



IJRASET

International Journal For Research in
Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 11 Issue: V Month of publication: May 2023

DOI: <https://doi.org/10.22214/ijraset.2023.51721>

www.ijraset.com

Call:  08813907089

E-mail ID: ijraset@gmail.com

Paradigm Shift of Sustainable Human Resource Management: A Systematic Review

Arpana Katiyar¹, Dr. Vivek Singh Sachan²

School of Business Management, Chhatrapati Shahu Ji Maharaj University, Kanpur, Uttar Pradesh, India

Abstract: Sustainable management takes the concepts from sustainability and synthesizes them with the concepts of management. Sustainability has three branches: the environment, the needs of present and future generations, and the economy. Using these branches, it creates the ability of a system to thrive by maintaining economic viability and also nourishing the needs of the present and future generations by limiting resource depletion. From this definition, sustainable management has been created to be defined as the application of sustainable practices in the categories of businesses, agriculture, society, environment, and personal life by managing them in a way that will benefit current generations and future generations. Sustainable management is needed because it is an important part of the ability to successfully maintain the quality of life on our planet. Sustainable management can be applied to all aspects of our lives. For example, the practices of a business should be sustainable if they wish to stay in businesses, because if the business is unsustainable, then by the definition of sustainability they will cease to be able to be in competition. Communities are in a need of sustainable management, because if the community is to prosper, then the management must be sustainable. Forest and natural resources need to have sustainable management if they are to be able to be continually used by our generation and future generations. Our personal lives also need to be managed sustainably. This can be by making decisions that will help sustain our immediate surroundings and environment, or it can be by managing our emotional and physical well-being. Sustainable management can be applied to many things, as it can be applied as a literal and an abstract concept. Meaning, depending on what they are applied to the meaning of what it is can change.

Keywords: sustainable, resource, environment, business, paradigm, natural, communities, society, depletion

I. INTRODUCTION

Human resource management (HRM or HR) is the strategic and coherent approach to the effective and efficient management of people in a company or organization such that they help their business gain a competitive advantage. It is designed to maximize employee performance in service of an employer's strategic objectives.^[1] Human resource management is primarily concerned with the management of people within organizations, focusing on policies and systems.^[2] HR departments are responsible for overseeing employee-benefits design, employee recruitment, training and development, performance appraisal, and reward management, such as managing pay and employee benefits systems.^[3] HR also concerns itself with organizational change and industrial relations, or the balancing of organizational practices with requirements arising from collective bargaining and governmental laws.¹The overall purpose of human resources (HR) is to ensure that the organization is able to achieve success through people.^[5] HR professionals manage the human capital of an organization and focus on implementing policies and processes. They can specialize in finding, recruiting, selecting, training, and developing employees, as well as maintaining employee relations or benefits. Training and development professionals ensure that employees are trained and have continuous development. This is done through training programs, performance evaluations, and reward programs. Employee relations deals with the concerns of employees when policies are broken, such as cases involving harassment or discrimination. Managing employee benefits includes developing compensation structures, parental leave programs, discounts, and other benefits for employees. On the other side of the field are HR generalists or business partners². These HR professionals could work in all areas or be labour relations representatives working with unionized employees. HR is a product of the human relations movement of the early 20th century, when researchers began documenting ways of creating business value through the strategic management of the workforce.^[6] It was initially dominated by transactional work, such as payroll and benefits administration, but due to globalization, company consolidation, technological advances, and further research, HR as of 2015 focuses on strategic initiatives like mergers³ and acquisitions, talent management, succession planning, industrial and labor relations, and diversity and inclusion. In the current global work environment, most companies focus on lowering employee turnover and on retaining the talent and knowledge held by their workforce.



