
Barriers to Implementing the Concept of Green Human Resource Management: The Case of Poland

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Abstract:

Purpose: The Green Human Resource Management concept is relatively new to Polish managers. There is a research gap with respect to investigating the reasons behind limited practical implementation of GHRM. The objective of the study is the identification of major barriers to the implementation of the GHRM concept in Polish companies.

Design/Methodology/Approach: The study was conducted in 2018 on a random sample of 300 Polish enterprises. The respondents were managers responsible for HR policy development. The method used in the study was CATI. In the first stage of the analysis, an assessment of the level of implementation of the GHRM concept in 7 functional areas was carried out with the use of a 5-point Likert scale. The second stage involved identification of the main barriers impeding the implementation of green HR practices.

Findings: Green Human Resource Management viewed as the latest research tendency plays a crucial role in the strategies of corporate sustainable development. However, studies demonstrate that the level of GHRM implementation in Polish companies is low. In the course of the analysis, it appeared that the primary barriers limiting GHRM implementation are: limited financial means, lack of incentives to engage in environmentally friendly activities, low competencies of the management with respect to sustainable HRM, no or low effectiveness of GHRM tools and a culture based on economic values.

Practical Implications: If the major barriers to GHRM implementation are identified and Polish managers become aware of them, barrier removal may prove easier and, consequently, the scope of implementation of green practices within the HR function may be broadened.

Originality/Value: This article is a pioneer attempt to identify the barriers to Green HRM implementation in Poland. The research enriches the still limited set of literature concerning environmental practice performance in the area of HR. The author believes that the results of the presented research may stimulate interest in GHRM concept's implementation in Polish companies as a tool of corporate sustainable development.

Keywords: Green Human Resource Management, sustainable development, barriers.

JEL codes: M12, M14, Q56, O15.

Paper type: Research article.

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1. Introduction

Over the last few years, we have observed increased concerns for the natural environment, which is now one of the key social priorities (Potocan, Nedelko, Peleckienė and Peleckis, 2016). It is the consequence of both environmental degradation due to anthropogenic impact and the growing social awareness with respect to environmental issues. Organizations worldwide can sense increasing pressure to demonstrate sustainability. The concept of sustainable development assumes the need to maintain a balance between economic, social, and environmental goals (Daily, Bishop and Steiner, 2007) and has become a new strategy for gaining a competitive edge. Being “green” is currently a new standard (Margaretha and Saragih, 2013). Consequently, organizations have started to implement a number of environmentally friendly practices described as “green management” (Yusliza *et al.*, 2029). The number of scientific publications in the field is also steadily growing (Renwick *et al.*, 2013). Nonetheless, green organization development would not be possible without the human factor.

It is the employee who stimulates practices oriented at enhancing organizations' environmental performance. Sustainable company development based on green practices is possible only if the staff are competent in the implementation of the principles of green development, and if such competencies are continuously developed and effectively applied. Hence, the HR function has, more and more frequently, been identified as a driving force for sustainable development of contemporary enterprises (Das and Reddy, 2016; Bangwal and Tiwari, 2015; Renwick *et al.*, 2013; Zubair and Khan, 2019). Human resource management oriented at supporting the implementation of the principles of sustainability and environmentally friendly employee attitudes, referred to as Green Human Resource Management, has a prominent role to play in the achievement of high environmental effectiveness of any organization (Bombiak, 2019).

GHRM has become a research area relatively recently (Jabbour and De Sousa Jabbour, 2016). Despite the growing number of publications, the concept is still in its early phase of development. Many GHRM-focused research studies continue to be in the theoretical phase (Jabbour, 2013). A review of international literature demonstrates a gap in the research concerning the barriers to practical implementation of the GHRM model in management.

The author intends to bridge the gap, at least to some extent. In this context, the main research objective was to determine the reasons behind the low level of implementation of GHRM practices given the Polish conditions. The author believes that the identification of major barriers to GHRM implementation and promoting awareness of the topic among Polish managers may not only facilitate barrier elimination but also extend the scope of implementation of green practices within the HR function.

2. The Principles of the Green Human Resource Management Concept

In management, the term “green” refers to environmentally friendly activities (Farid and El-Sawalhy, 2016). Green activities aim at minimizing the negative effect of organizations on the environment (Ramnus, 2002). The concept of Green Human Resource Management (GHRM) falls within this area. Renwick *et al.* (2013) defined GHRM as an integration of environmental management with human resource management. According to Jabbour (2011), GHRM reflects the level of the greening of human resource management practices. It includes HR principles and practices suited to the three pillars of sustainable development, i.e. an environmental, social and economic balance (Yusliza, Ramayah and Othman, 2015), which contribute to either a decreased or an increased positive impact of organizations on the environment (Yusliza *et al.*, 2019). The concept’s goal is to increase environmental awareness and engagement of employees (Sheopuri and Sheopuri, 2015). As a result, environmental goals of organizations and their sustainable development can be achieved (Renwick, 2008; Jabbour, 2010; Mampra, 2013). Thus, it ought to be emphasized that GHRM is an integral element of Sustainable Human Resource Management oriented at generating value for company stakeholders through simultaneous considerations for efficiency and social and environmental aspects in HR processes (Bombiak, 2020). Table 1 shows a selection of GHRM practices.

