluated extending simple regression models to multiple regression. The results of the regression indicated, only five dimensions were predictors ($F_{(5,725)} = 130.978$, $p < .05$, $R^2 = .471$), namely Job Satisfaction (beta = 0.328), Training and Development (beta = 0.253), Teamwork (beta = 0.157), Compensation and Benefits (beta = 0.161), and Strategic Management (beta = -0.133) were included in the model. Job Satisfaction explained 40.5% of

176

variance in affective commitment, 47.5% of variance were explained by all five variables. **These results therefore provided partial support for Hypothesis 4.**

Surprisingly, Strategic Management was found to have a negative effect on affective commitment, meaning that increase in strategic management will result in a decreased level of affective commitment. This could be explained by self-determination theory of motivation, supporting the idea that people are intrinsically motivated to behave in an effective and healthy ways (Deci and Ryan, 2012) and that job autonomy, which is the direct opposite of job control, will be related to higher levels of job satisfaction and commitment and lower levels of turnover (e.g., Galletta et al. 2011).

Extending the regression analysis application suggestions from Hair (2010) to employment context, the prediction equation derived from regression analysis can be used to study how employees form their affective commitment attitudes as well as a forecasting model − to predict affective commitment based on employment experience inputs.

$$Y\,(AFFCOM) = 0.168 + 0.495 \cdot JOBS + 0.263 \cdot TRAIND + 0.204 \cdot TEAMW + 0.153 \cdot COMPB - 0.144 \cdot STRATM$$

Accordingly, employee affective commitment should increase creating their job satisfaction, enabling training and development, fostering teamwork and implementing successful compensation and benefits strategy. However organizations should be careful and not place too much direction, control and formality on their employees but by contrast pursue job autonomy.

Finally, one more interesting insight follows from considering OAES dimensions as intrinsic and extrinsic factors (Herzberg et al, 1959; Herzberg, 1968) as distinguished in Table 91 below:

Table 91. OAES dimensions assigned to intrinsic or extrinsic factors

Intrinsic (motivator) factors	Extrinsic (hygiene) factors
Job Satisfaction	Strategic Management
Training and Development	Supervisor Relationship
Academic Environment	Teamwork
Fairness and Trust	Working Conditions
Organizational Culture	Compensation and Benefits
	Work-Life Balance

Evidently, affective commitment in higher education surfaces both from intrinsic and extrinsic motivation, but it is argued (Armstrong, 2003) that exactly *intrinsic motivation*, to wit interesting, challenging and varied work, job autonomy, task identity and task significance, or

otherwise job enrichment, may turn commitment into *job engagement*, which is especially common in knowledge work.

4.1.5. Interpretation of Hypothesis 5 tests results

The results of this dissertation also support previous observations (e.g., Tolbize, 2008), indicating that generations, starting with dedicated Traditionalists and ending with self-concerned Generation Y, are successively less loyal to their employers. Furthermore, consistently with previous research (Smith, 2008; Burke, 2004; Marston, 2007; Meister and Willyerd, 2010; Zemke et al.*,* 2000; Tolbize, 2008, Twenge et al., 2010), Generation Y was found to be driven by personal relationships with colleagues, flexibility to combine work and personal life needs, sense of greater good expressed as a concern for study quality assurance, need for immediate, straight and continuous supervision, and inclusive, transparent management style (measured there as Fairness and Trust). There was no clear evidence found to support recent findings that representatives of Generation Y place less importance on social interaction and "more value on work that provides extrinsic rewards" (Twenge et al., 2010: 1133), except for higher emphasis on working conditions, which was particularly observed in the colleges' subsample. Interestingly, Strategic Management was not given much importance by Generation Y in universities and colleges and by Generation X in universities, which could be explained both by particularity of academic workplace, which is "built on a culture of individualism and academic personal autonomy" (Coaldrake and Stedman, 1999: 1) and generational values of independence, flexibility, and 'challenging authority'. The results of this study also indicate that Generation X holds high expectations for security provided by credible, trusted and fair leadership, and places increased importance on salary, namely Compensation and Benefits. Generation X was not, as expected (Smola and Sutton, 2002), found to place much emphasis on work-life balance, continuous learning and working conditions (Hansen and Leuty, 2012; Tolbize, 2008). The findings of this research suggest that Baby Boomers exceptionally value Academic Workplace which "serves as symbolic economy, in which academic performance assumes a symbolic value that is worth little in other occupations" (Bauder, 2006: 232), accordingly, providing Baby Boomers with a particular sense of achievement, recognition and contribution that motivates them (Cennamo and Gardner, 2008). Finally, consistently with previous findings (Burke, 2004), Traditionalists were found to be the most distinct generational group which values authority, institutions' reputation and image, wants to be heard, is collaborative and cares the least about compensation, benefits and recognition of results.

178

The results of this dissertation also support previous evidence (Tolbize, 2008; Smith, 2008) that generations have many points of agreement or a 'common good' that is shared by all and not much dependent on generations. Specifically, the study indicates that all generations in higher education appear to be predominantly driven by job satisfaction, i.e. work which is interesting and meets one's experience and abilities. These findings support the idea that higher education institutions have preserved a continuous identity that is bonded by "love", settled by academic men of ideas and ruled by personal autonomy, collegial self-governing and altruistic commitment (Clark, 1986). The research also found that such work values as Fairness and Trust and Supervisor Relationship are embraced almost unanimously by all four generational groups. These findings are consistent with previous research showing that trust is among the key universal values and the defining principles of great workplace (www.greatplacetowork.com) as well as interpersonal relationships (especially in the area of supervisor-subordinate relationship) lead to psychological growth, development and long-term satisfaction (Montana and Charnov, 2000; Sachau, 2007).

Summarizing it could be concluded that **Hypothesis 5,** assuming that different generations hold different expectations for employment experience, **is supported**. It is evident that, in line with previous research on generational differences, people raised in a particular era and sharing specific historical and social experiences and events tend to have similar work values and employment experience preferences. However, although the results of this study indicate that generations differ, this diversity − as investigation of generational preferences in universities' and colleges' subsamples revealed − is increasing when analysis is being gradually detailed elaborating upon types and, especially, individual higher education institutions. Therefore, it clearly suggests that generational 'packages of work benefits' should be neither generalized nor 'prescribed' to all institutions. On the contrary, altogether these findings argue for individual approach and specific case analysis researching the wants, needs and expectations of employees in a particular organization.

All in all, this study provides new evidence for generational segmentation and encourages organizations to apply generational perspective in their employer branding strategy. And the main reason for demographical targeting is not generational differences per se. Due to the effects of ageing society, this will be the most noticeable between 2015 and 2035, when a large part of the Baby Boomers retire (European Commission, 2012) and "the competition to attract and retain key performers will become more fierce − companies will solicit candidates and not vice versa" (Dahlström, 2011:10). Therefore, in order to reach the right employees in today's complex and segmented society, "every future leader will have to be culturally dexterous, knowing how to motivate and reward people of different backgrounds" (Ibid.:11). Generational

employer branding targeting individuals based on their generational preferences or even personal values becomes an imperative for organizational survival and success in winning the war for talent.

Finally, considering the fact that higher education institutions are increasingly facing the challenges and opportunities presented by the aging academic workforce, and employing disproportionally higher numbers of older people in the labor force in general (Kaskie et al., 2012), they are even more sensitive to generational differences and struggling with "reallocation of resources and staffing policies for the older and the younger generation of academics" (Enders and Weert, 2004: 11). Additionally, regarding the particularity of higher education institutions, making them a "substantial reservoir of knowledge, talent and energy" (European Commission, 2008: 11), yet admitting that "in many countries the career patterns and employment conditions of academic staff as well as the attractiveness of the academic workplace for the coming generation are of a major concern" (Enders and Weert, 2004: 12), higher education institutions should start building their strong employer brands as a leading strategy to attract and retain multigenerational talent.

4.1.6. Interpretation of Hypotheses 6 and 7 tests results

Furthermore, this dissertation illustrates the relevance of the identity-based organizational ecology approach to employer branding theory and specifically to the conceptualization and operationalization of labor market identities. Particularly, this study elaborates on the ideas of Baron (2004), who has argued that "culture and labor market identity are at the very core of contemporary organizations – critical for strategy, survival, innovativeness, and performance (p. 28), urged for "greater attention to how organizations relate to the labor market as a primary basis for distinguishing organizational identities and forms" (Ibid.: 29), and suggested dimensionalizing and clustering "labor market identities within a set of competing enterprises" (Ibid.: 27) as a fruitful research strategy toward that end.

Two hypotheses were tested respectively: **Hypothesis 6** proposing that attitudinal segments of employees can be differentiated based on their perceptions of employment experience and **Hypothesis 7** anticipating that types of employment-based identities can be differentiated based on their employment experience offering. **Both Hypothesis 6 and Hypothesis 7 were largely supported** by the results of cluster analysis provided in Section 3.2.6 and discussed more in detail below.

Consequently, this dissertation attempted to cluster higher education employees according to their perceptions of employment experience and to group higher education institutions based

on their most salient labor market identities. Methodologically it is the application of consumer segmentation approach to employment situation and specifically to employees. Eleven OAES dimensions and total means of Affective Commitment scale items were used to cluster employees and four attitudinal segments were obtained as demonstrated in Figure 35.
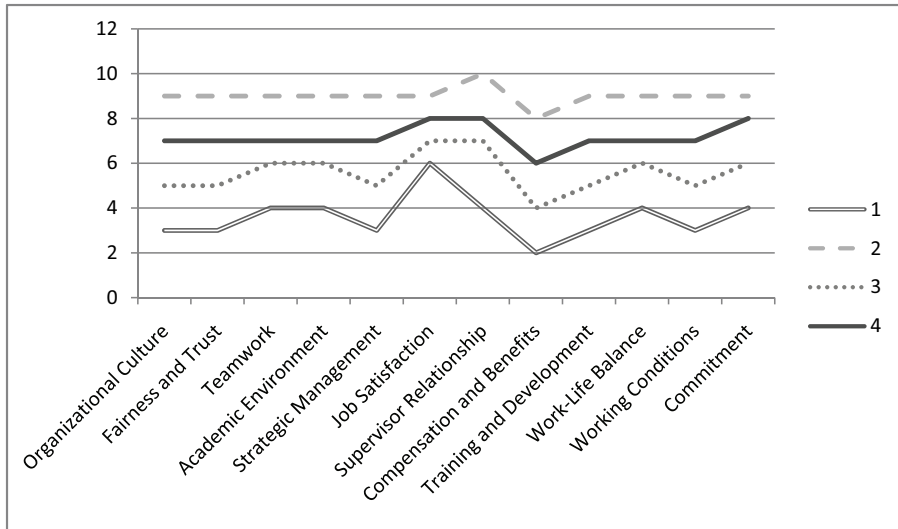
Figure 35. Cluster's profiles

Interpreting and profiling clusters, cluster centroids and mean profiles were examined (Malhotra, 2009), the highest scoring items within each dimension considered and significant cluster memberships used (Mooi and Sarstedt, 2011) to complete the description of segments.

Accordingly, C**luster 1**, commonly represented by universities' academic and subordinate employees from 36 to 45 years old is characterized by low organizational loyalty and low throughout work commitment. Most likely, this segment − fortunately small enough − includes those "actively disengaged", who, according to Gallup (2010) "view their workplaces negatively and are liable to spread that negativity to others", or "ambivalent" that tend to be low talent and low skill (TNS, 2003). Physically present but psychologically absent, this group could be named **"*Work Pessimists*"**. It may be presumed, however, that having low perceptions of organizational attractiveness Work Pessimists also signal about the *unhealthy* employer brand of their higher education institution.

Further, **Cluster 2**, by contrast, is characterized by high organizational loyalty, overall manifestation of organizational attractiveness facets and is most often found in colleges among supervising and administrative staff aged above 55. Primary driven by *Supervisor Relationship*, *Job Satisfaction, Fairness and Trust* and as well as embracing *Teamwork* and *Organizational*

Culture employees in this segment appreciate academic freedom, good relationships with colleagues, rely upon clear employment standards, are driven by intellectually challenging work and a possibility to be heard and counted. Although working a lot, members in this group are engaged and connected to their higher education institution, enjoy its good reputation (*Strategic Management*), perceive it as an attractive employer, thus could be labelled **"*Work Enthusiasts*"**.

Employees comprising C**luster 3** are facing lower salaries, lack of incentives (*Compensation and Benefits*), and objectivity of remuneration system (*Fairness and Trust*), organizational integrity (*Strategic Management*) and purposeful training (*Training and Development*). Presumably, Cluster 3 could suffer from a number of inherent challenges academic workplace is struggling with. This segment is more concentrated in universities and mainly represented by supervising and academic employees aged from 36 to 45. Members in this group are more dedicated to their work (*Job Satisfaction*) than to their organization, embrace *Academic Environment* providing a possibility to work alongside the best scientists and lecturers and enjoy good relationships (*Teamwork* and *Supervisor Relationship*). However, as suggested by the average loyalty score and the low to above average mean profile, employees in this segment are not engaged, therefore could more easily leave the organization for better future, career or working conditions. It could be concluded that employees comprising Cluster 3 are more career-oriented, forwarding their own interests, striving for more self-realization through enhancement of their excellence and expertise, and accordingly might be named **"*Work Pragmatists*"**.

Eventually, the largest **Cluster 4** prevails in universities among subordinate and administrative employees aged from 26 to 35. Characterized by sufficient loyalty, engagement and generally positive viewpoint, this segment prefers *Supervisor Relationship* over their work (*Job Satisfaction*), shows strong team orientation (*Teamwork*), and highly appreciates *Work-Life Balance,* allowing properly prioritize between work and personal life needs. This segment most likely reflects the recent trends of the changing society that caused "many workers to face conflicts between their work and their personal lives" and to "desire… for more flexibility in the workplace" (Council of Economic Advisors, 2010: 1) and embraces the real attractiveness of academic life "enjoying the bigger flexibility of working conditions and accountability" and "academic freedom" (Enders and Weert, 2004: 225). Thus, this group striving to achieve ideal work-life balance could be referred to as **"*Work-life Balancers*"**.

The main characteristics of four attitudinal employee segments are summarized and tabulated below (see Table 92).

Table 92. Matrix of attitudinal segments of employees

HIGH

Work Pragmatists 24%	Work Enthusiasts 22%
More dedicated to their job than to organization, suffering from the number of challenges academic workplace is struggling with *Not engaged, career-oriented, striving for self-realization, could leave easily for better future*	Characterized by high organizational commitment and overall positive attitudes towards employment *Engaged, connected, hard-working and trusted*
Work Pessimists 11%	**Work-life Balancers 43%**
Characterized by low organizational loyalty and low perceptions of organizational attractiveness *Actively disengaged*	Characterized by sufficient loyalty, generally positive viewpoint, showing strong team orientation, preferring supervisor relationship over their work and highly appreciating work-life balance *Demanding and enjoying academic freedom and flexibility of working conditions*

(Y-axis: Attitudes towards employment; X-axis: Affective Commitment to Organization, LOW to HIGH)

Comparing employee segments, it could be noticed that they are driven by different employment experiences. Work Pessimists although being dissatisfied and disengaged still do think that their job is rather interesting. Probably employer branding activities could propel their interest in organization and raise the trust. However, it is not the segment organization should devote full effort to. On the contrary, Work Enthusiasts should be given most attention in employer branding activities focusing employer value proposition on their needs and wants. This segment, representing the most committed and optimistic about employment employees, presumably can be described by organizational citizenship behavior which predicts altruism, conscientiousness, sportsmanship, courtesy and discretional contribution to overall excellence and effectiveness of their employer (Organ, 1988). The main drivers of Work Enthusiasts are listed in Table 93.

Table 93. Drivers of Work Enthusiasts

- **Supervisor Relationship**
  - I have trust in my supervisor.
  - My supervisor gives me guidance.
  - My supervisor supports me.
  - My supervisor listens to me and regards my opinion.
- **Job Satisfaction**
  - My job is intellectually challenging.
  - I like my job and find it interesting.
- **Fairness and Trust**
  - Remuneration system is clear and objective.
  - I have trust in my institution's leadership.
  - Employees are treated fairly.
  - Procedures promoting transparency are developed.
- **Teamwork**
  - I have good relationships with my colleagues.
  - My colleagues are helpful and supportive.
  - I can rely on my colleagues.

