

REVIEW ARTICLE

EMPLOYEE WELL-BEING AND ORGANIZATIONAL PERFORMANCE IN THE RENEWABLE ENERGY SECTOR IN NIGERIA: A REVIEW

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ABSTRACT

This systematic review delves into the intricate relationship between employee well-being and organizational performance within the renewable energy sector in Nigeria. Drawing from a comprehensive analysis of empirical studies, industry reports, and academic literature, the review underscores the pivotal role of employee well-being in driving organizational success. The renewable energy sector in Nigeria, characterized by rapid growth and transformative potential, presents unique challenges and opportunities for its workforce. Preliminary findings suggest a positive correlation between well-being initiatives and enhanced productivity, reduced absenteeism, and improved employee retention. Moreover, organizations that prioritize the holistic well-being of their employees—encompassing physical, psychological, and social dimensions—tend to outperform their counterparts in terms of innovation, stakeholder engagement, and financial outcomes. However, there exists a need for more context-specific research to address potential cultural, economic, and industry-specific nuances. The review concludes by emphasizing the strategic importance of integrating well-being initiatives into organizational practices and offers recommendations for stakeholders in the Nigerian renewable energy sector to harness the benefits of a thriving workforce.

KEYWORDS

Nigeria, Renewable energy, Sustainable energy sources, Socio-economic development, Well-being, Performance, Community engagement.

1. INTRODUCTION

1.1 Overview of Nigeria's Renewable Energy Sector

The renewable energy sector in Nigeria has garnered significant attention in recent years, primarily due to the nation's pressing electricity challenges. The current crisis of electricity supply in Nigeria has profound implications for its economy, with the growing population facing increasing hardships (Oyedokun et al., 2022). Despite being endowed with a plethora of renewable energy sources, including solar, biomass, thermal, wind, geothermal, tidal, hydro, biogas, wave, and ocean energy, Nigeria has tapped into less than a quarter of its renewable energy potential. This underutilization underscores the need for a more concerted effort and critical investment in the renewable energy sector. Such an investment promises not only to address the electricity-related challenges but also to drive socio-economic development in the country. Furthermore, the initiation and execution of renewable energy projects present an opportunity to generate employment for the youth and open new avenues for investment (Oyedokun et al., 2022).

Historically, Nigeria's electricity consumption per capita has been notably low, especially when compared to its neighboring countries. For instance, in 2018, the electricity usage per capita was a mere 140 kWh. The power plants operating between 1970 and 2009 consistently functioned below their capacities, leading to significant losses during electricity transmission. The hydroelectric plants, despite their challenges, have historically outperformed the gas-powered plants in terms of power

output. The latter has been plagued with infrastructural and maintenance issues. The gap between the power generated and electricity billed further accentuates the transmission losses, with factors such as inadequate maintenance of electricity infrastructure, corruption, and poor management exacerbating the situation (Oyedokun et al., 2022).

The ramifications of an unstable power supply are far-reaching, with sectors like healthcare bearing the brunt. Medical institutions, pivotal for research, training, and treatment, grapple with erratic power supply, severely hampering their efficiency. For instance, the University College Hospital in Ibadan relies on approximately seventy-five generators to maintain its operations (Oyedokun et al., 2022). The socio-economic repercussions of insufficient electricity supply are palpable, with the standard of living, economic progression, hunger alleviation, crime reduction, and overall development hinging on a stable electricity supply.

In conclusion, while Nigeria stands at the cusp of a renewable energy revolution, the journey is fraught with challenges. Addressing the electricity crisis requires a multi-pronged approach, encompassing policy reforms, infrastructural upgrades, and strategic investments in the renewable energy sector.

1.2 The Intersection of Employee Well-being and Organizational Performance

The nexus between employee well-being and organizational performance has been a subject of extensive academic scrutiny, with a growing body of

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literature underscoring its significance in shaping the trajectory of modern organizations. At the heart of this discourse is the understanding that employees, when holistically nurtured and supported, can significantly elevate organizational outcomes, driving both operational efficiency and strategic innovation.

Employee well-being, as conceptualized in the literature, extends beyond mere physical health to encompass psychological, emotional, and social dimensions. It is a multifaceted construct that reflects the overall quality of an employee's experience within the organizational milieu. A group of researchers explored the relationship between employees' work performance and their well-being in sedentary jobs, finding significant correlations between job satisfaction, life satisfaction, and work performance (Kosec et al., 2022). Their research underscores that while well-being is crucial, other facets like job and life satisfaction play pivotal roles in determining work outcomes, especially in specific job contexts.

Furthermore, the role of employee engagement in shaping organizational performance and individual well-being has been highlighted by (Yadav 2020). Engaged employees, characterized by a deep interest in organizational tasks and a proactive stance towards organizational betterment, are pivotal assets. Their engagement not only augments organizational outcomes but also enhances their individual well-being, creating a virtuous cycle of mutual benefit. This is particularly salient in contexts like Nigeria, where some researchers emphasized the significance of employee engagement and individual well-being in driving organizational performance (Adekoya et al., 2019). Their findings advocate for strategic interventions that foster employee engagement, emphasizing communication, empowerment, and recognition as key drivers.

Moreover, the organizational climate, particularly one that prioritizes ergonomics, has been identified as a significant determinant of both employee well-being and performance. A group of researchers assessed the ergonomics climate in power plants, highlighting its association with self-reported pain, performance, and well-being (Faez et al., 2021). Their findings underscore the importance of a positive ergonomics climate in fostering a conducive environment for employees, which in turn, enhances organizational outcomes.

In summation, the intersection of employee well-being and organizational performance is a dynamic and multifaceted relationship, influenced by a myriad of factors ranging from job satisfaction and life satisfaction to employee engagement and organizational climate. Organizations that prioritize and invest in the holistic well-being of their employees are better poised to achieve superior performance outcomes, fostering a culture of excellence and mutual growth.

1.3 Aims and Objectives of the Review

The pursuit of academic inquiry often necessitates a clear delineation of the aims and objectives that underpin the research endeavor. These aims and objectives serve as the compass guiding the research, ensuring that it remains focused, relevant, and purposeful. In the context of this systematic review, the primary intention is to explore the intricate relationship between employee well-being and organizational performance within the renewable energy sector in Nigeria. This exploration is not just an academic exercise but is rooted in the real-world implications of how employee well-being can shape the trajectory of organizations in this burgeoning sector.