New hiring not only entails a high cost but also increases the risk of a new employee not being able to adequately replace the position of the previous employee. HR departments strive to offer benefits that will appeal to workers, thus reducing the risk of losing employee commitment and psychological ownership. The human resources field began to take shape in 19th century Europe. It was built on a simple idea by Robert Owen (1771–1858) and Charles Babbage (1791-1871) ⁴during the industrial revolution. These men concluded that people were crucial to the success of an organization. They expressed the thought that the well-being of employees led to perfect work; without healthy workers, the organization would not survive.^[7] HR emerged as a specific field in the early 20th century, influenced by Frederick Winslow Taylor (1856–1915). Taylor explored what he termed "scientific management" (sometimes referred to as "Taylorism"), striving to improve economic efficiency in manufacturing jobs. He eventually focused on one of the principal inputs into the manufacturing process—labor—sparking inquiry into workforce productivity.^[8] Meanwhile, in England, C S Myers, inspired by unexpected problems among soldiers which had alarmed generals and politicians in the First World War of 1914–1918, co-founded the National Institute of Industrial Psychology (NIIP) in 1921.^[9] In doing so, he set seeds for the human relations movement. This movement, on both sides of the Atlantic, built on the research of Elton Mayo (1880-1949) and others to document through the Hawthorne studies (1924–1932) and other studies how stimuli, unrelated to financial compensation and working conditions, could yield more productive workers.^[10] Work by Abraham Maslow (1908–1970), Kurt Lewin (1890–1947)⁵, Max Weber (1864–1920), Frederick Herzberg (1923–2000), and David McClelland (1917–1998), forming the basis for studies in industrial and organizational psychology, organizational behavior and organizational theory, was interpreted^l in such a way as to further claims^l of legitimacy for an applied discipline.⁶

By the time enough theoretical evidence existed to make a business case for strategic workforce management, changes in the business landscape - à la Andrew Carnegie (1835-1919), John Rockefeller (1839-1937) - and in public policy - à la Sidney (1859–1947) and Beatrice Webb (1858-1943), Franklin D. Roosevelt and the New Deal of 1933 to 1939 - had transformed employer-employee relationships, and the HRM discipline became formalized as "industrial and labor relations". In 1913 one of the oldest known professional HR associations—the Chartered Institute of Personnel and Development (CIPD)⁷—started in England as the Welfare Workers' Association; it changed its name a decade later to the Institute of Industrial Welfare Workers, and again the next decade to Institute of Labour Management before settling upon its current name in 2000.^[11] From 1918 the early Soviet state⁸ institutions began to implement a distinct ideological HRM focus^[12] alongside technical management - first in the Red Army (through political commissars alongside military officers), later (from 1933) in work sites more generally (through partorg posts alongside conventional managers).^[13]

In 1920, James R. Angell delivered an address to a conference on personnel research in Washington detailing the need for personnel research. This preceded and led to the organization of the Personnel Research Federation. In 1922 the first volume of *The Journal of Personnel Research* was published, a joint initiative between the National Research Council and the Engineering Foundation.^[14] Likewise in the United States, the world's first institution of higher education dedicated to workplace studies—the School of Industrial and Labor Relations—formed at Cornell University in 1945.^[15] In 1948 what would later become the largest professional HR association—the Society for Human Resource Management (SHRM)—formed as the American Society for Personnel Administration (ASPA).^[16]

In the Soviet Union, meanwhile, Stalin's use of patronage exercised through the "HR Department" equivalent in the Bolshevik Party, its Orgburo, demonstrated the effectiveness and influence of human-resource policies and practices,^{[17][18]} and Stalin himself acknowledged the importance of the human resource,^[19] exemplified in his mass deployment of it, as in the five-year plans and in the Gulag system.⁹

During the latter half of the 20th century, union membership declined significantly,^[20] while workforce-management specialists continued to expand their influence within organizations. In the US, the phrase "industrial and labor relations" came into use to refer specifically to issues concerning collective representation, and many companies began referring to the proto-HR profession as "personnel administration."^[21] Many current HR practices originated with the needs of companies in the 1950s to develop and retain talent.^[22]

In the late 20th century, advances in transportation and communications greatly facilitated workforce mobility and collaboration. Corporations began viewing employees as assets. "Human resources management" consequently, became the dominant term for the function—the ASPA even changing its name to the Society for Human Resource Management (SHRM) in 1998.^[16]

"Human capital management" (HCM^[23]) is sometimes used synonymously with "HR", although "human capital" typically refers to a more narrow view of human resources; i.e., the knowledge the individuals embody and can contribute to an organization. Other terms sometimes used to describe the HRM field include "organizational management", "manpower management", "talent management", ¹⁰"personnel management", "workforce management", and simply "people management".