Table 1. *The main functional areas of Green HRM*

Area of GHRM	Definition
Green analysis and job description	Including environmental issues in all job descriptions translates commitment to the environment into employees' obligations, on top of their usual activities.
Green recruitment	The activities of either internal or external recruitment show company's preference for candidates committed to the environment.
Green selection	Selection of people who are committed and sensitive to environmental issues, with potential to contribute to the environmental management of a company.
Green rewards	Implementation of a system of financial and nonfinancial rewards for employees with a distinct potential to contribute to environmental management.
Green training	Provides employees with required knowledge on company’s environmental policy, its practices, and necessary attitudes.
Green performance assessment	Appraisal and register of employees' environmental performance throughout their career in a company and providing them with feedback about their performance in order to prevent undesirable attitudes or to reinforce exemplary behavior.

Source: (Yong *et al.*, 2019).

Implementation of the GHRM concept begins already at the stage of job analysis and design. It is a methodical and continuous process of needs analysis with respect to green human resources (Daily and Huang, 2001) that is to provide the staff

required to achieve corporate environmental goals (Jackson *et al.*, 2011; Opatha, 2013). Every job post should account for the tasks and duties related to environment protection (Yusliza *et al.*, 2019). Furthermore, qualification requirement profiles ought to include the knowledge, skills and abilities required to perform the said tasks and duties (Renwick, 2008). Many organizations have created a special position whose occupant is responsible for the coordination of various aspects of environmental management.

Green recruitment is a vital area of GHRM. It consists in attracting candidates characterized by high environmental competencies. Recruiting environment-oriented employees simplifies an introduction of professionals aware of the importance of sustainable actions for organizations. According to Opath (2013), green recruitment should be predicated on the provision of transparent messages about environmental criteria and values in job opening advertisements. Companies with a reputation for being green employers may be more effective in attracting talented specialists. Numerous research studies have confirmed that many employees prefer employment with environmentally friendly companies (Franka, 2003; Brekke and Nybord, 2008; Grolleau *et al.*, 2012). However, green recruitment is not only about exposing environmental values with the intention of drawing candidates competent in ecology, but also about the approach to the process of recruitment, i.e. through reduced use of paper throughout the process (Bombiak and Marciniuk-Kluska, 2018).

Green selection is about giving preference to those candidates who have knowledge about ecology, green attitudes, and experience in running environmental projects (Revill, 2000; Opatha, 2013). Environmental competencies of job seeking candidates may be verified with the application of various methods of selection, such as an analysis of submitted documents, an interview, or tests, for example Assessment Center tests. Environmental criteria in organizations implementing the GHRM concept should become the guiding selection criteria (Yusliza *et al.*, 2019). This is because employing green staff will be more beneficial than investing in their future environmental training (Renwick *et al.*, 2013).

One crucial component of GHRM is the promotion of environmental involvement among staff members, since green performance will largely depend on employee motivation (Collier and Esteban, 2007). A number of studies emphasize the relationship between employee motivation and organization's environmental effectiveness (Daily and Huang, 2001; Govindarajulu and Daily, 2004; Jacksona *et al.*, 2014). Researchers highlight that rewarding and informing employees are the major factors to be considered in HRM policy in order to promote effective environmental management. A study conducted by Forman and Jorgensen (2001) showed that employee engagement in environmental initiatives increases if compensation is offered for taking responsibility over the environment (Bangwal and Triwali, 2015). Hence, to stimulate employee engagement and pursuance of environmental goals, it is essential that green rewards are introduced (Pham *et al.*,

2019). Green rewards may be either financial (bonuses etc.) or non-financial (appreciation etc.) (Sheopuri and Sheopuri, 2015). Not only do they boost employee involvement, but they also increase staff loyalty, improve organization's reputation, and contribute to gaining a competitive advantage (Cherian and Jacob, 2012; Yusliza *et al.*, 2019).

Another area of GHRM is green training. The green system of management may be effectively implemented solely on condition that enterprises have employees with suitable competencies (Sudin, 2011; Fayyazi, 2015). These competencies may not always be acquired in the recruitment process. Green training develops green competencies and raises ecological awareness amongst employees. Therefore, all persons employed with organizations implementing GHRM should be trained. According to Teixeira *et al.* (2012), green training is one of the key tools of sustainable human resource development. A study conducted by Perron *et al.* (2006) demonstrated that tailoring training programs to organization's individual needs in the area of environment protection is essential. Yet another vital element is to reward employees for green skill acquisition (Renwick *et al.*, 2008).

