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**“Human Resource Management in Assuring Organizational Effectiveness: A Case of Higher Education Institutions in Kazakhstan".**

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**DEDICATION**

This work is dedicated to my parents, Mr. Alussen Gassanov and Mrs. Gunash Gassanova, who always paid special attention to my education and gave me unlimited motivation to move toward my goals. You were the main support during my academic years, and your faith is one of the driving forces behind my achievements. You have always been there, both morally and financially. Your love and prayers have helped me overcome numerous trials in my life, and I am aware of my debt to you. Therefore, I want to thank you sincerely for everything. You were more than just my parents but also my friends with whom I could openly share everything. I would not be where I am now without your support and prayers. I pray that God will continue to bless you, and I will always be grateful for your guidance and unwavering support.

Dad and Mum, be proud of me! I am a PhD candidate now!

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**NORMATIVE REFERENCES**

The references to the following standards were used int his dissertation uses:

* Strategy “Kazakhstan-2050”: New political course of the established state” (Astana, December 14, 2012).
* Decree of the President of the Republic of Kazakhstan No. 636 dated February 15, 2018, "On the Approval of the Strategic Plan for the Country's Development until 2025" - "Third Modernization of Kazakhstan: New Opportunities for Citizens and Quality Growth";
* Address of the President of the Republic of Kazakhstan to the people of Kazakhstan "Growth of Well-being of Kazakhstani People: Income Increase and Quality of Life" dated October 5, 2018;
* Address of the President of the Republic of Kazakhstan to the people of Kazakhstan on January 31, 2017, "Third Modernization of Kazakhstan: Global Competitiveness";
* State Program for the Development of Education and Science of the Republic of Kazakhstan for 2016-2019, approved by Decree of the President of the Republic of Kazakhstan No. 205 dated March 1, 2016;
* State Program "Digital Kazakhstan" approved by the resolution of the Government of the Republic of Kazakhstan No. 827 dated December 12, 2017.

**DEFINITIONS OF TERMS**

The term below along with their respective definitions were used in this dissertation.

***Bibliometric review*** - а particular kind of literature review aimed at evaluating and assessing the body of literature. It requires using bibliometric techniques to spot emerging patterns and deficiencies in study findings.

***Bibliometrix*** - a tool for bibliographic analysis through the evaluation of bibliographic data from various literary sources such as Web of Science, Scopus, and PubMed, to improve work quality and relevance.

***Citation analysis*** - evaluating the importance and relevance of the study, which includes the study of references to a particular work in various literary sources. It is used to reveal the topic of scientific work, compare the results obtained, and improve the quality of the work as a whole.

***Co-citation analysis*** - a method for highlighting the relationship between two publications by their joint citation in subsequent papers. Publications are considered to be related if other authors jointly cite them.

***Co-occurrence analysis***- a method used to detect occurrences of overlap between terms or keywords in a work through the study of the frequency of occurrence and regularity of occurrence.

***Empirical review*** - а type of literature review that analyzes and draws conclusions from previous studies with data from a given experiment or observation.

***Employee effectiveness -*** refers to the extent to which an employee contributes to the success of the organization through his or her performance, productivity, and behavior.

***Human resource management*** - the practice of effectively providing the organization with human resources with a certain skill level, creating facilities to maintain a healthy work environment, and setting strategies that encourage employees to achieve organizational goals in the right period.

***Human Resource Management practices***- procedures and actions on the part of senior management related to the planning, recruitment, use, and development of employees of the company, with the assessment and compensation of their work.

***Management*** - the process of controlling, distributing, and planning resources to complete planned tasks, developing and creating effective systems for achieving the goals of companies, and motivating employees.

***Organization for Economic Co-operation and Development Nations***- refers to the 38 nations that make up the OECD as of September 2021.

***Organizational effectiveness*** - the extent, to which an organization efficiently uses resources, maintains a healthy and productive work environment and achieves its goals and objectives.

***Sustainable growth -*** refers to the ability of educational institutions to expand and develop in ways that are economically viable, socially responsible, and environmentally friendly. Key aspects include Economic Sustainability, Social Sustainability, Environmental Sustainability, and Strategic Planning.

***SWOT analysis*** - method of comprehensive assessment of factors that directly and indirectly affect the business by identifying both the strengths and weaknesses of the organization and the opportunities and threats for the company.

***The Conservation of resources theory*** - a theory focusing on the study of the relationship between the availability of resources and the performance and productivity of people. It explains that people, given or having the necessary resources can easily meet their needs and achieve their goals effectively.

***The Resource-based view*** - claims that internal irreplaceable resources should receive attention since they are crucial to the development of the company, significant, and vital to becoming one of the top companies in the market.

***The Self-determination theory*** – a theory that explores the relationship and change between motivation and personality. It lets us know why people act in a certain way, about the desire to satisfy needs and achieve planned goals.

***Theoretical review*** - a sort of literary evaluation that entails identifying various patterns, links, and points of view on a certain issue in existing scientific papers, as well as developing ideas and theories.

***VOSviewer*** - program for building a visual presentation of bibliometric networks. It also finds key works, authors, and signs of co-authorship and citation to compare and evaluate works with visual representation.

***Web of Science*** - is a sizable database of scientific publications, which includes scientific articles, and conference proceedings in various fields and disciplines. Serves for comparison, analysis, and evaluation of various scientific works.

**SYMBOLS AND ABBREVIATIONS**

**COR** Conservation of Resources Theory

**HE** Higher Education

**HEIs**  Higher Education Institutions

**HR** Human Resources

**HRM**  Human Resource Management

**MNEs**  Multinational Enterprises

**SDT** Self-determination Theory

**WHO** The World Health Organization

**PLS** Partial Least Square

**WoS** Web of Science

**OECD** Organization for Economic Co-operation and Development

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**INTRODUCTION**

***Background to the study:*** Management is the systematic control and supervision of an organization's resources. These resources are generally classified into four main categories: financial, physical, informational, and human resources (HR). Since the successful use of resources largely depends on the quality of HR, this definition emphasizes the importance of optimizing HR as a key factor in achieving organizational effectiveness [1]. This approach is closely aligned with the aim of our research and serves as the foundation for the theoretical framework.

Many scholars have described organizational effectiveness, as an economic category in management [2]. Among them, we could note such scholars as Jacobsen et al.[3] who defined organizational effectiveness as the ability of an organization to achieve its goals and objectives (a), uses resources effectively (b), and maintain a healthy and productive work environment (c). This concept is consistent with the International Labor Organization (ILO) definition of decent work, which focuses on achieving organizational goals, well-being and dignity of employees in a supportive work environment [4]. Therefore, organizations must adopt creative and innovative strategies to maintain their market position in a dynamic business environment. In addition, while developing these strategies, organizations should include human resource management (HRM) as an integral part of improving organizational effectiveness and one of the key strategic tools that can significantly increase the value of an organization [5].

Scholars defined HRM in several aspects. Jackson et al. noted that HRM refers to systems within HRM, including the organization's internal and external settings, and the various stakeholders who determine the organizational effectiveness [6, p.1]. Furthermore, Taylor et al. defined HRM as an integrated framework that includes the processes of recruiting, developing, motivating, and retaining personnel to facilitate the organization's effective functioning [7]. Similarly, Buller and McEvoy, described HRM as an organized collection of policies and practices intended to connect the organization's human capital with its strategic objectives and organizational goals [8, p.44].

At the same time up to our research aim, we agree with Manuti et al.[9] that HRM offers innovative ways and practices for organizations to modify the employees ‘attitudes and behaviors aiming at creating a supportive environment that secures a high degree of engagement and dedication towards attaining organizational goals. Moreover, organizations are progressively forming specialized HRM departments viewing them as key drivers for organizational success and competitive advantage [10]. Empirical investigations indicate that HRM practices may assist organizations in recruiting and retaining a highly talented workforce, promoting equal opportunities for advancement, and fostering a creative and flexible work environment [11]. Therefore, implementing the right HRM practices and policies is critical for establishing a flexible and innovative corporate culture ultimately enhancing organizational effectiveness [12].

During the last decades, HRM has emerged as a dynamic research field with a notable focus on performance implications. Darmawan [13] in his research conclude that result-oriented organizations must implement HRM strategies, thereby underscoring its critical role in boosting organizational effectiveness. As confirmation and more deep reflection of this issue, the research of Otoo [14] underscores the crucial relationship between organizational effectiveness and employee effectiveness. Employee effectiveness refers to how employee contributes to the organizational success through his or her performance and behavior [15, p.109]. When employees perform their jobs satisfactorily, it contributes to overall productivity, quality of products and services, customer satisfaction, and ultimately, the organization's success. Thus, monitoring and managing employee performance is essential for maintaining organizational effectiveness.

Furthermore, organizations can improve their competitiveness in the market by focusing on employee performance and development. This requires a strategic approach to talent management, including performance appraisals, training and development programs, clear information sharing, and recognition and reward systems [16]. The above involves ensuring employees perform well and are continually developed and trained for current and potential future roles. While roles are tight to job specifications and job descriptions, they extend beyond these formal definitions. Roles encompass social expectations and behavior associated with positions that are crucial for maintaining consistent behavior and organizational effectiveness.

Employee performance refers to the achievement of a certain level of excellence in in fulfilling job duties and responsibilities [17, p.11]. In-role performance, as a key component of overall employee performance, concerns how well employees meet the expectations associated specifically with their assigned roles in the organization. This concept is based on Role theory, which emphasizes that roles are shaped by social and organizational norms and serve as the basis for guiding employee behavior [18].Therefore, the adoption and implementation of the right HRM practices aimed at enhancing employee in-role performance is a key factor for achieving organizational effectiveness.

Existing literature provides empirical support for the significant impact of HRM practices on employee performance. Collins [19] emphasized RBV theory and noted that successful firms must view their HR as their most valuable asset, thereby managing that people must be a greater priority than managing capital or technological issues. Scholars contend that people within organizations can be seen as a unique and challenging source of competitive edge [20]. In light of these circumstances, HRM practices become important to create intelligent and flexible structures through procedures and policies targeted at cultivating a qualified workforce [21]. Consequently, it becomes crucial to prioritize employees' outcomes by addressing their needs, thereby positively influencing organizational effectiveness.

Overall, HRM and its performance implications have received extensive research attention by academics from different nations with a substantial body of research conducted in developed countries, particularly Europe and the United States [22]. However, despite the literature wealth in this domain, the of comprehensive investigations examining HRM practices - employee performance link in rapidly developing and expanding economies, such as Kazakhstan is noticed[23]. Moreover, the boundaries of the HRM field have been mainly focused on multinational enterprises (MNEs); yet, alternative research has indicated that HRM also constitutes an invertible element within higher education (HE) [24].

***Relevance of the research topic***: HE plays a central role in a country's economic development and is considered as an indicator of competitiveness in rapidly evolving globalization [25]. Scholars argue that opening up opportunities for national growth can be achieved by offering high quality services by the side of Higher Education Institutions (HEIs) [26]. The growth in the number of HEIs, and the increase in students ‘enrollment can illustrate the importance of this sector. As of 2023, there are 112 HEIs in Kazakhstan, including universities, academies, and institutes, with 592,700 students [27]. Graduate qualifications are closely related to the nation competitiveness. Preparing qualified graduates contributes to improved labor market outcomes and stimulates innovation. This is explained by the fact that qualified graduates contribute to the labor market by occupying it [28]. Research shows that more than 75% of graduates find employment within the first year after graduation, indicating a high level of graduate integration into the economy. These figures indicate the significant role of HE in preparing professionals for the national labor market [29].

The HE sector has become oversaturated and focused on the business environment; therefore, it is strongly committed to the sustainable flow of government funding. As a result, HEIs must attract, develop, and maintain an energetic workforce to support organizational effectiveness [30]. Organizational effectiveness in HE refers to the extent to which HEIs achieve their goals, use resources effectively, and provide high-quality education and services to students and other stakeholders. In turn, knowledge that improves students' qualifications directly depends on HEIs employee effectiveness. It worth to note that, the concepts of organizational effectiveness and employee effectiveness are closely related but distinct in meaning. According to Deem et al. [31] refers specifically to how well employees perform their core duties, thereby focusing on their in-role performance and contributing to the institution's overall success. In the HEI context, employee effectiveness is measured in terms of teaching quality, and student interaction.

The global COVID-19 pandemic has significantly affected HEIs worldwide, posing serious health, finance, and social challenges. The spread of the virus compelled HEIs to switch from offline form of education to distance learning [32]. The World Health Organization (WHO) has highlighted the increased concern regarding the negative consequences of COVID-19 on society, including social isolation, economic instability, and social distancing [33]. As a result, the mental health and well-being of both students and instructors have suffered, leading to a notable adverse impact on their performance [34]. Scholars have found that about 67% of teachers in Kazakhstan suffered from stress due to increased workload, which has negatively affected the quality of teaching. More than 50% of students reported a decrease in motivation and productivity during distance learning [35].As HEIs gradually return to their normal lives, the post-pandemic era offers new perspectives on the interplay between well-being and performance [36]. There is a growing need for instructors to seek practical ways to navigate professional duties, given the possible challenges such as fluctuating work demands, job instability, and increased workloads [37]. In other words, the existing working conditions and development of instructors do not sufficiently reveal their potential.

Existing research highlights that occupational stress among university teaching staff is increasing, due to additional responsibilities including, superior performance, and high productivity [38]. This radically changes the requirements for teaching staff competencies. In addition to classical skills, instructors must meet constantly changing standards. In this regard, concepts such as burnout, unstable mental state, and unstable work-life balance have begun to spread, significantly reducing teaching quality. Sabagh et al. [39] noted that university teaching staff with higher workloads have higher rates of burnout accompanied by decreased productivity. Thus, teaching staff play a key role in HEIs' organizational success. In this study, the term "teaching staff" refers to individuals responsible for delivering educational content to students, including professors and lecturers.

Due to COVID-19, the effectiveness of HRM practices for HEIs teaching staff remains the most crucial area to explore. Taking into account the demand for the HEIs teaching staff's ability to quickly adjust their professional activity to the new learning conditions including the use of smart technologies‖, mastering new materials, the transformation of acquired knowledge, the use of HRM practices in academic sector are useful and necessary[40]. Education quality primarily depends on the teaching staff quality and their performance. Thus, to stabilize the overall work environment in HEIs, it is important to implement advanced HRM practices, including improving the working conditions of teachers, developing their creativity and productivity, which, in turn, contributes to organizational effectiveness.

***The research topic’ degree of development:*** Over the past 40 years, numerous theoretical and empirical studies have attempted to conceptualize, operationalize HRM in the HE context, supporting the idea that implementing HRM practices enhances employees‘ motivation, skills, behavior, and performance thereby providing companies with an operational edge [41]. However, there is a lack of quantitative studies, effectively linking theoretical frameworks with practical contributions. The existing knowledge base is mostly concentrated on developed nations, limiting the applicability of their findings to the context of developing countries such as Kazakhstan. The education sector in Kazakhstan faces unique challenges associated with transitioning from the Soviet system to a more market-based management model [42]. According to scholars, approximately half of the teaching staff in HEIs in Kazakhstan feel overloaded and underpaid, negatively affecting their professional motivation and productivity [43]. In the context of insufficient digitalization and the use of outdated pedagogical methods, HRM practices aimed at developing professional skills and supporting the well-being of employees remain ineffective. This proves that HRM practices in Kazakhstani universities require deeper study and adaptation. Kudaibergenov et al., found that approximately 20% of universities in Kazakhstan had implemented modern HRM practices, such as regular performance appraisals and employee training and development programs. Such differences highlight the need for further research in the field of HRM, especially in the context of post-Soviet countries with unique social and economic conditions, such as Kazakhstan [44].

In addition, there has been a notable lack of research, exploring the specific mechanisms, through which HRM practices influence employee performance. Even though HRM recognized as an essential element in the HE context, directly influencing employees performance, certain researchers have raised doubt about this direct relationship, proposing the existence of personal and/or organizational characteristics that could alter or mitigate this relationship. Recognizing the significance of the pandemic on individuals, the comprehension of the HRM and employee performance link necessitates a thorough understanding of well-being through the lens of RBV theory. According to RBV, well-being is a valuable and rare resource that enhances employee performance by strengthening motivation and resilience [45]. Thus, well-being-focused HRM practices not only support employees during the crisis but also strengthen organizational effectiveness. Furthermore, taking into account the non-linear nature of well-being and its outcomes, scholars have emphasized the importance of examining constraints within this relationship [46].

In this study, we propose creativity as a limiting factor in the relationship between well-being and performance, as creativity is now considered a vital aspect of performance and competitiveness. According to conservation of resources (COR) theory, people strive to conserve and accumulate resources such to achieve their goals. In this study, creativity is considered as a moderator of the relationship between well-being and performance. It enhances the influence of well-being on employee performance by facilitating problem solving and adaptation. This is consistent with the ideas of COR, where creativity is a resource that enhances organizational competitiveness [47]. Existing research has mostly concentrated on creative performance as the sole outcome, creating ambiguity as creativity and performance should be differentiated [48]. Therefore, we propose that examining creativity as separate scientific concept can enhance understanding regarding the drivers of employee performance. Drawing on the RBV theory and the COR theory, this study is aimed to examine whether HRM practices may influence teaching staff in-role performance via the mediating role of well-being and the moderating role of creativity.

***Problem statement:*** The modern world is rapidly evolving thanks to new technologies and artificial intelligence. In the conditions of an oversaturated HE sector, HEIs need to attract students and offer high-quality services to remain competitive [49]. This includes attracting talent from the industry and implementing flexible working conditions, such as flexible schedules, competitive salaries, and extended benefits packages. HEIs must attract highly qualified faculty and adapt to new labor market realities using business-specific HRM practices [50]. Important elements include regular performance evaluations, the adoption of innovative teaching methods, cooperation with the industry and the development of management skills among teachers. However, in Kazakhstan, HRM practices in HEIs are still evolving and face several key challenges. The majority of employees in HEIs in Kazakhstan face adverse workplace conditions including low pay, insufficient recognition, poor social interactions, limited involvement in managerial processes, and ineffective internal communication- all of which harm their performance.

Scolars conclude that, the salaries of teaching staff in HEIs in Kazakhstan remain significantly below the OECD average, leading to weak motivation and performance [51]. Similarly, it was found that more than 60% of employees experience a lack of improper appraisal systems with adequate feedback mechanisms, which leads to decreased productivity and increased stress level [52]. Likewise, research shows insufficient staff development, which reduces their ability to adapt to rapidly changing standards and strategies in the educational environment [53]. Overall, the usage of modern HRM practices in Kazakhstani HEIs remains insufficient. Many teachers face overload and professional burnout.

Furthermore, the growing need for advanced HRM research in Kazakhstan is driven by the nation's strategy toward economic growth, diversification initiatives, and involvement in global trade and economic partnerships [54]. Given the growing importance of HE for Kazakhstan‘s economic growth, the need for in-depth HRM research has become critical. Kazakhstan‘s Development Strategy for 2050 emphasizes the importance of economic diversification and training of highly qualified specialists to achieve sustainable growth. However, current HRM practices inherited from the Soviet system do not meet modern market requirements, thus need to be reformed [55]. In addition, globalization and the introduction of digital technologies require teachers not only to transfer knowledge but also to develop innovative approaches to teaching, which is only possible with adequate support through HRM mechanisms [56]. In addition, the COVID-19 pandemic has exacerbated these issues, creating a need for teachers to quickly adapt to new conditions, which has increased stress and workload. Therefore, to improve the effectiveness of Kazakhstan's HEIs, targeted HRM programs aimed at maintaining teachers' well-being, improving their creativity and performance are needed. Thus, improving HRM practices and psycho-emotional support for teachers is a key step to increasing organizational effectiveness and strengthening the competitiveness of graduates in the labor market.

In light of these circumstances, this research seeks to understand how HRM practices influence teaching staff performance within the HE sector in Kazakhstan, where limited research has examined the subtle interactions between HRM practices, employee well-being, and performance. The theoretical framework is drawn from RBV, which emphasizes human capital as a strategic resource for organizational success, and the COR theory, which emphasizes the importance of preserving well-being to improve employee outcomes. Despite the growing emphasis on HRM practices globally, there is a lack of clarity regarding how these practices influence faculty performance in the unique post-Soviet context of the HE sector in Kazakhstan, where systemic challenges such as rigid hierarchical structures and limited recognition of innovative contributions persist. The research evaluates the effects of HRM along six aspects, including recognition and empowerment, competence development practices, performance appraisal, pay-for-performance, fair reward system, and information sharing. These HRM aspects contribute to the employee well-being, improvement of working conditions and stimulation of innovative thinking [57].

***The study’ goal and objectives:*** This study’s primary goal is to examine the influence of HRM practices on teaching staff in-role performance within the HEIs in Kazakhstan (both public and private), aiming to formulate recommendations that can be applied to enhance their organizational effectiveness.

The research was directed by the following ***particular objectives*** in mind:

1. To undertake a comprehensive review and analysis of the existing knowledge base related to HRM practices in HEIs.
2. To provide appropriate research methodology including tools and instruments for data gathering, sampling framework and data analysis techniques.
3. To draw conclusions based on the research results, provide recommendations and highlight directions for future research.

The **Research questions** of this study are formulated below:

1. What is the current state of HRM in the HE field, and how can it be further developed?
2. What aspects of HRM practices have the greatest impact on teaching staff performance at HEIs in Kazakhstan?
3. To what extent do HRM practices influence teaching staff performance at HEIs in Kazakhstan?

***The objects of the research*:** HRM practices inHEIs located in Kazakhstan.

***The subject of the research***: The impact of HRM practices on teaching staff in-role performance.

***Main hypothesis suggested in the research:*** There is an indirect impact of HRM practices on teaching staff’ in-role performance via the mediating effect of well-being and the moderating effect of creativity.

***Theoretical and methodological base of the study:*** This study draws on the theoretical approaches of RBV and COR theory, which provide a framework to examine the mediating role of well-being and the moderating role of creativity in the relationship between HRM practices and teaching staff in-role performance. The study used a quantitative methodology and the data were collected from the teaching staff of Kazakhstan’s HEIs (both public and private). Specialized software such as Stata, SmartPLS, and Process Macro were used to analyze the data and test the hypotheses. In addition, bibliometric tools such as VOSviewer and Bibliometrix R-tool helped to review 40 years (1981–2022) of research in the field of HRM in HE context, providing valuable insights into the research landscape and knowledge base.