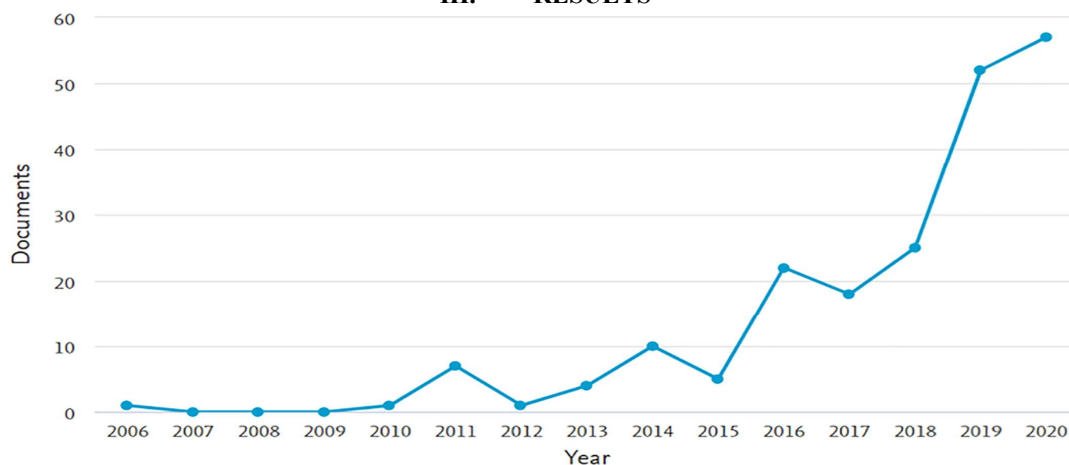
As organizations increasingly claim to have become more sustainable and to have contributed to global sustainable development, demands for Human Resource Management (HRM) to become sustainable intensify. In the past decade, the concept of Sustainable HRM received increasing attention in both practice and research.¹¹ However, academics' views about what Sustainable HRM means are diverse, and the effectiveness of Sustainable HRM practices is uncertain. We reviewed key articles in the literature on Sustainable HRM and as a result highlight how the purpose of HRM has been transformed in the search for sustainability. We present four Sustainable HRM types and describe how HRM can effectively contribute to solving today's "grand" sustainability challenges by applying ideas from a common good economy perspective. We propose that a new type of Sustainable HRM – Common Good HRM – could be essential in driving progress toward addressing sustainable development goals (SDGs) in Sustainable HRM.¹²