Another area of GHRM is green performance assessment. Efficiency management schemes are necessary to guarantee environmental management efficiency (Jabbour and Santos, 2008). For the schemes to be effective, managers must set out specific environmental targets for each job position, determine suitable indicators for measuring them and carry out audits (Renwick *et al.*, 2008; Jackson and Seo, 2008). It is crucial to provide employees with regular feedback concerning progress towards meeting the set environmental objectives. Given the above, one can note that the GHRM concept changes organizational culture, producing green workers showing the following attitudes (Huselid and Becker, 2000):

- sense of responsibility for the preservation of natural resources in their original form,
- sensible use of natural resources,
- minimization of environmental pollution in their actions,
- engagement in initiatives having a positive effect on the environment.

3. Materials and Methods

The objective of the study was to identify difficulties in the implementation of GHRM in Polish companies. In the course of analyses, the following research problems were addressed:

- what is the level of GHRM implementation in the individual areas of the HR function?
- what are the main barriers to the implementation of environmentally friendly practices in HR?

With respect to the above, the research was two-stage. In the first stage, an attempt was made to assess the level of implementation of the GHRM concept in seven

functional areas with the use of the 5-point Likert scale. In the second stage, the author identified the main barriers impeding the implementation of green HR practices. The following methodology of assessment of the level of GHRM implementation was adopted:

- level 1 – practices followed in 0-20% of the studied entities,
- level 2 – practices followed in 21-40% of the studied entities,
- level 3 – practices followed in 41-60% of the studied entities,
- level 4 – practices followed in 61-80% of the studied entities,
- level 5 – practices followed in 81-100% of the studied entities.

The study was based on a diagnostic survey method employing a questionnaire. The survey was conducted in 2018 on a random population of 300 Polish enterprises located across the country. The method used in the study was CATI. The study sample was selected on a layer basis. To ensure representative sampling, 50 entities from each of the six Polish regions, i.e. the Central, South, East, North-West, South-West and North Poland, were randomly selected. The characteristic features of the studied population are shown in Table 2.

Table 2. *Details of enterprises covered by the research*

Criterion	Number of Enterprises	Percentage
Employment number: 50-249 employees	125	41.7%
250-499 employees	94	31.3%
500-749 employees	33	11.0%
More than 500 employees	48	16.0%
Time on the market:		
up to 3 year	150	50.0%
3-5 years	14	4.7%
5-7 years	8	2.7%
7-9 years	2	0.6%
More than 9 years	126	42.0%
Type of ownership:		
limited liability company	179	59.7%
joint-stock company	52	17.3%
state-owned enterprise	69	23.0%
Scope of operations:		
international	130	43.3%
national	82	27.3%
regional	38	12.7%
local	50	16.7%
Main type of activity:		
services	162	54.0%
production	119	39.7%
trade	19	6.3%

Source: Own study.

In the structure of the study population, large-sized companies employing over 250 employees prevailed, totaling to 58.3%. Another sizeable group of entities comprised companies which operated on the market between 1 and 3 years (45.3%). However, deep-seated companies with over 9 years of market presence were also present in large numbers. The most frequent type of ownership among the analyzed organizations was a limited liability company (59.7%). The scope of operations was diversified; most companies operated on a global (43.3%) and national scale (27.3%). The leading types of business activity were services (54%) and production (39.7%). The respondents were mainly managers of human resource departments in charge of corporate HR policy development.

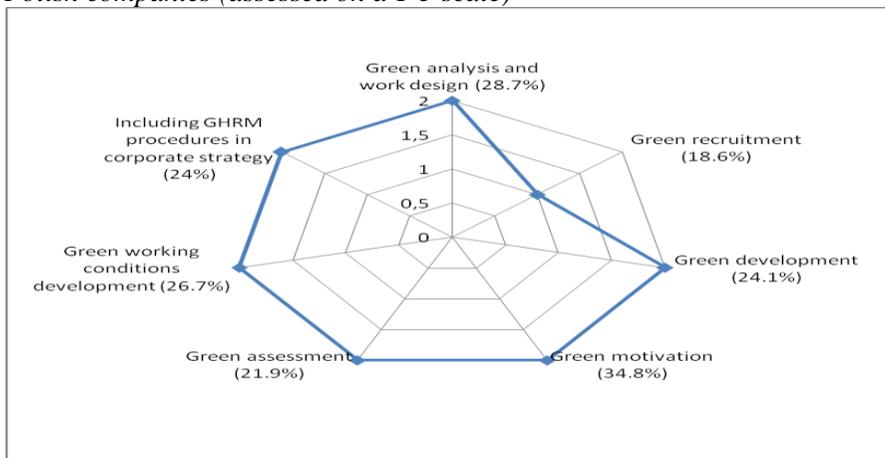
4. Research Results

The assessment of the maturity of the GHRM concept was performed in the following areas of the HR function:

- green analysis and work design,
- green recruitment,
- green development of employees,
- green motivation of employees,
- green assessment of employees,
- green working conditions development,
- including GHRM procedures in corporate strategy.

In the assessment process, the 5-point Likert scale was used, where 1 presented an exceptionally low and 5 – a remarkably high level of implementation. The study outcomes are illustrated in Figure 1.