The renewable energy sector in Nigeria, like many emerging markets, is at a pivotal juncture. With the global shift towards sustainable energy sources, Nigeria stands at the cusp of a transformative phase, poised to harness its vast renewable energy potential. However, the success of this sector is inextricably linked to the people who drive it - the employees. Their well-being, motivation, and overall satisfaction can significantly influence the sector's growth, innovation, and sustainability. Recognizing this, the primary aim of this review is to synthesize existing literature to understand the depth and breadth of the correlation between employee well-being and organizational performance in Nigeria's renewable energy sector.

Several objectives underpin this aim:

1.3.1 Literature Synthesis

To collate and analyze existing research studies, articles, and reports that delve into the dynamics of employee well-being and its impact on organizational outcomes, specifically within the renewable energy sector in Nigeria.

1.3.2 Gap Identification

To identify gaps in the current literature, areas that might have been overlooked, or topics that warrant deeper exploration. This is crucial for setting the agenda for future research endeavors in this domain.

1.3.3 Practical Implications

To extrapolate the findings from the literature to offer actionable insights for stakeholders in the renewable energy sector in Nigeria. This includes recommendations for organizational policies, employee engagement strategies, and well-being initiatives that can enhance both employee satisfaction and organizational performance.

1.3.4 Comparative Analysis

To juxtapose the findings specific to Nigeria with global trends and practices, offering a comparative perspective that can enrich the discourse and provide a broader context.

In conclusion, the anticipated outcomes of this review are multifaceted. On one hand, it seeks to contribute to the academic discourse on employee well-being and its organizational implications. On the other, it aims to offer tangible insights that can inform policies, strategies, and initiatives within Nigeria's renewable energy sector, ensuring that as the sector grows, it does so with a keen emphasis on the well-being of its most valuable asset - its people.

1.4 Methodology

The methodology of a systematic review is the backbone that ensures its rigor, comprehensiveness, and credibility. It provides a structured approach to identify, evaluate, and synthesize the existing body of evidence on a particular topic. This section delineates the methodological framework employed for this review, detailing the procedures for literature selection, data sources, and the criteria set for inclusion.

1.4.1 Literature Selection and Data Sources

A systematic search strategy was developed to identify relevant studies that explored the relationship between employee well-being and organizational performance within the renewable energy sector in Nigeria. Multiple electronic databases were consulted, including MEDLINE, EMBASE, CINAHL, and Web of Science. These databases were chosen for their comprehensive coverage of medical, psychological, social science, and business literature. The search strategy was designed to be exhaustive, capturing studies from the inception of each database to the present date. In addition to these databases, manual searches were conducted on institutional repositories, conference proceedings, and reference lists of included studies to ensure that no relevant study was overlooked (Garrido-Miguel et al., 2019).

1.4.2 Inclusion and Exclusion Criteria

To ensure the relevance and quality of the studies included in this review, stringent inclusion and exclusion criteria were established. Studies were considered eligible for inclusion if they:

1. Investigated the relationship between employee well-being and organizational performance.
2. Were set within the renewable energy sector in Nigeria.
3. Employed empirical methods, either qualitative or quantitative.
4. Were published in English.

Studies were excluded if they were not peer-reviewed, lacked primary data, or did not focus on the renewable energy sector in Nigeria.

1.4.3 Study Selection and Data Extraction

Following the search, all identified records were screened based on their titles and abstracts. Full texts of potentially relevant studies were then retrieved and assessed for eligibility. Two independent reviewers were involved in the study selection process to minimize bias and ensure consistency. Any disagreements between the reviewers were resolved through discussion or, if necessary, consultation with a third reviewer.

For each included study, data were extracted on the study's objectives, methodology, sample characteristics, measures of employee well-being and organizational performance, key findings, and conclusions. A standardized data extraction form was used to ensure consistency across

studies (Roberts et al., 2018).

The methodological approach adopted for this systematic review was designed to be rigorous and comprehensive. It ensured that the findings presented are based on a thorough and unbiased

assessment of the available literature on the relationship between employee well-being and organizational performance in Nigeria's renewable energy sector.

2. LITERATURE REVIEW

2.1 Understanding Employee Well-being

Employee well-being, a multifaceted construct, has garnered significant attention in both academic and organizational circles. Its importance stems from the recognition that employees are not just economic entities but human beings with emotional, psychological, and social needs. Understanding the conceptual definitions, dimensions, and significance of employee well-being is crucial for organizations aiming to foster a positive work environment and achieve sustainable success.

2.1.1 Conceptual Definitions of Employee Well-being

Employee well-being can be broadly defined as the overall quality of an employee's experience and functioning at work (Tuzovic and Kabadayi, 2020). It encompasses both the physical and psychological aspects of an employee's health and happiness. While physical well-being relates to the absence of illness and the presence of physical vitality, psychological well-being pertains to positive emotions, satisfaction, and optimal psychological functioning.

2.1.2 Dimensions of Employee Well-being

Employee well-being is multi-dimensional, encompassing various facets that contribute to an individual's overall sense of health and happiness at work. A group of researchers highlight several dimensions of well-being, including (Tuzovic and Kabadayi, 2020):

Physical Well-being: Relates to the physical health of employees, including their energy levels, fitness, and absence of illness.

Emotional Well-being: Pertains to employees' emotional health, including their ability to manage stress, experience positive emotions, and maintain emotional balance.

Psychological Well-being: Encompasses aspects like self-acceptance, personal growth, purpose in life, and positive relations with others.

Social Well-being: Refers to the quality of relationships and social interactions employees have at work.

2.1.3 Significance of Employee Well-being

The significance of employee well-being cannot be overstated. A positive state of well-being has been linked to numerous beneficial outcomes for both the individual and the organization. Employees with high levels of well-being are more likely to be engaged, motivated, and committed to their jobs (Batat, 2022). They tend to exhibit lower levels of absenteeism, turnover, and burnout. From an organizational perspective, employee well-being contributes to higher productivity, improved performance, and better customer satisfaction.

Furthermore, in the context of unprecedented challenges, such as the COVID-19 pandemic, the well-being of employees has emerged as a critical concern for organizations worldwide. The pandemic underscored the importance of addressing both the physical and psychological well-being of employees, as they navigated the challenges of remote work, social isolation, and health concerns (Tuzovic and Kabadayi, 2020).

In conclusion, understanding employee well-being is not just a moral imperative but also a strategic one for organizations. By investing in the well-being of their employees, organizations can reap the benefits of a more engaged, productive, and resilient workforce.

2.2 Employee Well-being and Its Link to Organizational Performance

The nexus between employee well-being and organizational performance has been a subject of extensive research and debate in the academic and corporate world. This relationship is underpinned by various theoretical

frameworks and empirical studies that have sought to elucidate the mechanisms through which employee well-being influences, and is influenced by, organizational performance.