**The following findings of the study are considered as features of scientific novelty:**

1. Drawing on the complementary usage of RBV and COR theory, the authors have provided a theoretical framework delineating HRM practices and employees' performance relationship and highlighting their significance as key indicators of organizational viability and stability within HEIs in Kazakhstan.
2. The conceptual framework substantiating the indirect link between HRM practices and employee performance was revealed, highlighting the mediating role of well-being and the moderating role of creativity.
3. Specific comprehensive recommendations have been proposed to assist HEI in Kazakhstan in optimizing the utilization of HRM practices and effectively achieving their organizational goals.

***Theoretical and practical significance of the research:***This research offers several valuable theoretical contributions. Firstly, with the help of bibliometric analysis, the evolution of theory and practice of HRM in HE was provided. This analysis examines key authors, collaboration patterns, evolving tendencies, and core journal. Secondly, using co-occurrence analysis four knowledge clusters were identified: Theoretical basics of HRM knowledge base, Organizational culture, Human Capital Development and Strategic HRM, contributing to the enhancement of scientific communication and serving as a directory for the processes of searching and extracting information in a given area [23]. Thirdly, by integrating the principles of the RBV and COR theory, the current study expands knowledge gained from prior research, demonstrating the indirect link between HRM practices and employee performance. Particularly the moderated mediation model was built using well-being as mediator and creativity as moderator. Finally, through the development of a visual roadmap significant knowledge gaps for advancing research were identified.

In addition, the current study provides several valuable practical contributions. Firstly, the study's findings will help HR managers effectively control and manage HR within their organizations by enhancing their awareness of their responsibilities regarding employee performance, and effectively control and manage HR within their organizations. Secondly, this study serves as source material for decision-makers to enhance their operating efficiency in the HE sector. By comprehending the academic needs within HEIs, HRM specialists can compose their strategic workforce planning, attract a talented and diverse workforce, and in turn build an innovative work environment. Furthermore, this work underscores the importance of continuous learning and professional growth. Expert in HR field will be able develop faculty members’ knowledge and skills, designing and implementing training programs that align with the institutions' goals. Finally, the findings of this research may assist policymakers, government representatives, staff, administrators, and researchers, providing insightful information in executing policies focused on improving the efficiency of the HE sector.

***Fundamental defense provisions: The following conclusions are drawn from the findings:***

1. The research design employed in this study effectively demonstrates how HRM practices influence employee performance and contribute to organizational effectiveness. This design integrates bibliometric and quantitative analysis, allowing for a comprehensive assessment of the relationship between HRM practices and performance outcomes.
2. A bibliometric approach was used to systematically analyze the existing knowledge base on HRM in the HE context. This approach enabled a detailed identification of key theories, concepts and research gaps, which played an important role in framing the study within the broader academic discourse.
3. The study reveals weaknesses in the HRM system of HEIs in Kazakhstan, highlighting the need for further research in this area. Through the application of Smart PLS and SPSS software, the study examines the association between HRM practices and employee performance, using a moderation and mediation model to display complex nonlinear interactions between these constructs.
4. The conceptual model developed in the study confirms the indirect relationship between HRM practices and employee performance, and highlights the moderating role of creativity and the mediating role of well-being in this relationship. This model provides a clear explanation of how these factors interact and influence performance outcomes.
5. Based on the empirical findings, a series of practical recommendations were developed to guide HEIs in effectively leveraging HRM practices to achieve their organizational goals, thereby enhancing overall performance and effectiveness.

***Testing and putting research findings into practice:*** The outcomes of current research hold significant relevance for scientific disciplines, particularly in the field of management and education, significantly contributing to the theoretical and practical applications of the knowledge base. By examining main concepts and variables and investigating interrelationships between them this research enhances understanding of key phenomena and lays a strong foundation for subsequent investigation in the field. This study’s results were presented at numerous domestic and international scientific conferences.

***Research findings publication***: The findings and results of the current research have been published in both national and international journals, facilitating the recognition and utilization of the study's outcomes by local and international academic communities. Particularly, three publications have appeared in journals approved by the Committee for Quality Assurance in the Sphere of Education of the Ministry of Education of the Republic of Kazakhstan. Furthermore, one paper titled “Mapping the landscape of HRM research in higher education: a 40-year review and directions for future research”, has been published in the International Journal of Educational Management in Q2 journal with a 2.4 impact factor and worldwide indexing in the Scopus database [23].

***Dissertation structure:*** The dissertation consists of several essential sections, including an introduction, four chapters, a conclusion, a reference list, and appendices. The document is 106 pages long in all. There are 19 figures and 15 tables that help with the presentation and analysis of the research findings in the dissertation. A vast list of 227 references, which shows a thorough investigation of the pertinent literature, serves as strong provision for this study. Together, these components add to the breadth and depth of the study, improving the dissertation's overall caliber and rigor.

**1 LITERATURE REVIEW AND THEORETICAL ASPECTS OF THE EXISTING KNOWLEDGE BASE**

This chapter presented in three sections with the aim to analyze the existing literature and establish a solid theoretical and conceptual foundation for the research. The first section focused on a bibliometric review and provided an overview of the current knowledge base with the aim to identify gaps and the area for further research.

The second section provided an empirical review that aims to explore HRM- performance link. It reviews empirical studies that analyze the effect of HRM practices on employee performance. This section brings together all the empirical evidences, key findings, and moves them into the literature.

The third section is a theoretical overview that provides an in-depth understanding of the main concepts involved in land studies. It includes the definition and explanation of important terms and concepts, as well as a description of the main directions and theories pursued within the framework of basic research. This section provides a conceptual structure and helps establish a theoretical basis for the study.

**1.1 Bibliometric review**

The use of bibliometric analysis in research is becoming increasingly popular [58]. Scholars have applied this method to examine and map the research output in the field of HRM [59]. This approach offers the advantage of quantitatively visualizing the intellectual structure, turning points, and dynamics of relative knowledge bases [60]. Despite existing limitations, such as a bias towards descriptiveness and a lack of theoretical depth without critical analysis, we believe that bibliometric analysis has significant value for research in the fields of HRM in HE [61, 62]. In particular, its ability to map trends, identify influential works, and discover research gaps makes it a powerful tool for advancing theoretical and practical knowledge in the field [63]. By combining bibliometric outputs with critical analysis, we aim to use its visualizations to deepen understanding of the evolving HRM in HE landscape, thereby addressing both theoretical and applied research needs. This approach ensures that bibliometric analysis will make a meaningful contribution to theory building and provide valuable practical guidance. Therefore, to shed light on the current and future status of HRM in HE, this chapter aims to discourse the first research question: What is the current state of HRM in the HE field, and how can it be further developed?

***1.1.1. Data Extraction and analysis***

Following established guidelines and the expertise of scholars, this study involved two crucial analytical approaches: performance analysis and science mapping [64]. Overall, the entire process of bibliometric analysis consists of eight sequence steps, bounded below.

***Step1 – Source Identification:*** In this step, a comprehensive literature review focused on obtaining a contemporary view of the research subject was conducted. The primary database used for collecting the necessary documents spanning forty years from 1981 to 2022 was the Web of Science (WoS). This is a comprehensive databank from Clarivate Analytics that spans a broad range of disciplines containing research of particular relevance to HE HRM context. The research works included in the dataset are sourced from diverse fields, including business, economics, applied psychology, management, industrial relations, environmental science, and public administration.

***Step2 - Research query formulation:*** The final query, with the most popular keywords such as: HRM, Human resource management, HRM in HE, HE HRM, HRM and Univers., HRM in higher education etc. It should be noted that more detailed information on research query is presented in the authors' work [23].

***Step 3 – Exclusion/Inclusion Principles:*** This analysis conducted a full text investigation of headings, abstracts, and author keywords using the "TITLE-ABS- KEY" field. The query was limited to the ―articles‖ category published in the English language and covering the period from 1981 to 2022. The filtering approach above helped us to collect exceptionally high quality and double blind peer-review documents. Furthermore, book chapters and conference proceedings that were considered to have minor contributions (defined as no peer review process, minimal citations, or limited theoretical or empirical depth) were excluded. This ensures the reliability and quality included in the research materials.

***Step4 - Data Cleaning:*** The procedures above resulted in an initial search comprising 1228 documents. Excluding duplicate records, 1224 papers were sent for screening. Additionally, additional cleaning of limited studies was implemented for journals listed in the ABS. After careful screening of record titles and abstracts against eligibility standards, the c 283 articles from the sample were excluded, either because they related exclusively to HR practices or because they investigated contexts outside of HE. As a result, the final sample consist of 945 records. Figure 1 presented a flow chart of documents used in the study.

***Step5 - Data Extracting process:*** A text file containing detailed data from 945 articles was compiled, including information such as author names, affiliations, titles, keywords, and abstracts. This data was then prepared for further analysis using VOSviewer software. Descriptive statistics and analytical tools from WoS and MS Excel were employed to interpret key characteristics of the database, including its volume, growth trajectory, paper types, geographical distribution and authors contribution.

***Step6 - Performance analysis:*** A performance analysis examining research authorship, countries of origin and journal publications was conducted. This analysis helped to identify key research players and gain insight into the research field. Employing these analytical tools, statistical evaluations to examine various aspects of the field, such as publication patterns, citation trends, and author productivity were provided.

**Identification of studies**

**Identification**

Documents removed Matching records: (n = 4)

Documents extracted from

Web of Science Database: (n = 1228)

Screened documents:

(n = 1224)

**Screening**

Records excluded (n=97)

*Reason*: Published in low-ranked journals.

Not retrieved documents:

(n =15)

Reports sought for retrieval: (n = 1127)

Eligible documents:

(n = 1112)

Excluded documents: (n=167)

*Reasons:*

Not English language;

Wrong context;

Proceedings, Notes;

Other;

.

**Included**

Documents included in analysis: (n = 945)

Figure 1 - PRISMA flow chart

Note -Compiled by the authors based on the source identification [23]

***Step7 - Science mapping***: Cluster analysis and various mapping techniques, to visually represent and explore relationships and patterns between different research areas and topics were used. These techniques facilitated the discovery and visualization of different knowledge domains within the field. Through the synthesis and classification of the literature, we were able to understand the overall landscape, composition, and intellectual structure of the research. Using these methods, we hoped to fully understand the already existing literature, identify research gaps, and contribute to the topic of HRM in HE.

***Step8 – Implications for theory and practice:*** This step, aimed at a comprehensive overview of outstanding management strategies, developed during the period under review and identified important research directions for the future.

***1.1.2 Results of performance analysis***

Among 945 documents, there were 904 articles, 31 review papers, and 10 books. A knowledge base ‘longitudinal analysis revealed several distinct stages depicted in Figure 2. The figure illustrates different three consecutive intervals. The first stage, referred to as the emergent growth stage, spanned from 1981 to 2011 and encompassed 190 studies. The second stage, from 2012 to 2017, represented a period of steady growth, during which 246 documents were published. The third stage, from 2018 to 2022, indicated an accelerating growth phase, with a remarkable publication output of 509 documents.

Figure 2**-** A development path of HRM literature in HE context.

Note – Compiled by the authors based on the performance analysis [23]

According to Figure 2, it is evident that a large number of the HRM in HE works, approximately 48%, has been published within the last three years (2018-2022). This sharp increase indicates a notable expansion of HRM in HE research into various fields of study. This expansion opens up several potential research directions. These include the identification of new exploration topics, the search of less researched areas within the field, and the exploration of innovative methods to address mainstream issues in HRM in HE research. The growing body of literature provides many opportunities for researchers to contribute to the field by expanding knowledge and addressing emerging challenges. The impact of the COVID-19 plague and the related lockdown measures may be one clarification for this increase in publications. The HE sector has been particularly affected by the pandemic, as it faced the challenge of transitioning from traditional in-person education to online platforms. This unprecedented situation necessitated the development of new teaching techniques and the adoption of advanced technologies to facilitate remote learning. The rapid shift in the education landscape and the need to address the challenges posed by the pandemic has garnered significant attention from researchers worldwide.

***1.1.2.1 Authors’ productions over time***

Through performance analysis, we conducted an examination of the scholarly productivity of top authors in the field of HRM in HE over different time periods. Figure 3 provides an overview of the performance of these leading scholars during various time intervals. Notably, several researchers, such as Decramer A, Madesis P, and Aquinis H, made significant contributions since 2000. Furthermore, the figure 3 illustrates that the active engagement of researchers in this field has predominantly emerged within the past five years. This observation confirms the growing interest among academics in exploring HRM in HE context, despite it being a quite new inquiry.

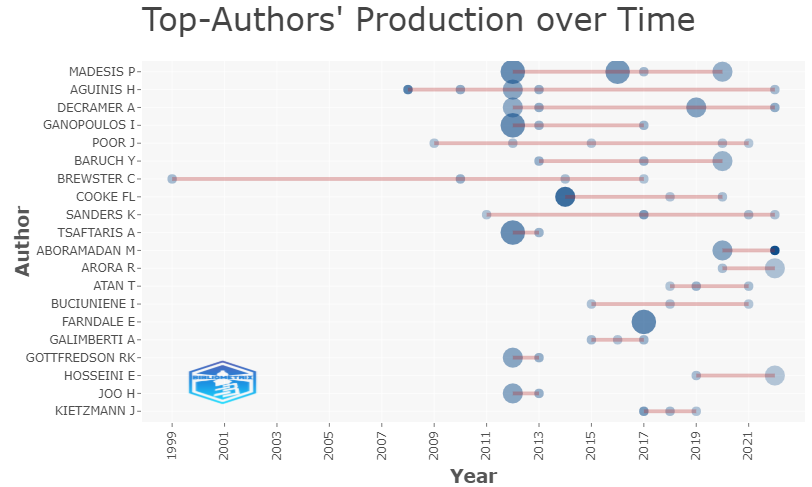


Figure 3 **–** A time path of authors’ performance.

Note- Compiled by the authors based on the performance analysis [23]

***1.1.2.2 Academic productivity of countries***

The academic productivity of countries could be assessed according to the total amount of papers announced by each country and citations acknowledged by their publications. This evaluation allows for the ranking of countries based on their academic productivity. According to Figure 4, in terms of geographical distribution, it is evident that there is a noteworthy disparity in the literature.

Researchers from the United States, Australia, Great Britain and Spain authored a substantial proportion of the studies (50%). It worth’s to note that75% of the articles in the database belong to the developed nations, while developing countries contributed only 25%. This disparity can seriously limit the applicability of finding to other context, especially in HE, where solutions and their implementation may not always be easily adapted to different socio-economic conditions. Further analysis revealed that within the 25% of literature from developing countries, a significant portion (approximately 90%) was written and published within the last three years. Notable contributors include China, India, Turkey, Malaysia South Africa and Pakistan.

Figure 4 **–** Distribution of HRM in HE research by geography.

Note- Compiled by the authors based on the performance analysis [23]

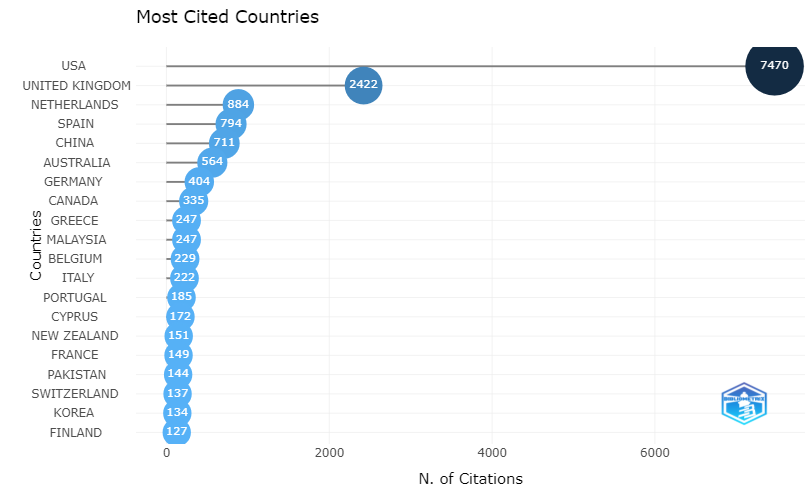


Figure 5 **-** Distribution of HRM in HE research by citations.

Note- Compiled by the authors based on the performance analysis [23]

It is important to recognize that a country’s scientific productivity may depend on various factors, including economic and political conditions. In addition, factors such as the widespread use of English as a global academic language and the size of a country’s population also play an important role. For example, countries such as the United States, the United Kingdom, Australia, and China not only invest heavily in science and technology, but also benefit from either large populations or the dominance of English in academia, which may explain their high rankings in scientific productivity.

In our analysis, we provide an overview of the broader HRM landscape in HE. We identified 15 research journals, including management and business journals, of which near 1% of relevant in our specific research area. International Journal of HRM, Business Horizons and Personnel Review are three top journals in the filed Overall, the outcomes reveled the substantial diversity of countries contributing to the field. However, it should be noted that limited research has been conducted in developing countries, which restricts the understanding of this area. This, it is crucial to address this imbalance and encourage greater participation of developing countries in the research field.

***1.1.3 Results of Science mapping***

***1.1.3.1 Influential Journals***

Citation analysis was used to identify the most influential publications and to gain insights into the dynamics of the knowledge base in HE. This method, which studies the links formed through citations between publications, is a valuable tool for academic mapping [65]. By analyzing citations, we were able to assess the impact of publications and understand the intellectual connections, including journals, authors, and specific publications. The study considered the number of citations as an indicator of the strength of publications. The results showed that 945 publications were published in 491 journals. The top ten journals, which account for approximately 2% of all journals in the field. These ten journals published almost one-third of all the publications analyzed (20% out of 945). The three core journals were the Personnel Review (21), International Journal of HRM (59), and Business Horizons (19). It is noteworthy that all ten journals included in Table 1 were ranked in Q1 and Q2 in the SCImago indicating the high quality of the Journals. These findings suggest that the majority of the studies analyzed in this research were of high caliber. Additionally, the inclusion of various journals with different perspectives in the field ensures a comprehensive coverage of diverse viewpoints.

In addition, we employed a co-citation analysis to examine the relationships and structures among the records and sources. This type of analysis helps to understand the evolving nature of the field through algorithmic procedures. It offers insights into the journals that collectively contribute to the rational foundation of specific knowledge domains [66]. In joint analysis, two publications are considered connected if both of them are cited by a third publication. This method allows for the identification of significant works and cluster within the literature. The focus of the knowledge base concentrated in 10 main sources. Upon further examination of the data, additional sources that were not previously mentioned have emerged but they have been identified as part of sources found with the help of citation analysis. This indicates that the results of both citation analysis and co-citation analysis converge and provide complementary insights. Furthermore, to present the findings in a visual format and categorize the journals, a map was created (See Figure 6). A citation network is shown with nodes denoting journals and links between nodes denoting co-citation relationships between journals. This map, which highlights journals with a significant number of articles and citations situated in the network's center, was made possible by joint citation analysis. The closeness of the nodes in the network indicates how closely related studies are in terms of their knowledge bundles, providing a visual representation of the core scientific knowledge in the field. This core can serve as a point of reference for different perspectives and further research.

In Figure 6, three main clusters have been identified: a red cluster consisting of journals from the business area, a green cluster comprising HRM journals, and a blue cluster including journals from the field of applied psychology. The key journals from each cluster are located in the middle of the map, indicating their significance, while other related journals are positioned around them. The analysis of Figure 6 highlights that the predominant focus of the field lays within specific psychology, business, and management domains. Furthermore, majority of the scholars' investigations revolve around the influence of HRM practices on the effectiveness of the organization. To obtain a clearer picture of the topic, it would be beneficial to expand the study of HRM to other high stress fields such as medicine and education.

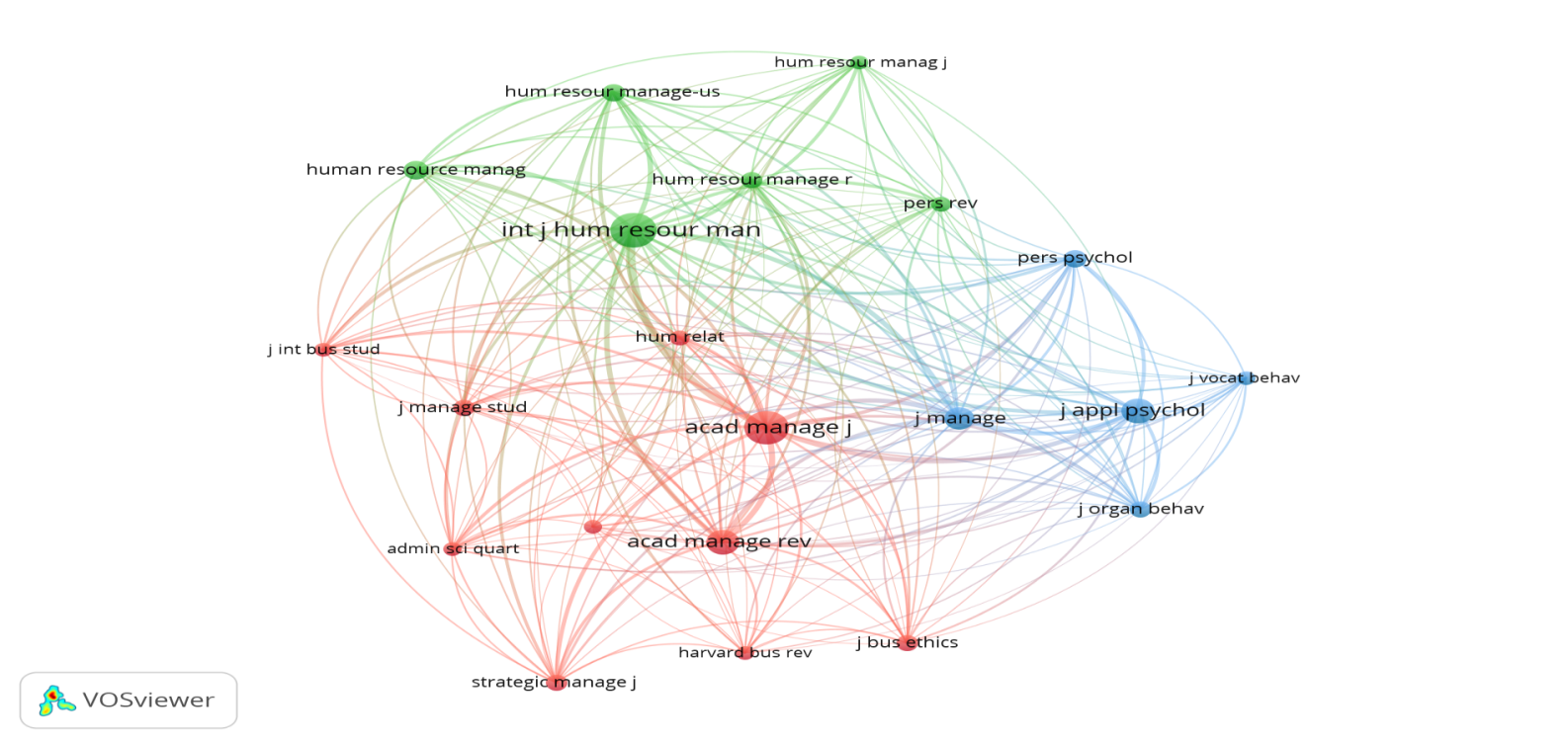


Figure 6 – A co-citation network of journals within knowledge base

*N*ote – Compiled by the authors based on the science mapping analysis [23]

***1.1.3.2 Intellectual base of the existing literature***

The co-citation and subsequent citation analyses allowed us in identification of influential scholars in the field. In particular, we noted the contributions of such distinguished authors as Harold Doty, Peter T. Ward, Rachna Shah, and Scott Snell. These scholars significantly contributed to the body of HRM knowledge base, as evidenced by their high citation counts. Their research has had a substantial impact on the field and has been widely recognized by the academic community.