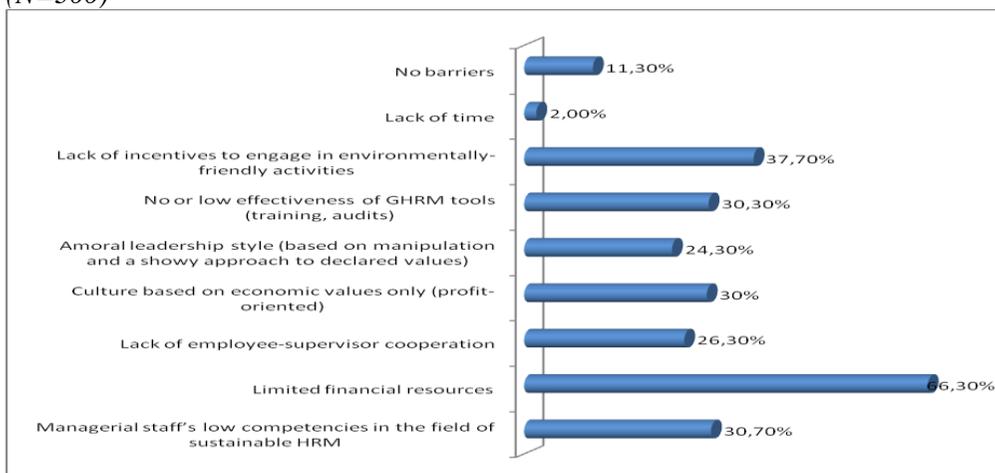
Figure 1. *The level of GHRM implementation in the selected HR function areas in Polish companies (assessed on a 1-5 scale)*



Source: *Own study.*

On the basis of the analysis, we can conclude that the level of implementation of green HR practices in the studied entities in the individual areas of the HR function was low. The majority of practices were followed in less than 30% of the companies, which – given the adopted methodology – signifies level 2 of implementation on a 5-point scale. The relatively most frequent practice was green motivation. The function was pursued in 34.8% of the studied entities. The popularity of green motivation was also confirmed by the studies conducted in Denmark (Forman and Joergensen, 2001) and in Pakistan (Malik *et al.*, 2020), which showed that green motivation programs increased employee participation in pro-environmental initiatives. The lowest level of implementation was reported in the area of green recruitment. The function was pursued in as few as 18.6% of the studied entities, which indicates level 1 of implementation given the adopted methodology. This means that continually little attention is being paid to employees presenting high levels of green competencies. Another rare practice is green advertising, which would define certain green knowledge expectations or requirements regarding experience in implementing environmental projects. One exception is recruitment for the post of the environmental management system specialist. One should note that research carried out by different authors showed significant impact of green employee acquisition on corporate environmental effectiveness and sustainable development (Masri and Jaaron, 2017; Yong *et al.*, 2019; Malik *et al.*, 2020). Considering the fact the average rate of the level of implementation of GHRM in the studied entities, set as an arithmetic mean of the assessment of levels in individual areas, was 2, it is reasonable to inquire about the reason of such little interest in environmental practices in HR policy of the studied organizations. To address the question, the author initiated an attempt to identify barriers to the implementation of GHRM in Polish companies. The study findings are illustrated in Figure 2.

Figure 2. Barriers to implementing the concept of Green HRM in Polish companies (N=300)



Source: Own study.

The results demonstrate that in only 1 out of 10 enterprises there were no obstacles to the implementation of GHRM. The major difficulties voiced by the respondents were:

- limited financial resources (66.3%),
- lack of incentives to engage in environmentally friendly activities (37.7%),
- managerial staff's low competencies in the field of sustainable HRM (30.7%),
- no or low effectiveness of GHRM tools, such as training, audits (30.3%),
- economic value-centered culture (30%).

The key barrier identified in over 66% of the studied entities were limited financial resources. Jafri (2012) presented similar results when conducting his research in the Indian motor industry. His studies revealed that the major barrier to the implementation of GHRM was the cost of its implementation. Without a doubt, GHRM implementation is associated with spending, for example the cost of environmental training or additional gratification for participation in green initiatives. The described spending is to be treated as an investment, which will repay in the future. The implementation of the GHRM concept may be advantageous both to the organization and its employees. Some of the benefits that employees and organizations can attain by implementing green HRM in the organization are listed in Table 3.

As emerge from Table 3, better reputation among employees and customers, more effective business processes, increased product quality, innovation, competitiveness, loyalty, and employee engagement, are just a few of the effects of GHRM adoption. Thus, it can be argued that GHRM implementation does generate additional costs for the organization (Firdaus and Udin, 2014). However, it is also an opportunity for companies to improve their financial performance thanks to improved efficiency (Jacobs *et al.*, 2010). Ambec and Lanoie (2008) argue that environmental effectiveness may contribute to both income increase and cost reduction. An increase in revenues is a result of gaining access to new "environmentally friendly" markets and introducing ecological products. Cost reduction can be achieved through lower production, distribution, and logistic spending due to a decrease in packaging and avoidance of financial loss due to litigation and penalties, if environmental standards are not met (Jacobs *et al.*, 2010). In this context, viewing the implementation of the GHRM concept only in the categories of financial costs is highly disturbing. We might assume that Polish managers are not convinced about the benefits organizations may achieve by implementing environmental practices in the area of the HR function. It could be the result of insufficient knowledge in the field, to some extent. The analysis of Polish literature reveals a deficit of research studies concerning the consequences of implementation of GHRM practices in the Polish reality and their impact on company's financial results and competitiveness. The issue is oftentimes perceived as an area of future research of the author, who wishes to fill in the noted empirical gap.