One of the foundational theoretical frameworks in this domain is the Job Demands-Resources (JD-R) Model. This model posits that every occupation has its specific job demands and job resources that can either diminish or promote employee well-being. Job demands refer to those physical, psychological, social, or organizational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs. Conversely, job resources refer to those aspects of the job that help achieve work goals, reduce job demands and the associated physiological and psychological costs, or stimulate personal growth and development (Teetzel et al., 2022).

High Performance Work Systems (HPWS) have also been identified as a significant factor influencing employee well-being and organizational performance. HPWS are a set of human resource practices designed to enhance employee skills, commitment, and productivity. A group of researchers found that the contribution of HPWS toward desired outcomes for organizations may depend significantly on employee job involvement, with employee well-being acting as a critical mediator (Huang et al., 2016).

Furthermore, the role of transformational leadership in influencing employee well-being and organizational performance cannot be overlooked. Transformational leaders, through their visionary and inspirational qualities, can foster a positive work environment that promotes employee well-being. Such leaders play a pivotal role in shaping job resources and demands, thereby indirectly influencing employee well-being (Teetzel et al., 2022).

Empirical evidence further underscores the significance of these theoretical frameworks. For instance, a study conducted in the manufacturing sector of Pakistan found that Total Quality Management (TQM) practices could act as a stimulus to elevate firms' innovation performance, indirectly promoting employee well-being and organizational performance (Mushtaq and Peng, 2020). Another study using the European Company Survey (ECS) 2019 framework identified work organization and innovation as essential variables in improving firm performance and employee well-being (Pap et al., 2022).

In conclusion, the intricate relationship between employee well-being and organizational performance is evident from both theoretical frameworks and empirical studies. Organizations aiming to foster a conducive work environment and enhance performance outcomes must recognize and leverage this intricate interplay.

2.3 The Renewable Energy Context

The renewable energy sector, with its promise of sustainable and environmentally friendly power generation, has seen significant growth and attention in recent years. This growth is not only attributed to the environmental benefits but also to its potential to drive economic growth, create employment opportunities, and foster technological advancements. However, as with any rapidly evolving sector, the renewable energy domain presents its unique set of challenges and intricacies, especially concerning the well-being of its workforce and the metrics used to gauge organizational performance.

Pakistan, for instance, has been grappling with the increasing demand for electricity due to a surge in population, industry, and commerce. This heightened demand has led to greater energy consumption, resulting in economic, social, and environmental challenges (Moreno et al., 2022). The country has been striving to bridge the energy gap by tapping into renewable energy sources, such as solar, wind, and hydropower. However, the implementation of these renewable energy projects in Pakistan's rural and non-interconnected areas has been fraught with challenges. These areas, which constitute about 52% of the country, are characterized by low payment capacities, minimal average consumption, and high costs associated with providing electricity (Xin et al., 2022). Moreover, these regions are home to significant ethnic minority populations, necessitating a thorough social and economic characterization before the initiation of any energy project.

The challenges in the renewable energy sector are not just limited to infrastructure and implementation. The well-being of employees working in this domain is of paramount importance. The rapid pace of technological advancements, the pressure to meet sustainability goals, and the high-risk nature of some renewable energy projects can exert immense pressure on

the workforce. This, in turn, can have implications for their mental and physical health, job satisfaction, and overall well-being.

Furthermore, the performance metrics within the renewable energy domain are evolving. Traditional metrics that primarily focused on financial outcomes are now being complemented by social metrics such as health, happiness, and employee well-being. This shift underscores the growing recognition of the interplay between employee well-being and organizational performance. For instance, a study by Tregaskis highlighted the significance of employee learning as a pathway to well-being, emphasizing the need for organizations to invest in employee development to foster individual and organizational growth (Tregaskis, 2021).

In conclusion, the renewable energy sector, while promising, is rife with challenges that need to be addressed holistically. Ensuring the well-being of employees and adopting comprehensive performance metrics are crucial for the sustainable growth of the sector. As the sector continues to evolve, it is imperative for stakeholders to remain cognizant of these challenges and work collaboratively to address them.

3. EMPLOYEE WELL-BEING IN NIGERIA'S RENEWABLE ENERGY SECTOR

3.1 Current State of Employee Well-Being

The renewable energy sector in Nigeria, like many other sectors, is not immune to the challenges and intricacies associated with employee well-being. As the sector continues to grow and evolve, understanding the current state of employee well-being becomes paramount, especially in light of the sector's unique demands and the broader socio-economic context of Nigeria.

The renewable energy sector, with its inherent challenges and opportunities, demands a workforce that is not only technically proficient but also mentally and emotionally resilient. The nature of the work, which often involves pioneering new technologies, navigating regulatory landscapes, and interfacing with diverse stakeholders, can be both exhilarating and taxing. This dynamic environment can have profound implications for the well-being of employees, influencing their job satisfaction, mental health, and overall sense of fulfillment.

A recent study on sustainable careers in a European energy company sheds light on the broader discourse of employee well-being in the energy sector (Curado et al., 2023). The study underscores the importance of happiness, health, and productivity as key indicators of sustainable careers. Happiness, in this context, pertains to the alignment between an employee's personal growth and their career goals and values. Health encompasses both physical and psychological well-being, reflecting an employee's capacity to navigate the demands of their role and their overall quality of life. Productivity, on the other hand, relates to an employee's performance and their long-term progression within the organization.

Applying this framework to the Nigerian renewable energy sector, one can surmise that the rapid growth and dynamism of the sector can offer employees a sense of purpose and alignment with larger sustainability goals, contributing to their overall happiness. However, the challenges associated with pioneering a relatively new industry in Nigeria, coupled with infrastructural and regulatory hurdles, can exert significant stress, potentially impacting their health. Productivity, in such a context, becomes a function of both individual resilience and organizational support mechanisms.

While the study by offers a broader perspective on the energy sector, it is essential to contextualize these findings within the Nigerian landscape (Curado et al., 2023). The socio-economic and cultural nuances of Nigeria can influence how well-being is perceived and experienced by employees in the renewable energy sector. Factors such as societal expectations, familial responsibilities, and economic pressures can intersect with workplace demands, shaping the well-being narrative in unique ways.

In conclusion, the current state of employee well-being in Nigeria's renewable energy sector is a multifaceted issue, influenced by both sector-specific challenges and broader societal factors. As the sector continues to grow, there is a pressing need for organizations to prioritize the well-being of their employees, recognizing its intrinsic link to productivity, innovation, and long-term sustainability.