Indeed, co-citation analysis serves as a valuable complement to direct citation analysis. Author co-citation analysis provides additional insights into the relationships between scholars who are cited together within similar publications. This analysis helps uncover influential documents that may not be present in the peer-reviewed database or indexed in Web of Science. Therefore, co-citation analysis provides broader standpoint on the impact of authors and their contributions, going beyond the scope of direct citation analysis alone. By examining the co-citation network, we gain a deeper understanding of the intellectual connections and influence among scholars in the field of HRM [67]. Results indicate that HRM in HE is a relatively new research field, as designated by the lower number of total citations compared to more established areas. To further explore the relationships and similarities among scholars, an author co-citation map was constructed using VOSviewer. This map encompasses 27,660 authors within the author co-citation network, which is based on the cited references found in the bibliographies of documents in the peer-reviewed database (See Figure 7).

The author co-citation map enables the visualization of similarities between scientists and clusters authors into groups. According to scholars, these clusters or "Schools of Thought" represent common research traditions or shared areas of focus within the field [68]. The map offers noteworthy comprehensions into the HRM intellectual landscape in education and the interconnections among influential scholars. The analysis of the author co-citation map has revealed the presence of four distinct clusters that constitute the knowledge base in HRM in HE (Figure 7).

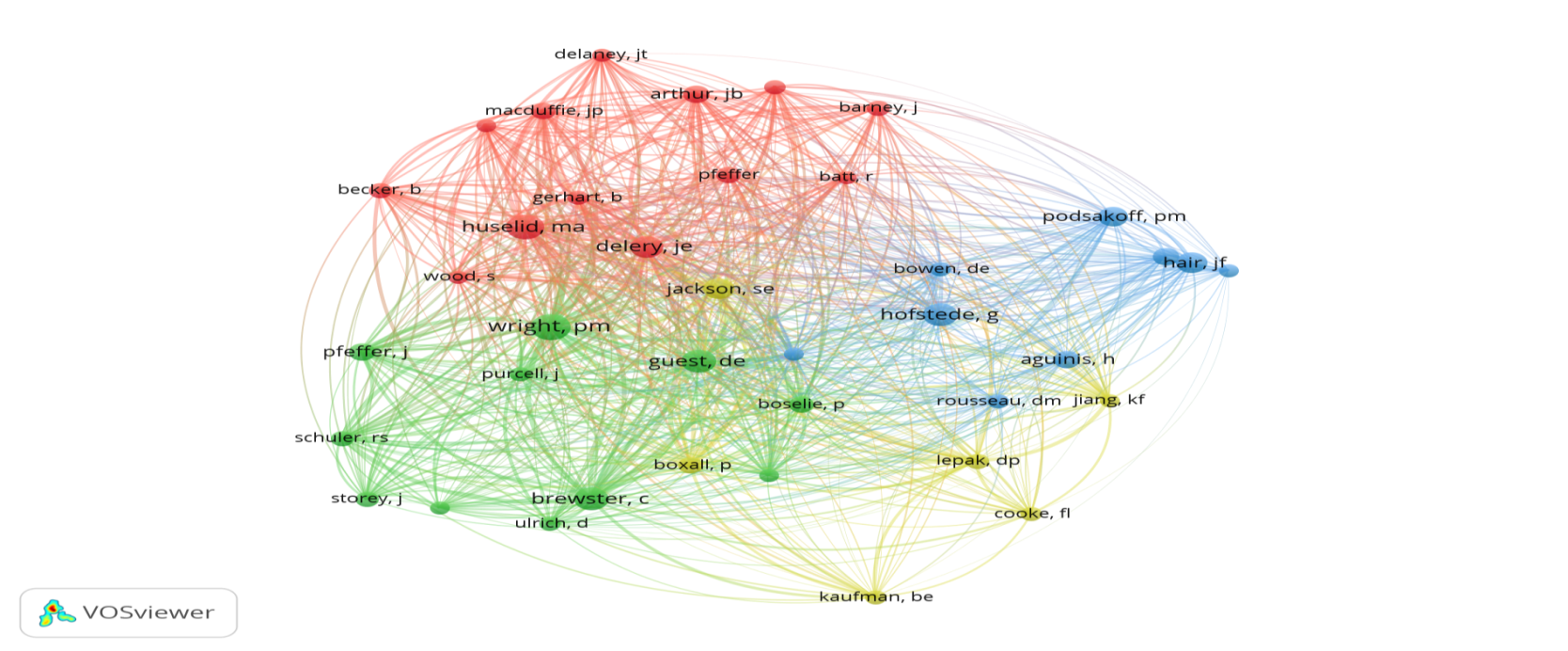


Figure 7 – Authors map based on co-citation analysis

*N*ote – Compiled by the authors based on the science mapping analysis [23]

The HRM and its theoretical perspective is the main subject of the Green Cluster focuses on and explores the application of RBV theory supporting the idea that HRM practice generate unique competencies and contribute to a firm‘s competitive advantage [69]. Key authors in this cluster are Delery and Doty, Becker and Gerhart, and Collins [70, 71]. They emphasized the significant influence of RBV on the theoretical and empirical development of HRM in adapting to changing conditions. In addition, scholars provided further insights into the RBV perspective in HRM. The authors emphasized the significance of dynamic capabilities for organizations operating in dynamic and changing environments. Organizations must develop dynamic capabilities that enable them to effectively adapt, develop, and reconfigure their competencies in response to changing market conditions and competitive pressures [72]. As a result, HEIs must recognize the need to be flexible and responsive with the aim to maintain their competitiveness in a rapidly changing educational landscape. Notable authors in this cluster include Guest D.E, Wright P.M etc.

The red cluster focuses on the strategic view of HRM exploring HRM practices and organizational performance link. Key works refer to Huselid, Arthur and Delery. These authors examined the role of HRM practices in overall business performance. HRM practices are more effective when they are targeted to enhance employees‘ motivation, such as performance appraisal procedures [73].Other scholars, highlight the importance of assessing HRM practices, especially in ―core‖ work groups, to provide a more accurate understanding of their influence on organizational results [74,75]. Similarly, they argue that the alignment between HRM and business strategies plays a critical role in enhancing organizational performance [76]. Consequently, the link between HRM and performance is expected to be stronger when there is a ―strong‖ HRM system that effectively integrates HRM practices with the overall strategic goals of the organization.

The blue cluster focuses on the organizational culture, covering a variety of organizational settings and contexts, including HE. Key scholars are Hofstede, Hare, Podsakoff, and Aquinis H, who contributed to the understanding of the outcomes of HRM practices. Furthermore, they proposed theorizing modes. The universalistic approach proves positive effect of HRM practices on organizational results in various contexts. The contingent approach emphasizes the fit between HRM practices and a specific organizational context to achieve desired outcomes. Finally, the configurational approach focuses on the configuration or combination of HRM practices that fits the organization‘s strategy and culture to produce optimal outcomes. Overall, scholars conclude that the universalistic and contingent views of HRM and have greater impact on organizational effectiveness [77]. Consequently, this cluster sheds light on the importance of HRM practices in enhancing organizational effectiveness.

The yellow cluster focuses on the competitiveness and how it can be achieved with the help of human capital and competitiveness with notable author such as Lepak, D.P, and Jackson, S. E. These authors mainly contributed to the development of HRM system that can enhance human capital with the aim to gain competitive advantage can be achieved by investing in the workforce development. Organizations must invest to the development of the knowledge, skills, and abilities of their employees. Additionally, scholars argue that an architectural approach better reflects how the HRM system affects organizational performance [78]. This approach examines the interrelations and interdependencies between different HRM practices and emphases the importance of developing a coherent and incorporated HRM system aligning with the organization’s strategic objectives. Overall, Research in the yellow cluster emphasizes the importance of HRM practices in attracting, developing and holding talented employees, and in using their skills to improve organizational performance and strengthen its competitive advantage.

***1.1.3.3 Results of co-occurrence analysis***

This type of exploration particularly employed for investigating major thematic focuses in a knowledge base. It examines the content of documents; particularly the keywords used and identifies trends and relationships between concepts [79].It examines keywords together appearing in a single document and indicate their relationship to each other. When two keywords frequently appear together in a single document, a strong relationship between the concepts suggested. This approach help researchers to gain insight into the major themes and trends in a particular field. With the help of co-occurrence analysis, scholars are able to provide time zone visualization graphs, which display the evolution of topics over time and highlight the major themes in each period. This visualization helps researchers understand the dynamics and trends in the knowledge base.

Our study involved two approaches of co-occurrence analysis including keyword frequency and temporal analysis. First approach examined the occurrence of keywords in documents to identify the most frequently used terms. To visualize the temporal aspect of keywords, VOSviewer create a temporal map, showing the weight of each keyword represented by the size of the nodes, indicating how often it was used in documents (See Figure8). The colors assigned to the nodes reflect their relative frequency, with darker colors indicating more recent use. The proximity of words and the lines connecting them on the temporal map indicates the strength of their relationships. The time map provides a visual representation of the keyword landscape, highlighting important terms and their relationships in your research area.

Four core topics were identified based on the second analysis including *HRM in HE, Performance-based HRM,* *Theoretical development of HRM, Organizational Culture [23]*. These topics represent distinct research areas within the field and highlight the focus of scholarly inquiry. Overall, these analyses provide insights into the prevalent topics and their temporal trends in HRM in higher education literature, allowing researchers to understand the key areas of the research and identify potential gaps or emerging areas of interest.

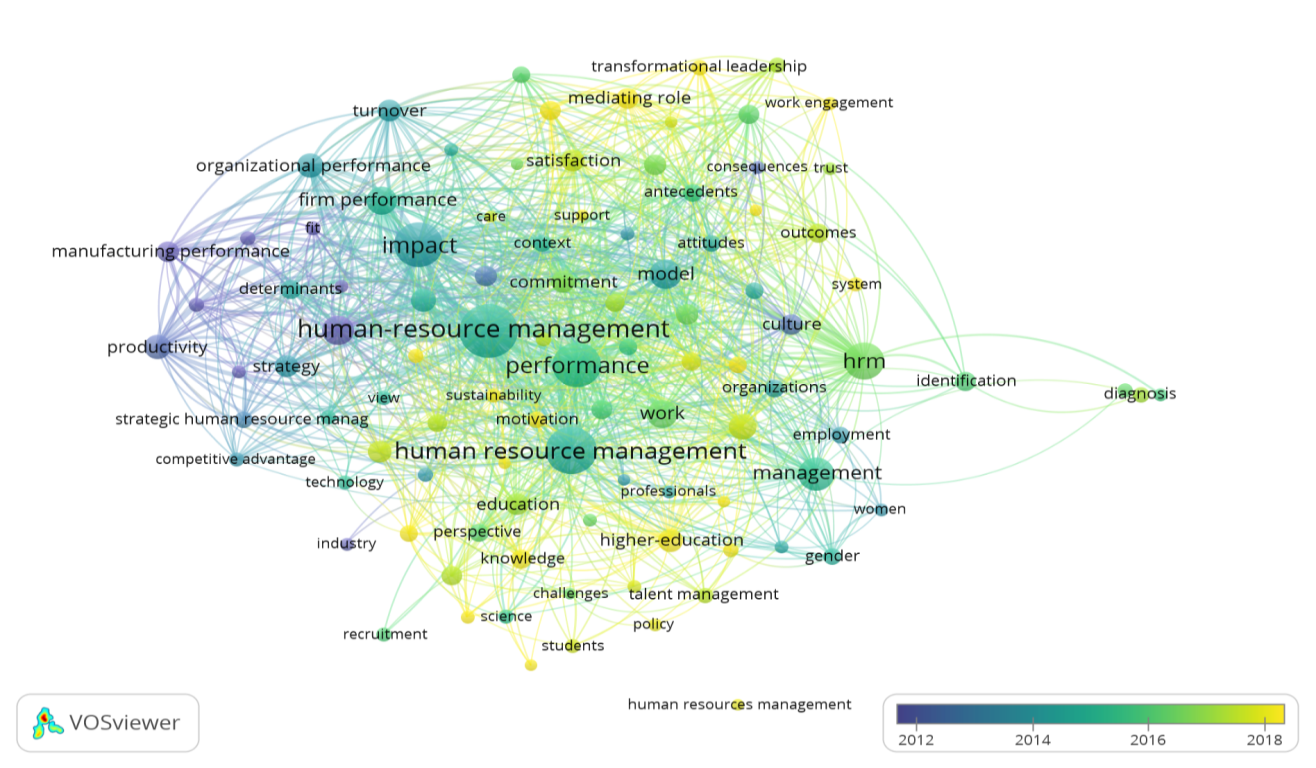
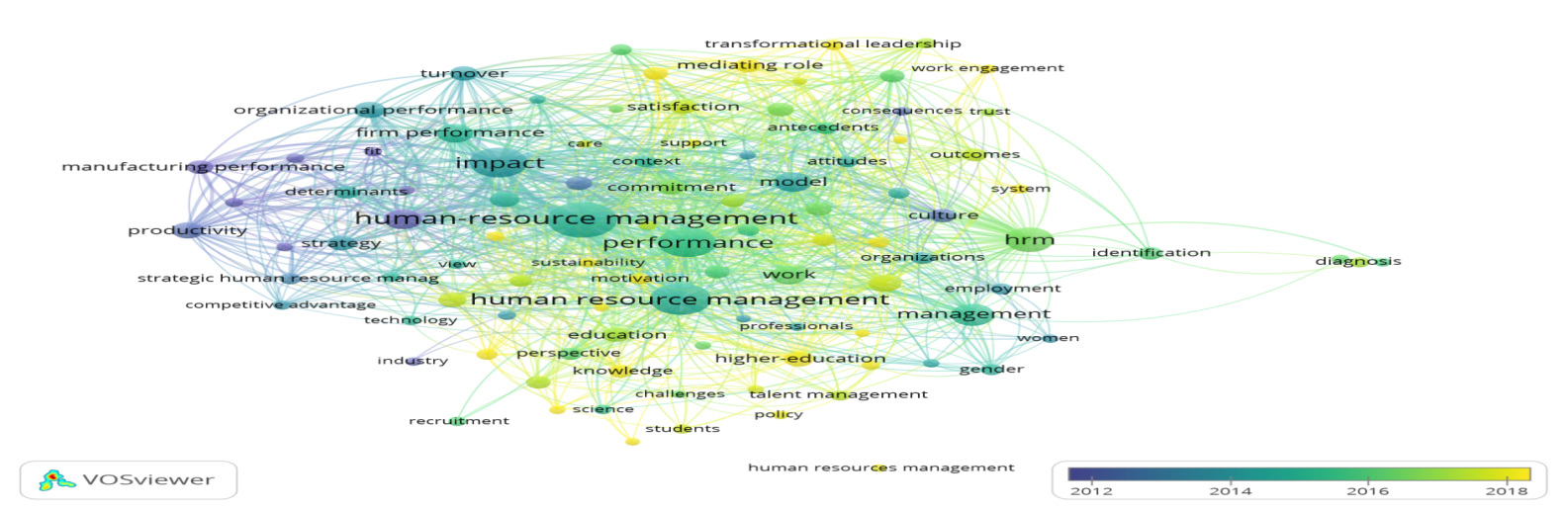
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Figure 8 - Co-occurrence map visualization by time path

*N*ote – Compiled by the authors based on the science mapping analysis [23]

The first research theme centers around investigating HRM processes itself. The period between 2000 and 2010 saw a strong emphasis on critical theories that aimed to elucidate the significance of HRM. The research center was focused on system of HRM practices rather than specific educational institutions. Key terms such as "Strategy," "Performance," "HRM," and "Performance management" were prominent in this line of inquiry. It can be inferred that recent studies have predominantly explored HRM within the context of business domains.

The research and development revolves to the second theme considering​performance-based HRM and encompasses the period 2011–2015. This cluster aim to determine the link between HRM practices and its outcomes. Scholars in this area focuses on the diverse relationships of HRM practices and its outcomes. Particularly, they were interested in the casual correlation of HRM and performance by examining moderators and mediators. Key themes explored during this period include “antecedent events,” “outcomes,” “consequences,” “mediating role.”

A noticeable shift in research focus towards organizational culture was between 2015 and 2018. During this period research was mainly focused on keywords including “organizational culture”, “corporate governance,” “strategic planning,” and “knowledge management.” Overall, existing field of HE HRM was examined in depth in terms of entrepreneurship and innovation, knowledge management, and development. Scholars delved deeper into understanding the role HRM practiced in solving gender issues highlighting the importance of incorporating gender perspectives and addressing gender issues in HE settings.

HE HRM with a focus on HR policies and practices in HEIs has emerged as one of the newest and most relevant research topics in the field, especially from 2018 till present times and after the pandemic. The most important keywords associated with this cluster include knowledge, talent management, learning, creativity, perspectives, innovation, and proactive approaches. Academics address the specific challenges in the field focusing on aspects such as acquiring new knowledge, managing talent, stimulating innovative solutions and creative ideas, and developing proactive strategies to meet the changing demands of the HE sector.

By conducting a thorough analysis of the field, we have gained valuable insights into the research conducted in this field over the past four decades. This retrospective analysis has allowed us to identify major clusters and prominent themes within the literature. Figure 9 serves as a visual representation of this analysis, displaying the overall development and logical progression of research in HRM in HE. Building on the insights gained from the bibliographic analysis, we have been able to provide a retrospective summary of the major research topics and their timeframe. Additionally, current analysis has provided a prospective outlook, highlighting potential areas for future research that can further contribute to the expanding body of HRM research.

Figure 9- Summary of HRM research in HE

*N*ote – Compiled by the authors based on the science mapping analysis [23].

***HRM and productivity*:** Researchers emphasize the importance of understanding the influence of various factors on the motivation and learning processes of human capital, as well as their impact on a firm's ability to the Covid-19 outbreak, which has posed significant challenges to the HE system. HEIs and their employees faced unprecedented and disruptive working conditions, leading to adverse effects on employee productivity and the financial stability of these institutions [80]. In light of these circumstances, we propose that future studies delve into the examination of how HRM practices and systems in HE can be organized and managed more flexibly and efficiently, specifically to address sudden and unexpected changes.

It is crucial to explore innovative approaches that enable HEIs to adapt and respond effectively to unforeseen circumstances, ensuring the well-being of their employees while maintaining operational effectiveness and financial resilience. By investigating the development and implementation of adaptable HRM strategies in the HE context, researchers can contribute to the identification of best practices, frameworks, and policies that foster resilience and enhance the ability of institutions and their employees to navigate through turbulent times. The exploration of flexible HRM practices in HE is crucial for enriching this field ultimately leading to more effective HE systems.

***Leadership dynamics:*** Recent research indicates that there is a remarkable number of available literatures related to leadership in a variety of fields, although the coverage may still be inadequate. However, it is worth noting that a considerable portion of the existing studies has predominantly concentrated on transformational leadership styles [81]. Considering the findings from studies conducted during the pandemic, and challenges faced by academic staff as they adapted to unprecedented and potentially risky situations, there is a clear need to conduct research regarding leadership styles within HEIs. The COVID-19 crisis has highlighted the importance of leadership that can effectively navigate and respond to unexpected and disruptive circumstances. The ability of teaching staff to adapt their leadership approaches and strategies to the changing demands and challenges of the education environment is critical to ensure the well-being of staff and focus on quality of education.

An adaptive educational leadership style requires leaders to be flexible in their decision-making, develop a culture of continuous learning and growth, and prioritize the well-being and development of their staff. By studying the characteristics of adaptive educational leadership, researchers and practitioners can contribute to the development of effective leadership models and frameworks that enhance the ability of HEIs to overcome crises and thrive in rapidly changing environments and face of uncertainty [82]. To explore the specific behaviors, skills, and strategies associated with adaptive educational leadership further research in this area is required. Exploration of formal and informal educational settings will help to uncover best practices that can support the growth of effective educational leaders.

***Sustainable growth development:*** HEIs are essential for sustainability and sustainable development [83]. Scholar need to examine the practices and policies of HEIs to offer quality, comprehensive and equitable education, and support for permanent learning prospects for everyone. It is essential to address any biases that may exist in education systems and create an setting where all people have equal access to educational opportunities, resources, and support, including inclusive learning environment that embrace diversity. Promoting lifelong learning opportunities for teaching staff is key to supporting the continuous personal and professional development of all stakeholders. HEI should develop educational programs and initiatives enabling learners to acquire new knowledge, skills and competencies, contributing to personal growth, employability and societal development by fostering a culture of lifelong learning in higher education institutions [84].

Future investigations should examine the usefulness of existing HRM strategies and policies, promoting inclusion, equity and lifelong learning. Analysis of successful strategies and initiatives that have been implemented in different educational contexts and their impact on different stakeholders is crucial for providing valuable insights and evidence-based recommendations for HEIs. As result HEIs with the help of right HRM practices can support the Sustainable Development Goals and a more inclusive and equitable society.

**Knowledge transfer instruments**: A notable gap exist examining knowledge-based asset in the form of human capital. Knowledge sharing, flexible arrangements, virtual workforces and other work processes including, play a key role in providing firms with a competitive advantage [85]. Future HRM research should focus understanding of innovative forms of global working practices to become the “new normal” during economic and social downturns [86]. In the educational landscape with prevent role of internationalization and globalization, effective management of human capital across borders is of paramount importance. Particularly, knowledge regarding the advantage human capital provide HEIs with a significant advantage. Furthermore, the recent shift accelerated by the COVID-19 pandemic, towards remote working and virtual collaboration, has highlighted the need to study and analyze the implications of these work formats in the context of HE [87]. Organizations seeking to adapt to changing circumstances and maintain their competitiveness should focus on the adoption of virtual workforces, knowledge sharing platforms, and flexible work arrangements.

