



Article

# **Bridging Sustainable Human Resource Management** and Corporate Sustainability

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Received: 16 September 2020; Accepted: 26 October 2020; Published: 29 October 2020



**Abstract:** The rise of the Sustainable Development (SD) concept contributed to the increasing interest in practices encompassing the Sustainable Human Resource Management (Sustainable HRM) and the results of these practices. This article relates to the area of Human Resource Management and activities undertaken by HR departments to implement the principles of sustainable development in the enterprise. In particular, it refers to the concept of Sustainable HRM, recognized by many researchers as a new paradigm in the area of HRM. Although an intensely-studied subject, there is a clear gap in research regarding Sustainable HRM in Polish companies. Additionally, there is a lack of research contribution on the Podlasie region—ecologically and ethnically the most diverse region in the country. While sustainability in environmental terms is evident in the region, the article focuses on sustainability implementation in the business sector. The article helps to close the research gap. Its aim is to examine the two-fold role of HR departments in: Implementing activities in the area of Sustainable HRM, and introducing the principles of sustainability to corporate strategies. It was assumed that such activities contribute to corporate sustainability. In order to verify the role of HR departments, a new, comprehensive research model, based on the work of De Prins, was built. The model relates to the double-task of HR departments in organizations. The added value of the article stems from the research model proposal, which can be applied without geographical limitations and to numerous organization types. The paper introduces one of the applications of the model—a regional one. The model was tested in a questionnaire survey conducted among employees of enterprises operating in the Podlaskie Voivodeship, which is unique in terms of environment, culture, and economy in Poland. The respondents were participants of MBA studies at one of the universities of the Podlaskie Voivodeship. The results of the study fully confirmed the hypothesis adopted in the study regarding the performance of activities by HR departments in the psychological and social areas of Sustainable HRM. The third aspect of the study, regarding the ecological area, was not clearly confirmed in the study. It was found that this may result from the restrictive law regulating the issue of the impact of enterprises on the natural environment. The results of the study allowed for the verification of the main hypothesis assumed in the research model, thus confirming its truthfulness.

Keywords: Sustainable HRM; corporate sustainability; manager's opinion; Podlasie enterprises

#### 1. Introduction

The aim of the article is to highlight the role of Human Resource Management (HRM) on the path to a sustainable organization. Stahl, Brewster, Colling, and Hajro [1] point to two different approaches to the HRM–CS (Corporate Sustainability) relation. One of these approaches is based on the assumption

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that HR acts as a driver for CS. The other assumes that CS is seen as an enabler of sustainable HRM. This article is based on the assumption that the relation between CS and HRM is mutual, complex, and interactive. The article is theoretical and empirical in nature. It was created on the basis of a literature review on Sustainable HRM and Corporate Sustainability, as well as research conducted among employees of HR departments of companies operating in the region of north-eastern Poland.

In HRM literature, it is common to find that most HRM practices are shaped by strategic and economic aspirations of organizations to maximize profit [2,3]. This concept, which supports the managerial view of HRM practices and primarily aims at improving the economic performance of the company, is assumed to be the mainstream view of HRM [2,3]. While corporations need to be profitable in order to ensure their existence; they cannot be interested in profits only when trying to reach Corporate Sustainability [4]. Organizations should be managed in the interest of more stakeholders than just the shareholder's [5–9]. Sustainable HRM, by relating to multiple stakeholders, seems to bring the people and respect for humanity back to human resource management [10] and widen the future HR perspective by including both internal and external stakeholders as well as more employee-oriented thinking [11,12]. Business should be conscientious not to exploit the most important asset of the company for the sole purpose of profit [13] (p. 132).

## 1.1. Corporate Sustainability

The concept of CS is related to the broader concept of sustainable development, which has been defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." [14] (p. 43). Therefore, sustainability transported to the business level is referred to as Corporate Sustainability [15].

In reference to the concept of sustainable development (SD), Corporate Sustainability can be defined as meeting the needs of a firm's direct and indirect stakeholders without compromising its ability to meet the needs of future stakeholders as well [15]. At the organizational level, this concept of SD has been translated to CS, which "entails the preservation, regeneration, and development of the ecological, economic and social resources of a system" [16] (p. 84). As such, CS can be considered as the process of organizational change, i.e., sustainability driven change. The purpose of this change is to move the organization to the state in which equally distributed attention to economic, social, and environmental concerns is incorporated into its strategy. Ultimately, sustainability-driven change has the purpose of transforming an organization into an active agent for sustainable development [17]. Subject literature has recognized the central role of facilitating and supporting such change played by the HRM system. Therefore, companies engaging in the development of their CS at some point also invest in the development of a more Sustainable HRM.

There is a number of reasons why CS is closely related to Human Resource Management. HR could guide the organization's leaders in the incorporation of sustainability in its strategy and help the realization of Corporate Sustainability-goals [18–20]. Sustainable HRM is seen as 'the' opportunity for HR to prove its own legitimacy and strategic position. Ehnert [19] regards sustainability as having a strategic potential for HRM.

## 1.2. Sustainable Management of Human Resources

Human Resource Management is an area which witnesses a constant evolution and change. The rationale behind relating the concept of human resource management with environmental issues is that it leads to sustainability and has become a new paradigm in this field [21]. Moreover, the organization's department of human resources plays a significant role in creating a culture of sustainable development for the enterprises [22].