Table 3. *The benefits of implementing GHRM*

Benefits	Description
Improved employee retention rate	Organizations that are not aware of green concepts, green practices and policies may lose their talented or innovative employees to companies that have implemented Green Practices or create their image as eco-friendly companies and offer socially responsible incentives. Some of the incentives include subsidizing the purchase of hybrid cars using the solar power system. Among the benefits of this approach is improved employee commitment and job retention.
Improved public image	By using environmentally friendly practices and products and implementing Green concepts. Most people are aware of environmentally friendly practices and are attracted to organizations adopting green management practices much more than to organizations that harm the environment.
Improvement in attracting better employees	In the race of attracting most creative and innovative employees, companies increase their recruiting potential and try to attract talented employees by providing environmentally friendly practices.
Improved productivity	Green HRM practices specifically focus on practices for sustainable use of resources that result in increased efficiency rate, less wastage, and cost reduction. What is more, GHRM improves job-related attitudes, employee performance and job satisfaction which leads to increased individual efficiency.
Improved sustainable use of resources	By increasing environmental awareness of employees, the Green HRM concept favors proper utilization of natural resources and retains natural resources for future generations.
Reduced practices causing environmental degradation	Green HRM develops environmentally friendly practices in personal life, which helps one avoid misuse of resources.
Reduced environmental impact	By promoting recycling and using reusable/green products, GHRM reduces waste volume and the amount of energy needed to produce replacement products.

Source: *Bangwal and Tiwari, 2015.*

One of the crucial barriers signaled by Polish managers is the lack of incentives to implement green practices. It was reported in 37.7% of the studied entities. Without a doubt, it is a consequence of the occurrence of the key barrier – limited financial resources. Insufficient funds limit the ability to apply financial incentives that are the underlying instrument of employee activation. Another significant issue in the Polish reality is a low level of competencies of the managers in GHRM concept implementation. The problem was detected in 30% of the studied entities. Good insight into Green HRM was confirmed by one in four (26% of the respondents) of all 300 managers participating in the study. In this context, the leading role is played by popularization of GHRM tools via further research in the field, publications focusing on the issue, and manager training.

Yet another disturbing fact is that every third manager (30% of the respondents) indicated economic value-based culture domination as the major barrier to GHRM implementation. This demonstrates that green corporate culture is absent in many Polish organizations. At the same time, green culture is considered an intangible good that plays the key role in sustainable development implementation (Yang *et al.*, 2017; García-Machado and Martínez-Ávila, 2019). This is because green culture is founded on norms and values shaping the expected standards of pro-ecological employee behavior (Chang, 2015). Such a culture encourages employees to employ green practices (García-Machado and Minerva Martínez-Ávila, 2019) and has an effect on green innovation. As a result, green culture development is viewed as the chief requirement of a constant growth of environmental effectiveness of the organization (Azzone and Noci, 1998; Fernández *et al.*, 2003).

Challenges in GHRM implementation are found not only in Polish companies. They are clearly signaled also in other studies conducted around the world. In a study conducted on a population of 31 managers and experts in the Iranian oil industry, the analysis focused on cultural, managerial, technological and HR factors (Fayyazi *et al.*, 2015). The results of the study are illustrated by Table 4. Upon an examination of the results, we can conclude that the key barriers to the implementation of GHRM were the absence of a comprehensive plan to implement green human resource management and the ambiguity of the green value. Staff's resistance was the least important factor. In the group of technological factors, the absence of green human resources management infrastructures turned out to be important, whereas among the HR factors, essential were lack of understanding of green policies and lack of knowledge.

Table 4. *The barriers to green human resource management implementation in the oil industry*

Group of factors	Factors	Average Rating
Management factors	Lack of a comprehensive plan to implement green human resource management	9.26
	Lack of organizational leadership support	7.55
	Managers' resistance	4.66
Technological factors	Lack of green human resource management infrastructures	8.31
	Lack of technical support	7.08
	Complexity and difficulty of adoption of green technology	4.27
Cultural factors	Ambiguity of green value	8.63
	Lack of green culture	7.35
Staff factors	Lack of understanding of green policies	7.98
	Lack of knowledge	7.65
	Staff's resistance	3.58
Others	Unavailability of an HR system structure	7.63

Source: *Own research compiled on the basis of (Fayyazi et al., 2015).*

Next, a research study conducted by Vahdati examined 113 experts of the Environmental Protection Organization of Iran. Two groups of factors were analyzed: internal factors (Personality and upbringing, Knowledge of individuals and Organizational culture) and external factors (Digital divide and Education and training). The results demonstrated that of all analyzed factors, personality and upbringing had the greatest impact on GHRM implementation. Environmental education was the second most influential component. On the contrary, digital divide had the least impact on GHRM practice implementation (Vahdati, 2018).