Work Pragmatists are most realistic about their employment and most self-oriented. It is plausible that Work Pragmatists personate the disillusion with their employer as a consequence of psychological contract breach. Being only moderately satisfied with employment experience and not overly loyal, employees in this segment need to see real and meaningful changes in their organization to take a deal. The main drivers of Work Pragmatists are listed in Table 94 below.

Table 94. Drivers of Work Pragmatists

- **Job Satisfaction**
  - I know what is expected of me at work.
  - My job feels meaningful.
  - My job meets my experience and abilities.
  - My job is intellectually challenging.
- **Academic Environment**
  - My peers are best scientists and lecturers.
  - Innovative training methods are encouraged in my institution.
  - High study quality is pursued.
- **Teamwork**
  - My colleagues are helpful and supportive.
  - I have good relationships with my colleagues.
- **Supervisor Relationship**
  - My supervisor gives me guidance.
  - My supervisor listens to me and regards my opinion.
  - My supervisor supports me.

Work-life Balancers are the most demanding employees in that they want more benefits and lots of vacation time. Some of the Work-life Balancers drivers that are listed below should be supplemented by institution's positive reputation and image (Strategic Management), opportunities for personal growth (Training and Development), encouragement of innovative training methods (Academic Environment) and compliance to ethical standards (Organizational Culture). Considering the fact that it is the largest segment, it should not be ignored but rather more flexible working schedules should be introduced and new recognition programs developed to nurture these employees. The main drivers of Work-life Balancers are listed in Table 95.

Table 95. Drivers of Work-life Balancers

- **Supervisor Relationship**
  - I have trust in my supervisor.
  - My supervisor listens to me and regards my opinion.
- **Teamwork**
  - Employees share their ideas and knowledge.
  - I have good relationships with my colleagues.
- **Work-life Balance**
  - I have enough flexibility in my work.
  - I may harmonize my work and personal life needs.
- **Job Satisfaction**
  - My job is intellectually challenging.
  - I feel that I and my efforts are valued.
  - My job feels meaningful.
- **Working Conditions**
  - I am provided with all necessary equipment and resources to do my job well.
  - Safe and comfortable working environment is created in my institution.

It could be assumed that prevalence of particular attitudinal segments spotlights the labor market identity of focal organization and delineates its profile of organizational attractiveness. As it can be seen from the data in Table 96, exploring the distribution of the identified segments across 19 surveyed higher education institutions, the following patterns could be observed:

- **Work Enthusiasts** prevail in six higher education institutions (HEI 8, HEI 9, HEI 12, HEI 14, HEI 15 and HEI 16) that are exclusively colleges.
- **Work-life Balancers** dominate twelve higher education institutions in different combinations with the second largest segment of:
  - Work Enthusiasts in HEI 5 and HEI 18 (universities)
  - Work Pragmatists in HEI 1 and HEI 4 (universities), and HEI 7 and HEI 17 (colleges)

- Work Pessimists in HEI 6 and HEI 10 (universities)
- the equal mix of Work Enthusiasts and Work Pragmatists in HEI 2 and HEI 13 (universities)
- the equal mix of Work Enthusiasts and Work Pessimists and in HEI 19 (college)
- **Work Pragmatists** dominate HEI 11 (college) with the second largest segment of Work Pessimists and with the equal part of Work-life Balancers in HEI 3 (college).

Table 96. Distribution of identified segments across surveyed higher education institutions

Higher education institutions	Cluster Labels				Total
	Work Pessimists	Work Enthusiasts	Work Pragmatists	Work-Life Balancers	
HEI 1	13.6%	19.3%	30.7%	36.4%	100.0%
HEI 2	.0%	21.4%	21.4%	57.1%	100.0%
HEI 3	15.4%	23.1%	30.8%	30.8%	100.0%
HEI 4	5.6%	22.5%	24.7%	47.2%	100.0%
HEI 5	.0%	27.3%	9.1%	63.6%	100.0%
HEI 6	24.1%	19.0%	17.2%	39.7%	100.0%
HEI 7	18.2%	9.1%	27.3%	45.5%	100.0%
HEI 8	7.7%	61.5%	15.4%	15.4%	100.0%
HEI 9	2.3%	55.8%	20.9%	20.9%	100.0%
HEI 10	27.8%	16.7%	22.2%	33.3%	100.0%
HEI 11	26.5%	8.8%	41.2%	23.5%	100.0%
HEI 12	.0%	59.1%	9.1%	31.8%	100.0%
HEI 13	6.7%	24.4%	24.4%	44.4%	100.0%
HEI 14	.0%	56.0%	16.0%	28.0%	100.0%
HEI 15	2.9%	58.8%	11.8%	26.5%	100.0%
HEI 16	25.7%	37.1%	8.6%	28.6%	100.0%
HEI 17	.0%	.0%	42.9%	57.1%	100.0%
HEI 18	15.9%	21.7%	17.4%	44.9%	100.0%
HEI 19	15.4%	15.4%	7.7%	61.5%	100.0%

According to these findings, with respect to the prevailing attitudinal employee segment or perceived employment experience offering, higher education institutions may be classified and notionally named as:

- **Inspiring Workplaces (32%)**, defined as those mainly represented by Work Enthusiasts and dominated by six colleges (HEI 8, HEI 9, HEI 12, HEI 14, HEI 15 and HEI 16).
- **Meaningful Workplaces (26%)**, defined as those mainly represented by Work-Life Balancers with the additional large representation of Work Enthusiasts and assigned to four universities and one college (HEI 5, HEI 18, HEI 2, HEI 13 and HEI 19).

- **Balanced Workplaces (21%)**, defined as those mainly represented by Work-Life Balancers with the second largest segment of Work Pragmatists and comprising two universities and two colleges (HEI 1, HEI 4, HEI 7 and HEI 17).

- **Unhappy Workplaces (21%)**, defined as those containing a rather larger numbers of Work Pessimists and including two universities and two colleges (HEI 6, HEI 10, HEI 11 and HEI 3).

This analysis is quite revealing in several ways and offers a number of insights and implications. First, the findings of this dissertation suggest that higher education institutions embody some default model of employment relations, complemented, enriched and differentiated by a number of unique features. Second, current research shows that perceptions of employment experience in different groups of employees are rather heterogeneous (e.g., supervising employees mainly stands for *Work Enthusiast* and *Work Pragmatists*, while subordinate staff generally represents *Work Pessimists* and *Work-Life Balancers*). That supports previous findings indicating that organization insiders, depending on their age, gender, work experience, education (Crossman and Abou-Zaki, 2003) as well as job position, career stage, cultures and work environment (Seta et al., 2000) "can hold different, perhaps conflicting, defaults for an organization" (Hsu and Hannan, 2005: 476). Third, the results of cluster analysis demonstrate that the data does significantly differentiate between the types of higher education institutions, i.e. the surveyed universities and colleges. Namely, colleges' employees have higher overall perceptions of employment experience, thus quite naturally, chiefly represent *Work Enthusiasts*, while universities' employees are more concentrated among *Work-Life Balancers*. Accordingly, *Inspiring Workplaces* are exclusively represented by colleges, whereas the distribution of colleges and universities in other groups is almost equal.

The classification of higher education institutions deriving from attitudinal employee segments is helpful in delineating the landscape of higher education labor market (see Figure 36), provides "the different stakeholders a better understanding of the specific ambitions and performances of the various types of higher education institutions" (Vught, 2008: 172), and could be a starting point for establishing distinctiveness and developing tailored employer branding strategies.
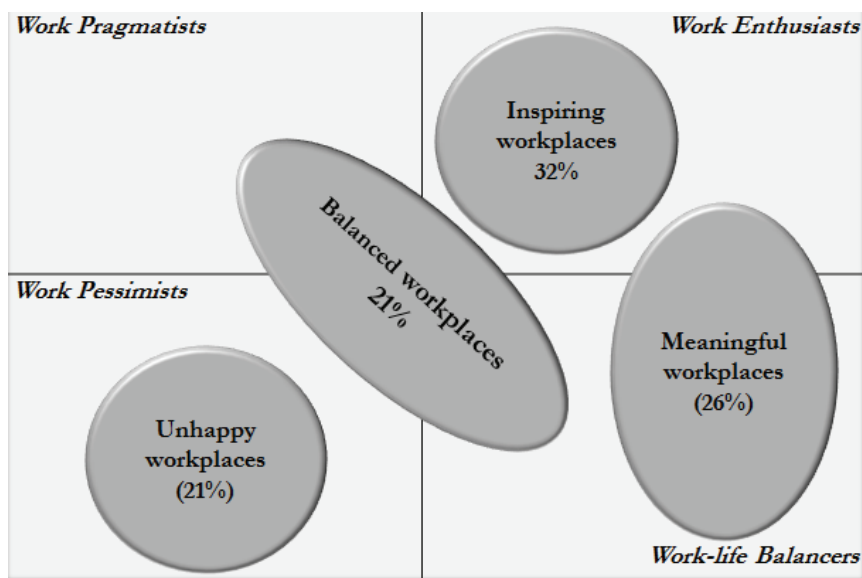
Figure 36. Landscape of higher education labor market

Promoting and encouraging these efforts, examples of best practices of successful employer branding efforts are already available from those recognized as the great academic workplaces (Academic Workplace 2012, n.d.). For example, Southern New Hampshire University's website proclaims that:

"We offer competitive compensation and affordable benefits programs, create opportunity for training and professional development, and administer sound payroll and employment practices that treat all employees with dignity and equality". (http://www.snhu.edu/602.asp)

Another case of a well-established and communicated distinctive identity is Baylor University, affirming that:

"At Baylor University, we strive to educate men and women for worldwide leadership and service by integrating academic excellence and Christian commitment within a caring community. We look for those individuals that not only want to be a part of the Baylor mission but want to help shape that experience for future generations. As a Christian institution of research and scholarship, we believe an atmosphere of diversity and inclusion is essential to academic excellence and seek to build a community whose members have diverse cultures, backgrounds, and life experiences". http://www.baylor.edu/hr/index.php?id=69170

George Mason University stands for one more illustration of a memorable identity and effective employer branding, announcing proudly that:

"People choose to work at George Mason University for many reasons, and there are even more reasons why they stay for a career. There's the excitement of being part of a vibrant academic and professional community, surrounded by people whose ideas are shaping tomorrow's news! Add that

to a robust benefits package, a commitment to flexibility as well as work/life options, the opportunity for personal and professional development and you have a career in balance at Mason!" http://hr.gmu.edu/employment/

Similarly, Miami Dade College emphasizes its distinctiveness of "providing quality and innovative educational opportunities", in such terms:

"...our employment needs are very diverse. From full-time professional faculty to part-time adjunct faculty and support staff, the people who comprise the MDC workforce are the innovators who help the College maintain our reputation as one of the most highly regarded colleges in the country. If you're committed and have a passion for education and a desire to help others learn and grow in their personal and professional lives, consider an opportunity with MDC. Come here to learn, come here to grow, come here to make an impact!" http://jobs.mdc.edu/

Reflecting on the examples above and drawing on the findings from the current research, it could be speculated that Southern New Hampshire University is a *Meaningful Workplace*; Baylor University and Miami Dade College represent *Inspiring Workplaces,* while George Mason University could be labelled "*Balanced Workplace*". It could be also concluded that each of the cases described possesses organizational identities that are, according to Baron (2004), sharp, focused and authentic (notably the case of Baylor University and to a lesser extent Southern New Hampshire University's), therefore strong.

4.2. Synthesis of research findings

Elaborating on all empirical findings and extensive results of the current research, it should be accentuated there that better knowledge of how organizations in general and higher education institutions in particular should develop the underlying value proposition of their employer brand has been gained.

As it is summarized in Table 97, the research results confirm all the hypotheses. Thus it could be concluded therefore that the logic and distinctive role of the measurement of organizational attractiveness for employer brand development was grounded and explicitly supported.

Table 97. Results of hypotheses testing

Hypothesis	Statement	Accepted
H1	Organizational attractiveness is a multidimensional construct, comprising a set of employment experience attributes.	Yes
H2	Manifestation of organizational attractiveness dimensions is different across HEIs.	Yes
H3	There are significant differences of perceived employment experience quality across HEIs	Yes
H4	A more positive perception of employment experience will be associated with higher perceived affective commitment	Partially yes
H5	Different generations hold different expectations for employment experience.	Yes
H6	Attitudinal segments of employees can be differentiated based on their perceptions towards employment.	Yes
H7	Types of employment-based identities can be differentiated based on the employment experience offering.	Yes

Namely, as it is delineated in Figure 37, the organizational attractiveness measure developed in this study – Organizational Attractiveness Extraction Scale - has proved to be reliable to extract unique employment experience attributes, or an *organizational attractiveness mix* that creates an employer brand as a place to work.

More specifically, following the conceptual employer branding model, developed in this dissertation (see Figure 14), and the conceptual research model demonstrated in Figure 18, **the application of OAES enables**:

- To identify employment experiences that are most often met by employees in higher education institutions, i.e. the prevailing model of human resource management systems;
- To unfold employee expectations or 'most wanted' benefits provided by work at a particular higher education institution;
- To diagnose the health of institutions *unintentional* employer brand;
- To discover the gaps of factual and desirable employment experience, indicating the perceived employement experience quality and possible areas for improvement;
- To differentiate types of attitudinal employee segments;
- To determine the type of institution's employment-based identity;
- To predict affective commitment based on employment experience inputs;
- To clarify generational expectations and gain generational competence to apply market segmentation approach to employer branding;
- To uncover and build institution's employer brand differentiating from competitors in the labor market.
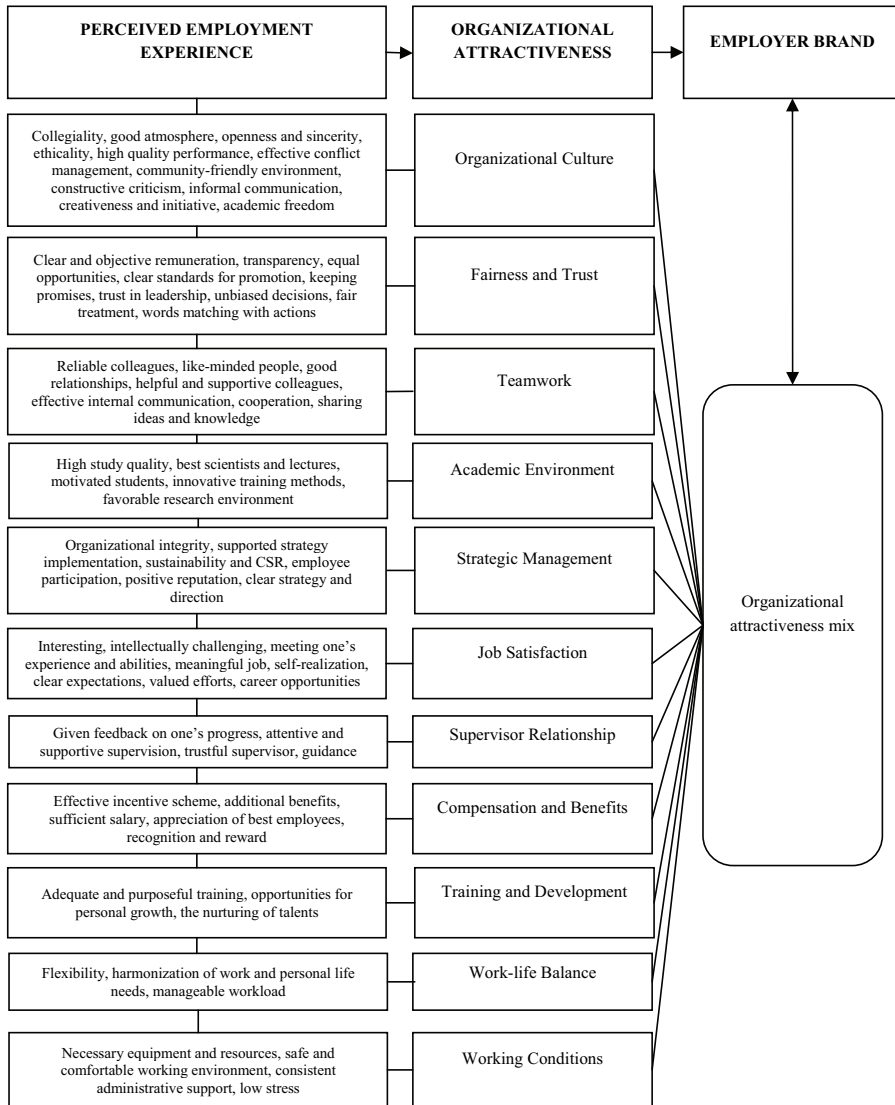
Figure 37. Extraction of organizational attractiveness mix

Summarizing it all, OAES provides with means of extracting distinct, central and enduring characteristics of organizational identity to be transformed into unique, authentic, energizing, credible and differentiating employer value proposition that will be marketed to potential applicants as well as promised and kept to existing employees.