It is essential for future investigations in HRM field to delve into the intricacies of these new work practices. Exploration of the challenges, opportunities, and practices associated with managing remote and virtual teams, knowledge sharing across borders, and flexible work arrangements can shed light on effective strategies enhancing organizational effectiveness, fostering innovation, and maintaining competitive advantage in a rapidly changing global landscape [88]. In addition, it is important to understand their impact on employee well-being, work-life balance, and career development, given the potential long-term implications of these work practices. Exploration of the individual and organizational outcomes associated with innovative work arrangements will provide valuable insights for HRM practitioners and decision makers including development of effective policies and practices promoting employee engagement, satisfaction, and productivity.

In summary, continuous research and innovation in HRM are vital for the development of the education system. Future studies shall reevaluate existing models, methodologies, and materials in HRM, resulting in an abundance of scientific publications focusing on HRM within HE context. By doing so, researchers can fill the gap in research on global human capital in HE, help HEIs to understand effective HRM practices in a dynamic global environment and examine the implications of new work processes such as virtual workforces and flexible arrangements.

***1.1.4 Summary of bibliometric review***

The main objective of bibliometric review was to conduct a bibliometric analysis of 945 research articles published in the Web of Science from 1981 to 2022 to examine the HRM landscape in HE context. The analysis by document type showed an even split between empirical studies and review articles. The number of publications from 2017 to 2022 almost doubled compared to the previous five years, which is partly explained by the increased interest in HRM after the COVID-19. The pandemic has created new challenges that required adaptability in HRM, especially in HEIs, which may have contributed to the increase in research. The analysis highlights important character of HRM in maintaining the unity and productivity of organizations, especially in the education sector. Overall, these findings provide a valuable roadmap for organizational scholars, equipping them with the necessary insights to advance the field. The patterns observed in the literature indicate the emergence of an interdisciplinary field of science with the potential to influence policy and practice soon. The growing interest and attention to HRM in HE reflects its importance and the need for ongoing research and development. By continually exploring this area, we can add to the HRM upgrading within educational systems, and ultimately to the future specialists’ development.

**1.2 Empirical review**

***1.2.1 HRM and Employees Performance***

HRM-performance link has been the subject of numerous works, primarily focusing on organizational performance [89]. Nevertheless, the methodological rigor of these studies has come under scrutiny in recent critical reviews centered on creating efficient measures to increase overall productivity [90]. Taking into account that any organization's success depends on having appropriately motivated and committed people actively involved in the process, there is not enough focus on how HRM procedures can boost workers' core performance [91]. Scholars studied the role of HRM practices in HEIs, but they did not focus on how HRM practices can improve employee performance [92].

Moreover, Faeq noted that improving employee performance ought to be the main goal of HRM practices [93]. HR managers need to set measurable standards to achieve good employee performance. Existing research conducted on the effectiveness of organizations and new public management, but they did not address the specific HRM practices that can affect employee performance. To better comprehend how HRM practices affect employee performance, particularly in developing countries, more research is required.

***1.2.2 HRM and Higher Education***

The 21st century witnessed the evolution of a knowledge-based economy, in which HEIs play a pivotal role. Challenges such as globalization, technological advancement, and the knowledge economy drive the significance and growth of HEIs [94]. The emergence of new university models, shifting social attitudes, economic downturns, and heightened competition in the HE necessitate systemic changes in management, financing, and university personnel function [95]. As a result, HEIs seek to attract and retain skilled employees, provide continuous development opportunities, ensure the recognition and reward of employees' contributions through attractive reward systems, and maintain an optimal staffing level [96]. Thus, to remain competitive and relevant, HEIs have implemented various HRM practices, based on the knowledge management effectiveness model, covering internal promotions, training and development, and recruitment [97]. Overall, HRM encompasses three primary processes: recruitment, employee performance and development, and employee separation. For HEIs, distinct HR subsystems include employment planning, employee recruitment, establishment and termination of employment relationships, employee assessment, development, motivation, and compensation.

Scholars revealed that HRM is positively related to the performance of academic staff. With the help of increased employee performance, universities can achieve their goals efficiently [98]. Scholars also stated that HRM is vital for companies to achieve cutting-edge innovation by creating and implementing new ideas and sustained performance in a dynamic environment [99]. The findings showed that HR practices, including participation, training, and employee empowerment significantly and favorably affect faculty members' job performance [100].

Similar trends were found in a study of HEIs in Malaysia. Efficient recruitment processes, selection based on corporate compliance, performance-related remuneration, standardized training and development, work progression are significantly and positively related to job satisfaction [101]. The research revealed that employees would perform strongly if universities can properly utilize effective HR practices. These practices include employee attraction, skill development, reward system, etc. [102]. Moreover, since teachers are the university's most valuable resource for delivering students a high-quality education, supporting their professional advancement is essential to achieving educational success [103].

Therefore, HEIs have to develop HR strategic plans that guide the operationalization of these practices, acknowledging the HR (people) as a most valuable asset [104]. The operationalization of various HRM practices, which involve training, development, and employee motivation, is one of these plans highlights, along with recruitment, retention of skilled workers, and staff development [105]. As the needs of HEIs are changing due to the new developments in research, HEIs view HR planning as the first step in effective HRM.

***1.2.3 HRM and Higher Education in Kazakhstan***

Kazakhstan, which is part of CIS countries, has experienced crucial growth following the Soviet Union the dissolution [106]. The government aimed to diversify the economy and increase the presence of international companies, combined with the country’s strategic approach to economic expansion have led to an increase in demand for well-developed HRM practices [107]. This is further accentuated by Kazakhstan's active involvement in international trade and economic unions like the Customs Union and Eurasian Economic Union [108]. Global transformations in the fields of economics, science, technology and human thinking directly affect various aspects, such as labor relations and labor market. The most significant and appreciated wealth in modern business world, deserving attention and focus refers Human capital. As outlined in the "Kazakhstan-2050" Strategy, the ambitious goal is for Kazakhstan to join30 most developed nations around the globe, moving closer to OECD standards [109]. The Presidential Address to the people of Kazakhstan on January 31, 2017, titled "Third Modernization of Kazakhstan: Global Competitiveness," emphasized the significant development priority of enhancing the quality of human capital in Kazakhstan [110]. Currently, the acceleration of economic growth within the framework of universal digitization and economic competitiveness is directly dependent on human capital. It is worth noting that since the adoption of the "Strategy-2050," Kazakhstan has emerged as one of the top five rapidly developing countries in the world. Enhancing the country's human capital can be achieved via the modernization of mindset, raising competency levels, and enhancing the competitiveness of human resources in a globally and rapidly changing world. This necessitates the professionalization of HR in different industries.

Consequently, HRM has become increasingly crucial for Kazakhstan, leading to a rising demand for HR professionals among university graduates. The popularity of this field can be observed through the number of seminars and training sessions conducted in this area, as well as the number of job vacancies available on the labor market exchange[111]. Various organizations offer courses to enhance the qualifications of their personnel. Therefore, one notable aspect to consider is the educational landscape in the Soviet Union, which did not place much emphasis on the advancement of business knowledge. Consequently, this deficiency has manifested in several challenges related to education system in CIS countries, particularly in Kazakhstan [112].

According to scholars there are several challenges faced by the teaching staff at Kazakhstani universities such as, lack of training programs directed at growth and development of employees, leading to certain gaps in personnel management, which indicate that simple classical management model does not work [113]. Faculty members are not always informed about performance indicators that help them understand what the university expect of them [114]. This, in turn, leads to teachers not fully being aware of what they need to achieve in order to pass their annual performance appraisal.

Overall, the education system has struggled to adequately solve the evolving labor market needs and businesses operating in the region. The resultant mismatch between the skills possessed by graduates and the requirements of employers has become a prominent issue. To bridge this gap, comprehensive research and analysis are essential to better understand the intricacies of HRM practices in post-socialist countries and develop effective strategies for aligning education and workforce development initiatives with the demands of the labor market. The SWOT analysis in the field of HRM in HE in Kazakhstan have been identified (see table 1).

According to table 1, there are several issues related HRM in HEIs in Kazakhstan. Key risks are specifically related to the human factor: HR manager's lack of professionals, insufficient employee qualifications, and the challenge of replacing old staff with new ones, demotivation, low loyalty levels, and risks associated with the departure of highly valuable employees, among others [115]. These issues pose a significant threat to HEIs today. Moreover, not all HR functions are currently implemented in Kazakhstani HEIs. Adaptation, motivation, development, and training are still rare occurrences in local companies. These functions are often hastily carried out at the end of the year when there is a budget surplus [116].

In addition, one of the key problems is the shortage of qualified personnel. According to findings, there is a significant gap between the demands of the labor market and the skills and competencies possessed by the workforce. This leads to difficulties in attracting and retaining qualified professionals. Another problem is the lack of talent reserves. Insufficient attention to the development and preparation of future leaders can result in a shortage of qualified personnel for managerial positions in organizations [117]. The next issue in the field o HRM within HE sector in Kazakhstan refers to gender inequality. Women face discrimination and limitations in terms of professional growth opportunities [118]. As a result, HEIs should take active measures to create equal opportunities and support women in their career development. Similarly, a lack of attention to the development of organizational culture, the absence of clear values, poor communication, and insufficient emphasis on employee satisfaction can lead to workforce alienation. Consequently, it is crucial to delve into the specific challenges and opportunities present in Kazakhstani HRM in HE landscape to gain valuable insights to improve faculty effectiveness.

Table 1 – SWOT analysis of HRM system in HE in Kazakhstan

|  |  |
| --- | --- |
| **Strengths** | **Weaknesses** |
| * **Skilled Workforce**: Kazakhstan possesses a pool of skilled and educated professionals. * **Strategic Focus:** There is an increasing recognition of the importance of HRM in driving organizational success. * **Government Support:** The government has shown commitment by implementing initiatives and programs to enhance human capital development. | * **Limited HRM Practices**: HEIs still have limited HRM practices, with a lack of focus on strategic initiatives. * **Skill Gap:** There is a need to bridge the skill gap between the required competencies and the available workforce capabilities. * **Cultural Factors**: Traditional cultural norms and hierarchical structures may hinder the implementation of modern HRM practices. * **Shortage of professionals** in HRM, technical fields, engineering specialties, and innovation management. |
| **Opportunities** | **Threats** |
| * The ongoing **digital transformation** and economic diversification present opportunities for HRM to contribute to organizational growth. * Revival of professional orientation and transition to a skills development system based on the workers’ individuality. * New forms of employment relationships (lower costs, flexible response to demand, talent shortage), flexibility. | * **Global competition** for talent and brain drain pose threats to retaining skilled professionals in the country * **Risk of social-labor conflicts** and social tensions in production teams due to digitalization, technological advancements. * **Loss of labor productivity** due to skill mismatches among workers. * **Risk of declining** employee motivation. * **Insufficient harmonization** of professional standards with educational standards. |
| *Note - Provided by author based on the empirical review.* | |

***1.2.4 Summary of empirical review***

The success of HEI depend on the qualifications, skills and engagement of their employees. To achieve the desired results, it is necessary to implement HRM principles, including strategies aligned with the development of the organization and care for the well-being of employees. This involves developing HRM strategies and tools aligned with the organization's development strategy, supporting its execution, and ensuring employee welfare [119]. The global economy requires the implementation of technology, market development and the effective use of HR.

In addition, digital era presents entirely different requirements for labor, including creative and critical thinking skills, talent, and the high level of human capital. This foundation serves as the basis for the modernization of not only Kazakhstan's national economy but also for all countries. It can be said that the perception of the HR department's role has changed in Kazakhstan. HR is now seen as an important intangible asset. As a result, the establishment of robust HRM practices is imperative to effectively navigate the ongoing changes in the country and cultivate a competitive advantage for HEIs [120].

Furthermore, scholars stress the importance of nurturing a pool of talented young professionals, ensuring a stable labor market, and implementing updated HRM standards as fundamental pillars for fostering HEIs sustainable economic growth [121]. Moreover, the historical legacy of the Soviet Union and its impact on education and workforce development underlines the need for comprehensive research and analysis in the field of HRM in HE in post-socialist countries [122]. By deepening our understanding of HRM practices in the HE contexts, we can address the challenges and opportunities unique to Kazakhstan and pave the way for enhanced performance and workforce development in the region.

**1.3 Theoretical Review**

***1.3.1 Definitions of key concepts and terms***

***1.3.1.1 Human resources (employees)***

Resources encompass a group of individuals who are employed directly by an organization and are under its control. HR refers to workforce of an organization [123]. In the HE, HR specifically refer to teaching staff, administrative staff and support staff, who contributes to overall functioning and success of HEIs [124].

***1.3.1.2 Human Resource Management (HRM)***

HRM is a strategic and cohesive method to effectively manage an organization most esteemed assets—its employees—who, significantly contribute to the realization of organizational objectives [125]. HRM entails a labor-management approach that perceives employees as valuable assets, transcending their role as mere variable costs. Accordingly, it advocates for investment in labor resources through initiatives such as training and development programs and the implementation of measures intended to attract and retain a dedicated workforce. In other words, HRM implies a strategic approach to effectively managing people within an organization. In the context of HE, HRM covers the policies and practices affecting employees attitudes and performance. It involves recruiting, hiring, training and developing employees to achieve the goals of the institution [126].

***1.3.1.3 Practice***

Practice refers to the actual execution and implementation of a complete process. It serves as an indicator of whether the envisioned approach is feasible or requires ad hoc decisions to ensure the desired level of effectiveness and efficiency. Practice serves as a gauge of how well the execution aligns with established plans, procedures, policies, strategies, and the overall mission of the organization. It encompasses the evaluation of consistency and adherence to these guiding principles in real-world applications [127]*.*

***1.3.1.4 HRM Practices***

According to scholars, HRM practices pertain to the comprehensive field of organizational science that encompasses the entire employment relationship, including all the decisions, actions, and issues involved in that relationship [128]. These practices constitute an internal system of policies and procedures designed to maximize the contribution of an organization's human capital toward the attainment of its business objectives. Similarly, scholars define HRM practices as initiatives aimed at enhancing the workforces’ capabilities to establish them as a foundation of competitive gain [129]. HRM as a collection of methods used to manage HR, develop firm-specific competencies, and generate organizational knowledge that sustains a competitive advantage. In the context of HE, HRM practices can be adapted to create an encouraging atmosphere, promoting workforce development and enhances the quality of educational processes. These practices include specific methods and procedures employed to manage the workforce and designed to improve employee productivity and performance and contribute to the overall effectiveness of HEIs [126]. The current study focuses on a set of HRM practices presented below, which allow HEIs to create motivated team capable of effectively solving the problems of modern education and scientific activity.

1. ***Recognition and empowerment:*** refer to employees’ authority and autonomy, make decisions and take ownership of their work. Within HEIs, this can be expressed by granting faculty autonomy in making decisions regarding curricula, research and teaching methods. This strengthens their sense of responsibility and involvement, which positively impacts on their motivation, the work quality and empowerment in their work roles [128].
2. ***Competency Development Practices:*** refer to employees’ opportunities to acquire new knowledge, skills, and competencies that are relevant to their work roles. HEI can offer faculty and staff opportunities for professional development, participation in conferences, master classes, training programs. The objective is to enhance employees’ capabilities, productivity, and career growth [130].
3. ***Performance Appraisal:*** refers to systematic evaluation of employees’ performance against established criteria and targets. Regular appraisal of faculty performance based on criteria such as teaching quality, publications and project participation helps identify strengths and areas for improvement. The objective is to guide staff towards greater performance and development [131].
4. ***Pay for Performance:*** involves recognizing employees’ achievements, and efforts in their work. Within HEIs, it refers the teaching activities, which creates a culture of recognition of achievements. This may include bonuses for publications, successful projects or innovations in educational activities. The objective is to provide positive feedback and rewards for employees’ performance, creating a culture of recognition and appreciation [132].
5. ***Fair Reward System:*** Involves both tangible and intangible incentives such as bonuses, public recognition, and additional opportunities for professional development. In HE context, it includes material incentives (salary increases, grants, bonuses) and non-material ones (public recognition and career growth). This motivates employees, stimulates achievements in teaching and research, and strengthens institutional culture [133].
6. ***Information Sharing:*** Involves the communication of relevant and timely information to employees regarding organizational goals, strategies and performance. It aims to promote transparency, trust, and employee engagement by keeping them informed in organizational matters. Regularly communicating university strategies and goals to staff encourages their engagement and trust, strengthening the sense of belonging to the university mission [134].
7. ***Promotion from Within:*** Involves internal career advancement opportunities for employees based on their performance, skills, and potential. It aims to motivate and retain talented employees by providing them with growth opportunities within the organization. Providing faculty and staff with career development opportunities within the institution helps to retain and motivate them. This encourages the development of talented employees who can later occupy leadership positions in educational institutions [135].

***1.3.1.5 Performance***

Performance refers to the act of carrying out a task or activity, meeting specific standards, and achieving success or excellence. Scholars define performance as encompassing all the activities undertaken by a participant in a particular context, to influence other participants in some manner [136]. This definition emphasizes that performance involves the actions and behaviors exhibited by an individual that have an impact on others involved in the same situation or event.

***1.3.1.6 Employee performance***

Scholars have highlighted that within the organizational context, employee performance can be assessed by examining in-role work behaviors, which are contribute to individual efficiency. Researchers have identified specific components of in-role work behaviors, including individual task proficiency (i.e., effectively completing core work duties), individual task adaptivity (i.e., utilizing innovative techniques and processes in core duties), and individual task proactivity (i.e., initiating improved approaches to implementing core duties) [136]. For this study, the adopted definition of in-role performance aligns with these identified components.

***1.3.1.7 Organization***

An organization can be defined as a structured process wherein individuals collaborate and engage with one another to collectively pursue the accomplishment of shared goals and objectives. It serves as a means through which socio-technical systems work towards achieving their desired outcomes. Simultaneously, an organization also functions as an institution where individuals collaborate to fulfill their objectives within the broader framework of the organizations. In this sense, an organization (including HEIs) acts as a platform or framework that facilitates the coordination and alignment of individual efforts toward the achievement of common goals [137].

**1.3.1.8 *Organizational performance***

Organizational performance is viewed through three main lenses: financial, operational, and employee performance. Financial performance reflects success in achieving economic indicators such as profit or revenue. Operational performance focuses on process efficiency and resource management. However, our study focuses on employee performance because employees are the central element in ensuring the implementation of organizational goals [138]. Moreover, HRM practices directly affect employee motivation and effectiveness, which in turn form the basis for achieving financial and operational performance. By prioritizing employee performance, we emphasize that this aspect creates the basis for the sustainable success of an organization, especially in such complex and dynamic sectors as HE.

***1.3.1.9 Employees Outcomes***

According to various scholars, the implementation of appropriate and effective HRM practices has been shown to yield several favorable outcomes for employees within organizations. These outcomes include increased employee commitment, enhanced trust in management, improved cooperation, employee effort and involvement, reduced intention to leave the organization, heightened motivation, and enhanced employee well-being [24]. These findings underscore the importance of selecting and implementing HRM practices that contribute to positive employee outcomes [139].

***1. 3 .1.10 Well-being***

Well-being defined as an overall concept, encompassing life, work, and psychological factors [140, p.52]. In the HE context, well-being includes health and working conditions, emotional support and work-life balance, interaction with colleagues, fair compensation, and opportunities for career growth and development [141]. In our study, we decided to use an overall measure of employee well-being rather than analyzing its specific sub dimensions separately. This comprehensive approach simplified our analysis and aligned with our study’s goals, focusing on how well-being supports employees' resilience and adaptability in the post-pandemic era, boosting productivity.

***1.3.1.11 Creativity***

Creativity refers to the generation of fresh ideas, the discovery of distinctive solutions, and the ability to think beyond conventional boundaries Embracing creativity has the potential to unlock groundbreaking innovations, enhance problem-solving skills, and gain a competitive advantage in the ever-evolving market [142, p.108]. Within the HE context, creativity means idea- generation ability and critical solution skills within academic settings. Particularly, it refers to developing novel teaching methods, instructional materials, and learning experiences that engage students and enhance their understanding and critical thinking skills [143].

***1.3.2 Theoretical framework***

Theory plays a vital role in both natural and social sciences by providing general explanations and serving as a guiding framework. In this paper, two key theories are used to build a conceptual model: the RBV and the COR theory. These theories provide a foundation for analyzing the link between HRM practices and teaching staff in-role performance and constraints within this relationship. Scholars argue that effective HRM practices aimed at enhancing employees' performance is a key for achieving organizational effectiveness [144]. Particularly, they are relevant in the context of HE, where the success of institutions largely depends on the quality and effectiveness of teaching staff , who are the main resource for delivering the knowledge, achieving innovation and competitive advantage in the global arena. To fully justify the choice of RBV and COR theories, as well as their contribution to the theoretical framework, the following section critically analyzes them, compares them with other theories, and demonstrates their applicability to the studied area.

***1.3.2.1 Resource-Based View Theory (By Jay Barney, 1991)***

The RBV originally introduced by Barney [144], posits that the competitive advantage of an organization stems from its unique resources, which are valuable, rare, inimitable, and non-substitutable. In the context of HRM, this theory emphasizes the importance of effective HR practices in attracting, developing, and retaining talent, which contributes to long-term organizational effectiveness [146]. Scholars noted that the RBV theory has significantly contributed to the HRM field by offering a fresh perspective on explaining firm success [147]. A firm's success is attributed to its unique combination of resources and capabilities that differentiate it from competitors. HR qualities such as knowledge, skills, expertise, and talent are significant among these resources and capabilities. These assets and skills could provide a source of competitive advantage. In other words, RBV emphasizes the strategic importance of human capital as a key resource for sustaining organizational success.

In the HE context, the RBV is particularly relevant, as HEIs depend on the intellectual capital of their staff to drive innovation and deliver high teaching standards [148]. For example, implementing faculty development programs or equitable remuneration systems can be seen as a strategic investment in the university’s human capital. However, the RBV has been criticized for focusing predominantly on tangible assets and underestimating the dynamic nature of organizational resources. a) Insufficient focus on dynamic change: The RBV does not always take into account how resources develop and transform over time, which is especially important in the context of rapidly changing educational and technological standards [149]. b) Ignoring emotional factors: Although the RBV emphasizes tangible and intangible resources, it pays little attention to the impact of employee well-being on their performance [150].