The concept of Sustainable HRM is the result of linking the concept of sustainable development with human resource management in an organization.

Sustainable HRM entails taking into account the economic as well as the social and ecological aspects of company objectives while implementing the human resource function. It is believed that

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"HRM is the best placed to provide leadership and drive innovation to influence individuals, groups, and all organizational actors toward embracing more sustainable attitudes and behaviors" [23] (p. 813). According to Ehnert and Harry "HRM could play a vital role in implementing a sustainability mindset in business organizations" [24] (p. 236). This turns out to be a "survival strategy" for organizations dependent on high quality employees. Therefore, it is logical for organizations to apply Sustainable HRM, as it allows them to take care of what the companies should sustain. Additionally, Sustainable HRM allows for implementing a manner in which it will do so without compromising the needs of future generations of the company employees [13] (p. 136).

According to I. Ehnert [19] sustainable management of human resources means undertaking such activities that enable achieving the organization's goals in the long term and demonstrate care for the employees at the same time. R. Kramar extends this definition by adding the element of minimizing the negative impact of the company's activities on the natural environment, employees, and the community [25]. The author emphasizes the role of all employees of the organization in this process.

In Poland, the definition of Sustainable HRM was presented by A. Pabian, who claims "the essence of this concept is planning and recruiting employees and affecting them in such a way that they achieve economic, ecological and social goals in the enterprise, thus contributing to balancing inter-generational needs" [26] (pp. 8–9).

Until recently, it was considered that Sustainable HRM as a concept was still undefined and has not yet received much attention from scholars [27–31]. Despite the increasingly important role management plays, "the history of research on Sustainable HRM is still at the pioneering if not emerging phase. It is only in the past decade that we observe an increase in publications on sustainability and HRM (...)" [24] (p. 225). However, in recent years there has been an increased interest in Sustainable HRM. The evidence of scholarly and academic interest in Corporate Sustainability and Human Resource Management are: The edited volume by Ehnert et al., together with the special issues in journals such as Human Resource Management 51 (6), Personnel Psychology 67 (4), Journal of Organizational Behavior 34 (2), Organization 20 (3), and Management Review 23 (3), have devoted attention to Corporate Sustainability and HRM [17].

The issues raised in the research on Sustainable HRM focus on the question of whether the concept of sustainable human resource management is important in achieving sustainable development of an enterprise [32] (p. 91). The results of this study have shown that enterprises in the West Pomeranian Province, Poland, actually use the concept of the sustainable management of human resources in business management to achieve sustainable development.

Other issues undertaken in the research concern the implementation of Sustainable HRM in a SME (small and medium-sized enterprise) context in Lithuania. The results of the research (case study) showed that despite the fact that the company's owner tried to implement some Sustainable HRM practices that were mainly related to work-life balance and health management issues, these practices were not sufficient and did not solve crucial problems such as job burnouts, lack of expertise, retention of employees, limited career development, and weak leadership, which are the issues that many authors distinguish as challenges that stop SMEs form achieving a better performance in the long run [33].

Noteworthy at this point is also a study conducted in Finnish companies on how Finnish top managers actually construct the meaning of Sustainable HRM. According to the results of the research, Sustainable HRM is organized into four (interconnected) main dimensions: Justice and equality, transparent HR practices, profitability, and employee well-being. The analysis also reveals how these dimensions are linked to different stakeholder groups. Thus, Sustainable HRM seems to bring the people and respect for humanity back to the human resource management and widen the future HR perspective to include both internal and external stakeholders. It also embraces more employee-oriented thinking in organizations, turning the leadership in a more responsible direction [34].

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Results of the literature review indicate that Sustainable Human Resource Management plays a significant and positive role in achieving organizational outcomes. Moreover, via the strength of the HRM system, it exerts an additional impact upon employees and external stakeholders [35].

Sustainable HRM practices enhance profit maximization for the organization and at the same time reduce the negative harmful influence on employees, their families, and communities [36]. The beneficial role of Sustainable HRM varies therefore with regards to the organization, the employees, and the society.

The positive influence Sustainable HRM has on the organization can be observed in the growth of the overall value of the organization's worth [37–40], as well as in the increase of national and international competitiveness [41]. Those improved results can be attributed to the impact Sustainable HRM has on the employees. It can be observed that Sustainable HRM leads to improved employee engagement [42], increased employee satisfaction, and therefore higher organizational loyalty [43], HR quality boost [44], motivation growth [40,44], employee development, and enhanced work efficiency [40].

Sustainable HRM is beneficial for the organization and for the employees, but it also positively affects other stakeholder groups. The general effect Sustainable HRM has on the society as a whole can be characterized as a contribution to the activities of the societies. Sustainable HRM incorporates activities directed towards improving communities and neighbourhoods. Additionally, it allows creating sustainable career pathways for the younger generations to become transitional on the job market and secure a better future [45].

Sustainable HRM is at times considered a new humanistic paradigm in management, which, although sometimes recognized as an alternative to the economic one, does not separate itself from the necessity of generating profit by an enterprise [5,21,32].

The direct effect of implementing the concept of Sustainable HRM is shaping sustainable human resources, i.e., highly qualified employees who understand and apply the principles of sustainable development in their work. This concept includes both: Managers setting directions at all levels of the company, as well as employees employed in non-managerial positions [20,46].