Rompa (2011) listed lack of knowledge, technological support, and stakeholders' support as other barriers to GHRM implementation. Paille *et al.* (2013), in turn, emphasized the absence of managerial support as the major barrier to GHRM. Then, Jackson and Seo (2010) pointed out factors such as: lack of interest in the GHRM concept, its complexity, lack of knowledge and resistance to change. The authors underlined that effective GHRM implementation required a full understanding of related consequences for corporate operations, amongst other things the life cycle of a product, supply chain, distribution processes, and customer behavior. Finally, Viswanathan (2014) emphasized that difficulties in GHRM implementation might be not only internally, i.e. lack of suitable organizational resources, but also externally driven, such as government regulations or other laws.

5. Conclusions

The GHRM concept stresses the importance of HR processes and decisions in the shaping of sustainable organizations. Its implementation involves the “greening” of functional HRM dimensions, starting with employment planning, through employee selection, development, and motivation, up to work performance assessment. The effect of the above is the development of “green” human resources featuring high environmental efficiency. A human resource policy based on the principles of GHRM leads to sustainable resource use in companies. Therefore, the future of the concept looks promising to all organization's stakeholders. However, under Polish conditions, it is critical to expand the scope of its implementation. To do so, we must overcome the existing barriers. In order to reduce them, regular and integrated actions must be taken. First of all, it is necessary to disseminate knowledge about GHRM which will contribute to increased manager competencies in the area of effective tools of GHRM implementation. Researchers conducting further research in the study area may have a pivotal role, for they can show data and contribute to the compilation of a database of knowledge about GHRM. What is more, presenting positive experiences with respect to the application of green HR practices may be an encouragement to benchmarking.

Nonetheless, engaging enterprises in the implementation of nature-friendly solutions only due to legal or market regulations will not bring about satisfactory results. The still prevailing in many organizations economic goal-based company orientation is short-term thinking. It fails to provide an opportunity to gain a long-term

competitive edge on the present-day highly competitive market. It is imperative, therefore, that we build green organizational culture through raised ecological awareness and development of environmentally friendly attitudes. This is possible only through environmental education and a broad coverage of the condition and needs of the environment and environment-focused actions in closer and further environments. Green attitudes must be developed at the earliest stages of citizen education. Finally, it is important to design and implement motivation systems that will promote engagement in various forms of environmental activity.

References:

- Ambec, S., Lanoie, P. 2008. Does it pay to be green? A systematic overview. *The Academy of Management Perspectives*, 22(4), 45-62. Retrieved from: <https://www.jstor.org/stable/27747478>.
- Azzone, G., Noci, G. 1998. Identifying effective PMSs for the deployment of “green” manufacturing strategies. *International Journal of Operations & Production Management*, 18(4), 308-335.
- Bangwal, D., Tiwari, P. 2015. Green HRM – A way to greening the environment. *Journal of Business and Management*, 17(12), 50-51.
- Bauer, T.N., Aiman-Smith, L. 1996. Career choices: the influences of ecological stance on recruiting. *Journal of Business and Psychology*, 10(3), 445-458. <http://dx.doi.org/10.1007/BF02251780>.
- Bombiak, E., Marciniuk-Kluska, A. 2018. Green Human Resource Management as a Tool for the Sustainable Development of Enterprises: Polish Young Company Experience. *Sustainability* 10, 1739.
- Bombiak, E. 2019. Green human resource management – the latest trend or strategic necessity? *Entrepreneurship and Sustainability Issues*, 6(4), 1647-1662. [https://doi.org/10.9770/jesi.2019.6.4\(7\)](https://doi.org/10.9770/jesi.2019.6.4(7)).
- Bombiak, E. 2020. Advances in the implementation of the model of sustainable human resource management: Polish companies’ experiences. *Entrepreneurship and Sustainability Issues*, 7(3), 1667-1687. [https://doi.org/10.9770/jesi.2020.7.3\(16\)](https://doi.org/10.9770/jesi.2020.7.3(16)).
- Brekke, K.A., Nyborg, K. 2008. Attracting responsible employees: green production as labor market Screening. *Resource and Energy Economics*, 30(4), 509-526. <http://dx.doi.org/10.1016/j.reseneeco.2008.05.001>.
- Chang, C.H. 2015. Proactive and reactive corporate social responsibility: Antecedent and consequence. *Management Decision*, 53(2), 451-468.
- Cherian, J., Jacob, J. 2012. A Study of Green HR Practices and Its Effective Implementation in the Organization: A Review *International Journal of Business and Management*, 7(21), 25-33.
- Collier, J., Esteban, R. 2007. Corporate social responsibility and employee commitment. *Business Ethics: A European Review*, 16, 19-33.
- Daily, F.B., Huang, C.S. 2001. Achieving sustainability through attention to human resource factors in environmental management. *International Journal of Operations and Production Management*, 21(12), 1539-1552.
- Das V.T., Reddy, B.S. 2016. Employee perception towards Green HRM: an investigative study. *International Journal of Economic and Business Review*, 4(9), 101-112.