Accordingly, as it is demonstrated in Figure 38, this dissertation offers a three step analytical and typological framework for employer brand development **utilizing the designed OAES methodology**, namely:

1) **Extraction**, through internal research assessing organization's current employment environment and the nature of employment relations, and answering the question "Who am I"?

2) **Distillation** and **Contemplation**, capturing the essence of organizational attractiveness as an employer and answering the current and potential employees "What's in it for me?"

3) **Creation**, **Activation** and **Cultivation**, constructing distinctive, authentic, energizing and compelling employer value proposition, deeply embedding it into organization's *psyche* and *soma* and living your employer brand.

The key idea behind the application of this framework is that every organization has an employer brand whether or not it has ever spent any time developing it. The current research is designed to diagnose the health of this *unintentional* employer brand and to find out whether it is working for or against organization (Sartain & Schuman, 2006). Accordingly, it may initiate the development of *intentional* employer brand that would derive from inside and enhance employee connection, commitment, contribution and engagement. Being very clear about where the organization is and where it wants to get to – as it is intended by the current research – helps to introduce changes and eventually become an employer of choice.

STEPS	OBJECTIVES	PROCESSES	METHODS	RESULTS
Extraction	• What employment experience organization provides to its employees? • What are employee work values, needs and expectations? • How organization's employment experience quality is perceived and what are the areas for improvement? • What factors drive organizational attractiveness as an employer? • How committed are employees to their organization?	• Administration of OAES (11 dimensions, 67 items) in HEI. • Collecting and analyzing data.	• Descriptive statistics on Experience (EXP) and Importance (IMP) scales (M, SD); total mean of responses (indexes) for each dimension on EXP and IMP scales; ordering and ranking data. • Calculation of employment experience quality (EEQ) scores (by item/dimension/total). • Calculation of total Affective Commitment (AFFCOM) score. • Regression analysis to predict AFFCOM on the basis of values of OAES dimensions.	Know **Who are you?**
Distillation and Contemplation	• What employment experience organization should be offering to its existing and potential employees? • What kind of employees organization is eager for? • Where the uniqueness and distinctiveness of organization's attractiveness as an employer lies? • What particular attributes and values of employment experience should be embedded in employer brand?	• Synthesis of research results • Deriving attitudinal employee segments and typologies of employment-based identities	• Descriptive analysis for generational or other demographical differences to assess the need for employer branding segmentation. • Cluster analysis to identify the prevailing attitudinal employee segment (Work Pragmatists, Work Enthusiasts, Work Pessimists, or Work-life Balancers) and employment-based identity of HEI (Inspiring Workplace, Meaningful Workplace, Balanced Workplace or Unhappy Workplace).	Answer **What's in it for me?**
Creation, Activation and Cultivation	• Translate' the extracted and distilled knowledge into a compelling and authentic employer value proposition - brainstorm, outline and build organization's employer brand. • Develop efficient target group-oriented employer brand strategies. • Communicate organization's employer brand to external audiences • Make and keep a promise to existing employees • Nurture your employer brand and get employees connected and committed.	• Qualitative research • Interpretation of research results	• Focus group discussions. • Semantic text analysis procedures. • Associative and brainstorming techniques, etc.	Act **Live your brand**

Figure 38. Analytical and typological framework for employer brand development

Altogether, repeating the question raised by Hazelkorn (2011: 3) "does everyone really want to be like Harvard – or they do they just want to be loved?" (p. 3), the answer is almost evident. Respectively in the business, if everybody were to get stuck on admiring the Fortune 500 list, they would be as narrow-minded as to see only .000000001% of those that got there (Murmann et al., 2003). After all, the world is full of other success stories that do not conform to any universal laws of organizational attractiveness, and employer branding is there to embrace and celebrate this uniqueness. Thus, despite the fact that higher education institutions are roughly doing the same thing and serving the same mission, i.e. teaching and research, their inherent "unity and diversity" per se speaks of much unexplored potential of distinctiveness towards "owning a word in the prospect's mind. A word that nobody else owns" (Temple, 2006: 18).

4.3. Implications for future research

In terms of future research further application of OAES in new samples of higher education institutions as well as repeatable surveys would provide additional data to reassess the validity of the scale and retest the feasibility of the proposed employer value proposition development framework.

It should be also noted that OAES combined with other measures and methods would be advisable. First and foremost, qualitative research interpreting research results would enable the "translation" of the research data into the "native" and compelling language of specific organizations. This would ensure authenticity of employer value propositions. Additionally, measures for assessing person-organization fit, such as Organizational Culture Profile (O'Reilly et al, 1991), organizational personality profiles and reputation management instruments would be beneficial to uncover organizational values, traits and perceptions of image to external audiences.

Overall organization's attractiveness as an employer category (e.g., "For me, this organization is a good place to work") would be beneficial to observe the effects and determine the relative importance of each OAES dimension.

CONCLUSIONS

1. This dissertation linked, reviewed and integrated different areas of literature - the theory of psychological contract, a concept of brand equity, signalling theory, theory of organizational ecology and the construct of organizational attractiveness – and contributed to the better understanding of employer branding, elaborated on the theoretical foundations of the construct, and expanded the knowledge of its underlying premises. The existing terminology of employer brand was summarized and, admitting its confusion, a working definition of employer brand was developed defining it as a set of particular employment experience attributes that make organization distinctive and attractive as an employer. Employer branding process was investigated through comparative analysis of available employer branding frameworks and, overcoming their insufficient integrity, depth and rigour, an integrative conceptual employer branding model was developed delineating the current research field and its boundaries. The focus was set on an inside out approach of building an employer brand through the investigation of internal organizational attractiveness as perceived by current employees. Specifically, the employer branding stages of discovery and research, analysis, interpretation and creation were covered. Affective commitment as one of the key employer branding outcomes was noted. Market segmentation approach, and specifically, generational employer branding was encouraged as assisting organizations in developing efficient target-group oriented employer branding strategies to attract, retain, and engage key talent. The rationale for exploring employer branding in higher education was provided, arguing that strong employer brands enhance distinctiveness and could be a leading strategy earning a label of attractive employer. Eventually, theoretical and conceptual foundations of employer branding were integrated and a conceptual model for hypotheses testing was developed.

2. The philosophical orientation about the nature of research was set taking the objectivist ontology and postpositivist epistemology perspectives, since this research aimed to find empirical evidence for the dimensions of organizational attractiveness, to search for their causes, effects and explanations, testing theories and hypotheses. The principles of empiricism and critical rationalism were thus implied. The mixed methods research strategy was adopted given the research objective to develop an instrument for measurement of organizational attractiveness, where both qualitative and quantitative research should be employed. The cross-sectional research design with case study elements was employed, comprising a survey research and exemplifying a case study.

3. A 67 item Organizational Attractiveness Extraction Scale (OAES), measuring 11 dimensions, i.e. *Organizational Culture*, *Fairness & Trust*, *Teamwork*, *Academic Environment*, *Strategic Management*, *Job Satisfaction*, *Supervisor Relationship*, *Compensation and Benefits*, *Training & Development*, *Work-Life Balance*, and *Working Conditions*, was developed and pilot tested following a 7-step procedure. OAES has proven useful in determining employment experiences that are most met by employees in higher education institutions and unfolding employee work values preferences. The organizational attractiveness inventory showed a stable internal factor structure and was found to be highly reliable (Cronbach alpha = .985) with the gathered data (N = 1105). The sample of 19 Lithuania higher education institutions – 8 universities and 11 colleges was established through two-stage sampling using a non-probability purposive criterion-based technique and probability random cluster sampling. An internet based survey design was described and the representativeness of the sample reported, which allowed to generalise with the confidence level of 95% and confidence level of ±2.87%.

4. The national study of employer's attractiveness revealed that Lithuanian higher education institutions embody some default model of employment relations, complemented, enriched and differentiated by a number of unique employment experience features. Job Satisfaction was found as the main facet of employment experience in academia. Fairness and Trust as well as Supervisor Relationship emerged amongst the most important employment experience attributes. The research findings indicated that employment experiences differed significantly across the surveyed higher education institutions, producing an organizational attractiveness mix inherent to a specific institution. The data also differentiated significantly between universities and colleges subsamples, implying different patterns of organizational attractiveness correlating with different missions. Significant differences of the perceived employment experience quality were observed. The perceived employment experience quality was evaluated and labeled as excellent/good or fair/poor, finding 9 higher education institutions in the first group and the rest of 10 in the latter. Affective commitment was found as a consequence of all 11 employment experience attributes if tested separately, but observing the combined influence of OAES dimensions, only five dimensions were found to be predictors, namely Job Satisfaction, Training and Development, Teamwork, Compensation and Benefits and Strategic Management, but Strategic Management was found to have a negative effect. Affective commitment prediction equation was produced based on employment experience inputs. Work value preferences of Traditionalists, Baby Boomers, Generation X and Generation Y were analyzed and indicated the successively declining loyalty and provided the evidence for generational segmentation.

5. This dissertation attempted to cluster higher education employees according to their perceptions of employment experience and to group higher education institutions based on their most salient labor market identities. The four main segments this analysis produced were *Work Pessimists* (11%), *Work Enthusiast* (28%), *Work Pragmatists* (22%) and *Work-Life Balancers* (39%). The matrix of attitudinal segments was developed profiling and characterizing each segment and listing their key drivers. Work Enthusiast were identified as most engaged, connected, hard working and trusted employees, Work Pragmatists were named as most realistic about their employment, not engaged, career-oriented and striving for self-realization. Furthermore, Work Pessimists were labeled as dissatisfied and disengaged, and, finally, Work-life Balancers were referred to as most demanding employees that want more benefts and lots of vacation time. Accordingly, with respect to the prevalence of particular segments, higher education institutions were grouped into *Inspiring Workplaces* (32%), *Meaningful Workplaces* (26%), *Balanced Workplaces* (21%) and *Unhappy Workplaces* (21%). Classification of higher education institutions deriving from attitudinal employee segments was argued to be useful in delineating the landsape of higher education labor market and establishing their distinctiveness. Exemplifying employer value proposition of Southern New Hampshire University, Baylor University, George Mason University and Miami Dade College were provided to illustrate the applicability and transferability of the identified typology of organizational attractiveness. Synthesizing the research results and implications, a three step analytical and typological framework for employer brand development utilizing the designed OAES methodology was developed, comprising stages of 1) extraction; 2) distillation and contemplation; and 3) creation, activation and cultivation. Therefore, the main research questions **how organizations in general and higher education institutions in particular should develop the underlying value proposition of the employer brand was answered.** Organizations that would employ OAES methodology and adopt the suggested employer brand development framework were enabled to strategically build their successful employer brands, introduce changes and establish their identity as an employer.

It is believed that OAES methodology and its application will constitute a fruitful base for further exploration of employer branding and, specifically, employer value proposition development not solely in higher education but in diverse business organizations as well.

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ANNEXES

Initial list of dimensions in analysed "best workplaces" surveys

Survey tools	No	Dimensions (subdimensions)		
Great Place to Work® Trust Index©	1	Trust	2	Credibility (Communication; Competence; Integrity)
			3	Respect (Support; Collaborating; Caring)
			4	Fairness (Equity; Impartiality; Justice)
	5	Pride (Personal job; Team; Company)		
	6	Camaraderie (Intimacy; Hospitality, Community)		
The ModernThink Higher Education Insight Survey©	7	Job Satisfaction/Support		
	8	Teaching Environment		
	9	Professional Development		
	10	Compensation, Benefits and Work/Life Balance		
	11	Facilities		
	12	Policies, Resources and Efficiency		
	13	Shared Governance		
	14	Pride		
	15	Supervisor/Department Chairs		
	16	Senior Leadership		
	17	Faculty, Administration, and Staff Relations		
	18	Communication		
	19	Collaboration		
	20	Fairness		
	21	Respect and Appreciation		
Best Places to Work in the Federal Government®	22	Employee Skills/Mission Match		
	23	Strategic Management		
	24	Teamwork		
	25	Effective Leadership (Empowerment; Fairness; Senior Leader; Supervisor)		
	26	Performance Based Rewards and Advancement		
	27	Training and Development		
	28	Support for Diversity		
	29	Family Friendly Culture and Benefits		
	30	Pay		
	31	Work/Life Balance		
The Scientist's Best Places to Work Academia	32	Job Satisfaction		
	33	Peers		
	34	Infrastructure and Environment		
	35	Research Resources		
	36	Pay		

	37	Management and Policies
	38	Teaching and Mentoring
	39	Tenure and Promotion
The Gallup Workplace Audit Q12©	40	Knowing What's Expected
	41	Materials and Equipment
	42	Doing What I Do Best
	43	Recognition or Praise
	44	My Supervisor Cares About Me
	45	Someone Encourages My Development
	46	My Opinions Seem to Count
	47	My Company's Mission or Purpose
	48	Doing Quality Work
	49	I Have a Best Friend at Work
	50	Talk to Me About My Progress
	51	Opportunities to Learn and Grow
Canada's Top 100 Employers	52	Physical Workplace
	53	Work Atmosphere and Social
	54	Health, Financial and Family Benefits
	55	Vacation and Time Off
	56	Employee Communications
	57	Performance Management
	58	Training and Skills Development
	59	Community Involvement
Britain's Top Employers®	60	Pay and Benefits
	61	Training and Development
	62	Career Opportunities
	63	Working Conditions
	64	Company Culture
Aon Hewitt Best Employers, Australia and New Zealand	65	Employee Engagement
	66	Leadership Commitment
	67	A Differentiated High Performance Culture
	68	A Compelling Promise to Employees
	69	Connection to Company and Strategy
Lithuania's Most Desirable Employer	70	Attractive Salary
	71	Social Guarantees
	72	Reliable Management
	73	Appreciated Employees
	74	Financial Success
	75	Friendly Staff
	76	Interesting Job

Content analysis of organizational attractiveness scale dimensions

Expert No.
Name, Surname:

Purpose: to develop an instrument to measure organizational attractiveness in higher education institutions.

Dimensions: the list of potential construct dimensions was developed after analysis of 8 international[21] and 1 national[22] methodologies of workplace attractiveness assessment.

Content review: please, assess every dimension's importance to the attractiveness of the higher education institution as an employer, evaluating on the scale of 1 to 10, where 1 is "absolutely irrelevant" and 10 is "extremely relevant". In order to achieve a high level of objectivity and distance yourself as far as possible from the evaluation of the *present situation* in your focal higher education institution, please refrain from analysing a current situation in separate dimensions, but instead base your answers on your own expectations, i.e. points of view, opinions, attitudes and beliefs about the higher education institution as an attractive employer.