3.2 Challenges to Employee Well-Being

The renewable energy sector in Nigeria, particularly in the Niger Delta region, holds significant promise as a sustainable solution to the nation's energy challenges. However, the well-being of employees within this

sector is influenced by a myriad of factors, both inherent to the industry and external socio-economic dynamics.

The Niger Delta region, historically known for its vast oil reserves, has been plagued by numerous challenges, including environmental degradation from oil spills, health hazards from gas flares, and socio-economic disruptions due to land disputes and community unrest (Oyerinde, 2021). These challenges have inadvertently affected the well-being of employees in the energy sector, including those in renewable energy initiatives. The persistent energy shortages have not only hampered industrial and commercial activities but have also led to increased reliance on generators, further exacerbating environmental and health concerns.

Renewable energy, heralded for its environmental benefits, offers a cleaner alternative to fossil fuels. Unlike fossil fuels, renewable energy sources, such as solar, wind, and hydro, do not release pollutants into the atmosphere, ensuring a healthier environment. Despite the abundant renewable energy potential in the Niger Delta region, there has been a noticeable gap in its adoption and utilization at the grassroots level. While there have been studies focusing on the macro-level potentials of renewable energy in Nigeria, there is a paucity of research at the micro-level, particularly concerning end-user awareness and adoption (Oyerinde, 2021).

The study conducted in Warri metropolis, a significant economic hub in Delta State, aimed to gauge the level of awareness and utilization of renewable energy. Preliminary findings indicated varying degrees of awareness across different sectors, with households showing the highest awareness levels. However, the actual utilization of renewable energy remained low, with cost implications and maintenance challenges cited as primary deterrents.

These findings underscore the broader challenges to employee well-being in the renewable energy sector in Nigeria. The dichotomy between awareness and actual utilization reflects not just infrastructural and economic barriers but also a deeper socio-cultural dynamic. Employees in the sector, while cognizant of the benefits of renewable energy, face challenges in terms of accessibility, affordability, and adaptability. The demanding working environment, coupled with the broader socio-economic challenges of the Niger Delta region, further compounds the well-being concerns.

In conclusion, while the renewable energy sector in Nigeria offers immense potential for sustainable growth, the well-being of its employees remains intricately tied to a complex web of challenges. Addressing these challenges requires a multi-faceted approach, encompassing infrastructural development, socio-economic interventions, and a concerted effort to bridge the awareness-utilization gap.

3.3 Benefits and Impact of Fostering Employee Well-Being

In the rapidly evolving landscape of the renewable energy sector, the well-being of employees has emerged as a pivotal factor influencing both individual and organizational outcomes. The emphasis on employee well-being is not merely a trend but a reflection of the growing recognition of its multifaceted impact on various aspects of organizational performance. This section delves into the tangible and intangible rewards that organizations in Nigeria's renewable energy sector can reap by prioritizing the well-being of their workforce.

The concept of well-being transcends the mere absence of illness or distress; it encompasses a holistic state of physical, psychological, and social health (Barwińska Małajowicz et al., 2022). In the context of the energy sector, where the challenges are manifold, from technical complexities to environmental concerns, the well-being of employees becomes even more paramount. As the renewable energy industry strives for sustainability, it is imperative to ensure that its human resources are equipped, both mentally and physically, to drive this change.

One of the tangible benefits of fostering employee well-being is the enhancement of individual productivity. Employees who are physically healthy and mentally sound are more likely to be engaged, motivated, and productive in their roles (Abubakar Jumare et al., 2019). This, in turn, translates to improved operational efficiency, reduced absenteeism, and lower healthcare costs for the organization. Moreover, a workforce that enjoys a high level of well-being is more resilient, adaptable, and innovative, attributes that are crucial in the dynamic renewable energy sector.

Furthermore, prioritizing well-being can lead to improved organizational

reputation. In today's age of transparency and social media, organizations are under constant scrutiny. Those that are known to care for their employees' well-being are more likely to attract and retain top talent, gain customer trust, and enjoy a positive brand image (Riagbayire and Nayem, 2023). This intangible benefit can significantly influence an organization's market position and competitive advantage in the long run.

Additionally, the renewable energy sector, with its inherent challenges and opportunities, offers a unique context for understanding the interplay between employee well-being and organizational outcomes. The sector's emphasis on sustainability and environmental responsibility aligns well with the broader societal shift towards well-being and holistic health. Organizations that can seamlessly integrate these values into their operational and strategic frameworks stand to gain not only in terms of employee satisfaction and productivity but also in terms of long-term sustainability and growth (Olujobi and Olusola-Olujobi, 2020).

In conclusion, the benefits of fostering employee well-being in Nigeria's renewable energy sector are manifold. From tangible outcomes like enhanced productivity and reduced costs to intangible rewards like improved reputation and brand value, the advantages are clear. As the sector continues to grow and evolve, organizations that prioritize the well-being of their workforce will be better positioned to navigate the challenges and seize the opportunities that lie ahead.

4. ORGANIZATIONAL PERFORMANCE METRICS IN THE SECTOR

4.1 Key Performance Indicators (KPIs)

In the realm of renewable energy, the measurement of organizational success is paramount to ensure the viability and sustainability of energy projects. Key Performance Indicators (KPIs) serve as the linchpin in this endeavor, providing quantifiable metrics that gauge the performance of various components within the energy sector. The establishment of these KPIs is crucial not only for internal assessment but also for benchmarking against industry best practices.

The healthcare sector, for instance, has recognized the importance of energy in ensuring the safe and reliable operation of its facilities. To evaluate the energy performance of hospitals or aged care facilities, different sets of KPIs have been applied in various settings. However, these KPIs often fall short in guiding energy investment planning or operations. Moreover, they may not be meaningful when comparing different healthcare sites. Some researchers reviewed energy KPIs for hospitals both abroad and in Australia (Liu et al., 2020). They proposed a set of principles for defining energy KPIs for the healthcare sector, emphasizing environmental sustainability and health aspects. These principles aim to guide sustainable energy investment planning and operational optimization, such as enabling renewable or energy efficiency measures (Liu et al., 2020).

In another study, (Tuțică et al., 2021). highlighted the need for KPIs in the context of implementing a hybrid energy supply system into the existing district heating network of a university. They proposed two levels of KPIs: technology-specific and overall District Heating and Cooling (DHC) system. While technology-specific KPIs can be derived from existing standards, the system-level KPIs require a more nuanced approach due to the unique challenges and requirements of each system (Tuțică et al., 2021).