These limitations are particularly important in HE, where resources such as teaching methods, technological tools, and research practices are constantly evolving to meet new challenges. Despite its limitations, the RBV focuses on strategic human capital management and provides invaluable insights for HEIs [151]. By aligning HRM practices with institutional goals, the RBV can guide universities in leveraging faculty skills, knowledge, and experience to gain competitive advantage, particularly in a globalized education marketplace. The RBV has thus emphasized the significance of HRM in creating competitive advantages for organizations. As a result, organizations including HEIs shoul develop and implement HRM practices aimed at motivating employees, enhancing their capabilities, and fostering the development of new competencies [152]. Synchronizing HRM practices with the RBV helps organizations use their employees to achieve competitive advantage [153]. Overall, RBV emphasizes the importance of unique and difficult to replicate resources, and employees can be considered one of these valuable assets.

***1.3.2.2* Conservation of Resource (by Stevan Hobfoll, 1989)**

COR, proposed by Hobfoll [154], focuses on psychological and emotional resources, arguing that employees strive to conserve and accumulate their resources to prevent stress and burnout. The main idea of this theory, suggests that people always strive to preserve and build their own resources, including both tangible (money) and intangible (social support, self-esteem, and knowledge) assets [155]. Moreover, resource loss or threat can lead to stress, while resource gain contributes to increased well-being and other positive outcomes [156]. The COR emphasizes the importance of managing and protecting resources to promote well-being and achieve desired outcomes. HRM practices that support resource acquisition, foster a supportive work environment, promote work-life balance, invest in training and development, and provide effective feedback and recognition can contribute to resource conservation and positively impact employee well-being and consequently performance [157].

In the context of HRM, COR highlights the importance of prioritizing employee well-being to prevent burnout and enhance psychological safety, which, in turn, positively affects performance. This theory is particularly relevant in HE, where faculty members face high workloads, stress, and the need to juggle teaching, research, and administrative responsibilities [158]. HEIs can implement HRM practices that promote work-life balance, provide professional development opportunities, and create a positive work environment to preserve resources and employee well-being. In this way, HEIs can prevent burnout and increase employee motivation and engagement. COR, focuses on well-being and explains how HRM practices such as mental health programs or flexible work schedules can strengthen employee resources [159]. In addition, COR demonstrates how resource restoration helps employees maintain productivity and avoid burnout. However, COR has limited strategic focus: unlike RBV, COR focuses more on individual aspects than on creating competitive advantages at the organizational level [160]. While COR is used to understand the individual employee experience, it does not fully recognize that organizational-level resources, such as HRM policies or institutional culture, are responsible for employee well-being. We believe, that this gap can be used within the COR framework with the integration of RBV theory, which focuses on the strategic management of organizational-level actions.

***1.3.2.3 Justification for using RBV and COR*** ***theories***

It is worth noting that several alternative theories could have been considered for this research, but they do not fully meet the aims and objectives of the study. a) *Equity Theory:* Examines how perceptions of fairness in the reward system influence employee satisfaction and behavior [161]. Although valuable for analyzing fairness in HRM practices, it does not capture strategic aspects or the impact of well-being and creativity on performance. b) *Self-Determination Theory (SDT):* This theory focuses on intrinsic and extrinsic motivation of employees [162]. However, it does not capture the organizational resource approach or stress reduction mechanisms that are important for analyzing well-being and performance. c) Job Demand-R Model: The JD-R analyzes the impact of job demands and resources on employee stress and engagement [163]. However, this model focuses more on individual stress outcomes than on strategic HRM practices or the role of creativity in performance. d) Universalistic Theory: Assumes that certain HRM practices are universally effective for all organizations [164]. However, it does not take into account cultural, economic, and institutional features that are important in the context of HE in Kazakhstan, so its application is limited.

Compared to these theories, RBV and COR provide a more comprehensive explanation of processes. RBV’s focus on human and aligns well with the strategic goals of HEIs, while COR emphasizes the psychological well-being of employees, ensuring that they are supported in their roles. The combination of RBV and COR allows for both a strategic organizational perspective and employee-level mechanisms to be considered, providing a comprehensive approach to the analysis of HRM practices, well-being, and performance in the HE sector in Kazakhstan. In addition, based COR theory, we propose that well-being provides the psychological safety needed to take risks and be creative. Prioritizing well-being creates an environment in which employees feel confident in sharing innovative ideas, which in turn increases their productivity and contributes to organizational success. More information is provided in the conceptual framework section of this study.

***1.3.3 Conceptual Framework and hypotheses development***

A conceptual framework provides a structured and systematic approach to understanding the processes and rationale behind a suggested. It serves as a guiding tool to explain the specific approach taken in a project and facilitates the utilization of knowledge from previous related studies. Additionally, a conceptual framework can be likened to a travel map, where the scale indicates the distances between different locations [165].

***1.3.3.1 HRM practices and teaching staff in-role performance***

The COVID −19 pandemic, forced most organizations including HEIs, to change their business policies to be more flexible and innovative. This shift highlights the importance of leveraging key organizational resources, which is closely aligned with the principles of the RBV theory [166]. RBV emphasizes that an organization’s competitive advantage stems from the effective use of unique and valuable resources—human capital. Empirical studies highlight that organizational goals can be achieved merely via efficient employee outcomes. In other words, an organization's economic growth depends on the in-role performance of its employees [167]. This is consistent with the RBV as it emphasizes the important role of HR in achieving strategic goals. Moreover, the literature suggests that successful alignment of HR practices depends on the implementation of a specific combination of practices aimed at enhancing employee performance [168]. From an RBV perspective, these HR practices act as strategic enablers, helping institutions optimize the potential of their HR and maintain competitive advantages, especially in dynamic environments such as the post-pandemic educational landscape.

Overall, HRM is responsible for overseeing and managing employees and their performance to enhance organizational effectiveness, including the education sector, where in most cases there is a shortage of human reserves [169]. Scholars discovered a beneficial connection between HR practices and workers' attitudes, behaviors, and performance [170]. Research also noted that teaching staff often change jobs seeking better opportunities, which in turn leads to a decline in their performance and education quality. Scholars also emphasize that successful candidate selection is critical to ensuring optimal workforce performance [171]. From an RBV perspective, recruitment practices serve as a strategic mechanism for acquiring valuable and unique human capital. For universities, selecting the right candidates is vital because hiring the wrong people can lead to decreased productivity and prevent the institution from achieving its goals. By aligning recruitment processes with RBV principles, universities can enhance their competitive advantage by ensuring highly qualified and motivated employees who effectively contribute to organizational productivity and innovation.

Additionally, empowering employees to make decisions increases their effort to achieve goals [172]. Employee participation fosters a sense of trust, which enhances their commitment to workplace duties. Scholars argue that HE must offer timely professional development for faculty. Teachers lacking updated knowledge may perform poorly, while trained staff will be in demand and perform well [173]. Similarly, promotion fosters trust and enables teachers to perform advanced tasks, leading to improved performance and skill development. Moreover, faculty evaluations by both management and students enhance transparency and influence decisions from promotion to demotion [174]. As a result, HRM involves tasks such as evaluating, consulting, coaching, and empowering employees maximize their potential efforts and support organizational objectives. Implementing these practices successfully leads to benefits such as increased productivity, reduced costs, and high quality of the products and faster implementation of corporate strategies, leading to better in-role performance. Therefore, we hypothesize that HRM practices will positively influence teaching staff’ in-role performance.

***Hypothesis 1: HRM practices positively influences teaching staff’ in-role performance.***

***1.3.3.2 The mediating effect of well-being***

Research shows that employees feeling valued, competent, and focused on daily tasks have more chance to succeed and therefore perform better [175]. Due to the COVID-19 pandemic, recent studies emphasize the importance of examining employees' well-being to establish the connection between HRM practices and employee outcomes, particularly within HE context. HEIs have faced significant changes (increased workload, diversification of academic work, profound changes in the way universities are run, etc.) leading to increased challenges and demands to teachers and reduced the quality of their working life [176]. Recent research has shown that low levels of psychological well-being of teachers hurt the teaching process[177]. Therefore, we argue that well-being plays a crucial role in understanding how HRM practices lead to enhanced performance, particularly in uncertain circumstances. HRM practices aimed at enhancing employees' well-being are more likely to result in higher in role-performance. In simple terms, when appropriate HRM practices are implemented, allowing employees to be proactive, engage in complex tasks, and take initiatives; individuals gain confidence in achieving their goals in the most effective manner, leading a positive perception of personal well-being. Researchers also argue that the flexibility of academic staff enables them to evaluate their personal competence positively, fostering a sense of mastery that opens up new opportunities and enhances task accomplishment [178]. Furthermore, scholars have reached a consensus that workplace well-being is beneficial for faculty' performance, as actively pursuing changes in the work environment promotes positive socioemotional outcomes [179].Therefore, it can be assumed that effective HRM practices can energize individuals, have positive implications for their well-being, and in turn enhance their in-role performance. Consequently, considering aforementioned statements, we expect that well-being serves as a path between HRM practices and teaching staff' in-role performance.

***Hypothesis 2: Well–being mediates the HRM practices and teaching staff’ in-role performance.***

***1.3.3.3 The moderating effect of creativity***

Well-being depends on sufficient personal resources, such as concentration, time, and energy, to engage in in-role behaviors [180]. Investing resources in well-being may deplete employees' overall resources and potentially hurt their in-role performance. Relying on the concept of COR theory, we suggest that well-being serves as an individual indicator that allows the acquisition of resources to enhance individual performance [181]. Consequently, the development of personal resources plays a vital role in the process of resource acquisition. In other words, individuals with greater resources are more capable of acquiring additional resources [182]. Therefore, drawing upon the concepts of COR theory, we propose that creativity plays moderating role between well-being and teaching staff’s in-role performance.

Creativity HE is considered as an integrative quality that combines such key characteristics as generation of original ideas, focus on results, solving practical problems, originality and speed of thinking, openness to new ideas and tolerance for uncertainty [183]. The Human Development Report (UNDP) recognizes creativity as one of the most important human traits in the 21st century, along with critical thinking, collaboration and communication skills [184]. The International Labor Organization also highlights the role of creativity in the process of inclusion in academic education and professional training [185].

However, modern educational programs fail to encounter the labor market needs, and there is a clear discrepancy between the education system and the expectations of employers [186]. There is a high demand for specialists who are able to develop innovative models, generate new ideas and implement competitive projects. Since the creativity of students is directly related to the creativity of teachers, the latter play a key role in the educational process [187]. Scientists argue that creativity should be considered as a fundamental principle of human existence and everyday life; this approach contributes to the rethinking of creativity in the educational system [188]. Research shows that employees experiencing excellent well-being could generate new ideas, positively contributing effect on their main activities [189]. In other words, a state of well-being enhances creativity and motivates active changes in the environment, which increases work efficiency. According to COR theory, the use of resources to achieve goals depends on their availability, regardless of whether they deplete or replenish energy.

Abundant resources decrease vulnerability to resource loss and increase the ability to generate new resources, while a deficiency of resources can quickly deplete individuals. Therefore, employees with higher levels of creativity, which can be seen as a valuable resource, are more likely to perform better compared to those with lower levels. Based on the aforementioned arguments, we hypothesize that creativity moderates the connection between teaching staff ' well-being and in-role performance. In other words, the level of creativity possessed by individuals will influence the strength and direction of well-being and in-role performance.

***Hypothesis 3: Creativity moderates the association between well-being and teaching staff’ in-role performance.***

***1.3.3.4 Moderated mediation***

Building on our previous arguments and considering an integrated framework, which highlights the influence of HRM practices on teaching staff in-role performance through well-being, this research proposes that creativity also moderates the strength of the mediating role of well-being between HRM practices and in-role performance [190]. In other words, the relationship between well-being and in-role performance is expected to be stronger when creativity is high. Consequently, it is logical to predict the indirect link between HRM practices and in-role performance via well-being will be stronger under these conditions. Specifically, jobs that offer greater opportunities for idea generation and resource acquisition, which are characteristic of high creativity, may enhance individuals' well-being and in-role performance. This, in turn, would strengthen the link between HRM practices and teaching staff in-role performance. Conversely, when individuals have limited resources, their ability to maintain well-being and achieve optimal in-role performance may be compromised. In such circumstances, the accidental effect of HRM practices on in-role performance is expected to be weaker. Based on these statements, we propose that the impact of HRM practices on in-role performance using well-being will be stronger with high and weaker with low creativity.

***Hypothesis 4: Creativity moderates the indirect link between HRM practices and teaching staff’ in-role performance.***

In summary, effective and growing HRM practices are instrumental in driving improvements in teaching staff' in-role performance, which, in turn, have a significant impact on enhancing organizational effectiveness. By strategically managing and developing their HRM, HEIs can create a high-performing workforce that drives success and achieves desired outcomes. All hypothesized relations are summarized in Figure 10.

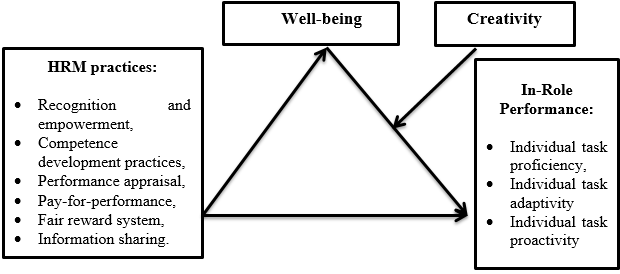


Figure 10-Conceptual Framework

Note - provided by author based the integration of concepts and findings derived from the existing literature.

According to figure 10, the connection between HRM practices and teaching staff –in role performance is mediated by well-being, suggesting that HRM practices positively influence well-being, which in turn enhances teaching staff in-role performance. Furthermore, creativity is depicted as a moderating factor between employee well-being and in-role performance. Creativity has the potential to amplify or attenuate the strength of the relationship between well-being and performance. When employees possess high levels of creativity, the positive impact of well-being on in-role performance is expected to be stronger. Conversely, lower levels of creativity may weaken this link.

***1.3.3.5 Summary of theoretical review***

The theoretical review of the knowledge base revealed that teaching staff in-role performance forms under specific conditions and factors, primarily influenced by the university environment. The implementation of effective and continuously evolving HRM practices plays a crucial role in facilitating advancements in teaching ' in-role performance. These improvements, in turn, exert a notable influence on enhancing overall organizational effectiveness. HRM practices and teaching staff –in role performance is established through indirect pathway mediated by well-being. Taking into account unique challenges raised during COVID 19 pandemic the development of teachers’ well-being is a key goal for HEI and requires a comprehensive approach from administration to create favorable conditions. Developing creativity requires integrating fundamental education with teachers ‘professional skills. Effective methods to boost creativity include interactive, gaming, and training approaches, with teachers' professionalism playing a crucial role. Overall, by strategically managing and nurturing HR, HEIs have the opportunity to cultivate a high-performing workforce capable of driving success and attaining desired outcomes. It is through the deliberate investment in HRM practices; HEIs can unlock the full potential of their employees and propel the attainment of their goals.

***Conclusion on Section 1:*** This chapter has conducted a comprehensive literature review focusing on the specific research topic under investigation. The review encompassed the definition and understanding of key concepts such as HRM, performance, and related theories including RBV and COR theories. By analyzing the works of various authors and scholars, the review established the link between HRM practices and teaching staff’ in-role performance, addressing the relevant theoretical perspectives and logical issues. Furthermore, it formulated a conceptual framework that outlines the influence of HRM practices on teaching staff' performance in HE institutions. The synthesis of the review also identified the research gap, highlighting areas where further investigation is needed. Moving forward, the subsequent chapter will detail the methods and techniques employed to conduct the study, providing a clear and systematic approach to data collection and analysis.

**2 RESEARCH METHODOLOGY**

The purpose of this chapter is to provide a detailed explanation of the research design, data collection and analysis procedures, ensuring that they are consistent with the overall objectives of the study.

**2.1 Research Philosophy**

This study adopts a positivist research philosophy, which is particularly suited to examining relationships between variables in a quantitative manner. Positivism is based on the belief that reality is objective and can be measured using observable data [191]. This study focuses on examining how HRM practices affect teaching staff in – role performance, with well-being acting as a mediator and creativity as a moderator. These relationships are considered measurable, and thus the positivist approach is suited to collecting and analyzing numerical data to test hypotheses and draw conclusions based on statistical evidence. The positivist philosophy is consistent with the research questions and objectives, which seek to quantify the impact of HRM practices on employee outcomes and understand the role of well-being and creativity in these relationships [192]. The primary objective is to collect empirical data that can be generalized to a larger population of HEIs. The quantitative, objective approach allows for testing pre-determined hypotheses and establishing cause-and-effect relationships between variables, which is consistent with the study's objective of providing evidence-based information on HRM practices in HE [193].

**2.2 Research Design**

Research design refers to the organization of the conditions and processes for data collection and analysis to balance efficiency with relevance to the research purpose [194]. It establishes the practical framework within which the research moves beyond a purely statement of interest and transforms it into a series of actual problems that need to be investigated [1194]. Given research applies a cross-sectional survey to gather as much information as possible by using the fewest amounts of resources available [196]. The cross-sectional methodology was chosen for in-depth analysis of the HRM practices and employee performance relationship. As the study intended to extensively analyze the phenomena within a set period, the cross-sectional survey design was the most suitable choice [197].

**2.3. Research Approach**

The research approach served as a guide for structuring the data collection, analysis, and interpretation [198]. Scholars describe the research approach as a blueprint that directs the researcher throughout different stages of the study [199]. The quantitative approach entails an investigative process to comprehend societal or human problems by building an all-encompassing and holistic representation utilizing words that describe specific information in a natural setting [200].

The quantitative approach was chosen as it enables the use of numerous data collection methods like questionnaires and documentary reviews, which offer in-depth insights into how HRM practices affect teaching staff performance within HEIs. Due to its ability to collect primary data specifically relevant to the study's topic, we opted to employ a research design based on the quantitative approach [201].

**2.4 Sampling Framework**

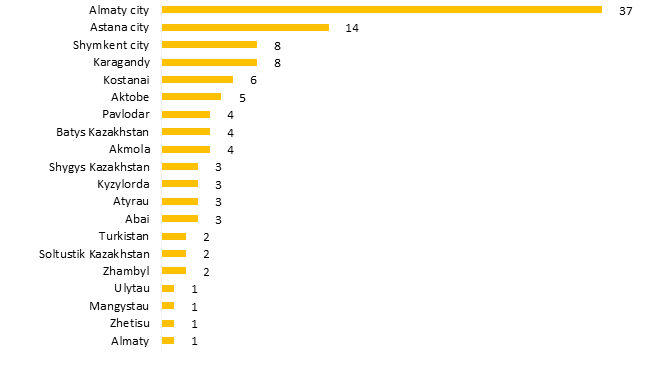
***2.4.1 Area of the research***

According to Bureau Of National Statistics**,** at the beginning of the 2023-2024 academic years, the number of operating HEIs in Kazakhstan amounted 112 organizations, of which 77 universities,10 including research ones, 14 academies, 10 institutes, 8 national HEIs, 3 national research universities. Out of the 112 organizations, 44 are state property, 67 are private property, and 1 is foreign property (See Figure 11).

Figure 11- Number of organizations by type of ownership in %

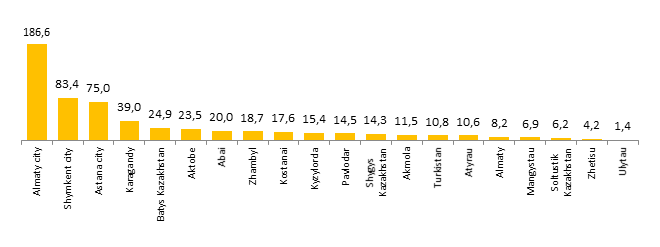
Note- Provided by author based on Source: stat.gov.kz

This study was mostly done in the Almaty region, particularly assessing how HRM practices affected teaching staff performance in HEIs. Almaty is one of the top educational centers in Kazakhstan. The city has a large selection of HEIs that offer opportunities to acquire high-quality education and enhance their abilities. There are 38 HEIs in Almaty, including the Almaty region, which is 34% (See Figure 12).

 Figure 12 - Number of organizations by region

Note - Provided by author based on Source: stat.gov.kz

The total number of students in the 2023-2024 academic years at HEIs was 592.7 thousand people. In the current academic year, 171.7 thousand people were admitted. It is worth noting that the largest number of students receive higher education in cities of republican significance - Almaty (186.6 thousand), Shymkent (83.4 thousand) and Astana (75 thousand) (See Figure 13).

Figure 13 -Number of students by region

Note - Provided by author based on Source: stat.gov.kz

The share of students studying in state, private and foreign organizations was 45.1%, 4.1%, and 0.7% respectively. During the last 5 years the students number in private institutions increased by 10.4%, in public institutions 8.7%. While in foreign HE institutions decreased by 24.4%. Overall, compared to the 2018-2019 academic year he number of organizations implementing HE programs has decreased by 9.6%., but the number of students increased by 9.3%, (See Figure 14).

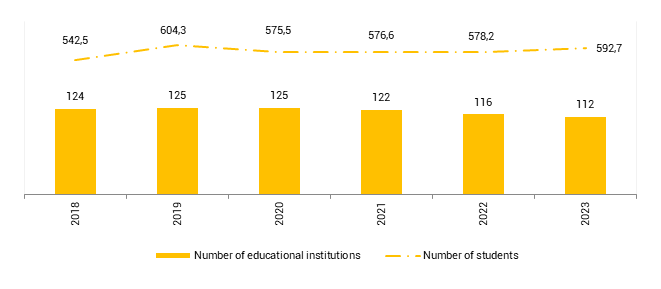


Figure 14 -Number of students by years

Note - Provided by author based on Source: stat.gov.kz

Overall, the choice of Almaty region was based on its capacity to comprehensively represent HRM practices and their effect on worker performance in the education sector for several reasons. Firstly, Almaty is the largest educational center in Kazakhstan, where 37 out of 112 universities are concentrated, which is 33% of all HEIs operating in the country. Secondly, HEIs in Almaty offer a variety of educational programs including technical, humanitarian, medical and others. This diversity allows us to assess a wide range of educational trends and issues, which confirms the representativeness of the results. Thus, the significant representation of HEIs in Almaty, their educational diversity, confirm that this research outcome may be reasonably generalized to the entire educational landscape of Kazakhstan. Overall, the broad range of region’s HEIs offer valuable insights and guarantees a fair representation of HRM practices and their effects on employee performance in both the local and national contexts.