No.	Dimensions	1. Absolutely irrelevant						10. Extremely relevant			
1.	Shared Governance: *the set of practices under which university faculty, staff, and students participate in significant decisions concerning the operation of their institutions,the extent to which employees feel empowered with respect to work processes and involved in decisions that affect their work.*	1	2	3	4	5	6	7	8	9	10
2.	Fairness: *the extent to which employees believe people are managed fairly, personal favouritism is not tolerated, disputes resolved fairly, reporting illegal activity is comfortable, equity through compensation and benefit programs.*	1	2	3	4	5	6	7	8	9	10
3.	Effective Leadership: *the extent to which employees believe leadership at all levels of the organization generates motivation and commitment; leaders demonstrate passion for the people in the business.*	1	2	3	4	5	6	7	8	9	10
4.	Supervisor Relationship: *quality relations with supervisor,employees' opinion about their immediate supervisor's job performance and the extent to which supervisors support employee development and provide worthwhile feedback about job performance.*	1	2	3	4	5	6	7	8	9	10
5.	Job Satisfaction: *the extent, to which employees believe that their work is interesting, valued and gives a great personal satisfaction.*	1	2	3	4	5	6	7	8	9	10
6.	Social Security: *job,income security,employees are covered by social insurance, sickness, maternity and paternity benefits.*	1	2	3	4	5	6	7	8	9	10

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[21](1) Great Place to Work ® Trust Index©; (2) Great Colleges to Work For, The ModernThink Higher Education Insight Survey©, The Chronicle of Higher Education; (3) Best Places to Work in the Federal Government®; (4) The Scientist's Best Places to Work Academia; (5) The Gallup Workplace Audit, Q12©; (6) Canada's Top 100 Employers; (7) Britain's Top Employers; (8)Aon Hewitt Best Employers, Australia and New Zealand.
[22]Lithuania's Most Desirable Employer, Verslo Žinios and cv.lt.

7.	Pay: *how satisfied employees are with their compensation, are there opportunities for merit increases and criteria are clearly spelled out.*	1	2	3	4	5	6	7	8	9	10
8.	Benefits: *the extent to which employees believe benefits (e.g., wellness programs) and flexibilities (e.g., alternative work scheduling) offered to them meet their needs.*	1	2	3	4	5	6	7	8	9	10
9.	Career Development: *the extent to which employees believe they have opportunity to get a better job in their organization, to be promoted in a fair and timely manner for their performance and contribution.*	1	2	3	4	5	6	7	8	9	10
10.	Respect, Recognition and Appreciation: *good work and extra effort is appreciated, employees are recognized as individuals and feel a sense of accomplishment, they feel valued and know that really make a difference.*	1	2	3	4	5	6	7	8	9	10
11.	Organizational Culture: *inspiring, strong, values-rich, unique social and psychological environment of an organization.*	1	2	3	4	5	6	7	8	9	10
12.	Organizational Integrity: *people and resources are coordinated effectively and efficiently, so that employees know how their work relates to the organization's goals.*	1	2	3	4	5	6	7	8	9	10
13.	Diversity: *tolerance, acceptance and respect, understanding that each individual is unique, recognizing individual differences in a safe, positive, and nurturing environment.*	1	2	3	4	5	6	7	8	9	10
14.	Work Atmosphere and Social: *friendly work atmosphere, high level of cooperation and collegiality among peers, having best friend at work.*	1	2	3	4	5	6	7	8	9	10
15.	Collaboration and Teamwork: *the extent to which employees believe they communicate and collaborate effectively inside and outside of their teams organizations.*	1	2	3	4	5	6	7	8	9	10
16.	Training and Development: *learning environment that promotes learning and growth, employees are satisfied with the training they receive for their present job.*	1	2	3	4	5	6	7	8	9	10
17.	Work/Life Balance: *the extent to which employees consider their workloads reasonable and feasible, and managers support a balance between work and life.*	1	2	3	4	5	6	7	8	9	10
18.	Working Conditions:*adequate facilities, necessary workplace tools, infrastructure and building well maintained, excellent information technology infrastructure.*	1	2	3	4	5	6	7	8	9	10
19.	Teaching Environment(for academic staff):*adequate resources to support teaching and mentoring duties, flexibility in balancing research and teaching, the tenure and promotion system is transparent.*	1	2	3	4	5	6	7	8	9	10
20.	Research Resources (for academic staff): *the extent, to which employees feel that administration provides support and encouragement for their research activities, provides adequate research funding and resources.*	1	2	3	4	5	6	7	8	9	10

21.	A Compelling Promise to Employees: *employees perceive that their organization delivers on a clear and consistent set of promises about their employment deal and this is reflected in HR practice and strategy.*	1	2	3	4	5	6	7	8	9	10
22.	Employee Engagement: *employees have a high level of emotional and intellectual commitment to their organization.*	1	2	3	4	5	6	7	8	9	10
23.	Commitment to Quality: *employees believe that leaders, systems and processes, that drive them to contribute to outstanding performance, are in place.*	1	2	3	4	5	6	7	8	9	10
24.	Financial Success: *successful organizational performance, superior results, profitability, achieved business goals.*	1	2	3	4	5	6	7	8	9	10
25.	Pride: *in personal job, in work produced, in the organization's products and standing in the community.*	1	2	3	4	5	6	7	8	9	10
26.	Credibility: *management's display of honest and ethical business practices indicates employees the standard of behavior that is expected in the business and sets the tone for all interactions with employees and customers.*	1	2	3	4	5	6	7	8	9	10
27.	Community Involvement: *social aspects integrated into the fundamental processes of organization; the role of an active community member and a leader in the development of the city's, region's, country's society.*	1	2	3	4	5	6	7	8	9	10
28.	Strategic Management: *employees perceive managers and leaders to create meaning for their people around the organization's goals and objectives.*	1	2	3	4	5	6	7	8	9	10
29.	Performance Management: *HR strategy and practices ensure that goals are consistently being met in an effective and efficient manner.*	1	2	3	4	5	6	7	8	9	10
30.	Trust: *trust in relationships between employees and management, between employees and their jobs/organization, between employees and other employees*	1	2	3	4	5	6	7	8	9	10

Common Remarks

Summary of answers from semi-structured interviews with 70 Vytautas Magnus University employees

Topics explored: „Why I am working in this University?" and „For what reasons I would leave?"

Atmosphere/freedom: informal communication; diversity (of people, activities, situations); freedom is a valued; freedom of criticism and speech; you are being heard; your opinion is taken into consideration; self-dependence, possibilities of choice; flexible work schedule; good atmosphere; freedom to create and act; people with different worldviews; democracy, it's possible to accept decisions; nonhierarchical relations; human respect, there's no routine, the university is rather small, liberal spirit.

Possibility of self-realization and improvement: new relations; versatile job; self-realization; personal improvement; possibility to realize your own ideas; the best group of specialists in my field of interest; feeling of being valued and needed; possibility to create; possibility to make a difference, to influence the environment; possibility to realize your potential, possibility to continually improve knowledge and practice; I am trusted; possibilty to implement ambitious goals; possibility to show initiative and to propose innovative ideas; I feel appreciated by students.

Good colleagues: honesty; collegiality; intellectual, stimulating environment; a pleasant, friendly collective; creative atmosphere; friendly atmosphere; a lot of friends among the colleagues; few intrigues; competent, inspiring, true intellectuals; a lot of like-minded people; supportive colleagues; a small organization; tolerance; selfishness is uncommon; managers care for me; creative environment, no hierarchies, common projects.

Students: good relations with students; inteligent, motivated, honest, active, inspiring, interesting students; intellectual youth.

Study quality: variety of subjects; high study quality is promoted; research activities are supported.

Modernity: novel, innovative, modern University; building its own traditions and history; flexible; *Green* University.

Transparent governance: there is no autocracy; consistency; unbiased decisions; Code of Ethics; clarity of requirements; effective internal communication; culture of discussions.

Other reasons (that were not supported by majority): national, patriotic University; historically significant; tolerance; security and stability; participation in public life.

Summary of answers from semi-structured interviews with 160 Vytautas Magnus University undergraduate final course students

Topic explored: Why I am in this University?

Most common and received the most support:

Prestige: VMU - one of the most prestigious universities in Lithuania; suggested, recommended by friends; positive student feedback about VMU; because VMU as something different, exceptional; unique; because it's one of the best Universities in Lithuania; University marketing, communication and recruitment; University has a good reputation, well known in society; excellent reviews; VMU is attractive; because of the VMU's contribution to the society; prestigious name; VMU is one of the most popular universities; one of the newest universities; because of the name; because VMU is young and energetic; good name of the University; because the VMU is the coolest, finest, one of the most beautiful Universities in the world; famous, recognized university.

Liberality, freedom, diversity: variety of subjects (e.g. Arab Culture); the option of being able to form your own timetable and choose subjects; freedom of thought, a free lecture schedule; possibility to combine work and studies; convenient lecture time; attending lectures is not obligatory; because VMU means freedom and everyone understands it in a different way; VMU – one of the most liberal universities in Lithuania; student are respected and are treated equally as the rest of the University's community; here the needs of students are taken into consideration; because it's a liberal university and the study advancement depends on the student's desire to study; I'm a VMU student because I like it's promoted *Liberal Arts* ideology and being a democratic university; long vacations; during exams, student needs and capabilities are taken into account; there's much more freedom than in other universities; lots of choice options; freedom and liberalism of the university is appealing; the university promotes democracy and liberalism; this university lets us express our opinion freely; freedom when choosing subjects, participating in social events, communication with lecturers; great exam session time; tolerance, diversity, freedom.

Environment (organizational culture): tidy, nice and comfortable environment; all my best friends are here; helpful colleagues in case of trouble; a good atmosphere; a person matters there; creativity, initiative are encouraged.

Specialty: there was a study program that I wanted; I was choosing specialty, not University; because of a promising specialty; University offered the study subject I was interested in;

because VMU offered studies of business administration; I found specialty of my interest there; possibility to study such subjects as „Bioethics", „History of the old civilizations"; interesting and relevant study programme; obtaining a specialty and knowledge that is ageless and also knowledge about new technologies; the choice of subjects; useful and interesting subjects as well as the way they're presented.

After class activity: knowing that students are able to choose other activities and not just the studies; University organizes a lot of events for students, offers various activities, opportunities, student clubs/organizations; University has a sports centre; many events; organized projects that may attract many students to deepen knowledge.

Languages (internationalization): there is a good chance to go abroad to study with various programs; international University; English language is well taught there; being able to learn various languages; VMU offers a huge variety of foreign languages to study that are available to every student; VMU cooperates with different universities around the world which opens the possibilities for students to go on exchange programs.

Faculty (lecturer-student relations): a friendly atmosphere during lectures; competent and friendly lecturers; lecturers see students as colleagues; lecturers are professionals and experts; lecturers are friendly and understanding; some of the lecturers work with students not only inside the university but also outside of it; outstanding faculty team, a young team; lecturers are understanding, forgiving; interesting lectures; knowledge is more important than principles; lecturers are *cool*.

City (Kaunas): convenient place, town center; short distances; the wish to study in Kaunas; because the University is in Kaunas; University is in my hometown; because Kaunas is always closer to home and VMU is in the heart of it.

Other reasons (that were not supported by majority): only few or none cases of bribing; funded studies, big scholarships; free of charge studies; VMU minor studies making it possible to acquire two diplomas when finishing bachelor's degree studies; high study quality; a good grading system.

Content analysis of organizational attractiveness scale items

Dimensions	No	Items	Experts' ratings													Number in agreement	CVR	Comments
			1	2	3	4	5	6	7	8	9	10	11	12	13			
1. Supervisor Relationship	1	My supervisor listens to me.	4	3	4	4	4	4	4	3	4	4	4	4	4	11	0.85	Join with item No. 2
	2	My supervisor regards my opinion.	3	4	4	4	4	4	4	4	4	4	4	4	4	12	0.92	
	3	My supervisor cares about me.	3	3	3	4	4	4	4	3	3	3	4	4	4	7	0.54	
	4	There is no hierarchy in this institution	3	0	4	3	4	2	3	4	3	2	1	4	4	5	0.38	
	5	There is no autocracy in this institution.	3	2	4	3	4	2	4	4	0	2	4	4	4	7	0.54	
	6	I know my organisation's direction.	4	1	4	3	0	3	4	3	4	2	4	4	3	6	0.46	
	7	My supervisor objectively evaluates my work performance.	4	3	4	3	4	4	3	3	4	0	4	4	3	7	0.54	
	8	My supervisor supports me.	4	4	4	4	4	4	4	3	4	4	4	4	4	12	0.92	
	9	My supervisor gives me guidance.	4	4	4	4	4	4	4	4	4	4	4	4	4	13	1.00	
	10	I have trust in my supervisor.	4	4	4	3	4	4	4	3	4	3	4	4	4	10	0.77	
	11	My supervisor sets clear goals and objectives for my work.	3	4	4	3	4	2	4	3	4	3	4	4	4	8	0.62	
	12	My supervisor praises me.	3	4	4	4	4	4	3	3	4	2	4	3	4	8	0.62	
	13	My supervisor gives me feedback about my progress.	3	3	4	4	4	4	4	3	4	2	4	4	3	8	0.62	
2. Fairness	14	Decisions are made without bias.	4	4	3	4	4	4	4	0	4	4	4	4	4	11	0.85	
	15	Procedures promoting transparency are developed.	4	4	3	3	4	4	4	0	3	3	4	4	4	8	0.62	
	16	A consistent management approach is maintained.	4	2	3	3	2	2	4	3	3	3	4	4	3	4	0.31	
	17	Equal opportunities are ensured.	4	4	0	4	4	4	4	3	3	3	4	4	3	8	0.62	
	18	Employees are treated fairly.	4	4	0	4	4	4	4	0	3	0	4	4	4	9	0.69	
3. Trust	19	Employees are honest there.	3	1	2	0	1	2	4	0	0	2	3	0	0	1	0.08	
	20	I have trust my colleagues.	3	4	3	4	4	4	4	4	3	3	4	4	3	8	0.62	
	21	I have trust in organisation's leadership.	3	2	3	4	4	4	4	3	3	3	4	4	4	8	0.62	
	22	I am trusted there.	0	3	4	3	4	4	4	4	3	3	4	4	0	7	0.54	
	23	Words match with actions there.	3	3	2	3	4	4	4	3	4	3	4	4	4	8	0.62	
	24	Promises are kept in my institution.	4	4	4	3	4	3	4	4	4	4	4	3	3	9	0.69	
4. Job Satisfaction	25	I can make new connections there.	3	4	3	3	4	3	4	4	3	4	4	3	4	7	0.54	
	26	I can choose from variety of activities there.	3	3	2	3	4	4	2	4	3	4	2	4	3	4	0.31	
	27	I know what is expected of me at work.	3	4	3	4	4	4	4	4	4	3	4	4	4	10	0.77	
	28	I have opportunities for personal growth in my institution. (6)	3	4	3	4	1	4	3	4	4	4	4	4	4	9	0.69	Move to the dimension No. 6
	29	I can realise my ideas and potential.	3	4	3	4	4	4	4	4	3	3	4	4	4	9	0.69	
	30	I feel important to my institution.	3	3	4	3	4	4	4	3	4	3	4	4	3	7	0.54	