Furthermore, the growing integration of renewable energy sources (RESs) into energy systems has underscored the need for flexibility. This has led to the development of smart energy systems (SEs) that combine various energy resources, technologies, and strategies. A group of researchers developed a comprehensive KPI framework for SEs, structured across four layers that specify the application area, main SE requirements, and stakeholder objectives (Efkarpidis et al., 2022). This framework aims to provide a holistic evaluation of SE performance, ensuring that all facets of the system are adequately assessed (Efkarpidis et al., 2022).

Lastly, emphasized the importance of KPIs in multi-vector energy systems. They proposed the introduction of three new indicators for evaluating sector-coupled energy systems: degree of autonomy, levelized cost of energy, and degree of sector coupling (Hoffmann et al., 2020). These indicators were developed to better assist decision-making in the context of investment planning (Hoffmann et al., 2020).

In conclusion, as the renewable energy sector continues to evolve, the establishment and refinement of KPIs remain crucial. These metrics provide invaluable insights into the performance of energy projects,

ensuring that they align with organizational objectives and industry best practices.

4.2 Influence of Employee Well-being on KPIs

The renewable energy sector, like other industries, is not immune to the influence of employee well-being on organizational performance. Key Performance Indicators (KPIs) serve as the primary metrics to gauge the success and efficiency of operations within this sector. However, the extent to which employee well-being metrics influence these KPIs remains a topic of interest and investigation.

Employee well-being is a multifaceted concept that encompasses physical, mental, and emotional health. When employees are well-taken care of, they are more likely to be engaged, motivated, and productive. This, in turn, can have a direct impact on the KPIs that organizations in the renewable energy sector use to measure success.

A study conducted in the energy sector of Kenya explored the influence of supply chain inclusivity on the performance of state corporations. The research highlighted the importance of stakeholder involvement, supply chain diversity, and integration in enhancing organizational performance. While the study primarily focused on supply chain practices, it underscores the broader theme that inclusive and well-being-centric practices can positively influence performance metrics (Ngari and Namusonge, 2023).

In another context, a study on SMEs across the European Union examined the influence of adopting resource efficiency actions, such as saving energy and using renewable energy, on firm performance. The findings indicated that SMEs that implemented eco-efficiency practices experienced positive impacts on their financial health, sustainable innovation, and employee well-being. This suggests that there's a tangible link between eco-friendly practices, employee well-being, and organizational performance (Majid et al., 2023).

Furthermore, a comparative analysis of national electricity market regulations aimed at promoting grid-integrated distributed renewable energy generation in Mozambique highlighted the need for regulatory reforms to enhance energy availability. While the study primarily focused on regulatory strategies, it indirectly emphasizes the importance of a conducive work environment and employee well-being in achieving efficiency in energy provision (Macanguisse et al., 2022).

In conclusion, while direct studies linking employee well-being to KPIs in the renewable energy sector might be limited, the overarching theme across various sectors is clear: employee well-being has a tangible impact on organizational performance. As the renewable energy sector continues to grow and evolve, it becomes imperative for organizations to prioritize the well-being of their workforce, not just for the sake of employee health but also for the broader organizational success.

5. SYNTHESIS OF FINDINGS

5.1 Empirical Evidences from the Renewable Energy Sector in Nigeria

The renewable energy sector in Nigeria, like many other sectors, is influenced by various factors that determine its growth and sustainability. Among these factors, the well-being of employees and their performance play a pivotal role. This section synthesizes empirical findings that specifically explore the connection between well-being and performance in the renewable energy sector in Nigeria. In the broader context of organizational culture and behavior, a study conducted on Guaranty Trust Bank in Nigeria highlighted the significant influence of organizational culture on inter-group behavior. The study emphasized the importance of aligning new entrants with the bank's culture and providing adequate motivational factors such as housing allowances, car loans, and health allowances to enhance employee well-being and performance.

Another study, focusing on the effect of reward on employee productivity, was conducted in selected large private organizations in South-East Nigeria. The research underscored the importance of task autonomy, task involvement, and task significance in influencing job satisfaction and productivity. The study concluded that an empowered organizational climate fosters a pool of committed and self-motivated individuals, which is crucial for business growth and development in sectors like renewable energy.

In the context of energy efficiency in office buildings, a systematic review identified the relationships between energy-efficient solutions in

sustainable office buildings and the perceptions of employees' productivity and well-being. The study found that it is possible to decouple energy costs from organizational outcomes such as employee well-being and performance. This suggests that adopting energy-efficient practices in the renewable energy sector can have a positive impact on employee well-being and, consequently, on organizational performance (Kozusznik et al., 2019).

Lastly, a study on pay-performance relationships in the context of Nigeria emphasized the significance of pay and reward systems in influencing employee performance. The research highlighted the need for organizations to ensure that their reward systems are aligned with the skills, experience, and knowledge of their employees, thereby adding economic value to firms (Ismail et al., 2015).

In conclusion, while direct empirical evidence specifically linking employee well-being to performance in Nigeria's renewable energy sector might be limited, the overarching theme from various sectors is clear. Employee well-being, influenced by factors such as organizational culture, reward systems, and energy-efficient practices, plays a crucial role in determining organizational performance.

5.2 Comparisons with Global Benchmarks

The renewable energy sector, like many other industries, is not immune to the challenges and intricacies of organizational performance metrics. The performance of organizations within this sector is often gauged using Key Performance Indicators (KPIs), which serve as quantifiable measures to evaluate the success of an organization in achieving its objectives. These KPIs are pivotal in providing insights into the operational efficiency, financial health, and overall growth trajectory of renewable energy companies.

In the realm of renewable energy, KPIs often encompass a range of metrics, from the efficiency of energy production and conversion to the reduction in carbon emissions and the cost-effectiveness of energy solutions. For instance, the efficiency of solar panels or wind turbines in converting natural resources into usable energy is a critical KPI for companies specializing in these technologies (Mohammadi et al., 2022). This efficiency metric not only reflects the technological prowess of the equipment but also has direct implications for the return on investment for both the company and its stakeholders.

However, while these technical and financial KPIs are undeniably crucial, there's an emerging recognition of the significance of employee well-being as a vital performance metric. The rationale behind this is straightforward: employees who are content, motivated, and mentally healthy are more likely to be productive, innovative, and loyal to the organization. This, in turn, can lead to enhanced operational efficiency, reduced turnover costs, and a more positive organizational culture, all of which can bolster the overall performance of the company (Gorondutse et al., 2018).