Sustainable Human Resource Management is assigned numerous functions in an organization. E. Cohen, S. Taylor, and M. Muller-Camen [47] claim that it:

- Supports the organization's sustainable development strategy;
- emphasizes fair treatment, development, and the well-being of employees;
- contributes to building the skills, value, and trust of employees and increases their engagement in sustainable development;
- focuses on the well-being of the internal (employees) and external (all entities interested in the functioning of the organization) stakeholders; and
- supports environmentally-friendly organizational practices.

#### 1.3. Sustainable Management Research Model

One of the first attempts to capture the complexity of the concept of Sustainable Human Resource Management is the holistic model by Peggy De Prins. According to De Prins [19], Sustainable HRM focuses on the optimal use and respect of human capital in the organization in which the clear relationship between the organization's strategic policies and the environment in which it operates is built. The model assumes four aspects of Sustainable HRM [48] (pp. 15–17): Sociological, psychological, ecological, and strategic. On the basis of the De Prins model and the Sustainable HRM aspects included in it, a research model was built that indicates the double role of HR departments, consisting in carrying out activities in the area of the three mentioned aspects and introducing them into the company's strategy. This model is the basis in the study.

The Sustainable HRM framework, including all of those aspects, is depicted in the figure below and developed next.

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The psychological perspective focuses on the employee and, in particular, on what one deems important. If assumed that people play a key role in creating a lasting competitive advantage, then the knowledge about and promoting of what motivates them to work should be of significant importance for the organization [18]. An important role in this aspect of Sustainable HRM is played by: Work–life balance, autonomy, self-development, and a balanced career. An example of the latter will be used to study the psychological aspect of Sustainable HRM. A balanced career is different from the traditional career path, as 20th century enterprises mostly applied the economic paradigm in management.

The new career model, based on the idea of careers as actions, as means of learning, and as boundary-less entities, has replaced the prior model of careers as structures, as means of earning, and as constrained entities. This new concept of career has gained the name of a balanced career. Its source lies in the more commonly used concept of human sustainability.

An exemplary definition was provided by Carl Holling, who defined human sustainability as:" the capacity to create, test and maintain adaptive capability" [49] (p. 390). Holling's definition is related to the operationalization of the concept of employability by Van der Heijde and Van der Heijden and reads:" The capacity of continuously fulfilling, acquiring or creating of work through the optimal use of competences" [50] (p. 453). The latter suggests an important responsibility of the individual employee in creating, testing, and maintaining his or her own work capacity or ability. On a similar note, Oldham and Hackman [51] stressed the increasing importance of personal initiative of workers to successfully progress or adjust one's work capacity or ability across time by shaping or customizing their jobs in order to protect their sustainability at work (for example, via job crafting) [52].

In the view of the above, the concept of sustainable careers could be perceived as 'sequences of job opportunities that go beyond the boundaries of single employment settings' [53].

The sociological approach aims to make HRM activities more of a social practice. The interests and commitment of the three elements—the employee, the employer, and the society—are closely related in this perspective. Issues such as Corporate Social Responsibility (CSR) or social issues such as employee diversity, age, gender, nationality or ethnicity, disability, etc. are of great importance in this approach.

Socially responsible human resource management manifests itself in the treatment of employees as important stakeholders of the enterprise [54]. Diversity management will be used to study the social aspect of Sustainable HRM.

Diversity is often defined as any significant difference that distinguishes one individual from another—a description that encompasses a broad range of overt and hidden qualities. Researchers classify diversity characteristics into four areas:

- Personality (traits, skills and abilities),
- internal (gender, race, ethnicity, IQ, sexual orientation),
- external (culture, nationality, religion, marital or parental status), and
- organizational (position, department, union/non-union) [54].

Organizational policies formulated to manage diversity aim to implement initiatives, activities, and practices that recognize, promote, or encourage the differences between groups or people. These elements are seen as positive values that warrant development to achieve social integration, which can also boost productivity of the company and support the democratization of access to opportunities [55].

Diversity means the dissimilarity, variety, and individuality that emerges from various differences between people. Diversity of individual abilities, experiences, competencies, and qualifications of human resources contributes to the success factor in organizations, which enables entrepreneurial strategies of increasing flexibility and continuous learning. Managing Diversity is more than a scheme. It is an attitude and a new understanding of how enterprises function and how to manage human resources in a sustainable way. Creating and applying effective diversity management concepts is one of the main challenges in modern organizations [56].

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Human resource management involves planning, integration, and actions to achieve effective management of all employees. Diversity can be included in the set of human management practices, guaranteeing an alignment between the strategies of human resources and diversity management goals.

The ecological perspective concerns those aspects of HRM that can help make an organization "greener" (environmentally-friendly). This includes activities such as employee training in sustainable development or stimulation of pro-environmental behaviours that create employee competences. The wide spectrum of the definition of "green" HRM is shown in Table 1.

Table 1. Green Human Resource Management (HRM) definitions.