	No.	Item														Sum	Index	Notes
	31	I feel important to society.	0	3	4	3	4	3	4	0	3	0	4	4	3	5	0.38	
	32	I have career opportunities in my institution.	2	4	0	3	4	4	4	4	4	4	4	4	4	10	0.77	
	33	I can make a difference there.	0	4	0	3	4	4	4	0	4	3	4	4	3	7	0.54	
	34	I can achieve my ambitions there.	0	4	3	3	4	4	4	3	4	3	4	4	3	7	0.54	
	35	I can show initiative there.	3	1	4	3	4	4	4	4	4	3	4	4	4	9	0.69	
	36	I have freedom of choice there.	3	3	3	3	0	4	4	2	3	0	4	4	3	4	0.31	
	37	I feel that I and my efforts are valued.	4	4	0	4	4	3	4	0	0	3	4	4	4	8	0.62	
	38	I can suggest innovative ideas there.	4	3	3	4	4	3	4	4	4	3	4	4	0	7	0.54	
	39	I like my job.	3	4	4	4	4	4	4	3	4	4	4	4	4	11	0.85	Join with item No. 41
	40	My job feels meaningful.	3	4	4	3	4	4	4	0	4	3	4	4	0	8	0.62	
	41	My job is interesting.	3	3	4	3	4	4	4	4	4	3	4	4	4	9	0.69	
	42	I can nurture my talents there.	3	3	2	4	4	4	4	2	4	3	4	4	0	7	0.54	
	43	My job meets my experience and abilities.	4	4	4	4	4	4	4	0	4	3	4	4	4	11	0.85	
5. Work/Life Balance	44	I have enough flexibility in my job.	4	0	4	4	4	4	0	4	3	3	4	4	3	8	0.62	
	45	My work load is manageable.	4	4	2	4	4	4	4	2	3	2	4	4	3	8	0.62	
	46	I may harmonize my work and personal life needs.	4	4	1	4	4	4	4	0	4	2	4	4	3	9	0.69	
6. Training and Development	47	Employee training and development meets institution's aims and objectives.	3	1	3	4	4	4	4	3	4	4	4	4	4	9	0.69	
	48	I receive enough training to do my job in best manner.	4	4	3	4	4	4	4	0	4	3	4	4	4	10	0.77	
	49	My institution is focused on continuous improvement.	3	4	3	4	4	1	3	3	3	3	4	4	4	6	0.46	
	50	Talents are nurtured in my institution.	4	3	4	3	4	4	3	4	3	4	4	4	4	9	0.69	
	51	Employees' development meets their needs.	3	4	2	4	4	4	4	0	3	0	4	4	0	7	0.54	
	52	I know about training offered in my institution.	3	4	0	4	4	4	4	2	0	2	4	4	2	7	0.54	
	53	I have competencies needed to do my job in best manner.	3	4	3	4	1	4	4	3	3	3	4	4	3	6	0.46	
	54	I have skills needed to do my job in best manner.	3	4	0	4	1	4	4	3	4	3	4	4	3	7	0.54	
7. Academic Environment	55	Excellence in studies is ensured there.	3	4	3	4	4	4	4	2	3	1	3	4	3	6	0.46	
	56	Teaching and research activities are valued in my institution.	3	4	3	3	4	4	4	2	4	2	3	3	3	5	0.38	
	57	My peers are best scientists and lecturers.	4	4	4	4	4	4	4	4	4	3	4	4	4	12	0.92	
	58	A favourable research environment is created in my institution.	4	4	3	4	4	2	4	4	4	4	4	4	4	11	0.85	
	59	Good student-faculty relationship prevail.	4	4	4	4	0	3	4	3	4	4	4	4	4	10	0.77	
	60	Students are good and motivated in my institution.	4	4	3	4	4	3	4	3	3	4	4	4	3	8	0.62	

Section	No	Statement														Sum	Coef	Notes
	61	Informal communication with students prevails there.	3	1	3	4	4	3	4	3	3	3	4	4	4	6	0.46	
	62	Youth is intelectual there.	4	0	3	4	3	4	4	3	4	3	4	4	3	7	0.54	
	63	Innovative training methods are encouraged in my institution.	4	3	4	4	4	3	3	4	4	3	4	4	3	8	0.62	
	64	High study quality is pursued.	4	4	0	4	4	4	4	0	4	0	4	4	3	9	0.69	
	65	Students' opinion is being heard and regarded in my institution.	4	1	4	4	2	3	4	3	4	3	4	2	4	7	0.54	
	66	Students' needs and expectations are important there.	4	4	3	4	2	3	4	3	4	3	3	2	4	6	0.46	
	67	The consistent administrative support is provided to faculty members.	4	4	4	4	4	4	4	3	4	2	4	1	4	11	0.85	Move to the dimension No. 10
8. Compensations and Benefits	68	Effective employee incentive scheme is functioning in my institution.	3	4	3	4	4	4	4	4	4	1	4	3	3	8	0.62	
	69	I am praised for the good job.	3	3	3	3	4	3	4	3	3	2	3	4	3	3	0.23	
	70	Best employees are appreciated in my institution.	4	1	3	4	4	4	4	0	4	0	4	4	3	8	0.62	
	71	Employee's performance results and competencies are recognized and rewarded.	3	4	3	4	4	4	4	0	4	3	4	3	4	8	0.62	
	72	I am getting paid enough for my job.	4	4	2	4	4	4	4	4	4	4	4	3	3	10	0.77	
	73	Additional benefits are offered to motivate employees.	3	4	2	4	4	3	4	0	4	3	4	4	4	8	0.62	
	74	Remuneration system is clear and objective.	3	4	1	4	4	4	4	4	4	3	4	3	3	8	0.62	Move to the dimension No. 2
9. Organisational Culture	75	Informal communication is frequent.	4	4	4	4	4	4	4	4	4	3	4	4	4	12	0.92	
	76	Variety of situations, activities and people is being met there.	4	4	4	3	4	4	4	4	4	4	4	4	4	12	0.92	
	77	Human rigts are respected there.	3	4	3	4	4	4	4	3	3	3	4	3	4	7	0.54	
	78	Freedom of speech is ensured.	3	4	3	4	3	4	4	3	3	3	4	4	4	7	0.54	
	79	I am independent there.	3	1	2	4	4	3	0	4	3	3	4	4	4	6	0.46	
	80	I have freedom to choose there.	3	2	4	3	4	3	4	4	4	3	3	0	4	6	0.46	
	81	Social security is ensured there.	2	0	1	3	4	4	0	2	3	2	4	4	3	4	0.31	
	82	I feel comfortable there.	4	0	2	3	3	4	4	1	3	3	4	0	2	4	0.31	
	83	Freedom to create and act is ensured there.	3	4	0	4	2	4	4	4	3	2	4	3	4	7	0.54	
	84	Environment is intellectual there.	4	0	3	4	4	4	4	4	4	3	4	4	3	9	0.69	
	85	Emloyees have different world views there.	3	2	4	3	4	4	2	4	4	3	4	3	4	7	0.54	
	86	Good atmosphere prevails there.	4	3	4	4	4	4	4	4	4	3	4	4	3	10	0.77	
	87	Constructive criticism is appreciated.	4	4	4	4	4	4	4	0	3	3	4	4	4	10	0.77	
	88	Respect for people is demonstrated in my institution.	3	2	4	3	4	4	4	3	3	2	4	4	4	7	0.54	
	89	Atmosphere is not stressful there.	3	2	4	3	4	3	4	4	3	3	4	4	3	6	0.46	
	90	There is no routine there.	3	2	4	4	2	3	4	2	3	3	4	4	3	5	0.38	
	91	My institution is a creative space.	4	3	3	4	3	4	4	3	4	3	4	3	4	7	0.54	

	92	Openess and sincerity is encouraged in my institution.	4	3	4	4	4	4	4	3	3	0	4	4	4	9	0.69	
	93	Emloyees are respected and valued there.	3	4	4	3	4	3	4	3	4	3	4	3	4	7	0.54	
	94	Sustainability and corporate social responsibility are fostered.	4	4	4	3	4	2	4	3	4	3	4	4	1	8	0.62	Move to the dimension No. 11
	95	Creativeness and initiative are fostered in my institution.	4	3	3	4	4	4	4	3	4	3	4	4	4	8	0.62	
	96	Positive approach prevails.	3	4	3	4	2	2	4	3	3	0	4	0	4	5	0.38	
	97	Conflicts are harmonized and resolved effectively in my institution.	3	4	4	4	4	4	4	4	4	3	4	4	4	11	0.85	
	98	Different opinions are respected.	3	4	3	4	2	4	3	3	4	3	4	3	4	6	0.46	
10. Working Conditions	99	I am provided with all necessary equipment and resources to do my job well.	4	4	4	4	4	4	4	3	3	0	4	4	4	10	0.77	
	100	I am not experiencing stress in my work.	4	4	3	4	4	4	4	0	3	3	4	4	4	9	0.69	
	101	Remuneration system is fair in my institution.	2	1	4	3	4	1	4	0	4	3	4	4	4	7	0.54	
	102	Safe and comfortable working environment is created in University.	4	4	4	4	0	4	4	3	4	2	4	4	4	10	0.77	
	103	I am paid for performance results.	2	4	4	3	4	3	4	3	3	3	4	4	3	6	0.46	
	104	My salary meets my needs.	3	4	3	4	4	4	4	3	3	3	4	4	0	7	0.54	
11. Strategic Management	105	My institution in international.	2	4	4	3	4	4	4	4	3	3	4	3	3	7	0.54	
	106	My institutions is modern.	2	4	3	2	4	2	1	3	2	3	4	4	4	5	0.38	
	107	My institution is innovative.	2	1	3	4	4	1	4	3	4	3	4	4	3	6	0.46	
	108	My institution is contemporary.	2	4	3	4	4	1	4	4	3	3	4	4	3	7	0.54	
	109	My institution has its history.	2	1	3	3	4	3	4	4	2	3	3	1	4	4	0.31	
	110	My institution creates its traditions.	2	1	3	4	4	2	4	0	4	3	4	4	4	7	0.54	
	111	My institutin is dynamic.	2	4	3	4	4	2	4	3	3	3	4	4	3	6	0.46	
	112	My institution is flexible.	2	4	3	2	3	4	0	3	3	3	2	4	1	3	0.23	
	113	High-quality performance culture is created in my institution.	4	0	3	4	4	4	4	1	4	3	4	4	3	8	0.62	Move to the dimension No. 9
	114	My institution is building positive reputatin and image.	4	3	3	4	4	4	4	3	4	3	4	4	3	8	0.62	
	115	Ethical standards are followed.	4	4	3	4	4	4	4	3	4	0	4	4	1	9	0.69	Move to the dimension No. 9
	116	My institution is prestigious.	3	3	0	4	0	1	4	2	4	0	4	2	3	4	0.31	
	117	Clear standards for promotion and tenure are articulated.	4	4	4	3	4	4	4	4	3	3	4	4	4	10	0.77	Move to the dimension No. 2
	118	A clear strategy and direction is set and aligned with my institution's vision and values.	4	4	0	4	4	4	4	3	3	4	4	4	4	10	0.77	
	119	My institution's strategy is ambitious.	3	4	0	3	4	1	4	3	4	2	4	2	2	5	0.38	
	120	My institution's strategy is unique.	3	4	0	3	4	4	4	3	3	3	4	3	3	5	0.38	

	№	Statement														Sum		Note
	121	Academic freedom is valued.	4	4	4	3	4	4	4	4	4	1	4	4	4	11	0.85	Move to the dimension No. 9
	122	Employee participation in decision making is promoted.	4	4	3	4	4	3	4	4	4	3	4	4	4	10	0.77	
	123	Organizational, departmental and employee integrity is ensured.	4	4	3	4	4	4	4	4	3	3	4	4	3	9	0.69	
	124	Environment is community-friendly.	4	4	3	3	4	4	4	3	4	3	4	4	1	8	0.62	Move to the dimension No. 9
	125	Academic culture is nurtured in my institution.	2	1	3	3	3	4	3	4	2	2	4	3	4	4	0.31	
	126	Institutional partnerships are established and maintained.	2	1	3	3	3	4	1	4	2	3	4	2	2	3	0.23	
	127	Policies, procedures and responsibilities support strategy implementation.	4	1	3	4	4	4	4	3	4	3	4	4	4	9	0.69	
	128	My institution is a classical university.	1	4	0	4	2	4	1	4	1	1	1	2	3	4	0.31	
12. Collaboration and Teamwork	129	Common projects are implemented there.	2	1	3	0	1	1	2	0	4	0	4	4	3	3	0.23	
	130	Creative atmosphere prevails there.	1	3	3	3	1	3	4	3	4	3	4	4	4	4	0.31	
	131	Effective internal communication is developed.	4	4	0	4	1	3	4	4	4	3	4	4	4	9	0.69	
	132	Employees are honest there.	3	3	3	3	1	3	1	3	3	3	4	0	0	1	0.08	
	133	Work environment is collegial.	4	3	4	3	4	3	4	4	1	4	4	0	4	8	0.62	Move to the dimension No. 9
	134	My job is intellectually challenging.	4	4	3	4	1	3	4	4	4	4	4	4	3	9	0.69	Move to the dimension No. 4
	135	Stimulating atmosphere prevails there.	2	3	3	4	1	3	4	4	3	3	4	4	3	5	0.38	
	136	Sense of community is being built there.	3	3	3	4	1	3	4	4	3	3	4	4	4	6	0.46	
	137	I have good relationships with my colleagues.	4	4	3	4	1	3	4	4	4	3	4	4	4	9	0.69	
	138	Friendly atmosphere prevails there.	3	4	3	3	1	1	4	4	3	3	4	4	4	6	0.46	
	139	Collegial relations prevail there.	2	1	3	3	1	3	4	2	3	3	4	4	3	3	0.23	
	140	There are no intrigues there.	1	1	0	0	1	4	4	0	0	3	4	4	0	4	0.31	
	141	My colleagues are inspiring.	2	3	4	3	1	3	4	3	3	3	4	3	3	3	0.23	
	142	I can rely on my colleagues.	4	4	3	3	1	4	4	4	3	3	4	4	4	8	0.62	
	143	I enjoy working alongside like-minded people.	4	4	4	4	1	3	4	3	4	0	4	4	4	9	0.69	
	144	My colleagues are helpful and supportive.	4	4	4	4	4	4	4	4	4	3	4	4	4	12	0.92	
	145	My colleagues are tolerant.	2	4	3	4	1	3	4	3	3	0	4	4	0	5	0.38	
	146	Employees share their ideas and knowledge.	4	4	3	4	4	4	4	0	3	0	4	4	4	9	0.69	
	147	My coleagues are unselfish.	1	1	0	3	1	3	4	0	0	3	2	0	0	1	0.08	
	148	My colleagues are true intelectuals.	2	1	3	3	1	3	4	3	3	3	4	4	3	3	0.23	
	149	Cooperation is promoted to get the jobs done.	4	4	3	4	4	4	4	4	4	0	4	3	4	10	0.77	

Initial Organizational Attractiveness Extraction Scale

1,2. My supervisor listens to me and regards my opinion.

8. My supervisor supports me.

9. My supervisor gives me guidance.

10. I have trust in my supervisor.

11. My supervisor sets clear goals and objectives for my work.

12. My supervisor praises me.

13. My supervisor gives me feedback about my progress.

Supervisor Relationship

14. Decisions are made without bias.

15. Procedures promoting transparency are developed.

17. Equal opportunities are ensured.

18. Employees are treated fairly.

74. Remuneration system is clear and obective.

117. Clear standards for promotion and tenure are articulated.

Fairness

20. I have trust in my colleagues.

21. I have trust in organization's leadership.

23. Words match with actions there.

24. Promises are kept in my institution.

Trust

27. I know what is expected of me at work.

29. I can realise my ideas and potential.

32. I have career opportunities in my institution.

35. I can show initiative there.

37. I feel that I and my efforts are valued.

39, 41. I like my job and find it interesting.

40. My job feels meaningful.

43. My job meets my experience and abilities.

134. My job is intellectually challenging.

Job Satisfaction

44. I have enough flexibility in my job.

45. My work load is manageable.

46. I may harmonize my work and personal life needs.

Work-life Balance

47. Employee training and development meets institution's aims and objectives.

48. I receive enough training to do my job in best manner.

50. Talents are nurtured in my institution.

28. I have opportunities for personal gowth in my institution.

Training and Development

57. My peers are best scientists and lecturers.	
58. A favourable research environment is created in my institution.	
59. Good student-faculty relationship prevail.	Academic Environment
60. Students are good and motivated in my institution.	
63. Innovative training methods are encouraged in my institution.	
64. High study quality is pursued.	
68. Effective employee incentive scheme is functioning in my institution.	
70. Best employees are appreciated in my institution.	Compensation and Benefits
71. Employee's performance results and competencies are recognized and rewarded.	
72. I am getting paid enough for my job.	
73. Additional benefits are offered to motivate employees.	