- Farid, M., El-Sawalhy, H. 2016. Green human resource management in hotels: Awareness and implementation. *Journal of Association of Arab Universities for Tourism and Hospitality*, 13(2), 125-134. DOI: 10.21608/JAAUTH.2016.49747.
- Fayyazi, M., Shahbazmoradi, S., Afshar, Z., Shahbazmoradi, M.R. 2015. Investigating the barriers of the green human resource management implementation in oil industry. *Management Science Letters*, 5(1), 101-108. DOI 10.5267/j.msl.2014.12.002.
- Fernández, E., Junquera, B., Ordiz, M. 2003. Organizational culture and human resources in the environmental issue: A review of the literature. *International Journal of Human Resource Management*, 14(4), 634-656.
- Firdaus, M., Udin, Z.M. 2014. Green human resource management (GHRM) towards SME'S: a conceptual view. The 4th International Conference on Technology and Operations Management-ICTOM, 4, 136-141. Retrieved from: <http://stmlportal.net/ictom04/papers/P13.pdf>.
- Frank, R.H. 2003. What Price the Moral High Ground? Ethical Dilemmas in Competitive Environment. Princeton University Press.
- García-Machado J.J., Martínez-Ávila, M. 2019. Environmental Performance and Green Culture: The Mediating Effect of Green Innovation. An Application to the Automotive Industry, *Sustainability*, 11, 4874. doi:10.3390/su11184874.
- Govindarajulu, N., Daily, B.F. 2004. Motivating Employees for Environmental Improvement. *Industrial Management & Data Systems*, 104, 364-372. <http://dx.doi.org/10.1108/02635570410530775>.
- Grolleau, G., Mzoughi, N., Pekovic, S. 2012. Green not (only) for profit: An empirical examination of the effect of environmental-related standards on employees' recruitment, *Resource and Energy Economics*, 34(1), 74-92. <http://dx.doi.org/10.1016/j.reseneeco.2011.10.002>.
- Huselid, M.A., Becker, B.E. 2000. Comment on „Measurement Error“ in Research on Human Resource and Firm Performance: How Much Error is There and How Does it Influence Effect Size Estimates? *Personnel Psychology*, 53, 835-854.
- Jabbour, C.C. 2013. Environmental training in organizations: From a literature review to a framework for future research. *Resources, Conservation and Recycling*, 74, 144-155.
- Jabbour, C.J.C., Santos, A.C.F. 2008. Relationships between human resource dimensions and environmental management in companies: proposal of a model. *Journal of Cleaner Production*, 16, 51-58.
- Jabbour, C.J.C. 2011. How green are HRM practices, organizational culture, learning and teamwork? A Brazilian study. *Industrial and Commercial Training*, 43(2), 98-105.
- Jabbour, C.J.C., De Sousa Jabbour, A.B.L. 2016. Green human resource management and green supply chain management: linking two emerging agendas. *Journal of Cleaner Production*, 112, 1824-1833.
- Jabbour, C.J.C., Santos, F.C.A., Nagano, M.S. 2010. Contribution of HRM throughout the stages of environmental management: methodological triangulation applied to companies in Brazil. *The International Journal of Human Resource Management*, 21(7-9), 1049-1089. doi: 10.1080/09585191003783512.
- Jackson, E.S., Seo, J. 2010. The greening of strategic HRM scholarship. *Organization Management Journal*, 7, 278-290.
- Jackson, S.E., Renwick, D.W.S., Jabbour C.J.C., Camen, M.M. 2011. State-of-the-Art and Future Directions for Green Human Resource Management: Introduction to the Special Issue. *German Journal of Research in Human Resource Management*, 25(2), 99-116.