Definition	Author
A new research direction oriented towards environmental management through HRM practices in the enterprise ()	Gholami [57] (p.147)
Environmentally friendly HR practices for the sustainable use of resources	Bangwal, Tiwari [58] (p.46)
Focusing on [the potential of] affecting employees' green behaviours Green HRM is HRM practices developed and implemented to promote employee	Dumont [59] (p. 15)
behaviour that increases the ecological efficiency of the entire company.	Ackermann [60] (p. 22)

Source: Own study based on [50].

Employees, employers, customers, and regulatory stakeholders can be stimulants of green HRM. The literature also indicates three strategies used by employers to stimulate green behaviour [61]. They are as follows:

- 1. Mobilizing employees to implement sustainability in basic operations and at every stage and level of their business;
- 2. holding employees accountable for applying sustainable practices in their work and encouraging them to further such practices in pay incentives;
- 3. equipping employees with tools and training them to develop for further improvements.

The authors focusing on the issue of "green" HRM point to a number of ecological practices that can be applied in the area of human resource management at all individual stages of the human resource process [62] as:

- Including tasks related to environmental protection in job descriptions,
- taking into account green competences as a component of the requirements profile at each workplace,
- preference in the recruitment and selection process of candidates with competences and experience in implementing ecological projects,
- encouraging the development of "green" competences and offering environmental training for employees and managers,
- inclusion of ecological criteria in the periodic assessment of employees,
- sharing knowledge in relation to environmental initiatives and programs and rewarding for their implementation, and
- encouraging ecological behaviour during the performance of professional tasks (i.e., limiting the use of paper in the office, waste segregation).

An element of green HRM is also creating a green workplace called "green collars". These are positions that help reduce the negative impact on the natural environment by improving the ecological quality of products, services, and technological processes [61].

Green HR practices should be implemented in a precisely planned HR strategy as part of the overall strategy concept. It is also important to study the company's strategy and culture, because they determine the effectiveness and efficiency of green HRM.

The strategic perspective of Sustainable HRM, explores the links between sustainable and strategic HRM. This approach highlights the impact that sustainable HRM has on traditional HR spheres, such

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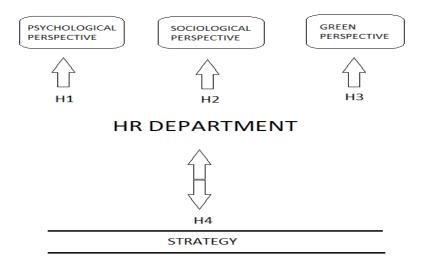
as recruitment and selection, employee rotation, aspects of evaluation, and employment opportunities within the organization. The task of HR is to achieve organizational goals that not only bring monetary benefits [19]. The main assumptions of this approach are the belief that people create a lasting competitive advantage and that achieving it enables sustainable management of human resources. Nevertheless, it should be emphasized that related policies are still under review and analysis.

The Human Resource Planning Society defines five key knowledge areas for HR practitioners [22]:

- HR strategy and planning,
- leadership development,
- talent management,
- organizational effectiveness, and
- building a strategic HR function.

Losey et al. [63] described numerous opportunities in the realm of sustainability for HR to bring important operational competencies and to exert strategic leadership.

The model presented in Figure 1 will be verified in an empirical study relating to enterprises in Podlasie. To this end, the main hypothesis was formulated and adopted. It reads as follows: In enterprises operating in the Podlaskie Voivodeship, there is a relationship between the use of sustainable development practices by HR departments and their introduction to the company's development strategy. The main hypothesis will be verified in a following empirical study.



**Figure 1.** Research model of Sustainable Human Resource Management. Source: Own elaboration on the base of Rompa [48].

## 2. Materials and Methods

## 2.1. Research Area and Research Population

The location of the research and selection of the research sample is purposeful, as the Podlaskie Voivodeship, located in the north-eastern part of Poland, is unique in the scale of the country in the perspective of natural, social, and economic scale. Its character is determined by areas of natural value. The legally protected areas with special natural values are built of the total area of national parks, nature reserves, landscape parks, protected landscape areas, documentation stands, ecological lands, and nature and landscape complexes. Taking into account the entire area of NATURA 2000, at least 40% of the area of the Podlaskie Voivodeship is covered by some form of nature protection. Those are unique places, on a European scale, barely changed by human activity.

Podlaskie Voivodeship, compared to other regions in Poland, is the least industrialized. Its share in domestic industrial production is only about 1.7%.

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The main sectors of the economy of the Podlaskie Voivodeship are also closely related to the specificity of the region, which is characterized by high air quality and rich natural resources, used in a sustainable way. Branches of the Podlaskie Voivodeship, in which the region has above average potential, include [64]:

- Agri-food sector and sectors connected with it by the value chain,
- metal and machine industry, boatbuilding, and sectors related to it by the value chain,
- medical sector and life sciences and sectors related to it by the value chain, and
- eco-innovation, environmental sciences, and sectors related to it by the value chain (including renewable energy sources, resource-efficient construction, and efficient wood processing).

The Podlasie region is also unique in terms of culture and religions. For centuries, Podlasie served as both a political and national border, where the Polish, Lithuanian, Belarusian, and Ukrainian ethnos intertwined. Companies in the Podlaskie Voivodeship operate in a religious plurality which stems from the area's location and history. Its multinational character provided a solid background for the creation of distinct systems of values and attitudes [65]. Podlasie is one of the most religiously diverse regions in Poland. The Catholic and Orthodox congregations constitute 77% and 13.5% of all inhabitants of Podlaskie Voivodeship, respectively (in some districts, for example in the Hajnowski district, over 80% of the inhabitants are Orthodox Church believers) [65].