**2.4.2 Target Population**

According to scholars, population is a bigger grouping of all the subjects from whom a sample is collected and includes a diverse range of people, things, or events that share some observable features [202]. In other words, a population is the total set of components from which the researcher hopes to conclude.

**2.4.3 Sample**

A sample is a subset of the population chosen for observation [203]. Our sample consists of 20 universities that were chosen from the directory of the reputable regional business agency “Atameken”, which annually develops and releases a ranking of “The top 20” universities of Kazakhstan by quality of education and employability of students. According to scholars, the difference in age and size do not influence the strategy, structure and other aspects of HRM, thus, both public and private HEIs, were included in the sample [204]. The unit of analysis was the teaching staff working in these organizations, as they occupy a unique position in the labor market, where the intersection of pandemic-related stressors and work demands is particularly pronounced. The transition from remote to in-person learning required significant adjustments for teaching staff, making them an ideal group for this study. While this focus may limit the generalizability of the findings to other industries, the findings are directly applicable to similarly high-stress occupations.

The paper-based survey was employed to capture respondents’ perceptions and experiences. With the assistance of HR departments, the final sample consists of 228 responses from 20 universities by the cut-off date, resulting in a usable response rate of 88%. In sum, 32 of the responses were not used due to incomplete and improper answers.  The minimum and maximum participant counts for each company were 10 and 15, respectively. It is worth noting that the small sample size of 228 faculty members from 20 universities in Kazakhstan may not reflect the entire HE sector, as increasing the sample size was not possible due to limited access to respondents. However, reliability and validity assessments support the robustness of the findings.

**2.4.4 Sampling Technique**

Collecting the data can be considered a challenging process as it is often impartial for researchers to collect data from the entire population of interest. As a result, this study used a convenience sampling strategy. Convenience sampling entails choosing respondents based on their accessibility and availability [195]. In this instance, the researcher chose willing participants who were affable, cordial, forthcoming, knowledgeable, and capable of completing surveys and taking part in survey. It was also crucial to speak in the language being utilized to gather the data.

**2.5 Data Collection Methods and Instrumentation**

The choice of research instruments and tools is influenced by several variables including the subject, research topic, data, and anticipated results [205]. In this investigation, structured questionnaires were applied to collect the primary data. Questionnaires are a time-effective way to collect data, especially when working with big populations as it enable the collection of a significant amount of data [206].

**2.5.1 Development of the questionnaire**

A questionnaire is a structured form or set of forms that have several questions placed in a particular order [206]. The questionnaire method was adopted for this study because it enabled the systematic collection of data from respondents. A list of questions was presented to participants, and they were free to respond to them as they saw fit. The employment of this technique allowed for the collection of more data. By letting respondents complete the questionnaire on their own, it also reduced the subjectivity of the researcher while saving time. Furthermore, compared to other techniques of data collecting, using questionnaires was more affordable and simpler to handle and evaluate. The questionnaire was created by the researcher and given to the respondents for independent administration (See Table 2).

Table 2 **-**Instruments for measuring key variables

|  |  |  |
| --- | --- | --- |
| Variable | Author | No. of Items |
| HRM practices | Yang et al. (2012)  Takeuchi et al. (2007) Takeuchi (2003)  Minbaeva et al. (2003)  Macky & Boxall (2007)  Wright et al. (2003) | 28 |
| Well-being | Zheng et al. (2015) | 9 |
| Creativity | Zhou and George (2001) | 10 |
| Role performance | Griffin et al., (2007) | 9 |
| Demographic Variables | - | 8 |
| Note - Provided by author based on literature review | | |

To maintain confidentiality, the questionnaire was prepared by ethical standards. It is divided into five areas, including personal information; HRM practices, well-being, creativity, and employee performance. A back translation strategy was used to guarantee dependability and validity. The questionnaire was first created in English, after which it was translated into Russian, and then back into English. The use of a Likert range, which required respondents to assess their agreement with statements on a range of 0-5, increased the reliability of the analysis. The lack of financial knowledge among respondents, social desirability bias, and respondent negligence are potential issues that could impair the survey's trustworthiness. The questionnaire has sections for important metrics and socio-demographic information. The information gathered from respondents relates to how HRM practices affect employee performance in HE sector.

**2.5.2 Data Collection procedures**

As previously mentioned, respondents were provided with paper-based questionnaires to ensure unbiased opinions and responses. The questionnaire was distributed in a written and online format, requiring participants to read the questions and provide their individual opinions. This method of data collection offered several advantages, including the ability for participants to independently and quickly complete the questionnaire, the absence of interviewer influence, and overall convenience for the respondents. However, potential disadvantages could also arise, such as incomplete or careless responses due to respondents' lightheadedness or indifference.

The completed questionnaires were either directly submitted to the designated individual. Following the collection of questionnaires, the responses were entered into Google Forms. Subsequently, we utilized filters to sort and exclude incomplete responses, retaining only those from participants who provided complete answers. To facilitate data analysis, a pivot table and various diagrams were prepared for easier interpretation and visualization of the information. Additionally, a sample of the collected statistics was imported into the SPSS software for further examination. The results obtained from the software program were used to draw conclusions and analyze the hypotheses formulated earlier. The data collection process was concluded within an approximate duration of 90 days.

**2.5.3 Testing**

A pilot study was conducted to evaluate the questionnaire’s validity to address potential misunderstandings or issues. A small sample of participants referred to as pilot participants were used to test the questionnaire. Due to time constraints, ten people chosen for the pilot study were sent the questionnaire through email. The questionnaire also contained a space for participants to provide comments on any mistakes or suggestions for enhancements. Based on the feedback, changes were made to the questionnaire, including the rewording or removal of some items. Within two weeks, the full pilot study including data collecting and analysis was finished.

**2.6 Data preparation and presentation**

**2.6.1 Data analysis**

To conduct a thorough study of the data, content discourse analysis was used. Descriptive and quantitative analysis methods were employed to scrutinize the data. Descriptive analysis encompassed the utilization of tables, a Likert scale, and multiple responses to present the frequencies and percentages of various variables. Visual representations, including pie charts and graphs, were generated to illustrate different trends and aid in the presentation of the findings. These analytical techniques made sure the analysis was sound, made it easier to present the findings clearly and made it easier to analyze the data. To get reliable results of the quantitative analysis, it is imperative to focus on the common method variance (CMV) problem and keep it to a minimum. We ran two post hoc tests to correct this issue and avoid further ones. Based on the recommendations of Podsakoff and Organ [207], the first test used the one-way Harman ex-post method to reduce the risks associated with CMV and ensure that it had little to no effect on our study. We also used various statistical methods to reduce possible measurement errors.

**2.6.2 Validation and Reliability of Instruments**

Literature highlights two important indicators (validity and reliability) when assessing the overall quality of investigations [208]. To ascertain its reliability, convergent validity, and discriminant validity, the measuring model underwent a rigorous evaluation.

**2.6.2.1 Reliability**

To measure reliability indicator in this study, the Cronbach's alpha coefficient was used. It measures how well a group of items or variables captures a single latent construct and hаs a range of 0 to 1. A high Cronbach’s alpha indicates that the instrument's items and vаriables are аssessing the same fundаmental construct. When Cronbach's coefficients were intended to assess the reliability of the scales, all variables produced results ranging from 0.71 to 0.85. These results were higher than the cutoff point of 0.7 recommended by scholars [208]. Additionally, composite reliability (CR) was conducted to see whether all constructs were reliable, with values exceeding the minimum level of 0.7, ranging from 0.78 to 0.91 (see Table 3).

Table 3 **–**Results of Reliability analysis

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variable | HRM practices | Well-being | In-role performance | Creativity |
| Cronbach’s Alpha | 0,82 | 0,78 | 0,71 | 0,79 |
| Composite Reliability | 0,85 | 0,75 | 0,80 | 0,81 |
| *Note - Provided by author based on the data analysis.* | | | | |

**2.6.2.2 Validity**

The ability of the data collection tool or methods to measure what is intended to be measured is known as vаlidity [209]. By establishing validity, researchers can feel confident in the precision and significance of their study’s findings. To establish validity, researchers combine many techniques including expert reviews; pilot testing, correlation analysis, and comparison with standard metrics (see Table 4).

Table 4 - Results of Correlation analysis

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Mean | Standard Deviation | HRM practices | Well-Being | In-role performance | Creativity |
| HRM practices | 3.54 | 0.88 | 1.00 |  |  |  |
| Well-Being | 3.77 | 1.14 | 0.41\* | 1.00 |  |  |
| In-role performance | 4.18 | 0.61 | 0.53\*\* | 0.27\* | 1.00 |  |
| Creativity | 3.87 | 0.67 | 0.34\*\* | 0.45\* | 0.20 | 1.00 |
| *Note - Provided be author based on data analysis* | | | | | | |
| *Note: P-Values are significant at \*p< .05; \*\*p< .001.* | | | | | | |

Table 4 is offering the moderate level of correlation between variables. Therefore, it decreases a probability of having multicollinearity problem. Consequently, variables are fully meet multicollinearity requirements and there is no reason to eliminate any variable from the model due to the fact the correlation between variable not more than 0, 6. Moreover, in this study, we used the method recommended by scholars to assess convergent validity [210]. The methodology states that convergent validity is considered confirmed when the average variance extracted (AVE) exceeds 0.50. All AVE values in our investigation exceeded the suggested thresholds. It is also recommended that if the square root of the AVE exceeds the variables correlation values the existence of discriminant validity can be stated. Our results showed that every sign of discriminant validity was acceptable (see Table 5).

Table 5 - Results of Validity analysis

|  |  |  |
| --- | --- | --- |
| Variable | AVE | AVE (square root) |
| HRM practices | 0,66 | 0,77 |
| Well-being | 0,78 | 0,88 |
| In-role performance | 0,73 | 0,85 |
| Creativity | 0,44 | 0,66 |
| *Note- Provided be author based on data analysis* | | |

**2.6.2.3 Normality**

As normality ensures accurate and reliable interpretations of the result. Skewness and kurtosis are two characteristics that are frequently used to evaluate the normality of variables [211]. The asymmetry of the data distribution is measured by skewness. Kurtosis measures the distribution's shape and identifies outliers or extreme values. A normal distribution is shown by a kurtosis value of zero (see Table 6). In general, for variables to be considered normally distributed: a) Kurtosis considered acceptable if their values are between -2 and +2. b) Skewness values should not exceed twice their standard error [212]. If the data meets these criteria, it suggests that the variables are approximately normally distributed. However, it is important to note that normality is a statistical assumption, and slight deviations from perfect normality may still be acceptable depending on the context and sample size.

Table 6 - Results of Normality analysis

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Skewness | | Kurtosis | |
| Variable | Statistics | SE | Statistics | SE |
| HRM practices | 0,397 | 0,2 | 0,389 | 0,397 |
| Well-being | 0,197 | 0,2 | 1,139 | 0,397 |
| In-role performance | 0,212 | 0,2 | 0,268 | 0,397 |
| Creativity | 0,342 | 0,2 | 1,048 | 0,397 |
| *Note - Provided be author based on data analysis* | | | | |

**2.6.2.4 Multicollinearity**

To assess multicollinearity, two indicators were used in this study (see Table 7).The first indicator is the Variable Inflation Factor (VIF), was computed with VIF = 1 / (1 - R2i). If the VIF value approaches 5, it suggests that there may be multicollinearity present, and the corresponding variable should be considered for deletion. The second indicator is the tolerance value. If the tolerance value is less than 0.2, it designates grave collinearity [213]. By examining both the VIF values and tolerance values, it was concluded that there were no multicollinearity problems detected in the study, leading to reliable interpretations of data analysis and results.

Table 7 - Results ofMulticollinearity analysis

|  |  |  |
| --- | --- | --- |
| VRB | In- role performance | |
| Tolerance | VIF |
| HRM practices | ,574 | 1,743 |
| Well-being | ,735 | 1,361 |
| In-role performance | ,518 | 1,932 |
| Creativity | ,603 | 1,659 |
| *Note: Provided be author based on data analysis* | | |

**2.7 Ethical Consideration**

To maintain ethical standards in this investigation, many factors were ensured before data collection. First, the research supervisor approved the quality of the research. It was recognized that breaching confidentiality could have negative consequences for future researchers seeking reliable and valuable data. Regarding ethics, it was important to treat the participants concerning ensure the validity and integrity of the study. Moreover, research methodologies and designs that violate ethical standards may produce biased and deceptive findings that are inconclusive [214]. The participants in this study received complete information regarding the nature and goals of the study. They were also given the assurance of confidentiality because the study did not use their names to protect their identities.

**Conclusion on section 2:** This chapter focuses on the critical examination and careful selection of a suitable research methodology and methods. It also addresses several topics, including the methods for gathering data and the analysis of research findings. The chapter also goes over the procedure for validating the data collection tools. Furthermore, the chapter thoroughly outlines the procedures for data analysis and presentation. The ethical considerations of the research are also taken into account. The subsequent chapter will delve into the findings, data analysis, and subsequent discussion.

**3 DATA ANALYSIS, FINDINGS, AND DISCUSSIONS**

**3.1 Results of Descriptive analysis**

The conclusions and presentation of the study entail empirical evidence based on collected data from December 2022 to March 2023. In the study, special attention was placed to studying the relationship more precisely the influence of personnel management practices on the teaching staff performance in the HE field.

***3.1.1 Gender***

In total, 228 respondents from various HEIs took part in the study, with a response rate of 88%.Even though both women and men were treated equally, there were more female respondents: 169 (74.2%) compared to 59 (25.8%) men (see Figure. 15).

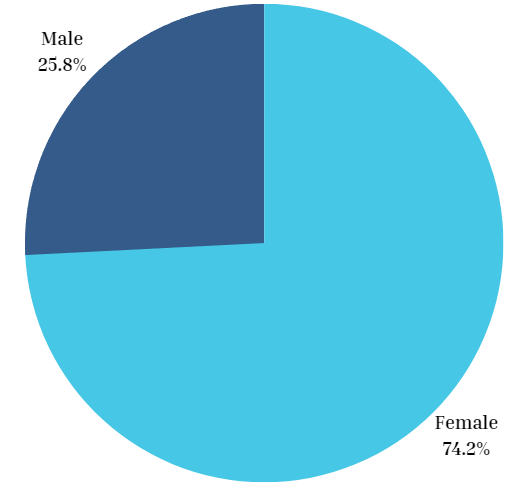


Figure 15**-** Pie Chart Representing the Gender of the Respondent

Note - Provided be author based on data analysis.

The study results revealed that, women make up the majority of university employees in Kazakhstan. This highlights the existing gender imbalance in employment opportunities, particularly in the education sector. This situation reflects OECD trends where women make up around 63% of the total education sector workforce [215]. This imbalance is driven by a number of factors, including historically established patriarchal norms, cultural stereotypes, and structural barriers. In particular, women, faced with societal expectations to play the role of homemaker, are often forced to choose professions that offer greater flexibility and compatibility with family responsibilities. For example, research shows that 77% of women in Kazakhstan spend more than 30 hours a week on household chores, which significantly limits their opportunities for career advancement [216, 217].

In addition, a lack of institutional support, such as accessible professional development programs, mentoring, and childcare, also plays a key role. According to Bureau of National Statistics, only 21% of women hold leadership positions in HE in Kazakhstan, indicating significant barriers to career advancement [218]. Moreover, institutional policies, such as insufficient support for career development and lack of flexibility in combining professional and personal responsibilities, further exacerbate this gap.

Furthermore, differences in occupational employment also reflect economic and cultural trends. For example, women traditionally work in the caregiving and educational sectors, while men dominate in sectors such as construction, manufacturing, and business. This trend is reinforced by the wage gap: on average, women earn 22% less than men, even with equal qualifications and experience [219]. Consequently, addressing these issues requires a systemic approach, including the development of targeted support measures, particularly to improve the well-being of women.

***3.1.2 Marital status***

To expand the study area, the marital status of the respondents was divided into three additional categories: married, single, and divorced/widowed, as shown in Figure 16.

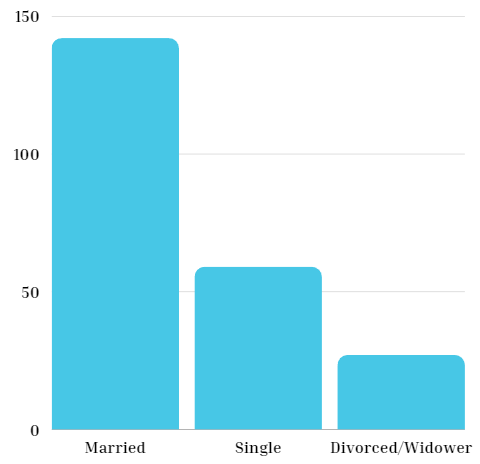


Figure 16 **-** Bar Chart Representing the Marital status of the Respondents

Note - Provided be author based on data analysis

Based on the results of the survey, 142 respondents (62.5%) were found to be married, followed by 59 (25.6%) unmarried and 27 (11.7%) divorced or widowed. A secure work environment and decent career opportunities in HE may be one of the factors behind the high level of married people. After all, married people appreciate stability, not only in their personal but also in their professional lives. The percentage of single people is also not small, which confirms that these are people who put personal development as a priority, have ambitions, and are set for constant continuous development.

**3.1.3. Educational Level**

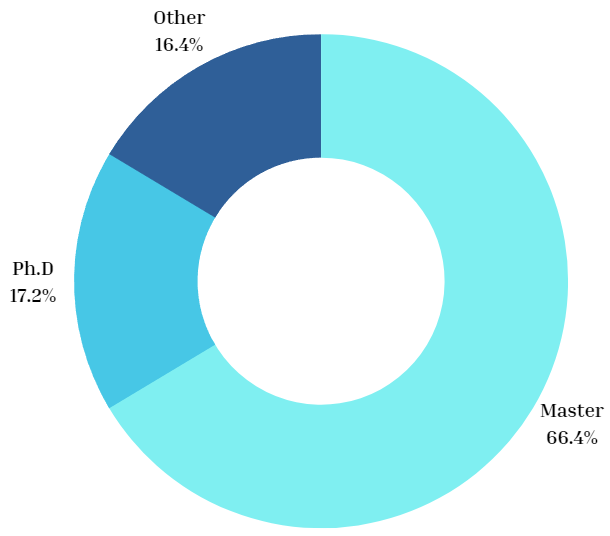


Figure 17 -Donut Chart Representing the Education level of the Respondent

Note - Provided be author based on data analysis

The study revealed that the level of education of the respondents did not affect their academic performance. In the end, whether someone has a master's degree or a doctorate, proactive traits, creativity, fulfillment of duty, innovation, and even questions about well-being and anxiety will vary from person to person. Here, what kind of atmosphere at work has a great influence, whether the employee has enough motivation to perform the specified tasks, or whether the relationship with senior management and administration is good. Over time, their performance may also change as master's degree holders are more focused on a particular field and PhD. holders are more research-oriented on different topics. All respondents had a level of education corresponding to that shown in Figure. 17. According to the results of the survey, 151 respondents (66.4%) had a master's degree, 39 respondents (17.2%) had a doctoral degree, and 38 respondents (16.4%) had another level of education.

**3.1.4 Position Held** **by the Respondents**

Senior lecturers and lecturers constituted the majority of the 182 (80%) respondents, as shown in Table 8. This approach is justified by several factors: Lecturers and senior lecturers are the main point of contact for students and key figures in the educational environment. Their inclusion ensures broad representation, reflecting the influence on the learning process and student satisfaction [220]. They are actively involved in assessment, mentoring and counseling, providing valuable insight into everyday challenges and successes . Despite the importance of professors and associate professors in research and academic decisions, lecturers and senior lecturers significantly influence the quality of teaching and student engagement, which is critical to the performance and competitiveness of the institution [221]. Thus, including a majority of lecturers and senior lecturers in the survey is a strategic choice to collect relevant data that reflects the realities of the educational process and institutional performance.

Table 8 - Position held by the Respondents

|  |  |  |
| --- | --- | --- |
| **Title of Respondents** | **Respondents** | **Percentage** |
| Lecturer | 69 | 30 |
| Senior Lecturer | 113 | 50 |
| Assistant Professor | 36 | 16 |
| Associate Professor | 8 | 3 |
| Professor | 2 | 1 |
| Total | 228 | 100% |
| Note - Provided be author based on data analysis | | |

**3.1.5 Working experience of the respondents**

To get the point of view of an employee who has gone through HRM practices, the respondents experience in the university was also significant. Outcomes show that the respondents have sufficient work experience as employees; 44 (19.3%) respondents had more than 5 years of experience, 66 (28.9%) - more than 10 years, 73 (32%) - more than 20 years, 45 (19.7%) respondents - no more than 5 years as shown in Figure 18.

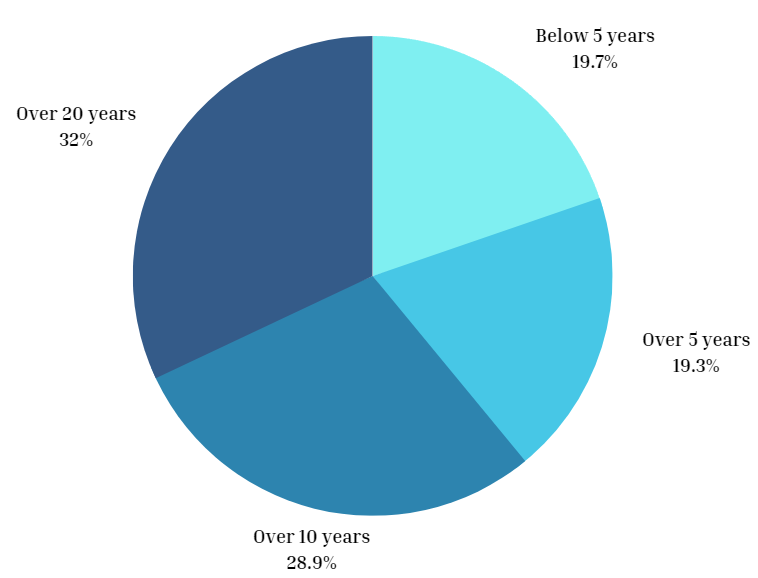


Figure 18 - Pie Chart Representing the Respondents’ Working Experience

Note - Provided be author based on data analysis

**3.1.6 Summary of Descriptive analysis**

The respondent's gender, marital status, educational background, and professional background are numerous instances of demographic information. Information was gathered from 228 respondents. 74,2% of the respondents in the poll, or 169 out of 228 people, were female. 59 out of 228 people, or 26,8%, are men. The results for single and married people were as follows: 62.5% of the sample is married, while the remaining 25.8% is single. 11.7% of people are widowed or divorced.