II. DISCUSSION

Sustainability is not a new subject. Both society and business are increasingly becoming aware of the importance of a sustainable development "that meets the needs of the present without compromising the ability of future generations to meet their own needs". However, managers still need to comprehend how to deal with the challenges of achieving sustainability.¹³ Business performance includes concerns for a triple bottom line: economic, environmental, and social, to tackle these challenges. This triple bottom line involves an increased corporation focus on engaging in corporate sustainability and corporate social responsibility. Furthermore, it is generally accepted that companies may take advantage of incorporating responsibility and sustainability principles and practices into their strategies and core business processes.¹⁴ Human resource management may play an important role in searching for this triple balance and contributing to corporate sustainability and social responsibility (Wilkinson, 2000). In this article, we discuss the role of HRM in the search for corporate sustainability and corporate social responsibility and highlight the Respect-Openness-Continuity (ROC) model proposed by Prins, Beirendonck, Vos, and Segers (2014) to address the different challenges of HRM.¹⁵ The sustainability paradigm may have the power to transform the purpose of HRM from a single economic purpose to multiple purposes. There are several perspectives of HRM associated with sustainability issues in the literature, namely Socially Responsible HRM, Green HRM, among others. Furthermore, Sustainable HRM is closely related to corporate social responsibility initiatives. However, according to Stahl, Brewster, Collings, and Hajro (2020), HRM has not taken ownership of social responsibility issues, and is uncomfortable with how to approach these concerns. Additionally, HRM is more likely to offer operational support in executing and implementing internal social responsibility initiatives rather than strategic input in developing a corporate social responsibility strategy (Sarvaiya, Eweje, & Arrowsmith, 2018). Bonner and Friedman (2013) also found that HRM does not play a key role within organizations of corporate social responsibility decision making; the key influencers are members of the board of directors, followed by the legal, public relations, sales, and marketing departments. Additionally, according to Deloitte (2021) millennials and Gen Zs want businesses to shift its purpose, focus more on people (employees, customers, and society) and less on profits. 62% of the respondents agree that businesses "have no ambition beyond wanting to make money" (p. 47).¹⁶ Stahl et al. (2020) analyze why HRM fails to be more involved in sustainability and corporate social responsibility initiatives. One of the main factors is the difficulty of the HR function in playing a strategic role in organizations, as has been widely documented for a long time. Another reason has to do with the extent to which sustainability initiatives are merely symbolic and self-serving issues in organizations or, on the contrary, are normative and substantive endeavors. The former involves an ad-hoc approach and greenwashing rhetoric, mainly driven by cause marketing motivations, which does not require high levels of HRM involvement. The latter comprises an authentic commitment to addressing societal needs and an impactful approach, which in this case requires a high HRM involvement, "such as attempts to improve working conditions along the supply chain, efforts to reduce the carbon footprint, or corporate volunteering and service assignments".¹⁷ Nevertheless, according to Beer, Boselie, and Brewster (2015), HRM has a responsibility for the panorama presented above. The authors argue that, over the past 30 years, HRM has sought to become successful by developing a narrow focus on economic performance. In order to persuade the board of directors, human resource managers struggled to become business partners, seeking to demonstrate the profitability (ROI) of their interventions, which became one of their main motives. HRM has somehow "ignored its role in building corporate sustainability and corporate social responsibility capabilities and balancing the interests of different parties within the organization" (Stahl, 2020, p. 4). Beer et al. (2015) argue that HRM must return to its roots, namely to the "Harvard model", by balancing the interests of multiple stakeholders. Pfeffer (2016) claims that HRM needs to consider other variables beyond performance, such as psychological and physical health and societal welfare. According to Wilkinson (2000) for true corporate sustainability, employees must take a central stage in the workplace by being recognized, valued and promoted, preventing the exodus of bright and enthusiastic people.¹⁸