The research was conducted on a group of 73 participants of MBA studies at the Janski University in Łomża, one of the three centres of economic life in the region. The research included students of two editions of the studies—2019 and 2020. The study group is dominated by men (66%) and people with over 10 years of work experience (53%). All participants acquired higher education, which is a formal requirement for candidates for MBA studies.

#### 2.2. Research Tool

The technique of a survey was used. The research tool was constructed on the basis of a questionnaire used on Dutch company managers with regards to the application of sustainable human resource management [39]. It consists of a record and 24 statements relating to four aspects of sustainable human resource management (6 for each aspect): Social, psychological, environmental, and strategic.

The type and intensity of activities related to diversity management (social aspect) were identified on the basis of six statements concerning undertaking activities for older workers (1), various age groups (2), people with disabilities (3), various cultural groups (4), religious groups (5), and women (6).

The psychological aspect (the possibility for an employee to pursue a sustainable professional career) was diagnosed on the basis of 6 statements claiming that: Employees are treated as a key resource of the organization (1), they are provided with a job consistent with their interests and talents (2), coaching (3) and professional development (4) are available, the company covers the costs of training (5), and monitors the progress in employee behaviour towards sustainable development (6).

Inclusion of ecological issues in human resource management by enterprises was diagnosed on the basis of the assessment of statements concerning: The company's taking into account the pro-ecological attitudes of job candidates (1) and during employee assessment (2), using public transport by employees (3) and compensating employees for their costs resulting from this (4), the use of ecological cars by the company (5), as well as the company's canteen offering organic food (6).

Activities reflecting the strategic aspect related to the practice and introduction of Sustainable HRM to the company's strategy were diagnosed on the basis of the following statements: The HR department is involved in creating a sustainable development policy (1), the HR department has introduced sustainability into the company's action plan (2), the HR department has financial resources and human capital to initiate and promote actions for sustainability (3), declarations of respondents that they see the benefits of taking initiatives for sustainability (4) and their organization could be considered a model in this respect (5), and sustainability is an opportunity for the HR department

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to prove its strategic position in the company (6). It can be stated that these statements relate to the conscious (4 and 6) and behavioural (1, 2, 3, 5) aspects.

The responses were scaled using the seven-point Likert scale, on the basis of which the respondents assessed whether the action described in the statement was carried out in their company. The extreme values of the scale are "definitely no" (1) and "definitely yes" (7). The Cronbach's alpha for the individual scales of the questionnaire is: 0.87; 0.84; 0.89.

The statements included in the questionnaire made it possible to answer the questions of whether and what activities for Sustainable HRM are undertaken, according to the respondents, in their companies, and what is the relationship between activities undertaken by HR departments in the area of diversity management (social aspect), enabling the development of sustainable professional career (psychological aspect) as well as promoting pro-ecological behaviour (ecological aspect) and strategic HR activities. The answer to the above questions also allowed us to verify the research hypothesis.

## 2.3. Selection and Application of Statistical Methods

In the first step, the skewness of the distributions was calculated (Tables 1–4). The absolute value of the obtained results was interpreted as follows [66]: 0–0.2 very weak asymmetry (distribution close to symmetric); 0.2–0.4 weak distribution asymmetry; 0.4–0.6 asymmetry of distribution strong; above 0.8, the asymmetry of distribution is very strong. As in most of the statements, the distributions of the answers were asymmetric and the skewness coefficient ranged from moderate to very strong, the calculation of the arithmetic mean and standard deviations was omitted in favour of median and mode. The basis for drawing conclusions about the implementation by the company's HR department of individual types of activities in the field of sustainable development was the analysis of the distribution of answer variants given by the respondents (Figures 1–4). It was assumed that the selection of the answers "rather yes" (5), "yes" (6), and "definitely yes" (7) proves that the HR department undertook such actions, and selecting the answers "definitely no" (1), "no" (2), "probably not" (3), and "don't know" (4) suggest that no such action is taken. On this basis, it was determined whether and what activities related to diversity management, building a sustainable professional career for employees, and shaping pro-ecological attitudes are practised in enterprises represented by MBA course students, and what activities related to sustainable human resource management are introduced by the HR department to the company's strategy. The relationship between taking actions related to the social, psychological, and environmental aspects in the area of HRM and the strategic aspect was calculated using the Spearman correlation coefficient. The obtained absolute values of the correlation coefficient were interpreted as follows [67]: r < 0.3, weak correlation; r < 0.5, moderate correlation; up to r < 0.7, high correlation; to r < 0.9, very high correlation; r < 1, the correlation is almost complete. In order to find out which variables (dimensions) significantly explain the shaping of the variables that make up the strategic aspect, regression models (multiple regression) were constructed. The calculations were made using the Statistica TIBCO 13.3 statistical package.

### 3. Results

3.1. Actions Taken for the Sustainable Management of Human Resources

## 3.1.1. The Social Aspect

Detailed data on the respondents' opinions on diversity management in their enterprises are presented in Table 2 and Figure 2.