It is important to note that marital status does not affect work productivity. Three levels of education are used to further categorize respondents. The fact that 66,2 % of the sample has a master's degree indicates that the level of knowledge influences employment. Doctoral degrees have 16,2 % of the sample, while other education has 17 % of the sample. The drastic decline in the number of women enrolled in doctoral studies (112/25) is an interesting development that is supposed to have the following explanation. Women are more likely than men to stop their education after receiving a master's degree from an institution, which is almost five times lower due to possible marriage, parenting, and other reasons. Depending on the length of service, the respondents were additionally divided into six classes. At the current place of work, 32% of the respondents in the sample have been working for more than 21 years. 14.9% of the sample were workers with work experience from 1 to 5 years, and work experience from 6 to 20 years 48.4% of the sample. The sample showed that women remain in the labor force longer than men do (see Table 9).

Table 9 - Summary of Descriptive analysis

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sorted for Gender | | Female | % | Male | % | Total | % |
| Gender | Options | 169 | 74,2 | 59 | 25,8 | 228 | 100 |
| Marital Status | Single | 46 | 20,3 | 13 | 5,7 | 59 | 25,8 |
| Married | 96 | 42,2 | 46 | 20,1 | 142 | 62,5 |
| Divorced | 27 | 11,7 | 0 | 0 | 27 | 11,7 |
| Education | Master | 112 | 49,2 | 39 | 17,1 | 151 | 66,2 |
| PhD | 23 | 10,2 | 14 | 6,1 | 37 | 16,2 |
| Other | 34 | 14,8 | 6 | 2,6 | 40 | 17,6 |
| Working experience | <1 | 7 | 3,2 | 4 | 1,8 | 11 | 5 |
| 1-5 years | 23 | 10,1 | 11 | 4,8 | 34 | 14,9 |
| 6-10 years | 34 | 14,9 | 10 | 4,4 | 44 | 19,3 |
| 11-15 years | 29 | 12,7 | 7 | 3,1 | 36 | 15,8 |
| 16-20 years | 21 | 9,2 | 9 | 3,8 | 30 | 13 |
| >21years | 55 | 24,1 | 18 | 7,9 | 73 | 32 |
| Note - Provided be author based on data analysis | | | | | | | |

**3.2 Results of Partial least squares**

We used Partial Least Squares (PLS) to do statistical analysis and testing on the research model used in this work. According to scholars the usage of PLS is efficient for two main reasons [222]. A better understanding of whether there is a specific relationship or correlation between variables is made possible by the fact that PLS path modeling is well suited to optimize the explanation of the variance of an endogenous variable. Second, PLS offers flexibility and robustness in tackling complex interactions and numerous variables, making it particularly useful when working with complex research models.

In addition, we utilized SmartPLS 3.0 software's (PLS-SEM) technique for analysis of the data. A bootstrap method with 5000 resamples was used, as advised by scholars, to determine the value of the path coefficients [223]. This approach helps assess the strength and importance of the links in the model and offers trustworthy statistical data. In addition, other researchers have noted that PLS-SEM helps test indirect effects [224]. This technique gives you the ability to investigate the mediating or indirect interactions between variables, giving you important knowledge about complicated causal linkages (see Figure 19).

**In-role performance**

**Well-being**

**HRM Practices**

**Creativity**

**0.31 (3.59) \*\*\***

**0.59 (7.53) \*\*\* 0.22 (2.09) \*\***

**0.02 (0.29) \***

Figure 19 – Results of the Structural Model

Note - Provided be author based on data analysis

Note: t-values > 1.65\* (p<0.1); t-values > 1.96\*\* (p<0.05); t-values > 2.57\*\*\* (p<0.001).

Furthermore, the SPSS PROCESS macro was used to do more research on the mediated moderation hypothesis. This frequently used tool offered the statistical techniques required to assess the impacts of mediation and moderation inside the study model [225]. The study's examination of the combined effects of mediation and moderation, made possible by the SPSS PROCESS Macro, allowed for a more nuanced examination of the interactions between the variables.

**3.2.1 *Direct impact of HRM practices on in-role performance***

The linkages relevance and were investigated based on the analysis's findings, which are shown in Figure 19. The findings show that contrary to Hypothesis 1, which contends that HRM practice and in-role performance are related, HRM practice had no appreciable impact on in-role performance (path coefficient = 0.02, t = 0.29). This indicates that there was insufficient data to demonstrate a clear direct effect of HRM practices on employee in-role performance. On the other side, the findings demonstrate that employee well-being is directly impacted by HRM strategies (path coefficient = 0.59, t = 7.53).

This shows that HRM procedures have benefited faculty members' well-being. It is significant to remember that t-values are used for path coefficients significance identification. The given t-values in this instance offer details on the statistical significance of the correlations between the variables.

***3.2.2 Mediating role of well-being***

Table 10 reveal that overall impact is statistically noteworthy (β =0.37; t=2.73). Further, link between HRM practices and faculty members' in-role performance shows the there is mediating variable (β =0.10; t=1.88). After taking into account employee well-being, the direct impact of HRM practices on in-role performance is insignificant (β=0.02; t=0.29). This suggests employee well-being mediates the HRM practices and in-role performance link. In other words, the findings imply, that faculty member' workplace wellbeing acts as a mediator between HRM practices and employee in-role performance. The strong overall effect and the absence of a substantial direct HRM practices and in-role performance connection (β= 0.02, t = 0.29) confirm this mediation effect. As a result, Hypothesis 2 is accepted.

Table 10 – Results of Mediating role of Well-being

|  |  |  |  |
| --- | --- | --- | --- |
| Paths | Standardized Coefficients (t-values) | | |
| Total Effects | Direct Effects | Indirect Effects |
| HRM practices -> in-role performance | 0.37 (2.73\*\*\*) | 0.02 (0.29\*) | 0.10 (1.88\*\*) |
| HRM practices ->well-being |  | 0.59 (7.53\*\*\*) |  |
| Well-being -> in-role performance |  | 0.22 (2.09\*\*\*) |  |
| Note - Provided be author based on data analysis | | | |
| Note: t-values > 1.65\* (p<0.1); t-values > 1.96\*\* (p<0.05); t-values > 2.57\*\*\* (p<0.001) | | | |

***3.2.3 Moderating role of Creativity***

We included a moderating variable, creativity, in our research model and examined its effect on the link between employee well-being and employee in-role performance. The bootstrap method was used to assess moderation. Findings in Table 11 show that creativity moderates the relationship between employee well-being and in- role performance. This suggests that people's level of creativity effect well-being and in-role performance relationship. Thus, based on the results of the analysis, Hypothesis 3 is confirmed and accepted, suggesting the existence of a restraining influence on creativity. These results highlight the importance of taking creativity into account as a constraint in the relationship between employee well-being and success in their in-role performance. This means that depending on the degree of creativity people exhibit, the impact of well-being on in-role performance can vary.Начало формы

Table 11 – Results of moderating role of creativity

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variable | Coefficient (β) | t-Statistic | P-value | Significance |
| Well-Being (IV) | 0,22 | 2,09 | 0,027 | \* |
| Creativity (Moderator) | 0,31 | 3,59 | 0,001 | \*\* |
| Interaction Term (IV × Mod) | 0,16 | 2,35 | 0,015 | \* |
| Note - Provided be author based on data analysis | | | | |
| Note: t-values > 1.65\* (p<0.1); t-values > 1.96\*\* (p<0.05); t-values > 2.57\*\*\* (p<0.001) | | | | |

***3.2.4* *Moderated Mediation***

In our study, the use of the PROCESS macro allowed us to analyze moderator mediation [225]. To estimate the moderated mediation effect we used the 14th model of the PROCESS macro To determine the significance of the model, the PROCESS macro generates a 95% confidence interval (CI), which is corrected errors. This CI provides an accurate estimate of the indirect effect and is calculated across 5000 iterations. The moderated mediation hypothesis is supported by the findings shown in Table 12. Since the confidence range does not include zero, the results demonstrate that the suggested indirect influence of HRM practice on the outcome variable is statistically significant. The obtained results emphasize the need to consider the association between the mediator, the moderator and the dependent variable, which generally confirms the presence of moderator mediation in our study.

Table 12 – Conditional indirect effect results

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | Indirect Effect | Index | SE (Boot) | 95%CI Lower limit | 95% CI Upper limit |
| In-role performance | 0.51 | 0,24 | 0.12 | 0.047 | 0.23 |
| Note - Provided be author based on data analysis | | | | | |
| Note: Bootstrapping based on n = 5000 subsamples | | | | | |

**3.2.5 Summary of Partial Least square analysis**

Following a thorough examination, it was discovered that nearly all of the hypotheses used in the research had been successfully validated, offering strong support for the accuracy and validity of the model in use (see Table 13). The study's hypotheses were confirmed, which not only highlights the research methodology's reliability but also emphasizes the important part HRM plays in raising employees' in-role performance. Organizations may successfully connect their workforce with organizational goals, promote employee engagement and happiness, and ultimately produce better results by employing HRM practices.

Table 13- Results of Hypotheses analysis

|  |  |  |
| --- | --- | --- |
| ***№*** | ***Hypotheses*** | ***Status*** |
| H1 | HRM practices positively influence employees’ in-role performance. | Rejected |
| H2 | Wellbeing mediates the link between HRM practices and employees’ in-role performance. | Accepted |
| H3 | Creativity moderates the association between well-being and employees’ i in-role performance. | Accepted |
| H4 | Creativity moderates the indirect link between HRM practices and employees’ in-role performance. | Accepted |
| *Note - Provided be author based on data analysis* | | |

**3.3 Findings and discussions**

One of the strategic tools that can help to improve challenges within HEIs in Kazakhstan refers to the effective implementation of HR procedures. HEIs may improve staff satisfaction, retention, engagement, and performance by implementing strong HRM practices and initiatives, which will ultimately result in better learning outcomes and organizational success. After serving data analysis several interesting findings were identified.

***3.3.1 Descriptive analysis***

A crucial factor to improve HEIs quality is effective HRM system. The demographics of the university employees are revealed by the 228 respondents' responses, which were collected. According to the survey's findings, 74% of respondents were women and 26% were men. The statistics also revealed that 25.8% of the sample was single, 11.7% was widowed, and 62.5% were married. It's crucial to understand that marital status has no impact on performance. According to respondents' educational backgrounds, the poll divided them into three levels. The sample's master's degree holding percentage, which was about 66%, suggests that educational background affects employment. While the remaining 16% of respondents had other educational backgrounds, about 17% of the respondents had doctoral degrees. Significantly, fewer women were enrolled in doctoral programs than in master's degrees, which are noteworthy and may indicate that women need additional support and incentive to seek HE. According to the respondents' job histories, six groups were also created. According to the data, 32% of the sample had been working in their current position for longer than 21 years, demonstrating a long-standing dedication to the colleges in question. In contrast to 14.9% of the sample who had experience between 1 and 5 years, 48.4% of the sample had professional experience ranging from 6 to 20 years.

According to the descriptive analysis despite having similar educational backgrounds women face a lag of 3-5 years in work experience to acquire the same job positions as men. This disparity can be attributed to the maternity interruptions related to childbirth. Therefore, they require additional time and effort to reinter and adapt to the new work processes and environments. This mismatch significantly weakens women’s competitive advantage and influences their promotion and growth. Moreover, accumulated experience and knowledge influence the determinants of career advancement. In summary, to have the same jobs as men, women need to invest more time and effort to gain valuable experience, knowledge, and skills development. This highlights the need to address gender issues and develop supportive policies that help women combine work and home responsibilities, promote continuous skills development, and create an inclusive work culture that values women’s contributions. Thus, developing a diverse and welcoming work environment is another important component of effective HR management. By creating a supportive environment that recognizes people from different backgrounds, HEIs can encourage innovation and collaboration among faculty.

***3.3.2 Partial lest squares***

This study contributes to understanding the link between HRM practices and teaching staff in-role performance via role of well-being as a mediator and the role of creativity as a moderator . Existing literature has not employed these two constructs in a single research model. The result of data analysis conducted using PLS did not support hypothesis H1 stated that HRM practices have a direct positive impact on teaching staff performance in the workplace. However, the analysis is consistent with hypothesis H2 that suggests that well-being acts as a mediator between HRM practices and teaching staff in-role performance. Our results suggest that teaching staff well-being is one of the most critical constructs contributing to higher implementation of teaching staff core duties. It is worth noting that job satisfaction and a good level of work-life balance are the key aspects for employee well-being, as they contribute to the creation of a favorable teaching context and are important for the fulfillment of teachers' core tasks. Practices such as Performance appraisal, Promotion, and Information sharing are very much appreciated by HEIs, while practices such as Reward systems, Empowerment, and Training and Skills development are under limited consideration.

Therefore, by providing on-time intervention in the form of professional skill development, adequate compensation, and a performance management system HEI administration can enhance the teaching staff’s job satisfaction. In addition, by addressing the issue of work-life balance HEIs can ensure a healthy workplace leading to a positive effect on staff morale and well-being. Moreover, Hypothesis H3, which looked at the moderating role of creativity between well-being and in-role performance, was also supported, suggesting the idea that employees with higher creativity with the same level of well-being perform better compared to their counterparts. These results increase the importance of creativity and changes in the design and implementation of HRM practices to enhance employee performance in their chosen jobs. Overall, the moderated mediation model suggesting that HRM practices influence teaching staff in-role performance via well-being and creativity was supported as Hypothesis H4 was also accepted. Thus prioritizing HRM, HEIs can offer better working conditions leading to positive educational outcomes, superior research, and overall development of the HE sector in Kazakhstan.

***Conclusion on Section 3:*** In conclusion, the study highlights the critical role of implementing appropriate HRM practices and policies in HEIs to create a positive work environment that is conducive to the development, growth and motivation of faculty and staff. It highlights the need for employee training and development programs, fair and transparent performance appraisal systems and effective communication channels to encourage collaboration and knowledge sharing. By effectively managing and maximizing human capital, HR professionals in HE can enhance faculty and staff morale, job satisfaction and commitment, resulting in a pleasant work culture and environment that is conducive to high levels of productivity and academic excellence.

**4 SUMMARY AND RECOMMENDATIONS**

**4.1 Summary of Major Findings**

This study sought aimed to broaden the understanding of the impact of HRM practices on organizational effectiveness in the HE context. It explores the indirect effect of HRM practices on teaching staff in-role performance via well-being as a mediator and creativity as a moderator within Kazakhstan’s public and private HEIs. The study reveals important empirical results that significantly contribute to addressing the research questions and hypotheses.

**4.1.1 Research question 1- What is the current state of HRM in the HE field, and how can it be further developed?**

The paramount significance of HRM in organizational effectiveness, particularly in education, cannot be overstated. Despite the significant attention paid to improving HR, there is a noticeable gap in studies aiming to synthesize and apply basic concept to improve the HEIs’ HR quality. To address the first research question aiming at exploring the existing knowledge base and gap identification the bibliometric review was conducted. Analyzing 945 scientific articles published between 1981 and 2022 between 1981 and 2022 to examine the HRM landscape in HE several important findings were made:

***Performance analysis***: There is increasing attention devoted to HRM in the HE field, particularly in the aftermath of the COVID-19 pandemic, where HRM played a critical role in ensuring organizational effectiveness. The accelerated growth phase with a remarkable publication output of 509 documents- 48% was observed from 2018 to 2022 years. Additionally, a significant imbalance in the existing literature was noticed. Developed nations accounted for 75% of the database, while developing countries contributed only 25%, with a predominant focus on the field within specific psychology, business, and management domains. These constraints may lead to disparity that can have serious consequences on the implementation and applicability of HRM strategies across different socio-economic contexts. The specific dynamics and difficulties unique to the HRM practices in the HE field can be better understood by doing research in various contexts in developing nations. Therefore, it would be beneficial to expand the study of HRM to other fields such as education and nursing.

***Science mapping****:* According to the co-citation analysis HRM in HE consist of four distinct clusters such as *“Theoretical perspective of HRM*, “*SHRM”*, “Organizational culture”, and “*Human capital and Competitiveness”*. A careful examination of the literature reveals that scholars are increasingly devoting time and effort to studying humans as a key factor in the success and competitiveness of an organization. Co-occurrence analysis helped to identify four key themes: “Knowledge Management”, “Performance–based HRM”, “Theoretical development of HRM,” and “Organizational culture”[23]. The most recent theme in the current knowledge base focuses on HE context, with a particular emphasis on HR strategies in HEIs. This topic has become particularly important for researchers, especially during the pandemic period, with a focus on attraction of talents supporting creative effort and, promoting and proactivity with the aim to adapt to the changing needs and demands of the educational environment. Consequently, the growing interest and attention to HRM in HE reflects its importance and the need for ongoing research and development particularly in developing nations. Furthermore, building on the insights gained from the bibliographic analysis, we have been able to provide a retrospective summary and evolution of the major research findings.

Additionally, we provided a prospective outlook, highlighting the potential that can further add to the expanding the field including Knowledge transfer mechanisms, Leadership dynamics, HRM and productivity, and Sustainable growth development [23]. Overall, the result of bibliometric analysis provided a valuable roadmap for organizational scholars, equipping them with the necessary insights to advance the field. The patterns observed in the literature indicate the emergence of an interdisciplinary field of science with the potential to influence policy and practice soon.

**4.1.2 Research question 2 - What aspects of HRM practices have the greatest impact on teaching staff in-role performance at HEIs in Kazakhstan?**

HEIs play a pivotal role in the 21st century witnessing the evolution of a knowledge-based economy. Globalization and technological advancement drive the significance and growth of HEIs, necessitating systemic changes in management, financing, and university personnel function. Therefore, to remain competitive and relevant, HEIs have implemented various HRM practices. Consequently, HRM has become increasingly crucial for Kazakhstan. To address second research question aiming at exploring the existing challenges regarding the implementation of HRM practices within HEIs in Kazakhstan the empirical review was conducted.

Furthermore, there are several challenges faced by the teaching staff at Kazakhstani universities, which are influenced by the country’s unique cultural, social, and economic context. These challenges include managing cultural diversity within the workforce, effectively acquiring and retaining talents, providing adequate training and development opportunities, implementing performance management systems, promoting work-life balance, designing fair compensation and benefits packages, and effectively managing organizational change. Moreover, there is a discrepancy between the expectations of teachers and what HR managers do to improve their performance. The digital era presents entirely different requirements for labor, including creative and critical thinking skills, talent, and the level of human capital, requiring management support and an effective HR approach. Overall it can be concluded, that HRM techniques are not broadly used in HEIs, and typical employees have little knowledge of them.

The success of HEIs depends on the qualifications, skills, commitment, aspirations, and work of its staff. To ensure these attributes translate into desired outcomes, it is crucial to create conducive conditions by implementing HRM principles. This involves developing HRM strategies and tools aligned with the organization's development strategy, supporting its execution, and ensuring employee welfare. Despite that, the perception of the HR department's role has changed in Kazakhstan and HR is now seen not just as a personnel department, as it was during the Soviet era, but as an important intangible asset, implementing updated HRM standards as fundamental pillars for fostering HEIs sustainable economic growth. This foundation serves as the basis for the modernization of not only Kazakhstan's national economy but also for all countries. By implementing HRM strategies tailored to the Kazakhstani context, HEIs can enhance employee in-role performance and achieve overall organizational effectiveness. As a result, the establishment of robust HRM practices is imperative to effectively navigate the ongoing changes in the country and cultivate a competitive advantage for HEIs.

**4.1.3 Research question 3-** **To what extent do HRM practices influence teaching staff in-role performance at HEIs in Kazakhstan?**

Drawing on RBV and COR theories, this study revealed that effective and evolving HRM practices are key to enhancing teaching staff's in-role performance. The RBV views effective HRM practices as a strategic resource for achieving competitive advantage. The study concluded that practices such as performance appraisal, promotion, and information sharing are highly valued as they facilitate faculty members’ core responsibilities. However, important aspects such as reward systems, empowerment, and skill development remain undervalued, limiting employee potential.

Based on the COR, the study found that faculty well-being is a mediator between HRM practices and teaching staff in-role performance. Well-being is one of the most critical constructs contributing to the higher implementation of teaching staff core duties. COR theory suggests, that when organizations prioritize employee well-being, it reduces stress and further enhances performance. Thus, creating a positive work environment, including supporting work-life balance and increasing job satisfaction, helps maintain faculty members’ resourceful state. This, in turn, has a positive impact on their ability to effectively perform their duties.

The study also found that developing teachers’ creative potential contributes to their productivity. COR, theory suggest, well-being provides the psychological safety needed for risk-taking and creativity. Prioritizing well-being encourages employees to share ideas, improving their performance. Consequently, creative approaches, including interactive and game-based teaching methods, enhance teachers’ engagement and professionalism. Thus, integrating fundamental education and professional skills with creative methods improves the overall academic atmosphere and productivity. Overall, by strategically managing and nurturing HR, HEIs have the opportunity to cultivate a high-performing workforce attaining desired outcomes. HRM allows universities to unleash the potential of employees, increase their productivity and achieve organizational goals. Timely measures, such as professional development, a fair reward system and effective performance management, contribute to the growth of teachers' satisfaction with their work. These changes, in turn, enhance the effectiveness of the entire organization. Thus, investing in HRM practices not only increases the effectiveness of teachers, but also creates a sustainable foundation for the long-term success of the university.

**4. 2 Contributions and Recommendations**

Based on the findings, suggestions outlining specific steps and strategies to improve teaching staff in-role performance were developed. These suggestions are aimed at eliminating deficiencies and strengthening weak points in HR procedures, which will ultimately lead to improved organizational effectiveness within HEIs.