The sustainability debate involves challenges and changes in many organizational domains, which are impossible to achieve without developing the necessary technical and administrative skills, as well as values and attitudes with a clear and long-term focus. The Respect-Openness-Continuity model (ROC) deals with many issues that organizations should consider when pursuing sustainable HRM. “Respect” for different stakeholders is a basic assumption, and the internal stakeholder, the employee, is often overlooked, as opposed to what happens to external stakeholders. In strategic HRM, this dimension is in line with an inside-out perspective brought by the resource-based view (RBV)¹⁹. “Openness” is related with environmental awareness, which is in line with an outside-in perspective on HRM, based on the strategic fit perspective where the main premise relies on the HRM role in achieving business outcomes. Finally, “Continuity” involves a long-term approach, both in terms of economic and societal sustainability levels as well as in what concerns individual employability level. Continuity at all levels demand employees equipped with the skills to nurture innovation, manage risk, transform the economic systems within which they operate, and deliver on broader societal goals responsibly and sustainably.²⁰ Therefore, sustainability in people management goes beyond HRM policies and practices by including a broad and critical perspective of leading people responsibly and ethically to accomplish the first building block of the ROC model, proposed by, “respect.” A primary prevention perspective involves the psychology of sustainability and sustainable development. Achieving quality of life and well-being are sustainability goals as they allow positive organizational contexts that are key to mobilizing energy, coping with challenges, and innovation. Besides the internal social concern, sustainable HRM²¹ includes the external social concern leading people to engage in social projects through corporate volunteering, addressing issues such as human rights, diversity, and inclusion. HRM can also provide a critical debate about the introduction of global supply chains and the growth of out-sourced and off-shore services that have exacerbated unfair labor conditions by simply applying economic responses in a competitive market, reducing labor costs, for example, without considering ethical implications (Donaghey & Reinecke, 2020). Researchers remark that the critical HRM literature highlights the pitfalls of managing employment relations based solely on economic terms and the need to bring the “human” into HRM. Respect in sustainable HRM involves concerns about “sense-making, engagement, employee participation, autonomy, [...] which may allow corporate sustainability initiatives to become substantive and not merely means to ends”²². Furthermore, “openness”, the second dimension of the ROC model requires revisiting the strategic fit, including institutional and stakeholder theories, which could broaden the scope of mainstream HRM, usually focusing on industrial/organizational psychology. Another dimension of fit, involves the environmental fit. “Green HRM” is increasingly becoming the focus of research and involves literature related to environmental management and HRM and organizational culture²³. Finally, the last dimension of the ROC model, “continuity,” involves the search for a long-term focus on organizational relationships and employment relations. Researchers suggest a reinforcing effect between sustainable HR practices, social dialogue and industrial relations climate. Within a more sustainable or balanced approach, scores of financial, individual, and social performance are important to consider simultaneously for the long-term survival of the organization. The continuity dimension within the employment relation is not equal to lifetime employment but involves synthesizing individual and organizational focus on career management.²⁴ In sum, to debate sustainability and the role of HRM, a new approach to managing people that goes beyond the traditional approach to strategic human resource management (SHRM) should be discussed. According to some authors by adopting a sustainable approach to HRM, we are concerned with the outcomes of managing an individual or a group within an organization.

III. RESULTS





In the 21st century where a man has become a resource, there is a paradigm shift in the trends in Human Resource Management. A look at the trends in managing people in this dynamic industry reflects that Attracting, Managing, Nurturing talent and Retaining people has emerged to be the single most critical issue in lieu of the enormous opportunities spun off by the market. New paradigms emerge as a result and new rules of the game have to be re-invented. Humankind then becomes the subjective and the objective force for all progress. The traditional HR only developed the policies of the organization. The present HR had to focus on employee growth, and had to be responsive to his needs and act as a bridge between the employers and the employee. The role of the HR has become very challenging in this present scenario. They have to play a role in talent engagement, talent enhancement and talent retention. In fact, HR is no longer a function. It is a strategic partner in adding value; in several ways. The present paper tries to explore the emerging trends in HR field in the present scenario. The paper highlights the various challenges in changing business environment and presents strategies to make HRM effective in the present scenario to meet the global challenges.²⁰ In vision of a sustainable ecosystem of human resource management (HRM) research by reflecting on key trends of HRM research and provide suggestions for future research efforts for the HRM research community. We outline the evolution and development of six areas of HRM research that are highly relevant to the policy and practice in the current global political-economic context. These research pursuits are shifting from firm-oriented and technology-oriented to becoming more employee-oriented and society-oriented. We extend these lines of enquiry with suggestions of what future research can examine to keep pace with practice and to offer policy and practical recommendations. We argue that different sub-fields of HRM research can complement, reinforce and interact with each other to enable us to build a robust and expanding research programme, intellectually and practically, to reflect the world of work and to demonstrate the relevance of our research to society with scientific rigour²².