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Variable	N	Median	Mode	<b>Mode Population</b>	Skewness
Social 1	73	5	5	21	-0.27
Social 2	73	5	6	23	-0.35
Social 3	73	5	6	19	-0.27
Social 4	73	4	3	21	0.27
Social 5	73	3	3	22	0.49
Social 6	73	5	6	27	-0.57

**Table 2.** The social aspect—descriptive statistics.

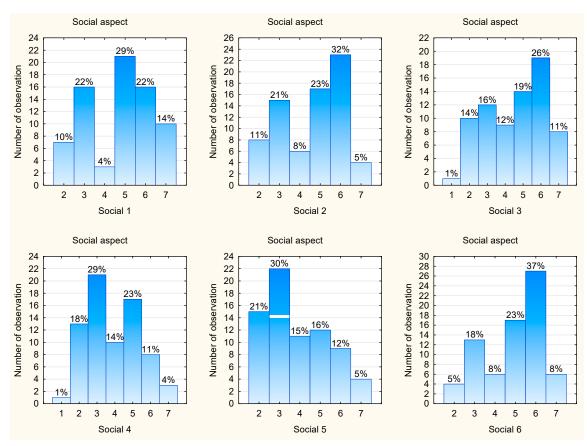


Figure 2. The social aspect—undertaking activities for the benefit of various groups of employees.

Activities that make up the diversity management in an organization are practiced in at least some enterprises. When assessing individual statements on a seven-point scale, the respondents rarely chose the extreme answers (1 and 7) and the middle answer (4).

In the case of statements 1, 2, 3, and 6, more than half of the respondents indicated that actions for specific groups of employees are undertaken in their enterprises (median 5). They concern activities for older workers, various age groups, people with disabilities, and women. In three groups, the mode was 6 (answer "yes"). On the other hand, when assessing activities for various cultural (statement 4) and religious (statement 5) groups, less than half (slightly more than 1/3) of respondents indicated that they were undertaken in their enterprises. The median was 4 and 3, respectively, and the mode was 3.

## 3.1.2. The Psychological Aspect

Detailed results concerning the possibility of pursuing a sustainable professional career by employees (psychological aspect) are presented in Table 3 and Figure 3.

According to the respondents, their enterprises undertake activities enabling them to pursue a sustainable professional career. This applies in particular to creating opportunities for professional development (statement 4), incurring related costs by the company (statement 5), and treating employees

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as a key resource of the organization (statement 1). In each of these statements, the distributions are strongly asymmetric (left-sided asymmetry—the percentage of affirmative answers is over 85%) and the median and mode were 6. The number of people choosing the affirmative answer definitely prevailed (78%) in the assessment of statement 2, concerning providing employees with work in line with their interests and talents, as well. However, the mode and median in the assessment of this statement were equal to 5, which means that at least half of the respondents answered "rather yes". It was also the most frequently given answer. In the assessment of statements 3 (providing employees with coaching) and 6 (monitoring employees' progress in behaviours for sustainable development), yes also prevailed (59% each), however, the asymmetry in the distribution of responses is smaller, and the most frequently chosen answer was "rather yes"—mode 5. When assessing practices used in the field of sustainable career development, the respondents rarely chose the extremely negative answer (only statements 5 and 6—4 and 3%, respectively) or the middle answer (from 0 to 13%).

Variable	N	Median	Mode	Mode Population	Skewness
Psychological 1	73	6	6	25	-0.82
Psychological 2	73	5	5	32	-0.51
Psychological 3	71	5	5	21	-0.34
Psychological 4	72	6	6	31	-1.19
Psychological 5	72	6	6	29	-1.50
Psychological 6	71	5	5	18	-0.36

**Table 3.** The psychological aspect—descriptive statistics.

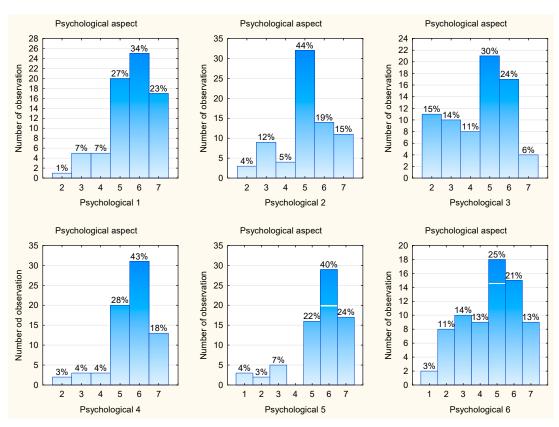


Figure 3. The psychological aspect—taking actions for the sustainable development of employees.

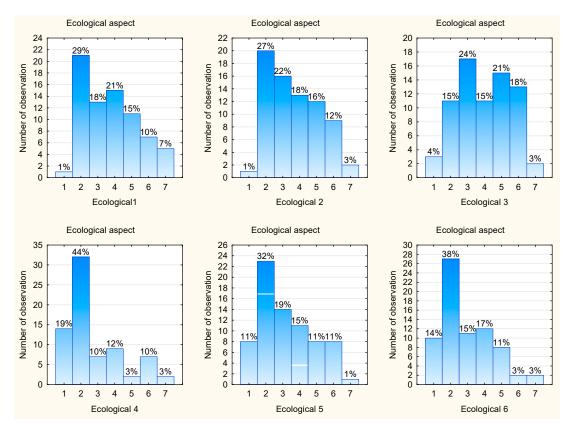
## 3.1.3. The Ecological Aspect

The results concerning the consideration of environmental issues by enterprises in human resource management are presented in Table 4 and Figure 4.