- Jackson, S.E., Schuler, R.S., Jiang, K. 2014. An aspirational framework for strategic human resource management. *The Academy of Management Annals*, 8(1), 1-56.
- Jacobs, B.W., Singhal, V.R., Subramanian, R. 2010. An empirical investigation of environmental performance and the market value of the firm. *Journal of Operations Management*, 28(5), 430-441. doi: <https://doi.org/10.1016/j.jom.2010.01.001>.
- Jafri, S. 2012. Green HR practices: an empirical study of certain automobile organizations of India. *Human Resource Management*, 42, 6193-6198.
- Malik, S.Y., Cao, Y., Mughal, Y.H., Kundi, G.M., Mughal, M.H., Ramayah. T. 2020. Pathways towards Sustainability in Organizations: Empirical Evidence on the Role of Green Human Resource Management Practices and Green Intellectual Capital. *Sustainability*, 12, 3228. doi:10.3390/su12083228.
- Mampra, M. 2013. Green HRM: Does it help to build a competitive service sector? A study. In *Proceedings of tenth AIMS International Conference on Management*, 1273-1281.
- Margaretha, M., Saragih, S. 2013. Developing new corporate culture through green human resource practice. *International Conference on Business, Economics, and Accounting*, 20-23 March. Bangkok, Thailand, 1-10.
- Masri, H.A., Jaaron, A.A. 2017. Assessing green human resources management practices in Palestinian manufacturing context: An empirical study. *Journal of Cleaner Production*, 143, 474-489.
- Mehta, K., Chugan, P.K. 2015. Green HRM in Pursuit of Environmentally Sustainable Business. *Universal Journal of Industrial and Business Management*, 3(3), 74-81. DOI: 10.13189/ujibm.2015.030302.
- Opatha, H.H.D.N.P. 2013. Green Human Resource Management: A Simplified Introduction, HR Dialogue, Department of HRM. Faculty of Management Studies and Commerce, University of Sri Jayewardenepura, 22-41.
- Paille, P., Chen, Y., Boiral, O., Jin, J. 2013. The impact of human resource management on environmental performance: An employee-level study. *Journal of Business Ethics*, 10, 1-16.
- Perron, R.P., Côte, J.F. 2006. Duffy Improving environmental awareness training in business. *Journal of Cleaner Production*, 14(6-7), 551-562. <http://dx.doi.org/10.1016/j.jclepro.2005.07.006>.
- Pham, N.T., Tuckovam, Z., Phan, Q.P.T. 2019. Greening Human Resource Management and employee commitment towards the environmental: an interaction model. *Journal of Business Economics and Management*, 20(3), 446-465. <https://doi.org/10.3846/jbem.2019.9659>.
- Pham, N.T., Phan, Q.P.T., Tučková, Z., Vo, N., Nguyen, L.H.L. 2018. Enhancing the organizational citizenship behavior for the environment: the roles of green training and organizational culture. *Management & Marketing, Challenges for the Knowledge Society*, 13(4), 1174-1189. DOI: 10.2478/mmcks-2018-0030.
- Potocan, V., Nedelko, Z., Peleckienė, V., Peleckis, K. 2016. Values, environmental concern and economic concern as predictors of enterprise environmental responsiveness. *Journal of Business Economics and Management*, 17(5), 685-700. <https://doi.org/10.3846/16111699.2016.1202315>.
- Ramnus, C.A. 2002. Encouraging innovative environmental actions: What companies and managers must do. *Journal of World Business*, 37, 151-164.
- Renwick, D. 2008. Green HRM: A review, process model, and research agenda (Discussion Paper Series). The University of Sheffield. Retrieved from: https://www.sheffield.ac.uk/polopoly_fs/1.120337!/file/Green-HRM.pdf.

-
- Renwick, S.W.D., Redman, T., Maguire, S. 2013. Green human resource management: A review and research agenda. *International Journal of Management Reviews*, 15, 1-14.
- Rompa, I. 2011. Explorative research on Sustainable Human Resource Management. Master's Thesis, University of Amsterdam.
- Sheopuri, A., Sheopuri, A. 2015. Green HR practices in the changing workplace. *Business Dimensions*, 2(1), 13-26.
- Teixeira, A.D., Jabbour, C.J.C., Jabbour, S.L.B. 2012. Relationship between green management and environmental training in companies located in Brazil: A theoretical framework and case studies. *International Journal of Production Economics*, 139(2), 1-12.
- Vahdati, S., Vahdati, S. 2018. Identifying the obstacles to green human resource management practices in Iran. *International Journal Human Capital Urban Management*, 3(1), 9-18. DOI: 10.22034/ijhcum.2018.03.01.002.
- Viswanathan, V. 2014. Sustainable Green HRM - Importance and Factors affecting successful implementation in Organisations. *International Journal of Innovative Knowledge Concepts*, 2(8), 77-85.
- Yang, Z., Sun, J., Zhang, Y., Wang, Y. 2017. Green, Green, and It's Green: A Triad Model of Technology, Culture, and Innovation for Corporate Sustainability. *Sustainability*, 9, 1369.
- Yong, J.Y., Yusliza, M.Y., Ramayah, T., Chiappetta Jabbour, C.J., Sehnem, S., Mani, V. 2019. Pathways towards sustainability in manufacturing organizations: Empirical evidence on the role of green human resource management. *Business Strategy and the Environment*, 29(1), 212-228.
- Yusliza, M.Y., Ramayah, T., Othman, N.Z. 2015. While examining adoption factors, HR role and attitude towards using e-HRM is the start-off in determining the successfulness of green HRM? *Journal of Advanced Management Science*, 3, 337-343.
- Yusliza, M., Norazmi, N., Jabbour, C., Fernando, Y., Fawehinmi, O., Seles, B. 2019. Top management commitment, corporate social responsibility and green human resource management: A Malaysian study. *Benchmarking: An International Journal*, 26(6), 2051-2078. <https://doi.org/10.1108/BIJ-09-2018-0283>.
- Zoogah, D. 2011. The dynamics of Green HRM behaviors: A cognitive social information processing approach. *Zeitschrift fur Personalforschung*, 25, 117-139.
- Zubair, S.S., Khan, M. 2019. Sustainable Development: The Role of Green HRM. *International Journal of Research in Human Resource Management*, 1(2), 1-6.