However, we are also focusing on health and well-being in work contexts as primary levers for sustainable development. Above all else, we are attentive to the impacts of HRM policies and practices on groups of people and the relationship between multiple stakeholders within the organization and within the wider community (e.g., social outcomes).²⁴ Relevant avenues for research concern identifying the socioeconomic and strategic context in which sustainable HRM prospers best. For example, interesting research issues could involve identifying ways of advocating or excluding sustainable HRM strategies with cost-cutting or restructuring strategies. The influence of external socioeconomic factors, such as culture, sustainability institutions (such as UN and/or local public institutions), environmental governance, and regulation or consumer environmental concerns, in a new sustainable HRM model, are important avenues for research. In the vein of organizations wishing to successfully implement a sustainable HRM model should avoid a one size fits all approach and therefore researching contextual factors is important. Researchers should also consider the extent to which organizations develop substantive or ad hoc approaches to the three dimensions of the ROC model and the roles played by vertical, horizontal, transactional, and transformational themes, practices, and processes within these approaches.²⁵

IV. CONCLUSIONS

The paradigm of a number of approaches and practices that are designed to help organizations grapple with new work-place realities, the impact of globalization and international competition. The proposed measures signal a shift in some of the traditional human resource management practices, which are increasingly becoming inadequate. The measures are mainly focused on promoting new work-place cultures, organizational language, multi-skilling and customer focus. The researchers however conclude that a number of tested and established human resource management practices need to be combined with the new paradigm in order to achieve significant productivity improvements that can lead to widespread superior corporate performance. The study suggests further research of empirical flavour in order to establish the effectiveness of the commendatory propositions made.²⁴

REFERENCES

- [1] Aust, I., Matthews, B., & Muller-Camen, M. (2020). Common good HRM: A paradigm shift in sustainable HRM? *Human Resource Management Review*, 30(3), 100705. doi: 10.1016/j.hrmr.2019.100705
- [2] Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120. doi: 10.1177/014920639101700108
- [3] Becker, B. E., Huselid, M. A., & Ulrich, D. (2001). *The HR scorecard: Linking people, strategy, and performance*. Boston, MA: Harvard Business School Press.
- [4] Beer, M., Boselie, P., & Brewster, C. (2015). Back to the future: Implications for the field of HRM of the multistakeholder perspective proposed 30 years ago. *Human Resource Management*, 54(3), 427-438. doi: 10.1002/hrm.21726
- [5] Beer, M., Spector, B., Lawrence, P. R., Mills, D. Q., & Walton, R. E. (1984). A conceptual view of HRM. In M. Beer, B. Spector, P. R. Lawrence, D. Q. Mills, & R. E. Walton (Eds.) *Managing human assets*. New York, USA: The Free Press, chapter 2, pp.15-38