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Variable	N	Median	Mode	Mode Population	Skewness
Ecological 1	73	4	2	21	0.46
Ecological 2	73	3	2	20	0.38
Ecological 3	73	4	3	17	-0.02
Ecological 4	73	2	2	32	1.10
Ecological 5	73	3	2	23	0.52
Ecological 6	72	2	2	27	0.79

**Table 4.** The ecological aspect—descriptive statistics.



**Figure 4.** The ecological aspect—undertaking practices enabling employees to develop pro-ecological behaviours.

The analysis of the results shows a right-hand asymmetry of the distribution of variants of answers to most questions (except statement 3). The respondents most often stated that the pro-ecological practices indicated in the questionnaire were not undertaken in their enterprises or that they had a problem with an unambiguous response to particular statements (answer "hard to say"). Mode in all statements (except for 3) is 2 (answer "no"). Positive answers (from "rather yes" to "definitely yes") did not prevail in the assessment of any of the statements.

The respondents most often (42%) indicated that employees in their enterprises use public transport to travel to work (statement 3). According to the respondents, the least frequently used practice (15% of positive answers) was compensating employees for the costs of commuting to work by public transport. Less than 1/3 of the respondents stated that their enterprise takes into account ecological criteria both at the stage of recruitment and employee evaluation.

### 3.1.4. The Strategic Aspect

The results concerning the implementation of sustainable management activities into the company's strategy are presented in Table 5 and Figure 5.

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Variable	N	Median	Mode	<b>Mode Population</b>	Skewness
Strategic 1	73	5	6	22	-0.75
Strategic 2	73	4	6	18	-0.37
Strategic 3	73	5	multiple	22	-1.02
Strategic 4	73	6	6	30	-1.55
Strategic 5	73	5	5	24	-0.63
Strategic 6	73	6	6	26	-1.41

**Table 5.** The strategic aspect—descriptive statistics.

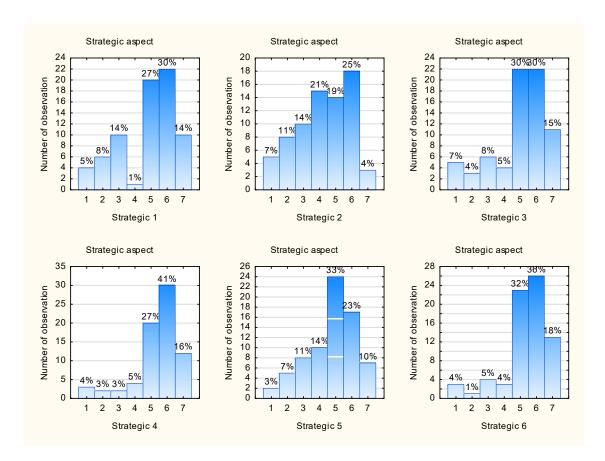


Figure 5. The strategic aspect—practising and introducing Sustainable HRM to the company's strategy.

In the evaluation of all statements, except for statement 2, the variants with the answer "yes" dominated (from 65 to 85% of responses). The evaluation of statements 4 and 6 concerning the consciousness aspect was higher than the others, as evidenced by a very high value of skewness coefficients as well as a median and a mode of 6.

When assessing the activities related to the implementation of Sustainable HRM into the company's strategy, the majority of respondents declared that they were undertaken in terms of statements 1, 3, and 5. The median in each of them was 5, i.e., half of the respondents indicated at least the answer "rather yes". However, the detailed distribution of answer variants differed. The most frequently chosen variant in statement 1 was "yes", in statement 5 "rather yes", and in statement 3 the distribution of answers was bimodal—the most common answers were "rather yes" and "yes".

The weakest asymmetry of the distribution and the lowest median were observed in the assessment of statement 2 (introducing sustainability into the company's action plan). The median was 4, and affirmative answers were slightly less than half of the total (48%). At the same time, a high percentage (21%) of respondents had a problem with an unambiguous assessment of this statement, thus selecting the middle value on the scale.

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#### 3.2. Correlations between the Strategic, Social, Psychological, and Ecological Aspects

The Spearman's rank correlation coefficients between the statements making up the strategic aspect and the variables making up the social, psychological, and ecological aspects are presented in Table 6.

**Table 6.** Correlation coefficients between the strategic aspect of Sustainable HRM and the social, psychological, and ecological aspect.

Variable	Strategic 1	Strategic 2	Strategic 3	Strategic 4	Strategic 5	Strategic 6
Social 1	0.46	0.60	0.35	0.51	0.68	0.42
Social 2	0.44	0.51	0.31	0.49	0.57	0.37
Social 3	0.45	0.47	0.37	0.34	0.39	
Social 4		0.37		0.31	0.36	
Social 5	0.30	0.46	0.34	0.33	0.46	
Social 6	0.36	0.42	0.39	0.41	0.44	0.34
Psychological 1	0.44	0.44,		0.59	0.53	0.62
Psychological 2	0.40	0.46	0.32	0.46	0.48	0.48
Psychological 3	0.48	0.49	0.32	0.47	0.42	0.45
Psychological 4		0.33	0.42	0.34	0.39	0.34
Psychological 5	0.32	0.39	0.41	0.54	0.40	0.54
Psychological 6	0.42	0.46	0.38	0.45	0.61	0.58
Ecological 1	0.32	0.36			0.36	
Ecological 2	0.32	0.36			0.37	
Ecological 3	0.41	0.32				
Ecological 4		0.35				
Ecological 5	0.30					
Ecological 6	0.40					

Empty fields in the table indicate no correlation or weak correlations, which were not included in the analysis.