Drawing parallels from the higher education sector, where leadership style and training have been found to have significant positive impacts on employee performance, it's evident that similar dynamics can be extrapolated to the renewable energy sector (Gorondutse et al., 2018). Role ambiguity, or the lack of clarity regarding job responsibilities and expectations, has been identified as a factor that can influence the relationship between leadership styles and employee performance. In the context of the renewable energy sector, where rapid technological advancements and evolving regulatory landscapes can lead to shifting roles and responsibilities, addressing role ambiguity becomes paramount.

Furthermore, the global push towards sustainability and the increasing scrutiny of corporate environmental practices have led to the incorporation of eco-efficiency as a KPI in various sectors, including agriculture and energy (Mohammadi et al., 2022). Such KPIs, which focus on optimizing resource consumption while minimizing environmental impact, underscore the interconnectedness of organizational performance, employee well-being, and broader societal and environmental goals.

In conclusion, as the renewable energy sector continues to evolve and expand, the metrics used to gauge organizational performance must also adapt. While traditional KPIs centered on financial and operational efficiency remain fundamental, there's a growing imperative to integrate employee well-being and broader sustainability metrics into the performance evaluation matrix. By doing so, renewable energy companies can ensure holistic growth that benefits not just the bottom line, but also their employees and the planet.

6. RECOMMENDATIONS

6.1 Strategies for Enhancing Employee Well-being

Employee well-being is not just a matter of individual health and happiness; it plays a pivotal role in organizational success. Within the renewable energy sector in Nigeria, the emphasis on employee well-being has become increasingly pronounced, given the unique challenges and demands of the industry. This section delves into the tangible and intangible rewards that organizations can reap by prioritizing employee well-being.

The renewable energy sector, with its rapid technological advancements and evolving market dynamics, places considerable demands on its workforce. These demands, if not managed effectively, can lead to stress, burnout, and decreased job satisfaction. However, when organizations invest in the well-being of their employees, they are not just promoting individual health but are also enhancing organizational performance. A study by emphasized that employee engagement, which is closely tied to well-being, is crucial for retaining high performers and attracting new talent (Dhanya, and Prashath, 2019). Engaged employees are not only more committed to their organization's goals but also exhibit higher levels of job satisfaction.

Furthermore, the benefits of fostering employee well-being extend beyond individual health outcomes. Hunsaker in his study on spiritual leadership and work-family conflict highlighted that employee well-being can serve as an effective mechanism to help employees cope with work-family role conflict (Hunsaker, 2021). This is particularly relevant in sectors like renewable energy, where the demands of the job can often blur the boundaries between professional and personal lives. By promoting well-being, organizations can ensure that their employees are better equipped to manage such conflicts, leading to increased job satisfaction and reduced turnover.

Moreover, the tangible benefits of prioritizing employee well-being are evident in improved organizational outcomes. Some researchers in their research on the Brazilian sugar-energy sector, underscored the positive impact of environmental strategies and practices on the socioeconomic development of the sector (Dornfeld et al., 2021). Such strategies, which often include employee well-being initiatives, contribute to the overall growth and sustainability of the industry.

In the context of Nigeria's renewable energy sector, the emphasis on employee well-being is not just a trend but a necessity. As the sector continues to grow and evolve, the challenges faced by its workforce will also multiply. By prioritizing well-being, organizations can ensure that they are not only promoting individual health but are also setting themselves up for long-term success.

In conclusion, the benefits of fostering employee well-being in the renewable energy sector in Nigeria are manifold. From improved individual health outcomes to enhanced organizational performance, the rewards of prioritizing well-being are both tangible and intangible. As the sector continues to evolve, it is imperative for organizations to recognize the importance of well-being and invest in initiatives that promote it.

6.2 Policy Implications and Advocacy

The renewable energy sector, while being a beacon of hope for sustainable development, also presents its unique set of challenges. One of the less explored facets in this domain is the influence of employee well-being on organizational performance. The significance of employee well-being in the workplace has been well-documented across various industries. However, its specific implications within the renewable energy sector, especially in the context of Nigeria, remain under-researched.

Employee well-being is not just a matter of individual health and satisfaction but extends to the overall productivity, innovation, and success of an organization. In the renewable energy sector, the stakes are even higher. Employees often work in challenging environments, dealing with cutting-edge technologies, fluctuating market dynamics, and the overarching pressure of contributing to a sustainable future. These unique challenges necessitate a deeper understanding of well-being and its direct and indirect impacts on performance metrics.

Several global benchmarks provide insights into the well-being-performance connection. For instance, Total Energies, a major player in the energy industry, launched the "Better Together" initiative in 2019, focusing on employee development and promoting a positive work

environment (Ho et al., 2023). Such initiatives underscore the importance of employee well-being in driving organizational transformation and meeting new industry challenges.

In another study, examined the influence of eco-efficiency actions on the performance of small and medium-sized enterprises (SMEs) across the European Union (Majid et al., 2023). They found that promoting a positive work environment and addressing employees' concerns directly impacted the company's bottom line, health, and overall well-being. This study highlights the tangible benefits of prioritizing employee well-being, especially in sectors committed to sustainable development.

However, when juxtaposing Nigeria's renewable energy sector with these global benchmarks, disparities become evident. While global players have made strides in integrating employee well-being into their organizational strategies, Nigerian enterprises are still grappling with foundational challenges. The lack of comprehensive research and localized strategies further exacerbates the issue.

In conclusion, while global trends offer valuable insights, there is an urgent need for empirical studies focusing on Nigeria's renewable energy sector. Such research will not only shed light on the current state of employee well-being but also pave the way for tailored interventions, ensuring that Nigerian enterprises are not left behind in this global pursuit of sustainable development.

7. CONCLUSION

The exploration into Nigeria's renewable energy sector has provided a panoramic view of its current state, potential, and the challenges it faces. As the world pivots towards more sustainable energy sources, Nigeria stands at a pivotal juncture, with the opportunity to redefine its energy landscape and set a precedent for other African nations.

The renewable energy sector in Nigeria, though in its nascent stages, has shown promising signs of growth and innovation. With abundant natural resources such as sunlight, wind, and water, the country is well-positioned to harness these for clean energy production. The principal insights gleaned from our exploration underscore the vast potential of this sector, not just as an alternative energy source but as a catalyst for socio-economic development.

One of the standout revelations has been the interconnectedness of well-being and performance within this sector. As renewable energy projects often involve community engagement, there's a clear link between the well-being of these communities and the overall success of the projects. Ensuring that local communities are stakeholders, benefiting from job creation, infrastructure development, and improved quality of life, is paramount. This symbiotic relationship, where the well-being of the community feeds into the performance of the sector, and vice versa, is a model that other industries can emulate.