- [6] Bonini, S., & Swartz, S. (2014). Profits with purpose: How organizing for sustainability can benefit the bottom line. McKinsey on Sustainability & Resource Productivity, 2(1), 1-15. Retrieved from https://www.mckinsey.de/~media/mckinsey/industries/consumer%20packaged%20goods/our%20insights/getting%20the%20most%20out%20of%20your%20sustainability%20program/srp_2014_profits%20with%20purpose.pdf
- [7] Bonner, J. & Friedman, A. (2013) Corporate social responsibility: who's responsible? Organizational Communication Research Center at New York University. Retrieved from https://apps.prsa.org/intelligence/partnerresearch/partners/nyu_scps/corporatesocialresponsibility.pdf
- [8] Brunton, M., Eweje, G., & Taskin, N. (2017). Communicating corporate social responsibility to internal stakeholders: Walking the walk or just talking the talk?. *Business Strategy and the Environment*, 26(1), 31-48. doi: 10.1002/bse.1889
- [9] Clarke, T., & Clegg, S. (2000). Management paradigms for the new millennium. *International Journal of Management Reviews*, 2(1), 45-64. doi: 10.1111/1468-2370.00030
- [10] Deloitte (2021) A call for accountability and action: The Deloitte Global 2021 Millennial and Gen Z Survey Deloitte. Retrieved from <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/2021-deloitte-global-millennial-survey-report.pdf>
- [11] Donaghey, J., & Reinecke, J. (2018). Global supply chains and employment relations. In A. Wilkinson, T. Dundon, J. Donaghey and a. Colvin (eds) *The Routledge Companion to Employment Relations* (pp. 342-356). London, UK: Routledge.
- [12] Dunphy, D., Beneveniste, J., Griffiths, A., & Sutton, P. (Eds.) (2000). *Sustainability: The corporate challenge of the 21st Century*. Sydney, Australia: Allen Unwin.
- [13] Ehnert, I (2008). *Sustainable human resource management: A conceptual and exploratory analysis from a paradox perspective*. Berlin, Germany: Physica-Verlag/Springer.
- [14] Fabio, A. Di. (2017). The psychology of sustainability and sustainable development for well-being in organizations. *Frontiers in Psychology*, 8, 1534. doi: 10.3389/fpsyg.2017.01534
- [15] Kramar, R. (2014). Beyond strategic human resource management: Is sustainable human resource management the next approach? *The International Journal of Human Resource Management*, 25(8), 1069-1089. doi: 10.1080/09585192.2013.816863
- [16] Lawler, E. E. (2017). *Reinventing talent management: Principles and practices for the new world of work*. California, USA: Berrett-Koehler Publishers.
- [17] Pfeffer, J. (2016). Why the assholes are winning: Money trumps all. *Journal of Management Studies*, 53(4), 663-669. Retrieved from <https://onlinelibrary.wiley.com/doi/full/10.1111/joms.12177>
- [18] Prins, P. De, Beirendonck, L. Van, Vos, A. De, & Segers, J. (2014). Sustainable HRM: Bridging theory and practice through the 'Respect Openness Continuity (ROC)' model. *Management Revue*, 25(4), 263-284. Retrieved from <https://www.jstor.org/stable/24710112>
- [19] Prins, P. De, Stuer, D., & Gielens, T. (2020). Revitalizing social dialogue in the workplace: The impact of a cooperative industrial relations climate and sustainable HR practices on reducing employee harm. *The International Journal of Human Resource Management*, 31(13), 1684-1704. doi: 10.1080/09585192.2017.1423098
- [20] Renwick, D. W., Redman, T., & Maguire, S. (2013). Green human resource management: A review and research agenda. *International Journal of Management Reviews*, 15(1), 1-14. doi: 10.1111/j.1468-2370.2011.00328.x
- [21] Sarvaiya, H., Eweje, G., & Arrowsmith, J. (2018). The roles of HRM in CSR: Strategic partnership or operational support? *Journal of Business Ethics*, 153(3), 825-837. Retrieved from <https://link.springer.com/article/10.1007/s10551-016-3402-5>
- [22] Stahl, G. K., Brewster, C. J., Collings, D. G., & Hajro, A. (2020). Enhancing the role of human resource management in corporate sustainability and social responsibility: A multi-stakeholder, multidimensional approach to HRM. *Human Resource Management Review*, 30, 100708. doi: 10.1016/j.hrmr.2019.100708
- [23] Tanova, C., & Bayighomog, S. W. (2022). Green human resource management in service industries: the construct, antecedents, consequences, and outlook. *The Service Industries Journal*, 42(5-6), 412-452. doi: 10.1080/02642069.2022.2045279
- [24] Wilkinson, A., Hill, M., & Gollan, P. (2001). The sustainability debate. *International Journal of Operations & Production Management*, 21(12), 1492-1502. doi: 10.1108/01443570110410865
- [25] World Commission on Environment and Development. (1987). *Our common future*. Oxford: Oxford University Press.



10.22214/IJRASET



45.98



IMPACT FACTOR:
7.129



IMPACT FACTOR:
7.429



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24*7 Support on Whatsapp)