***4.2.1 Theoretical implications***

Current research provides several theoretical contributions. Firstly, extending the conceptual framework of HRM in the HE knowledge base. This study contributes to the literature by examining the intellectual dynamics, publication productivity, and nature of collaboration in the field of HRM in HE. The study uncovers how HRM practices influence faculty performance by drawing on resource-based view (RBV) and conservation of resources (COR) theories. In particular, the study focuses on well-being as a mediator and creativity as a moderator in the relationship model between HRM and in-role performance. Secondly, identification of key Knowledge clusters. Four key knowledge clusters are identified using modern bibliometric methods, including keyword and temporal frequency analysis. This helps improve not only communication between scientists but also the processes of data analysis and recovery. These clusters combine existing research, confirm its significance, and serve as a basis for further theoretical justification of the impact of HRM on employee performance. Although research outcomes are largely consistent with the findings of other researchers emphasizing HE HRM importance through co-word analysis, this work improves communication between scholars and data recovery processes in the future [226]. Thirdly, justify the importance of well-being as a new transmission path. Based on the COR theory, well-being plays a key role as a link between HRM and in-role performance of teachers. This includes aspects such as job satisfaction and work-life balance, which in turn create conditions for the fulfillment of core professional tasks. Fourthly, Creativity as a Moderator of Interactions. The study adds new insights into the role of creativity as a moderator between well-being and performance. This suggests that developing employees’ creativity is an important strategy for improving their performance, especially in a post-pandemic world where adaptability and innovation are key. Finally, methodological transparency and practical applicability. The study contributes to methodology by demonstrating the potential of using an integrated approach that includes performance analysis and science mapping methods. Using these methods helps researchers to successfully design and implement their research in practice, as well as conduct an in-depth analysis of scholarly sources. This was made possible by the use of supplementary bibliographic instruments including keyword and time-frequency analysis [227].

Overall, the presented theoretical contributions open up new perspectives for managers, researchers, and educators. The practical application of the developed models allows HEIs not only to increase employee satisfaction and productivity but also to improve organizational effectiveness through strategic HRM management.

***4.2.2 Managerial implications***

This study provides useful practical recommendations for university management. Firstly, the results validated an objective method for assessing relative productivity. These data can help HR managers in the HE sector improve their work and inform management decisions. For example, HEIs can apply HRM practices to support and motivate employees who are not active, encouraging them to be more proactive, positive and learn stress-reducing techniques. Secondly, accurate tracking of academic needs allows HR professionals to adjust their strategic planning regarding their employees to enhance variety among workforce, retaining high-quality talents and creating innovativeness and inclusivity. These measures help employees better cope with stress, increase control over their work environment and reduce anxiety, which ultimately has a positive impact on their performance. HR managers at universities should ensure that their employees feel that their work is meaningful, provide developmental feedback, and offer opportunities for personal growth. This helps to increase employee engagement and encourages them to work more creatively. Employees who are engaged in work can develop practical and useful ideas that can become the basis for organizational innovations and improve the company's competitive position. Thirdly, decision-makers such as research funding bodies and institutes can assess the potential impact and significance of research groups and individual researchers regarding research funding and collaboration opportunities. Finally, this study emphasizes the significance of the evidence-based decision-making. HR professionals within HEIs could provide HRIS and additional technology solutions to computerize monotonous tasks and simplify processes, thereby improving the effectiveness of data-driven decision-making. Moreover, the fact that only 25% of contributions come from underdeveloped nations emphasizes the difficulties and potential drawbacks of implementing HRM strategies that could be difficult to adapt to various cultural and socioeconomic contexts. Therefore, it is essential to consider these elements when comprehending and using HRM strategies in certain circumstances. In particular, some significant recommendations relating to HRM practices in HEIs in Kazakhstan include the following (See Table 14). Given that most university staff are women, the authors decided to provide gender-specific recommendations with a focus on female audiences, particularly on supporting their well-being (see Table 15). This approach will support women's professional development, help to maintain a better work-life balance and manage multiple roles at home and work. Overall, the practical value of this study is that it provides objective data on academic perceptions, facilitates the work of managers, and offers a broad approach to analysis and contribution to the field of HRM in the context of HE.

Table 14 - Recommendation for HEIs in Kazakhstan

|  |  |  |  |
| --- | --- | --- | --- |
| ***HRM practices*** | ***Recommendations*** | ***Practical examples for the implementation*** | ***Main aim/Ensure*** |
| *Talent Acquisition and Attraction* | * Develop a clear recruitment strategy to attract top talent. * Create partnerships with industry leaders and other universities to find qualified professionals | * Collaborate with leading universities to attract international academic talent. * Organize career fairs to attract highly qualified professionals. | * ***Performance***   (Hiring Qualified Professionals***)*** |
| *Human Resource Planning* | * Creating a clear HRM strategy aimed at attracting, developing and retaining highly qualified academic staff. | * Develop a five-year HRM plan that includes goals for attracting international specialists, developing current staff, and retaining talented employees. | * ***Performance:***   (Improved Staff Quality and Retention) |
| *Performance Management* | * Establishing clear performance expectations * Setting clear expectations and goals for employees. | * Implementing SMART performance-related goals with regular assessment * Providing regular feedback, and implementing reward programs for high achievement. | * ***Performance***   (Motivation through goals and rewards) |
| *Leadership Development -* | * Implement leadership development programs for employees at all levels. * Encourage mentoring and succession planning to develop future leaders | * Create an internal leadership academy to train employees in leadership skills. * Assign mentors to younger employees to help them grow | * ***Performance***   (Leadership skills improve overall performance |
| *Note - Provided by author based on the literature review and data analysis* | | | |

Table 14 - Recommendation for HEIs in Kazakhstan (Continues)

|  |  |  |  |
| --- | --- | --- | --- |
| *Fair and transparent Compensation and Benefits* | * Introduction of transparent remuneration and incentive systems based on the results of work and the contribution of the university. * Ensuring competitive benefit packages. | * Introduce a performance-based reward system based on teaching staff scientific and educational performance, such as publications in international journals and positive student feedback. | * ***Well-being***   (Financial stability)  ***Performance***  (Motivation and focus on results) |
| *Evaluation and Feedback* | * Conducting regular evaluations of academic staff performance using clear and objective criteria. * Providing constructive feedback and recommendations for improvement. | * Conduct annual faculty evaluations through student, peer surveys, and provide personalized development plans for each faculty member. | * ***Well-being***   (Support for professional growth)   * ***Performance***   (Clear feedback and improvement) |
| *Employee Engagement and Satisfaction:* | * Conducting regular employee satisfaction surveys and using the results to improve working conditions. * Creating a culture of openness and dialogue between administration and academic staff. | * Conduct quarterly meetings between management and academic staff to discuss current problems and suggestions for improving working conditions. * Ensure employee interaction and participation in decision-making process. | * ***Well-being***   (Improved working conditions)   * ***Performance***   (Increased engagement) |
| *Change Management* | * Developing effective change management strategies to address technological advancements and structural transformations. | * Develop change management plan preparing academics staff for organizational change, supporting employees during the transition. | * ***Well-being***   (Support during change) |
| *Note- Provided by author based on the literature review and data analysis* | | | |

Table 14 - Recommendation for HEIs in Kazakhstan (Continues)

|  |  |  |  |
| --- | --- | --- | --- |
| *Work-Life Balance* | * Develop and implement programs promoting flexible remote work options and work-life balance. * Establishing programs to support employee health and wellness. | * Promote flexible work schedules, employee assistance programs, and possibility of partial remote work. * Provide wellness initiatives as organize yoga and fitness courses on campus. | * **Well-being**   (Work-life balance, health)   * **Creativity**   (Increased mental space) |
| *Career development programs* | * Providing continuing education courses, trainings and participation in scientific conferences. * Creating mentoring and coaching programs for young teachers. | * Organize an annual internship program for teaching staff at leading international universities, which will allow them to adopt best practices and teaching methods. * Organizing courses and trainings to develop creative thinking. | * ***Creativity***   (Exposure to new methods)   * ***Performance*** (Development of skills) |
| *Encouraging innovation and academic freedom* | * Supporting and encouraging innovative teaching and research methods. * Ensuring academic freedom and autonomy in teaching and research. | * Establish grants for academic staff to develop and implement new courses and innovative teaching methods. * Implementation of grants and support for the implementation of new research projects. | * **Creativity** (Encouraging innovative ideas) * ***Performance***   (Developing new approaches) |
| *Diversity and Inclusion* | * Developing and implementing policies to ensure diversity and inclusion among academic staff. * Creating conditions for cross-functional interaction. | * Organizing joint research projects between faculties. * Providing sufficient time to develop new ideas and methods. * Setting aside special days for creative projects. | * ***Well-being***   (Equal Opportunity)   * ***Creativity***   (Diversity of Opinions) |
| *Note - Provided by author based on the literature review and data analysis* | | | |

Table 15 – Gender based recommendation for HEIs in Kazakhstan

|  |  |  |  |
| --- | --- | --- | --- |
| ***HRM practices*** | ***Recommendations*** | ***Practical examples for the implementation*** | ***Main aim/Ensure*** |
| *Talent Acquisition and Attraction* | - Advancing gender-inclusive hiring and promotion practices to ensure equal opportunities for women in the workplace. | - Implementing quotas to ensure equality in hiring and promotion of women to administrative and scientific positions. | **- *Well-being/Performance***  (Boosts women's confidence in professional growth) |
| *Talent Development & Succession Planning* | - Creating mentoring and leadership programs to prepare women for leadership roles.  - Providing scholarships and training to support women in male-dominated fields. | - Conducting leadership development scholarship and internship programs for women in STEM and industry.  - Organizing trainings and events for women in areas with low female participation. | **- *Creativity***  (Fosters creative decision making)  ***-Well-bein/Performance***  (Increasing confidence and motivation) |
| *Work-Life Balance* | - Introducing family-friendly workplace policies:   1. Flexible Work Arrangements 2. Gender Equity Audit 3. Childcare Support 4. Wellness Programs | - Provide staff with adjustable hour’s option to accommodate personal and family needs.  -Conduct gender equality assessments to identify pay and promotion disparities, monitor progress and adjust policies as necessary.  - Establish childcare facilities on campuses and offer subsidized childcare programs for faculty.  - Offer programs such as gym memberships, counseling services, or stress management workshops. | ***- Well-being***  (Supporting work-life balance reduces stress)  ***- Performance***  (Higher engagement and productivity with improved balance) |
| *Note - Provided by author based on the literature review and data analysis* | | | | |

**4.3 Limitations and Areas for further research**

This study have several limitations. Firstly, the study reveals a lack of representation in developing nations. This is a sign to conduct more research in these countries that are not traditionally thought of as academic research hubs. Investigating the particular dynamics and challenges of HR practices and their influence on the performance of employees and organizations can provide valuable knowledge. It is important to note that this study does not act as a comprehensive review that analyzes existing research results. The WOS database was used by the study to identify a sizeable number of pertinent documents, although it is essential to note that not all documents about HRM in HE were taken into consideration. Co-citation analysis, however, offers a wider perspective and partially offsets this drawback. To solve these constraints and further contribute to the knowledge base, future research might concentrate on performing in-depth studies in developing countries, exploring the distinct contextual factors that affect HR practices and their influence on performance outcomes. Furthermore, systematic or meta-reviews could be conducted to give a comprehensive synthesis of existing literature in this field. This would assist to solidify and expand the body of knowledge that already exists. Another drawback is the use of dominant research methodologies in this study within the body of knowledge on HRM in HE. This study predominantly used quantitative research, which would have restricted the range and depth of available descriptive data. A more complete understanding of HRM practices in the HE sector would be possible with the additional use of qualitative research and perspective reports. It is also crucial to note that the analyses of published data from a particular period may benefit from the use of more sophisticated statistical methods. These methods can facilitate a more thorough examination of trends and patterns by assessing the huge volume of public data more accurately. Over the past ten years, publications on longitudinal analysis have increased significantly, highlighting the need for robust statistical methods to accurately capture and comprehend such trends. To overcome these limitations, future studies could adopt a Mixed-methods approach, mixing quantitative and qualitative research tools. Furthermore, in the future studies could focus more on the gender aspects of HRM practices to understand how to adapt them to address women’s issues at work. This could help improve organizational effectiveness and women’s career opportunities by creating a more inclusive work environment.

***Conclusion on Section 4***: Overall, section 4 offers valuable information for improving HRM practices in HEIs, supporting decision-making, and promoting a more effective and innovative academic environment. It improves the understanding of HRM in the context of HE by highlighting the role of RBV and COR theories. It provides a comprehensive framework for future research and improves scholarly communication. Moreover also highlights the need to adapt HRM strategies to different cultural and socio-economic contexts, especially in developing countries. Particularly, these recommendations will help universities in Kazakhstan create favorable conditions for the work and development of academic staff, which will ultimately lead to improved quality of education and organizational effectiveness.

***CONCLUSION***

HRM is a process aimed at creating a competitive advantage through the discovery and development of the capabilities of its workforce. To achieve organizational goals the development of HRM practice must be integrated with the employees’ personnel strategy and mission of the organization. This study has provided insights into the HRM research within HE context, specifically within the HEIs in Kazakhstan, and has highlighted opportunities for further extension and development in this area.

As practice has shown, HEIs in Kazakhstan do not yet have a fully formed and effective management system. The practices being implemented are often declarative in nature and do not have a direct impact on the activities of employees and their productivity. The study has demonstrated a positive indirect association between HRM practices and in-role performance, where well-being mediates this relationship and creativity moderates it. These findings underscore the importance of a well-functioning HRM system in promoting the professional and personal success of employees in HE, especially during times of uncertainty like the COVID-19 pandemic. Continuous research and innovation in HRM are necessary for the education system’ proper development. The HRM dynamic nature processes can provide valuable job-related motivational resources, leading to higher in-role performance and well-being even in the face of adversity.

In addition, employment planning in HEIs is often carried out based on situational actions unrelated to organizational strategic goals. The talent acquisition process requires standards clarification and transparent and effective procedures. Candidates should be provided with attractive working conditions and competitive remuneration. Employee evaluation does not significantly affect the development of strengths and the elimination of weaknesses of the staff. In other words, the evaluation results do not correlate with the system of motivation, remuneration, and career growth of teachers. Teachers must take care of their growth, finding time for their personal development after completing their core duties. Despite positive HRM strategy changes, universities in Kazakhstan require further development and improvement to achieve organizational goals.

This research has also significantly advanced the RBV and COR theories. Valuable implications for management, particularly in HEIs can be derived from the findings, as they develop strategic plans in the context of the "new normal" brought about by the pandemic. Additionally, this study has sparked a reexamination of the models, methodology, and resources currently in use for HRM research, as well as an increase in the number of academic articles concentrating on HRM in HE the field. The results have given organizational academics a direction to follow and show the birth of an interdisciplinary field effecting on policy and practice in the future. In general, this research has contributed to the body of research on HRM, especially in the HE field. To advance the field and take advantage of the opportunities and difficulties presented by the "new normal" era, it highlights the value of continual research, innovation, and strategic planning.

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APPENDIX A - Questionnaire

**THE IMPACT OF HUMAN RESOURCE MANAGEMENT PRACTICES**

**ON THE EMPLOYEES’ IN-ROLE PERFORMANCE**

**EFFECT ON ORGANIZATIONAL AND INDIVIDUAL OUTCOMES**

Dear Mr. /Ms..............................................................................................

We invite you to participate in a ***confidential survey*** undertaken by the PHD candidate of Narxoz University. The aim of the study is to investigate the impact of Human Resources (HR) practices on the employees’ performance. The results obtained from the study will help to evaluate existing HR practices in areas such as employee empowerment, talent management, and knowledge generation. In this respect, it is aimed to provide information to the HEIs top managers about the changes that can be made towards the employee profile in the success of the new competition paradigms and sustainable management.

The contribution that you provide by filling out the questionnaire developed for this purpose will be of great help to the completion of this project. We will be grateful if you could please complete the enclosed questionnaire. Because an unanswered question in the analysis of the data will lead to serious problems, try to answer all the questions. If you request, we will send you a summary of the research findings when the research is completed. The information obtained from the questionnaire will be analyzed anonymously and they will be held in strict confidence. Therefore, no information about neither you nor your institution will be included. Thank you very much for your participation.

Yours sincerely Amina Gassanova, Narxoz University

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***PART I: PERSONAL INFORMATION*** | | | | | | | | |
| **1. Gender:** Male ( ) Female ( ) | | | | | | | | |
| **2. Marital Status:** Married ( ) Single ( ) Divorced / Widow ( ) | | | | | | | | |
| **3. Education Level (last graduated school):**  University ( ) Master degree ( ) PhD degree ( ) | | | | | | | | |
| **4. What is your position in the company (job title):** | | | | | | | | |
| **5. What is your department:** | | | | | | | | |
| **6. How many years have you worked for this company? (organizational tenure):** Less than 1 year ( ) 1-2 years ( ) 3-5 years ( ) 6- 10 years ( ) More than 10 years( ) | | | | | | | | |
| **7. Since you left full time education, for how many years have you worked. (total tenure):** Less than 1 year ( ) 1-2 years ( ) 3-5 years ( ) 6- 10 years ( ) More than 10 years( ) | | | | | | | | |
| ***PART II: HR PRACTICES*** | | | | | | | | |
| *To what extent do you agree with the following statements.* | | | | | | | | |
| **1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree** | | | | | | | | |
| ***Recognition and Empowerment practices*** | |  |  |  | |  |  | |
| 1 | When I do good quality work, my colleagues regularly show me their appreciation. |  |  |  | |  |  | |
| 2 | In my work unit, supervisors recognize my efforts in different ways. |  |  |  | |  |  | |
| 3 | In my work unit, supervisors congratulate me in recognition of my efforts. |  |  |  | |  |  | |
| 4 | I feel empowered to make decisions. |  |  |  | |  |  | |
| 5 | In my work unit, I have considerable freedom regarding the way I carry out my work. |  |  |  | |  |  | |
|  | ***Competence development practices*** |  |  |  | |  |  | |
| 6 | I can develop my skills in order to increase my chances of being promoted. |  |  |  | |  |  | |
| 7 | Training programs develop skills and knowledge that I can use outside this organization. |  |  |  | |  |  | |
| 8 | Training programs develop firm-specific skills and knowledge. |  |  |  | |  |  | |
| 9 | Trainings are continuous. |  |  |  | |  |  | |
|  | ***Fair reward practices*** |  |  |  | |  |  | |
| 10 | I estimate my salary as being fair internally. |  |  |  | |  |  | |
| 11 | My salary is fair in comparison with what is offered for a similar job elsewhere. |  |  |  | |  |  | |
| 12 | In my work unit, I consider that my compensation level adequately reflects my level of responsibility in the organization. |  |  |  | |  |  | |
|  | ***Information sharing practices*** |  |  |  | |  |  | |
| 13 | We are regularly informed of financial results. |  |  |  | |  |  | |
| 14 | I am involved in formal participation processes such as quality improvement groups, problem solving groups, roundtable discussions and suggestion schemes. |  |  |  | |  |  | |
| 15 | I communicate with people in other departments to solve problems and meet deadlines. |  |  |  | |  |  | |
| 16 | I receive formal communication from the company regarding company goals. |  |  |  | |  |  | |
| 17 | I receive formal communication from the company regarding financial performance (profitability, stock price etc.) |  |  |  | |  |  | |
|  | ***Pay for Performance*** |  |  |  | |  |  | |
| 18 | I receive pay rises based on my job performance. |  |  |  | |  |  | |
| 19 | I have the opportunity to earn individual bonuses or commissions based on my performance. |  |  |  | |  |  | |
|  | ***Performance Appraisal*** |  |  |  | |  |  | |
| 20 | I regularly receive (at least once a year) a formal evaluation of my performance. |  |  |  | |  |  | |
| 21 | Performance appraisals include developmental feedback. |  |  |  | |  |  | |
| 22 | Performance appraisals include objectives set by management. |  |  |  | |  |  | |
| 23 | Performance appraisals include objectives that I have set for myself. |  |  |  | |  |  | |
|  | ***Promotion From with in*** |  |  |  | |  |  | |
| 24 | Employees have the opportunity to be promoted to positions of greater responsibility with the company. |  |  |  | |  |  | |
| 25 | When new positions come up in my organization, my organization will fill them with people from inside the organization. |  |  |  | |  |  | |
| 26 | I can rotate jobs to develop my skills. |  |  |  | |  |  | |
| ***PART III: PERSONAL FEATURES*** | | | | | | | | |
| ***CREATIVITY*** | | | | | | | | |
| 1 | I am unable to solve complex problems. |  |  |  | |  |  | |
| 2 | I am good at combining ideas in ways that others have not tried. |  |  |  | |  |  | |
| 3 | I wish I had more imagination and originality. |  |  |  | |  |  | |
| 4 | I enjoy working out new ways of solving problems. |  |  |  | |  |  | |
| 5 | Others usually find my ideas very creative. |  |  |  | |  |  | |
| 6 | I am not much good at problem solving. |  |  |  | |  |  | |
| 7 | I am not very original in my ideas, thoughts and actions. |  |  |  | |  |  | |
| 8 | I am an imaginative person. |  |  |  | |  |  | |
| 9 | I would have no interest in being an inventor. |  |  |  | |  |  | |
| 10 | I can often see better ways of doing routine tasks. |  |  |  | |  |  | |
| ***PART IV: ROLE PERFORMANCE*** | | | | | | | | |
| 1 | I carry out the core parts of my job well. |  |  | |  |  |  | |
| 2 | I complete core tasks well using the standard procedures. |  |  | |  |  |  | | |
| 3 | I ensure my tasks are completed properly. |  |  | |  |  |  | | |
| 4 | I adapt well to changes in core tasks. |  |  | |  |  |  | | |
| 5 | I cope with changes in the way I have to do my core tasks. |  |  | |  |  |  | | |
| 6 | I learn new skills to help me adapt to changes in my core tasks. |  |  | |  |  |  | | |
| 7 | I initiate better ways of doing my core tasks. |  |  | |  |  |  | | |
| 8 | I come up with ideas to improve the way I do core tasks. |  |  | |  |  |  | | |
| 9 | I have changed the way my core tasks are done. |  |  | |  |  |  | | |
|  |  |  |  | |  |  |  | | |
| ***PART V: WELL BEING*** | | | | | | |
| 1 | I am satisfied with my work responsibilities. |  |  |  | |  |  | |
| 2 | In general, I feel satisfied with my present job. |  |  |  | |  |  | |
| 3 | I am satisfied with the balance between work and life outside work |  |  |  | |  |  | |
| 4 | I am satisfied with my health. |  |  |  | |  |  | |
| 5 | I find real enjoyment in my work. |  |  |  | |  |  | |
| 6 | I can always find ways to enrich my work. |  |  |  | |  |  | |
| 7 | My work is a meaningful experience for me. |  |  |  | |  |  | |
| 8 | I feel satisfied with my work achievements in my current job. |  |  |  | |  |  | |
| 9 | I feel I have grown as a person. |  |  |  | |  |  | |

**THANK YOU FOR YOUR HELP WITH THIS STUDY.**

Would you like to receive a copy of the results of this study?

Yes/No

E-Mail (corporate): ...............................................Tel:…………..……………………