75. Informal communication is frequent.

76. Variety of situations, activities and people is being met there.

84. Environment is intellectual there.

86. Good atmosphere prevails there.

87. Constructive criticism is appreciated.

92. Openess and sincerity is encouraged in my institution.

95. Creativeness and initiative are fostered in my institution.

97. Conflicts are harmonized and resolved effectively in my institution.

113. High-quality performance culture is created in my institution.

115. Ethical standards are followed.

121. Academic freedom is valued.

124. Environment is community-friendly.

133. Work environment is collegial.

Organizational Culture

99. I am provided with all necessary equipment and resources to do my job well.

100. I am not experiencing stress in my work.

102. Safe and comfortable working environment is created in University.

67. The consistent administrative support is provided to faculty members.

Working Conditions

114. My institution is building positive reputation and image.

118. A clear strategy and direction is set and aligned with mv institution's vision and values.

122. Employee participation in decision making is promoted.

123. Organizational, departmental and employee integrity is ensured.

127. Policies, procedures and responsibilities support strategy implementation.

94. Sustainability and corporate social responsibility are fostered.

Strategic Management

131. Effective internal communication is developed.

137. I have good relationships with my colleagues.

142. I can rely on my colleagues.

143. I enjoy working alongside like-minded people.

144. My colleagues are helpful and supportive.

146. Employees share their ideas and knowledge.

149. Cooperation is promoted to get the jobs done.

Collaboration and Teamwork

Rotated Component Matrix[a]

	Items	Component										
		1	2	3	4	5	6	7	8	9	10	11
1	My supervisor listens to me and regards my opinion.							.704				
2	I have trust in my supervisor.							.668				
3	My supervisor gives me guidance.							.624				
4	*My supervisor sets clear goals and objectives for my work.*											
5	My supervisor supports me.							.684				
6	*My supervisor praises me.*											
7	My supervisor gives me feedback about my progress.							.754				
8	Procedures promoting transparency are developed.		.736									
9	Remuneration system is clear and obective.		.751									
10	Employees are treated fairly.		.642									
11	Decisions are made without bias.		.646									
12	Clear standards for promotion and tenure are articulated.		.703									
13	Equal opportunities are ensured.		.705									
14	*I have trust in my colleagues.*											
15	Words match with actions there.		.617									
16	Promises are kept in my institution.		.698									
17	I have trust in organization's leadership.		.660									
18	My job is intellectually challenging.						.650					
19	I can realise my ideas and potential.						.637					
20	My job feels meaningful.						.529					
21	I know what is expected of me at work.						.626					
22	I have career opportunities in my institution.						.464					
23	I like my job and find it interesting.						.678					
24	I feel that I and my efforts are valued.						.504					
25	My job meets my experience and abilities.						.548					
26	*I can show initiative there.*											
27	My work load is manageable.										.649	
28	I have enough flexibility in my job.										.771	
29	I may harmonize my work and personal life needs.										.740	
30	I receive enough training to do my job in best manner.									.778		
31	Employee training and development meets institution's aims and objectives.									.693		
32	I have opportunities for personal gowth in my institution.									.698		
33	Talents are nurtured in my institution.									.494		
34	Innovative training methods are encouraged in my institution.				.686							
35	My peers are best scientists and lecturers.				.731							
36	*Good student-faculty relationship prevail.*											
37	Students are good and motivated in my institution.				.705							
38	High study quality is pursued.				.767							
39	The consistent administrative support is provided to faculty members.											.494
40	A favourable research environment is created in my institution.				.634							
41	I am provided with all necessary equipment and resources to do my job well.											.743

No	Item	F1	F2	F3	F4	F5	F6	F7
42	Safe and comfortable working environment is created in University.							.655
43	I am not experiencing stress in my work.							.450
44	Informal communication is frequent.	.564						
45	*Variety of situations, activities and people is being met there.*							
46	Constructive criticism is appreciated.	.651						
47	Openess and sincerity is encouraged in my institution.	.683						
48	Creativeness and initiative are fostered in my institution.	.558						
49	Good atmosphere prevails there.	.691						
50	Ethical standards are followed.	.661						
51	Work environment is collegial.	.735						
52	High-quality performance culture is created in my institution.	.661						
53	Environment is community-friendly.	.656						
54	Academic freedom is valued.	.502						
55	*Environment is intellectual there.*							
56	Conflicts are harmonized and resolved effectively in my institution.	.657						
57	I am getting paid enough for my job.					.653		
58	Effective employee incentive scheme is functioning in my institution.					.709		
59	Best employees are appreciated in my institution.					.634		
60	Additional benefits are offered to motivate employees.					.659		
61	Employee's performance results and competencies are recognized and rewarded.					.579		
62	A clear strategy and direction is set and aligned with my institution's vision and values.			.579				
63	Sustainability and corporate social responsibility are fostered.			.659				
64	Organizational. departmental and employee integrity is ensured.			.772				
65	Policies, procedures and responsibilities support strategy implementation.			.746				
66	Employee participation in decision making is promoted.			.631				
67	My institution is building positive reputation and image.			.601				
68	Employees share their ideas and knowledge.		.525					
69	My colleagues are helpful and supportive.		.686					
70	I enjoy working alongside like-minded people.		.762					
71	I can rely on my colleagues.		.796					
72	Effective internal communication is developed.		.629					
73	I have good relationships with my colleagues.		.733					
74	Cooperation is promoted to get the jobs done.		.535					

Reliability analysis of initial Organizational Attractiveness Extraction Scale

Scale: Factor #1

Reliability Statistics

Cronbach's Alpha	N of Items
.933	11

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Informal communication is frequent.	7.76	53.359	.587	.932
Constructive criticism is appreciated.	7.29	49.917	.745	.926
Openness and sincerity is encouraged in my institution.	7.34	47.880	.771	.925
Creativeness and initiative is fostered in my institution.	7.42	50.901	.671	.929
Good atmosphere prevails there.	7.42	49.784	.798	.924
Ethical standards are followed.	7.53	51.109	.688	.928
Work environment is collegial.	7.51	48.883	.788	.924
High quality performance culture is being created in my institution.	7.38	50.044	.754	.925
Environment is community-friendly.	7.60	51.414	.681	.928
Academic freedom is valued.	7.59	51.324	.661	.929
Conflicts are harmonized and resolved effectively in my institution.	7.32	49.832	.778	.924

Scale: Factor #2

Reliability Statistics

Cronbach's Alpha	N of Items
.930	9

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Procedures promoting transparency are developed.	8.07	45.995	.767	.921
Remuneration system is clear and objective.	8.20	45.126	.766	.921
Employees are treated fairly.	8.02	45.815	.763	.921
Decisions are made without bias.	8.04	46.301	.745	.922
Clear standards for promotion and tenure are articulated.	8.39	47.348	.683	.926
Equal opportunities are ensured.	8.08	45.197	.762	.921
Words match with actions in my institution.	8.07	48.400	.682	.926
Promises are kept in my institution.	8.24	47.034	.757	.921
I have trust in my institution's leadership.	8.37	47.218	.765	.921

Scale: Factor #3

Reliability Statistics

Cronbach's Alpha	N of Items
.902	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Employees share their ideas and knowledge.	4.39	18.576	.670	.892
My colleagues are helpful and supportive.	4.72	18.172	.765	.882
I enjoy working alongside like-minded people.	4.61	17.875	.745	.884
I can rely on my colleagues.	4.57	17.658	.796	.878
Effective internal communication is developed.	4.26	18.026	.706	.888
I have good relationships with my colleagues.	4.81	19.302	.694	.891
Cooperation is promoted to get the jobs done.	4.34	17.706	.638	.899

Scale: Factor #4

Reliability Statistics

Cronbach's Alpha	N of Items
.839	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Innovative training methods are encouraged in my institution.	3.56	8.993	.655	.804
My peers are best scientists and lecturers.	3.55	9.093	.663	.802
Students are good and motivated in my institution.	3.57	9.540	.631	.811
High study quality is pursued	3.35	8.764	.730	.784
A favourable research environment is created in my institution.	3.11	8.576	.569	.835

Scale: Factor #5

Reliability Statistics

Cronbach's Alpha	N of Items
.870	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
A clear strategy and direction is set and aligned with my institution's vision (mission) and values.	3.99	15.313	.607	.859
Sustainability and corporate social responsibility are fostered.	3.78	14.536	.657	.850
Organizational. departmental and employee integrity is ensured.	3.77	13.884	.779	.829
Policies. procedures and responsibilities support strategy implementation.	3.87	13.955	.747	.834
Employee participation in decision making is promoted.	3.95	14.445	.606	.861
My institution is building positive reputation and image.	4.02	15.023	.631	.855

Scale: Factor #6

Reliability Statistics

Cronbach's Alpha	N of Items
.891	8

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
My job is intellectually challenging.	4.86	26.383	.622	.882
I can realize my ideas and potential.	4.50	24.975	.732	.872
My job feels meaningful.	4.64	25.888	.671	.878
I know what is expected of me at work.	4.60	25.080	.754	.870
I have career opportunities in my institution.	4.41	23.347	.668	.881
I like my job and find it interesting.	4.85	25.846	.625	.882
I feel that I and my efforts are valued.	4.73	25.972	.640	.880
My job meets my experience and abilities.	4.51	25.053	.668	.878

Scale: Factor #7

Reliability Statistics

Cronbach's Alpha	N of Items
.874	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
My supervisor listens to me and regards my opinion.	2.73	10.127	.736	.840
I have trust in my supervisor.	2.68	9.900	.748	.837
My supervisor gives me guidance.	2.86	10.480	.687	.852
My supervisor supports me.	2.69	10.305	.726	.843
My supervisor gives me feedback about my progress.	2.33	9.999	.632	.868

Scale: Factor #8

Reliability Statistics

Cronbach's Alpha	N of Items
.922	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I am getting paid enough for my job.	5.42	16.966	.769	.911
Effective employee incentive scheme is functioning in my institution (for loyalty. achievement. etc.).	5.37	16.346	.831	.898
Best employees are appreciated in my institution.	5.64	17.158	.770	.910
Additional benefits are offered to motivate employees.	5.42	16.502	.822	.900
Employee's performance results and competencies are recognized and rewarded.	5.41	16.275	.800	.905

Scale: Factor #9

Reliability Statistics

Cronbach's Alpha	N of Items
.857	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I receive enough training to do my job in best manner.	3.25	6.949	.724	.808
Employee training and development meets my institution's aims and objectives.	3.21	6.915	.760	.792
I have opportunities for personal growth in my institution.	3.16	7.110	.759	.795
Talents are nurtured in my institution.	3.17	7.468	.572	.872

Scale: Factor #10

Reliability Statistics

Cronbach's Alpha	N of Items
.714	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
My work load is manageable.	1.46	2.801	.450	.741
I have enough flexibility in my job.	1.78	3.029	.545	.614
I may harmonize my work and personal life needs.	1.66	2.725	.621	.517

Scale: Factor #11

Reliability Statistics

Cronbach's Alpha	N of Items
.721	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The consistent administrative support is provided to faculty members.	2.31	6.198	.448	.694
I am provided with all necessary equipment and resources to do my job well.	2.29	4.881	.658	.562
Safe and comfortable working environment is created in my institution.	2.45	5.884	.496	.668
I am not experiencing stress in my work.	2.28	5.759	.449	.698

Lithuanian Higher Education Institutions (state, non-state)

ID	NAME	ADDRESS	TELEPHONE	OFFICIAL NUMBER OF	
				STUDENTS (2013-10-01)	TEACHERS (2012-10-01)
UNIVERSITIES					
STATE					
KAUNO M. SAV.					
111950581	Kaunas University of Technology	K. Donelaičio g. 73, Kaunas	+370 37-300000	11436	1038
111951530	Lithuanian Sports University	Sporto g. 6, Kaunas	+370 37-302621	2127	116
302536989	Lithuanian University of Health Sciences	A. Mickevičiaus g. 9, Kaunas	+370 37-327201	6283	1107
111950396	Vytautas Magnus University	K. Donelaičio g. 58, Kaunas	+370 37-222739	8835	667
KAUNO R. SAV.					
111950962	Aleksandras Stulginskis University	Studentų g. 11, Akademijos mstl., Kauno r. sav.	+370 37-752300	4609	351
KLAIPĖDOS M. SAV.					
211951150	Klaipeda University	H. Manto g. 84, Klaipėda	+370 46-398900	6093	592
ŠIAULIŲ M. SAV.					
111951345	Šiauliai University	Vilniaus g. 88, Šiauliai	+370 41-595800	5655	408
VILNIAUS M. SAV.					
211959040	The General Jonas Zemaitis Military Academy of Lithuania	Šilo g. 5A, Vilnius	+370 5-2126923	307	66
111951498	Lithuanian University of Education	Studentų g. 39, Vilnius	+370 5-2790281	6584	528
111950624	Lithuanian Academy of Music and Theatre	Gedimino pr. 42, Vilnius	+370 5-2612691	936	358
111951726	Mykolas Romeris University	Ateities g. 20, Vilnius	+370 5-2714625	17428	872
111950439	Vilnius Academy of Fine Arts	Maironio g. 6, Vilnius	+370 5-2105430	1796	345
111950243	Vilnius Gediminas Technical University	Saulėtekio al. 11, Vilnius	+370 5-2745030	11518	989
211950810	Vilnius University	Universiteto g. 3, Vilnius	+370 5-2687000	19221	1823
NON-STATE					
KLAIPĖDOS M. SAV.					
111966048	LCC International Unversity	Kretingos g. 36, Klaipėda	+370 46-310745	1074	62

TELŠIŲ R. SAV.					
111966190	Bishop Vincentas Borisevicius Seminary of Telšiai	Katedros a. 6, Telšiai	+370 444-60622	17	34
VILNIAUS M. SAV.					
111963319	"ISM University of Management and Economics", JSC	Aušros Vartų g. 7A, Vilnius	+370 5-2123960	1936	97
111968775	Kazimiero Simonavičiaus University	J. Basanavičiaus g. 29A, Vilnius	+370 5-2135172	333	70
300975749	The Branch of the University of Bialystok "Faculty of Economics and Informatics"	Naugarduko g. 76, Vilnius	+370 5-2766739	-	49
111965665	Academy of Management and Business	J. Basanavičiaus g. 29A, Vilnius	+370 5-2133606	151	22
300548028	European Humanities University, Public Institution	Tauro g. 12, Vilnius	+370 5-2639650	1722	214
111966429	International Business School at Vilnius University, Public Institution	Saulėtekio al. 22, Vilnius	+370 5-2366889	1585	134
111963080	Vilnius St. Joseph's Seminary	Kalvarijų g. 325, Vilnius	+370 5-2701602	23	32
COLLEGES					
STATE					
ALYTAUS M. SAV.					
111965327	Alytus College	Studentų g. 17, Alytus	+370 315-79075	886	69
KAUNO M. SAV.					
111965284	Kaunas College	Pramonės pr. 20, Kaunas	+370 37-352324	7338	603
111967869	Kaunas Technical College	Tvirtovės al. 35, Kaunas	+370 37-308620	1556	120
KAUNO R. SAV.					
111967716	Kaunas College of Forestry and Environmental Engineering	Liepų g. 1, Girionių k., Samylų sen., Kauno r. sav.	+370 37-383082	1255	102
KLAIPĖDOS M. SAV.					
111968056	Klaipeda State College	Jaunystės g. 1, Klaipėda	+370 46-489132	4068	284
190986670	Lithuanian Higher Naval School	I. Kanto g. 7, Klaipėda	+370 46-397240	1492	71
MARIJAMPOLĖS SAV.					
211967140	Marijampole College	P. Armino g. 92, Marijampolė	+370 343-50750	1262	147
PANEVĖŽIO M. SAV.					
111968437	Panevezys College	Laisvės a. 23, Panevėžys	+370 45-460322	1940	145
RIETAVO SAV.					
111968394	Zemaitija College	L. Ivinskio g. 5, Rietavas	+370 448-68471	950	129