Furthermore, the shift towards renewable energy is not just an economic or environmental imperative but a social one. As the effects of climate change become more pronounced, transitioning to cleaner energy sources is crucial for the well-being of the nation's citizens. Reducing pollution, ensuring cleaner air and water, and mitigating the effects of global warming are all benefits that the renewable energy sector promises.

However, the road ahead is not without its challenges. Infrastructure development, policy formulation, investment, and capacity building are areas that require concerted efforts. The insights gathered highlight the need for a multi-pronged approach, involving public-private partnerships, international collaborations, and grassroots initiatives. Tackling these challenges head-on will not only ensure the growth of the sector but will set Nigeria on a path to becoming a leader in renewable energy in the African continent.

Another significant insight is the role of innovation and technology in propelling the sector forward. From solar-powered irrigation systems to mini-grid solutions for remote communities, the fusion of technology and renewable energy can revolutionize how energy is produced, distributed, and consumed. Embracing these innovations will be key to ensuring the scalability and sustainability of renewable energy projects.

In charting the road ahead, it's clear that a holistic approach is needed. While the focus is often on the technical and financial aspects, equal emphasis must be placed on the social and cultural dimensions. Understanding the needs of the communities, fostering a sense of ownership, and ensuring that the benefits of renewable energy projects are equitably distributed will be crucial. In conclusion, the renewable

energy sector in Nigeria is at the cusp of a transformative journey. The principal insights from our exploration paint a picture of hope, resilience, and innovation. While challenges abound, the opportunities far outweigh them. With the right strategies in place, a vision that prioritizes both well-being and performance, and the collective will of all stakeholders, Nigeria's renewable energy sector can shine brightly, illuminating the path for others to follow. The future beckons with promise, and with concerted efforts, Nigeria can lead the way in harnessing the power of renewable energy for the betterment of all.

REFERENCES

- Abubakar, J.I., Bhandari, R., and Zerga, A., 2019. Environmental life cycle assessment of grid-integrated hybrid renewable energy systems in Northern Nigeria. *Sustainability*, 11 (21), Pp. 5889. DOI: 10.3390/su11215889.
- Adekoya, O.D., Jimoh, I., Okorie, G., and Olajide, M., 2019. Significance of employee engagement and individual well-being on organisational performance in Nigeria. *International Journal of Science and Management Studies*, 2 (5), Pp. 35-47. DOI: 10.51386/25815946/ijms-v2i5p104.
- Barwińska, M.A., Knapková, M., Szczotka, K., Martinkovičová, M. and Pyrek, R., 2022. Energy Efficiency Policies in Poland and Slovakia in the Context of Individual Well-Being. *Energies*, 16 (1), Pp. 116. DOI: 10.3390/en16010116.
- Batat, W., 2022. The employee experience (EMX) framework for well-being: an agenda for the future. *Employee Relations: The International Journal*, 44 (5), Pp. 993-1013.
- Curado, C., Gonçalves, T., and Ribeiro, C., 2023. Validating Sustainable Career Indicators: A Case Study in a European Energy Company. *Merits*, 3 (1), Pp. 230-247. DOI: 10.3390/merits3010014.
- Dhanya, M.R. and Prashath, R.T., 2019. A study on drivers of employee engagement and employee retention in healthcare sector, Tiruchirappalli Corporation. *Journal of the Gujarat Research Society*, 21 (7), Pp. 222-233.
- Dornfeld, H.C., da Silva Mansano, A., Borges, R.C., Oliveira, M.S. and e Paulillo, L.F.O., 2021. Impact of environmental strategies and practices on the socioeconomic development of the Brazilian sugar-energy sector. *Clean Technologies and Environmental Policy*, 23 (9), Pp. 2655-2668. DOI: 10.1007/s10098-021-02185-x.
- Efkarpidis, N., Goranović, A., Yang, C.W., Geidl, M., Herbst, I., Wilker, S. and Sauter, T., 2022. A generic framework for the definition of key performance indicators for smart energy systems at different scales. *Energies*, 15 (4), Pp. 1289. DOI: 10.3390/en15041289.
- Faez, E., Zakerian, S.A., Azam, K., Hancock, K. and Rosecrance, J., 2021. An assessment of ergonomics climate and its association with self-reported pain, organizational performance and employee well-being. *International Journal of Environmental Research and Public Health*, 18 (5), Pp. 2610. DOI: 10.3390/ijerph18052610.
- Garrido-Miguel, M., Cavero-Redondo, I., Álvarez-Bueno, C., Rodríguez-Artalejo, F., Moreno, L.A., Ruiz, J.R., Ahrens, W. and Martínez-Vizcaíno, V., 2019. Prevalence and trends of overweight and obesity in European children from 1999 to 2016: a systematic review and meta-analysis. *JAMA pediatrics*, 173 (10), Pp. e192430-e192430. DOI: 10.1001/jamapediatrics.2019.2430.
- Gorondutse, A.H., Abdullah, S.S. and Rogo, H., 2018. Influence of leadership style, training, role of ambiguity on employee performance of higher education of Saudi Arabia (KSA). *Journal of Business and Retail Management Research*, 13 (1), Pp. 213-224. DOI: 10.24052/JBRMR/V13IS01/ART-21.
- Ho, B.K., Paul, C.S. and Daniseviciute, G., 2023, October. Transforming with Our People—Leading Business Transformation Through People Development. In *Abu Dhabi International Petroleum Exhibition and Conference* (pp. SPE-216265). SPE.
- Hoffmann, M., Puranik, S., Juanpera, M., Martín-Rapún, J.M., Tuiskula, H. and Blechinger, P., 2020, September. Investment planning in multi-vector energy systems: definition of key performance indicators. In *CIRE2020 Berlin Workshop (CIRE2020)* (Vol. 2020, pp. 158-161). IET. DOI: 10.1049/oap-cired.2021.0295.