ŠIAULIŲ M. SAV.					
111968241	Šiauliai State College	Aušros al. 40, Šiauliai	+370 41-523768	2768	202
UTENOS R. SAV.					
111965850	Utena College	Maironio g. 7, Utena	+370 389-51615	2173	169
VILNIAUS M. SAV.					
111965131	Vilnius College	J. Jasinskio g. 15, Vilnius	+370 5-2191600	7508	465
111967673	Vilnius College of Technologies and Design	Antakalnio g. 54, Vilnius	+370 5-2341524	3003	201
NON-STATE					
KAUNO M. SAV.					
302485644	St. Ignatius of Loyola College	J. Jablonskio g. 2, Kaunas	+370 37-200260	131	16
111965512	V. A. Graičiunas Higher School of Management	Laisvės al. 33, Kaunas	+370 37-320878	777	55
193038291	Kolping College, Public Institution	Raguvos g. 7, Kaunas	+370 37-220030	434	40
KLAIPĖDOS M. SAV.					
111960885	Klaipėda Business Higher School	Tilžės g. 46A, Klaipėda	+370 46-310214	472	32
291828430	Public institution Lithuania Business University of Applied Sciences	Turgaus g. 21, Klaipėda	+370 46-311099	602	58
291823650	University of Applied Social Sciences	Nemuno g. 2, Klaipėda	+370 46-397077	2266	171
ŠIAULIŲ M. SAV.					
111966571	North Lithuania College, Public Institution	Tilžės g. 22, Šiauliai	+370 41-525100	569	92
VILNIAUS M. SAV.					
111961987	International School of Law and Business	Laisvės pr. 58, Vilnius	+370 5-2426000	2351	145
191807983	Vilnius Business College, Public Institution	Filaretų g. 36A, Vilnius	+370 5-2154884	400	52
111960928	Vilnius College of Design	Akmenų g. 3, Vilnius	+370 5-2611121	668	76
211965470	Vilnius Co-operative College, Public Institution	Konstitucijos pr. 11, Vilnius	+370 5-2750183	992	83

Requesting for survey approval

No	Higher Education Institutions	Invitation sent	Message Recipient	e-mail address	Date	Response
	Universities					
1	The General Jonas Zemaitis Military Academy of Lithuania	Yes	Commandant	eugenijus.vosylius@mil.lt	2012.06.29	Positive
2	Lithuanian University of Health Sciences	Yes	Rector	rektoratas@lsmuni.lt	2012.06.27	Positive
3	Kaunas University of Technology	Yes	Rector		2012.06.27	Positive
4	Klaipeda University	Yes	Rector	vaidutis.laurenas@ku.lt	2012.06.27	Positive
5	LCC International Unversity	No				
6	Lithuanian Sports University	Yes	Rector	a.skurvydas@lkka.lt	2012.06.27	Positive
7	Lithuanian Academy of Music and Theatre	Yes	Rector	zbignevas.ibelhauptas@lmta.lt	2012.06.29	Negative
8	Mykolas Romeris University	Yes	Rector	roffice@mruni.eu	2012.06.27	Unanswered
9	Aleksandras Stulginskis University	Yes	Rector			Positive
10	Siauliai University	Yes	Rector	all@cr.su.lt	2012.06.27	Positive
11	ISM University of Management and Economics	Yes	Rector			Negative
12	Bishop Vincentas Borisevicius Seminary of Telsiai	No				
13	Vilnius Academy of Fine Arts	Yes	Rector	audrius.klimas@vda.lt	2012.06.27	Unanswered
14	Vilnius Gediminas Technical University	Yes	Rector	alfonsas.daniunas@vgtu.lt	2012.06.27	Unanswered
15	Lithuanian University of Education	Yes	Rector	rekt.vpu@vpu.lt	2012.06.27	Unanswered
16	Vilnius St. Joseph's Seminary	No				
17	Vilnius University	Yes	Rector	rector@vu.lt	2012.06.27	Positive
18	Vytautas Magnus University	Yes	Rector			Positive
19	Kazimiero Simonaviciaus University	Yes	Rector	rector@ksu.lt	2012.06.27	Positive
20	The Branch of the University of Bialystok "Faculty of Economics and Informatics"	No				
21	European Humanities University	No				
22	International Business School at Vilnius University	Yes	Director	julius.niedvaras@tvm.vu.lt	2012.06.27	Positive
23	Academy of Management and Business	Yes	Director	info@vva.lt	2012.06.27	Unanswered

	Colleges					
1	Alytus College	Yes	Director	danute.remeikiene@akolegija.lt	2012.06.27	Unanswered
2	Kaunas College	Yes	Director	mindaugas.misiunas@go.kauko.lt	2012.06.27	Unanswered
3	Kaunas College of Forestry and Environmental Engineering	Yes	Director	a.tebera@kmaik.lm.lt	2012.06.29	Positive
4	Kaunas Technical College	Yes	Director	Jonas.Krivickas @ ktk.lt	2012.06.27	Unanswered
5	V. A. Graiciunas Higher School of Management	Yes	Director	euvag@avm.lt	2012.06.27	Unanswered
6	Klaipėda State College	Yes	Director	v.kuznecovas@kvk.lt	2012.06.27	Positive
7	University of Applied Social Sciences	Yes	Director	gabija.skucaite@smk.lt	2012.06.27	Positive
8	Klaipėda Business Higher School	Yes	Director	administracija@kvam.lt	2012.06.29	Negative
9	Kolping College	Yes	Director	lina@kolping.lt	2012.06.27	Positive
10	Lithuanian Higher Naval School	Yes	Director	v.sencila@lmc.lt	2012.06.29	Positive
11	Marijampole College	Yes	Director	vaidotas.viliunas@mkolegija.lt	2012.06.27	Positive
12	Panevezys College	Yes	Director	direktorius@panko.lt	2012.06.27	Unanswered
13	Siauliai State College	Yes	Director	direktore@svako.lt	2012.06.27	Positive
14	North Lithuania College	Yes	Director	mykolas@slk.lt	2012.06.27	Positive
15	Utena College	Yes	Director	direktorius@utenos-kolegija.lt	2012.06.27	Unanswered
16	Lithuania Business University of Applied Sciences	Yes	Director	angele.lileikiene@vlvk.lt	2012.06.27	Positive
17	Vilnius College	Yes	Director	g.braziunas@viko.lt	2012.06.27	Positive
18	Vilnius Co-operative College	Yes	Director	jonas.jakubauskas@vkk.lt	2012.06.27	Positive
19	Vilnius College of Technologies and Design	Yes	Director	n.kikutiene@vtdko.lt	2012.06.29	Unanswered
20	Vilnius Business College	Yes	Director	jolanta@kolegija.lt	2012.06.27	Unanswered
21	Zemaitija College	Yes	Director	j.bacinskas@zemko.lt	2012.06.27	Positive
22	International School of Law and Business	Yes	Director	gitana.jurgelaitiene@ttvam.lt	2012.06.27	Unanswered
23	Vilnius College of Design	Yes	Director	vdk@dizainokolegija.lt	2012.06.29	Unanswered
24	St. Ignatius of Loyola College	No		aivaras.anuzis@gmail.com		

Organizational Attractiveness Extraction Scale (OAES)

1. Students are good and motivated in my University.									
1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

2. I can realize my ideas and potential.									
1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

3. I enjoy working alongside like-minded people.									
1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

4. I have enough flexibility in my work.									
1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

5. Cooperation is promoted to get the jobs done.									
1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

6. Work environment is collegial.									
1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

7. Sustainability and corporate social responsibility are fostered.									
1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

8. Employee training and development meets University aims and objectives.									
1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

9. I am getting paid enough for my job.									
1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

10. Additional benefits are offered to motivate employees.									
1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

11. University is building positive reputation and image.

	1	2	3	4	5	6	7	8	9	10
Least experienced · · · · · · · · · Most experienced

	1	2	3	4	5	6	7	8	9	10
Least important · · · · · · · · · Most important

12. I have trust in my supervisor.

	1	2	3	4	5	6	7	8	9	10
Least experienced · · · · · · · · · Most experienced

	1	2	3	4	5	6	7	8	9	10
Least important · · · · · · · · · Most important

13. I have opportunities for personal growth in University.

	1	2	3	4	5	6	7	8	9	10
Least experienced · · · · · · · · · Most experienced

	1	2	3	4	5	6	7	8	9	10
Least important · · · · · · · · · Most important

14. I am provided with all necessary equipment and resources to do my job well.

	1	2	3	4	5	6	7	8	9	10
Least experienced · · · · · · · · · Most experienced

	1	2	3	4	5	6	7	8	9	10
Least important · · · · · · · · · Most important

15. Effective employee incentive scheme is functioning in University (for loyalty, achievement, etc.).

	1	2	3	4	5	6	7	8	9	10
Least experienced · · · · · · · · · Most experienced

	1	2	3	4	5	6	7	8	9	10
Least important · · · · · · · · · Most important

16. Organizational, departmental and employee integrity is ensured.

	1	2	3	4	5	6	7	8	9	10
Least experienced · · · · · · · · · Most experienced

	1	2	3	4	5	6	7	8	9	10
Least important · · · · · · · · · Most important

17. My work load is manageable.

	1	2	3	4	5	6	7	8	9	10
Least experienced · · · · · · · · · Most experienced

	1	2	3	4	5	6	7	8	9	10
Least important · · · · · · · · · Most important

18. Employees share their ideas and knowledge.

	1	2	3	4	5	6	7	8	9	10
Least experienced · · · · · · · · · Most experienced

	1	2	3	4	5	6	7	8	9	10
Least important · · · · · · · · · Most important

19. Openness and sincerity is encouraged in University.

	1	2	3	4	5	6	7	8	9	10
Least experienced · · · · · · · · · Most experienced

	1	2	3	4	5	6	7	8	9	10
Least important · · · · · · · · · Most important

20. My job is intellectually challenging.

	1	2	3	4	5	6	7	8	9	10
Least experienced · · · · · · · · · Most experienced

	1	2	3	4	5	6	7	8	9	10
Least important · · · · · · · · · Most important

21. Innovative training methods are encouraged in my University.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

22. I feel that I and my efforts are valued.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

23. Constructive criticism is appreciated.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

24. I have trust in University leadership.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

25. Remuneration system is clear and objective.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

26. Environment is community-friendly.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

27. High study quality is pursued.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

28. A favourable research environment is created in my University.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

29. Safe and comfortable working environment is created in my University.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

30. Policies, procedures and responsibilities support strategy implementation.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

31. I know what is expected of me at work.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

32. Employee participation in decision making is promoted.

1	2	3	4	5	6	7	8	9	10

Least experienced   Most experienced

1	2	3	4	5	6	7	8	9	10

Least important   Most important

33. Effective internal communication is developed.

1	2	3	4	5	6	7	8	9	10

Least experienced   Most experienced

1	2	3	4	5	6	7	8	9	10

Least important   Most important

34. Ethical standards are followed.

1	2	3	4	5	6	7	8	9	10

Least experienced   Most experienced

1	2	3	4	5	6	7	8	9	10

Least important   Most important

35. Good atmosphere prevails in University.

1	2	3	4	5	6	7	8	9	10

Least experienced   Most experienced

1	2	3	4	5	6	7	8	9	10

Least important   Most important

36. Best employees are appreciated in University.

1	2	3	4	5	6	7	8	9	10

Least experienced   Most experienced

1	2	3	4	5	6	7	8	9	10

Least important   Most important

37. Informal communication is frequent.

1	2	3	4	5	6	7	8	9	10

Least experienced   Most experienced

1	2	3	4	5	6	7	8	9	10

Least important   Most important

38. My peers are best scientists and lecturers.

1	2	3	4	5	6	7	8	9	10

Least experienced   Most experienced

1	2	3	4	5	6	7	8	9	10

Least important   Most important

39. My job feels meaningful.

1	2	3	4	5	6	7	8	9	10

Least experienced   Most experienced

1	2	3	4	5	6	7	8	9	10

Least important   Most important

40. The consistent administrative support is provided to faculty members.

1	2	3	4	5	6	7	8	9	10

Least experienced   Most experienced

1	2	3	4	5	6	7	8	9	10

Least important   Most important

41. I may harmonize my work and personal life needs.

1	2	3	4	5	6	7	8	9	10

Least experienced   Most experienced

1	2	3	4	5	6	7	8	9	10

Least important   Most important

42. Creativeness and initiative is fostered in University.

1	2	3	4	5	6	7	8	9	10

Least experienced   Most experienced

1	2	3	4	5	6	7	8	9	10

Least important   Most important

43. Decisions are made without bias.

	1	2	3	4	5	6	7	8	9	10
Least experienced										Most experienced
	1	2	3	4	5	6	7	8	9	10
Least important										Most important

44. Promises are kept in my University.

	1	2	3	4	5	6	7	8	9	10
Least experienced										Most experienced
	1	2	3	4	5	6	7	8	9	10
Least important										Most important

45. My supervisor gives me feedback about my progress.

	1	2	3	4	5	6	7	8	9	10
Least experienced										Most experienced
	1	2	3	4	5	6	7	8	9	10
Least important										Most important

46. My supervisor gives me guidance.

	1	2	3	4	5	6	7	8	9	10
Least experienced										Most experienced
	1	2	3	4	5	6	7	8	9	10
Least important										Most important

47. Words match with actions in my University.

	1	2	3	4	5	6	7	8	9	10
Least experienced										Most experienced
	1	2	3	4	5	6	7	8	9	10
Least important										Most important

48. My job meets my experience and abilities.

	1	2	3	4	5	6	7	8	9	10
Least experienced										Most experienced
	1	2	3	4	5	6	7	8	9	10
Least important										Most important

49. Talents are nurtured in University.

	1	2	3	4	5	6	7	8	9	10
Least experienced										Most experienced
	1	2	3	4	5	6	7	8	9	10
Least important										Most important

50. High quality performance culture is being created in University.

	1	2	3	4	5	6	7	8	9	10
Least experienced										Most experienced
	1	2	3	4	5	6	7	8	9	10
Least important										Most important

51. I receive enough training to do my job in best manner.

	1	2	3	4	5	6	7	8	9	10
Least experienced										Most experienced
	1	2	3	4	5	6	7	8	9	10
Least important										Most important

52. A clear strategy and direction is set and aligned with University vision and values.

	1	2	3	4	5	6	7	8	9	10
Least experienced										Most experienced
	1	2	3	4	5	6	7	8	9	10
Least important										Most important

53. Equal opportunities are ensured.

	1	2	3	4	5	6	7	8	9	10
Least experienced										Most experienced
	1	2	3	4	5	6	7	8	9	10
Least important										Most important

54. My supervisor listens to me and regards my opinion.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

55. I can rely on my colleagues.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

56. My supervisor supports me.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

57. I like my job and find it interesting.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

58. I have career opportunities in my University.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

59. Employee's performance results and competencies are recognized and rewarded.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

60. Clear standards for promotion and tenure are articulated.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

61. I am not experiencing stress in my work.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

62. My colleagues are helpful and supportive.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

63. Academic freedom is valued.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

64. Conflicts are harmonized and resolved effectively in University.

1	2	3	4	5	6	7	8	9	10
Least experienced									Most experienced
1	2	3	4	5	6	7	8	9	10
Least important									Most important

65. I have good relationships with my colleagues.

1	2	3	4	5	6	7	8	9	10

Least experienced   Most experienced

1	2	3	4	5	6	7	8	9	10

Least important   Most important

66. Employees are treated fairly.

1	2	3	4	5	6	7	8	9	10

Least experienced   Most experienced

1	2	3	4	5	6	7	8	9	10

Least important   Most important

67. Procedures promoting transparency are developed.

1	2	3	4	5	6	7	8	9	10

Least experienced   Most experienced

1	2	3	4	5	6	7	8	9	10

Least important   Most important

AFFECTIVE COMMITMENT SCALE[1]

1. This organization has a great deal of personal meaning for me.

1	2	3	4	5	6	7	8	9	10

Strongly disagree   Strongly agree

2. I do feel a strong sense of belonging to my organization.*

1	2	3	4	5	6	7	8	9	10

Strongly disagree   Strongly agree

3. I really feel as if this organization's problems are my own.

1	2	3	4	5	6	7	8	9	10

Strongly disagree   Strongly agree

4. I do feel 'emotionally attached' to this organization.*

1	2	3	4	5	6	7	8	9	10

Strongly disagree   Strongly agree

5. I enjoy discussing my organization with people outside it.

1	2	3	4	5	6	7	8	9	10

Strongly disagree   Strongly agree

6. I would be very happy to spend the rest of my career with this organization.

1	2	3	4	5	6	7	8	9	10

Strongly disagree   Strongly agree

7. I don't think that I could easily become as attached to another organization as I am to this one.*

1	2	3	4	5	6	7	8	9	10

Strongly disagree   Strongly agree

8. I do feel like 'part of the family' at my organization.*

1	2	3	4	5	6	7	8	9	10

Strongly disagree   Strongly agree

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[1] Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance, and normative commitment to the organization // Journal of Occupational Psychology, Nr. 63.
originally reverse-keyed item, reworded positively

RESPONDENTS PROFILE

1. Age
- ☐ <25
- ☐ 26-35
- ☐ 36-45
- ☐ 46-45
- ☐ >55

2. Gender
- ☐ Female
- ☐ Male

3. Employee group:
- ☐ Academic staff
- ☐ Administrative staff

4. Employee position:
- ☐ Subordinate staff
- ☐ Supervising staff

5. Tenure in current higher education institution:
- ☐ <5
- ☐ 6-10
- ☐ 11-15
- ☐ >16

Collinearity diagnostics procedure No.1

Dimensions	Test1 Tolerance	Test1 VIF	Test2 Tolerance	Test2 VIF	Test3 Tolerance	Test3 VIF	Test4 Tolerance	Test4 VIF	Test5 Tolerance	Test5 VIF	Test6 Tolerance	Test6 VIF	Test7 Tolerance	Test7 VIF	Test8 Tolerance	Test8 VIF	Test9 Tolerance	Test9 VIF	Test10 Tolerance	Test10 VIF	Test11 Tolerance	Test11 VIF
FAIRT			.119	8.384	.118	8.486	.123	8.160	.116	8.640	.119	8.408	.128	7.782	.116	8.595	.116	8.637	.117	8.540	.149	6.703
TEAMW	.248	4.025			.246	4.072	.241	4.148	.242	4.140	.261	3.827	.241	4.148	.242	4.138	.241	4.149	.243	4.120	.286	3.494
ACADE	.256	3.908	.256	3.906			.285	3.514	.258	3.880	.252	3.968	.251	3.980	.262	3.812	.251	3.980	.254	3.937	.252	3.965
STRATM	.133	7.493	.126	7.933	.143	7.006			.126	7.927	.126	7.935	.127	7.853	.130	7.710	.127	7.888	.127	7.901	.134	7.442
JOBS	.324	3.088	.324	3.082	.332	3.012	.324	3.086			.340	2.940	.331	3.024	.329	3.035	.324	3.083	.331	3.019	.328	3.047
SUPR	.418	2.391	.441	2.266	.408	2.450	.407	2.457	.428	2.339			.409	2.443	.407	2.455	.412	2.425	.408	2.450	.407	2.457
COMPB	.262	3.817	.236	4.237	.236	4.238	.238	4.194	.241	4.150	.237	4.214			.245	4.075	.236	4.238	.243	4.122	.236	4.230
TRAIND	.241	4.141	.241	4.152	.251	3.988	.247	4.045	.244	4.091	.240	4.160	.250	4.003			.241	4.143	.241	4.152	.240	4.164
WORKLB	.450	2.223	.450	2.224	.450	2.224	.452	2.211	.450	2.220	.456	2.195	.450	2.224	.452	2.213			.499	2.003	.456	2.191
WORKC	.274	3.653	.272	3.671	.273	3.657	.272	3.681	.277	3.613	.271	3.686	.278	3.596	.271	3.687	.300	3.329			.272	3.679
ORGC	.120	8.364	.110	9.081	.093	10.744	.099	10.113	.094	10.638	.093	10.784	.093	10.762	.093	10.784	.094	10.625	.093	10.732		
a.	FAIRT		TEAMW		ACADE		STRATM		JOBS		SUPR		COMPB		TRAIND		WORKLB		WORKC		ORGC	

a. Dependent Variable

Collinearity diagnostics procedure No. 2

Dimensions	Test1 Tolerance	Test1 VIF	Test2 Tolerance	Test2 VIF	Test3 Tolerance	Test3 VIF	Test4 Tolerance	Test4 VIF	Test5 Tolerance	Test5 VIF	Test6 Tolerance	Test6 VIF	Test7 Tolerance	Test7 VIF	Test8 Tolerance	Test8 VIF	Test9 Tolerance	Test9 VIF	Test10 Tolerance	Test10 VIF	Test11 Tolerance	Test11 VIF
FAIRT			.125	8.020	.125	8.031	.132	7.585	.123	8.159	.125	7.971	.138	7.245	.123	8.136	.123	8.158	.124	8.065	.149	6.703
TEAMW	.254	3.933			.255	3.922	.250	4.001	.251	3.989	.270	3.709	.250	4.003	.250	3.999	.250	4.006	.252	3.976	.286	3.494
ACADE	.256	3.908	.257	3.892			.286	3.497	.258	3.872	.252	3.963	.252	3.976	.262	3.810	.252	3.976	.254	3.933	.252	3.965
STRATM	.137	7.304	.127	7.856	.145	6.919			.127	7.853	.127	7.864	.129	7.771	.131	7.658	.128	7.824	.128	7.833	.134	7.442
JOBS	.326	3.067	.327	3.058	.334	2.991	.326	3.065			.342	2.926	.333	3.005	.331	3.019	.326	3.064	.333	3.002	.328	3.047
SUPR	.417	2.399	.439	2.276	.408	2.451	.407	2.458	.427	2.342			.409	2.446	.407	2.456	.412	2.428	.408	2.452	.407	2.457
COMPB	.265	3.776	.235	4.255	.235	4.259	.238	4.207	.240	4.167	.236	4.236			.244	4.092	.235	4.258	.242	4.138	.236	4.230
TRAIND	.241	4.148	.241	4.157	.251	3.992	.247	4.055	.244	4.095	.240	4.162	.250	4.002			.241	4.146	.241	4.155	.240	4.164
WORKLB	.451	2.215	.451	2.218	.451	2.218	.453	2.206	.452	2.213	.456	2.191	.451	2.218	.453	2.208			.501	1.997	.456	2.191
WORKC	.274	3.653	.272	3.672	.273	3.660	.271	3.684	.276	3.617	.271	3.690	.278	3.596	.271	3.691	.300	3.332			.272	3.679
ORGC_sqrt	.139	7.172	.131	7.623	.115	8.718	.121	8.269	.115	8.674	.114	8.736	.115	8.682	.114	8.738	.116	8.635	.115	8.691		
a.	FAIRT		TEAMW		ACADE		STRATM		JOBS		SUPR		COMPB		TRAIND		WORKLB		WORKC		ORGC_sqrt	

a. Dependent Variable

Descriptive statistics for OAES items on Importance scale by Generation

Dimensions			Generation Y			Generation X			Baby Boomers			Traditionalists		
Items			Mean	SD	R	Mean	SD	R	Mean	SD	R	Mean	SD	R
Organizational Culture	1.	Work environment is collegial.	9.03	1.471	39	9.07	1.471	35	9.00	1.448	36	8.95	1.495	29
	2.	Good atmosphere prevails in my institution.	9.17	1.430	22	9.38	1.059	6	9.18	1.192	12	9.08	1.468	16
	3.	Openness and sincerity is encouraged in my institution.	8.42	1.739	64	8.58	1.659	61	8.52	1.557	60	8.55	1.535	57
	4.	Ethical standards are followed.	9.02	1.426	41	9.24	1.320	20	9.17	1.363	13	9.09	1.454	13
	5.	High quality performance culture is being created in my institution.	9.09	1.431	33	9.13	1.277	30	9.00	1.334	37	8.90	1.433	35
	6.	Conflicts are harmonized and resolved effectively.	9.01	1.377	44	9.15	1.426	25	9.11	1.231	24	8.84	1.597	40
	7.	Environment is community-friendly in my institution.	8.50	1.951	59	8.69	1.782	57	8.56	1.726	57	8.71	1.500	53
	8.	Constructive criticism is appreciated.	8.66	1.633	55	8.69	1.739	56	8.73	1.587	53	8.72	1.649	52
	9.	Informal communication is frequent.	8.11	2.058	67	8.32	1.745	65	8.29	1.813	66	8.17	1.943	65
	10.	Creativeness and initiative is fostered in my institution.	8.95	1.440	46	9.20	1.153	21	9.15	1.184	19	9.05	1.418	17
	11.	Academic freedom is valued.	9.00	1.377	45	9.08	1.406	34	9.06	1.456	31	8.97	1.522	25
Fairness and Trust	12.	Remuneration system is clear and objective.	9.11	1.574	30	9.06	1.665	36	9.01	1.497	34	8.92	1.615	31
	13.	Procedures promoting transparency are developed.	9.16	1.343	24	9.28	1.350	15	9.20	1.257	10	8.96	1.464	27
	14.	Equal opportunities are ensured.	9.09	1.477	32	9.25	1.180	19	9.07	1.218	30	8.97	1.524	26
	15.	Clear standards for promotion and tenure are articulated.	9.14	1.362	27	9.13	1.493	26	9.16	1.238	17	8.98	1.505	24
	16.	Promises are kept in my institution.	9.34	1.198	8	9.40	1.189	5	9.21	1.130	9	8.99	1.344	23
	17.	I have trust in my institution's leadership.	9.02	1.495	40	9.11	1.363	32	9.10	1.196	27	9.13	1.126	8
	18.	Decisions are made without bias.	9.07	1.402	34	9.18	1.393	22	9.12	1.203	23	8.91	1.571	33
	19.	Employees are treated fairly.	9.30	1.110	13	9.40	1.116	4	9.41	.899	2	9.19	1.171	5
	20.	Words match actions in my institution.	9.24	1.144	19	9.42	1.133	3	9.09	1.366	29	9.01	1.444	20
Teamwork	21.	I can rely on my colleagues.	9.26	1.129	16	9.13	1.352	29	9.00	1.319	35	9.03	1.450	18
	22.	I enjoy working alongside like-minded people.	8.48	1.698	60	8.61	1.776	58	8.56	1.779	58	8.38	1.793	61
	23.	I have good relationships with my colleagues.	9.31	1.196	12	9.31	1.102	12	9.26	1.040	5	9.23	1.135	3

	24. My colleagues are helpful and supportive.	9.32	1.133	10	9.29	.978	13	9.13	1.169	21	9.20	1.128	4
	25. Effective internal communication is developed.	8.75	1.636	53	8.89	1.738	48	8.78	1.533	52	8.54	1.738	58
	26. Cooperation is promoted to get the jobs done.	8.45	2.010	61	8.46	2.076	63	8.48	2.062	63	8.37	2.047	62
	27. Employees share their ideas and knowledge.	8.64	1.665	57	8.58	1.781	60	8.52	1.718	62	8.64	1.654	54
Academic Environment	28. High study quality is pursued	9.36	1.253	7	9.32	1.530	10	9.23	1.391	7	9.08	1.669	15
	29. My peers are the best scientists and lecturers.	9.05	1.468	35	9.18	1.437	23	9.19	1.250	11	9.03	1.363	19
	30. Students are good and motivated in my institution.	9.03	1.602	38	9.01	1.653	40	8.93	1.552	40	8.79	1.768	45
	31. Innovative training methods are encouraged in my institution.	8.87	1.703	50	8.75	1.876	52	8.83	1.627	46	8.88	1.594	36
	32. A favorable research environment is created in my institution.	9.26	1.358	15	9.08	1.700	33	9.13	1.501	22	8.83	1.750	42
Strategic Management	33. Organizational, departmental and employee integrity is ensured.	8.12	1.898	66	8.27	2.114	66	8.44	1.773	65	8.24	1.941	64
	34. Policies, procedures and responsibilities support strategy implementation.	8.66	1.605	54	8.74	1.706	53	8.80	1.641	49	8.76	1.541	48
	35. Sustainability and corporate social responsibility are fostered.	8.45	1.867	62	8.71	1.756	55	8.79	1.615	51	8.54	1.711	59
	36. Employee participation in decision making is promoted.	8.44	1.854	63	8.46	1.953	64	8.52	1.730	61	8.33	1.895	63
	37. University is building positive reputation and image.	9.11	1.588	29	8.97	1.591	42	9.10	1.627	26	9.11	1.649	10
	38. A clear strategy and direction is set and aligned with vision and values in my institution.	8.79	1.663	51	8.92	1.552	46	8.96	1.307	38	8.73	1.670	50
Job Satisfaction	39. I like my job and find it interesting.	9.60	.914	1	9.50	1.224	1	9.43	1.144	1	9.28	1.290	2
	40. My job is intellectually challenging.	9.15	1.575	25	9.02	1.696	38	9.11	1.451	25	9.10	1.420	11
	41. I can realize my ideas and potential.	9.32	1.215	11	9.02	1.580	39	9.09	1.429	28	8.84	1.574	41
	42. I know what is expected of me at work.	9.02	1.455	42	9.12	1.354	31	8.87	1.621	42	8.91	1.309	32
	43. My job meets my experience and abilities.	9.38	1.059	5	9.45	1.000	2	9.32	1.210	3	9.31	1.063	1
	44. My job feels meaningful.	9.16	1.334	23	9.31	1.167	11	9.16	1.311	16	9.01	1.359	21
	45. I feel that I and my efforts are valued.	9.05	1.597	36	8.91	1.823	47	8.85	1.735	45	8.83	1.711	43
	46. I have career opportunities in my institution.	9.13	1.512	28	8.84	1.673	51	8.86	1.477	44	8.62	1.659	55

Category	Item												
Supervisor Relationship	47. My supervisor gives me feedback about my progress.	9.03	1.526	37	9.04	1.547	37	8.66	1.784	56	8.79	1.700	46
	48. My supervisor listens to me and takes my opinion into account.	9.43	1.107	3	9.35	1.122	9	9.24	1.247	6	9.17	1.194	6
	49. My supervisor supports me.	9.37	1.060	6	9.28	1.226	16	9.15	1.147	20	9.09	1.499	12
	50. I have trust in my supervisor.	9.26	1.412	17	9.17	1.522	24	9.16	1.507	18	9.15	1.337	7
	51. My supervisor gives me guidance.	9.44	1.154	2	9.25	1.383	18	9.17	1.440	15	9.11	1.526	9
Compensation and Benefits	52. Effective employee incentive scheme is functioning in my institution (for loyalty, achievement, etc.).	8.92	1.613	48	8.95	1.784	45	8.79	1.627	50	8.56	1.886	56
	53. Additional benefits are offered to motivate employees.	8.52	1.860	58	8.59	1.697	59	8.45	1.775	64	8.03	2.004	67
	54. I am getting paid enough for my job.	9.14	1.507	26	8.96	1.839	43	8.81	1.953	47	8.75	1.873	49
	55. The best employees are appreciated in my institution.	9.27	1.184	14	9.35	1.232	8	9.17	1.217	14	9.09	1.446	14
	56. Employees' performance results and competencies are recognized and rewarded.	9.40	1.056	4	9.28	1.318	17	9.29	1.198	4	8.95	1.614	28
Training and Development	57. I receive enough training to do my job in the best manner.	8.90	1.491	49	9.13	1.422	27	8.71	1.784	55	8.73	1.663	51
	58. I have opportunities for personal growth in my institution.	9.19	1.451	21	8.96	1.691	44	8.86	1.655	43	8.99	1.429	22
	59. Employee training and development meet my institution's aims and objectives.	8.65	1.834	56	8.57	2.004	62	8.53	1.934	59	8.48	1.962	60
	60. Talents are nurtured in my institution.	8.78	1.733	52	8.86	1.499	49	8.73	1.685	54	8.87	1.492	37
Work-Life Balance	61. I have enough flexibility in my work.	8.95	1.678	47	8.72	1.901	54	8.80	1.771	48	8.80	1.604	44
	62. I can harmonize my needs in work and personal life.	9.33	1.388	9	9.29	1.249	14	9.02	1.367	33	8.91	1.565	34
	63. My work load is manageable.	8.16	2.334	65	8.00	2.342	67	8.10	2.199	67	8.10	2.040	66
Working Conditions	64. I am provided with all necessary equipment and resources to do my job well.	9.24	1.379	18	9.00	1.710	41	9.03	1.574	32	8.93	1.671	30
	65. Safe and comfortable working environment is created in my institution.	9.11	1.479	31	9.13	1.517	28	8.88	1.596	41	8.86	1.815	39
	66. Consistent administrative support is provided to faculty members.	9.21	1.276	20	9.37	1.091	7	9.22	1.056	8	8.87	1.502	38
	67. I am not experiencing stress in my work.	9.01	1.478	43	8.85	1.591	50	8.93	1.510	39	8.78	1.627	47

Rita BENDARAVIČIENĖ

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