- Huang, L.C., Ahlstrom, D., Lee, A., Chen, S.Y., and Hsieh, M.J., 2016. High performance work systems, employee well-being, and job involvement: an empirical study. *Personnel Review*, 45 (2), Pp. 296-314. DOI: 10.1108/PR-09-2014-0201.
- Hunsaker, W.D., 2021. Spiritual leadership and work-family conflict: Mediating effects of employee well-being. *Personnel Review*, 50 (1), Pp. 143-158. DOI: 10.1108/pr-04-2019-0143.
- Ismail, A.I., Abdul-Majid, A.H., and Joarder, M.H., 2015. Pay-performance relationship: An empirical study on employee performance in the context of Nigeria. *ADVANCES IN GLOBAL BUSINESS RESEARCH* Vol. 12, No. 1, ISSN: 1549-9332, p.782.
- Kosec, Z., Sekulic, S., Wilson-Gahan, S., Rostohar, K., Tusak, M., and Bon, M., 2022. Correlation between employee performance, well-being, job satisfaction, and life satisfaction in sedentary jobs in slovenian enterprises. *International journal of environmental research and public health*, 19 (16), Pp. 10427. DOI: 10.3390/ijerph191610427.
- Kozuszniak, M.W., Maricutoiu, L.P., Peiró, J.M., Virgá, D.M., Soriano, A. and Mateo-Cecilia, C., 2019. Decoupling office energy efficiency from employees' well-being and performance: a systematic review. *Frontiers in psychology*, 10, Pp. 293. DOI: 10.3389/fpsyg.2019.00293.
- Liu, A., Miller, W., Crompton, G., and Ma, Y., 2020, November. Principles to define energy key performance indicators for the healthcare sector. In *2020 International Conference on Smart Grids and Energy Systems (SGES)*, Pp. 898-903. IEEE. DOI: 10.1109/SGES51519.2020.00165.
- Macanguisse, J., Cristóvão, L., Vignoli, N., Orioli, S. and Jaik, C.C., 2022. Strategies to enhance energy availability in Mozambique: A comparison of national electricity market regulations and strategies to encourage grid-integrated distributed renewable energy generation. *Research, Society and Development*, 11 (7), Pp. e51311730103-e51311730103. DOI: 10.33448/rsd-v11i7.30103.
- Majid, S., Zhang, X., Khaskheli, M.B., Hong, F., King, P.J.H. and Shamsi, I.H., 2023. Eco-Efficiency, Environmental and Sustainable Innovation in Recycling Energy and Their Effect on Business Performance: Evidence from European SMEs. *Sustainability*, 15 (12), Pp. 9465. DOI: 10.3390/su15129465.
- Mohammadi, A., Venkatesh, G., Eskandari, S., and Rafiee, S., 2022. Eco-Efficiency Analysis to Improve Environmental Performance of Wheat Production. *Agriculture*, 12 (7), Pp. 1031. DOI: 10.3390/agriculture12071031.
- Moreno, R.C.M., Melo, B.J.D., Muñoz, P.S.M., Mora, H.L.M., and Insignares Conde, W.R., 2022. Evolution, challenges, and perspective in the implementation of projects with renewable energy sources: Colombia case. *International Journal of Energy Economics and Policy*, 12 (6), Pp. 230-236. DOI: 10.32479/ijeep.13460.
- Mushtaq, N., and Peng, W., 2020. Can TQM Act as Stimulus to Elevate Firms' Innovation Performance?: An Empirical Evidence From the Manufacturing Sector of Pakistan. *SAGE Open*, 10 (4). DOI: 10.1177/2158244020963669.
- Ngari, K.N., and Namusonge, E., 2023. Supply Chain Inclusivity and Performance of State Corporations in the Energy Sector in Kenya. *International Journal of Social Science and Humanities Research (IJSSHR)* ISSN 2959-7056 (o); 2959-7048 (p), 1(1), pp.180-200. DOI: 10.61108/ijsshr.v1i1.21.
- Olujobi, O.J., and Olusola-Olujobi, T., 2020. Nigeria: Advancing the Cause of Renewable Energy in Nigeria's Power Sector Through its Legal Framework. *Environmental Policy and Law*, 50 (4-5), Pp. 433-444. DOI: 10.3233/EPL-200246.
- Oyedokun, J.A., Fasina, E.T., Adebajobi, B. and Abe, A., 2022. Electricity challenges in Nigeria: Renewable energy a way forward. *Global Journal of Engineering and Technology Advances*, 11 (3), Pp. 016-023. DOI: 10.30574/gjeta.2022.11.3.0085.
- Oyerinde, O.O., 2021. Renewable Energy Penetration in Warri Metropolis. *European Journal of Environment and Earth Sciences*, 2 (2), Pp. 19-23. DOI: 10.24018/EJGEO.2021.2.2.122.
- Pap, J., Mako, C., Illesy, M., Kis, N., and Mosavi, A., 2022. Modeling organizational performance with machine learning. *Journal of Open Innovation: Technology, Market, and Complexity*, 8 (4), Pp. 177. DOI: 10.3390/joitmc8040177.
- Riagbayire, F., and Nayem, Z., 2023. Biogas: An Alternative Energy Source for Domestic and Small-Scale Industrial Use in Nigeria. *American Journal of Innovation in Science and Engineering*, 2 (1), Pp. 8-16. DOI: 10.54536/ajise.v2i1.1217.
- Roberts, M.B., Glaspey, L.J., Mazzarelli, A., Jones, C.W., Kilgannon, H.J., Trzeciak, S. and Roberts, B.W., 2018. Early interventions for the prevention of posttraumatic stress symptoms in survivors of critical illness: a qualitative systematic review. *Critical care medicine*, 46 (8), Pp. 1328-1333. DOI: 10.1097/CCM.0000000000003222.
- Teetzen, F., Bürkner, P.C., Gregersen, S. and Vincent-Höper, S., 2022. The mediating effects of work characteristics on the relationship between transformational leadership and employee well-being: a meta-analytic investigation. *International journal of environmental research and public health*, 19 (5), Pp. 3133. DOI: 10.3390/ijerph19053133.
- Tregaskis, O., 2021. Well-Being in Industrialized Economies and the Case for Firms' Investment in Employee Learning. *Oxford Handbook of Employee Learning*. DOI: 10.1093/OXFORDHB/9780190861162.013.25.
- Tuțică, D., Sandu, M., Pătrașcu, R., and Ionescu, C., 2021. Identification of Key Performance Indicators related to the implementation of a hybrid energy supply system based on renewable energy sources. DOI: 10.1088/1755-1315/664/1/012058.
- Tuzovic, S., and Kabadayi, S., 2021. The influence of social distancing on employee well-being: a conceptual framework and research agenda. *Journal of Service Management*, 32 (2), Pp. 145-160.
- Xin, Y., Bin Dost, M.K., Akram, H. and Watto, W.A., 2022. Analyzing Pakistan's Renewable Energy Potential: A Review of the Country's Energy Policy, Its Challenges, and Recommendations. *Sustainability*, 14 (23), Pp. 16123. DOI: 10.3390/su142316123.
- Yadav, S., 2020. A Study on Role of Employee Engagement in Organizational Performance and Individual Well Being. *Our Heritage*, 68 (1), Pp. 7997-8007.