All the observed correlations between the individual statements that make up the strategic aspect and the others are positive, most often moderate, and strong in several cases. The highest number of correlations was observed between the strategic and psychological aspects, and the least—between the strategic and environmental ones.

### 3.2.1. The Strategic Aspect and the Social Aspect

Strong correlations were observed between strategic statements 2 and 5 ("HR has introduced sustainability into the company's action plan"; "I think my organization could be a model for other organizations when it comes to promoting sustainability activities") and social statements 1 and 2 (actions for older workers and different age groups), as well as between strategic statement 4 ("I see benefits for the company from taking initiatives for sustainability") and the social statement 1. The other observed correlations are moderate.

## 3.2.2. The Strategic Aspect and the Psychological Aspect

Correlations exist between most of the statements that make up both the strategic and psychological aspects. A strong positive relationship was observed between statements 4–6 of the strategic aspect (noticing the benefits of taking actions for sustainability, the organization can be a model in this field, an opportunity for the HR department to raise its strategic position) and the psychological statement 1 (treating employees as a key resource in the organization), between strategic statements 4 and 6 and psychological statement 5 (covering the costs of training by the company) and between strategic statements 5 and 6 and psychological statements 6 (monitoring employees' progress in sustainable development behaviour). The remaining observed correlations are of moderate strength.

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## 3.2.3. The Strategic Aspect and the Ecological Aspect

Out of the 6 statements that make up the strategic aspect, only 3 correlate with selected statements that make up the ecological aspect. The strength of the correlation is weak to moderate. Strategic statement 1 (involvement of the HR department in creating sustainable development policy) is correlated with statements 1–3 and 5–6 that make up the ecological aspect. Strategic statement 2 (introducing sustainability into a company's action plan) correlates with environmental statements 1–4, and strategic statement 5 (organization as a model for promoting sustainability activities) with environmental statements 1 and 2.

Summarizing the analysis of the correlation between the strategic aspect of Sustainable HRM and the social, psychological, and ecological aspect, one can observe an emerging tendency that correlations occur more often and with greater power between these variants of answers, constituting particular aspects in which enterprises take specific actions, which confirms the usefulness of the adopted research model.

## 3.3. Multiple Regression of the Strategic Aspect in Relation to the Social, Psychological, and Ecological Aspects

In order to establish the relationship between the variables forming the individual Sustainable HRM dimensions, regression models were constructed. Six regression models, in which the dependent variables were individual questions concerning the strategic aspect, while the independent variables were questions concerning the social, psychological, and ecological aspect, were examined. Regression models for dependent variables strategic (i - 1,..., 6) are described by the equation:

$$ST_i = \alpha_0 + \sum_{j=1}^6 \alpha_j * SO_j + \sum_{j=1}^6 \alpha_{j+6} * P_j + \sum_{j=1}^6 \alpha_{j+12} * E_j$$
 (1)

where ST—Strategic; SO—Social; P—Psychological; E—Ecological.

The normality of the rest of the regression model was checked in each case. Based on the scattering plots of the model residuals with respect to the predicted residuals, it was concluded that the residuals were homoscedastic and non-correlated, and the existence of outliers in the model was checked on the basis of Cook's distance. Analysis of the PLOTS of predicted residual values for all models showed that they are constructed correctly. The residuals in the model have normal distributions, and residual homoscedasticity is present. Cook's distance analysis also shows that there are no outliers in the individual models.

The only significant variable that influences the Strategic Aspect 1 is the Psychological 3 aspect of providing employees with coaching.  $R^2$  in the model is 0.55, and the p-value in Fisher's significance test is 0.00011.

The Strategic aspect 2 is influenced by the Social aspect 1. The Fisher test shows that the model is statistically significant, with p-value 0.00011 and  $R^2$  for the model 0.55.

The factor with a statistically significant impact on the Strategic aspect 3 is the Ecological aspect 3. The model as a whole is statistically significant, as evidenced by the p-value in the Fisher test p = 0.0052.  $R^2$  in the model is 0.45.

In model 4, the factors significantly influencing the Strategic 4 variable are the Psychological 1, Psychological 5, and Ecological 1 aspects, where the p-value in Fisher's significance test is p < 0.0000 and  $R^2$  is 0.69.

In the regression model 5, the Strategic 5 variable is significantly influenced by Social 1 and Psychological 6 aspects.  $R^2$  in the model is 0.61, while the p-value in the model significance test is 0.0001.

In the last constructed regression model, the Strategic 6 variable is significantly influenced by the Psychological 1 and Psychological 4 variables.  $R^2$  in the model is 0.57, while the p-value in the Fisher significance test is 0.0003.

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To sum up, there were 18 independent variables (Social 1–6, Psychological 1–6, Ecological 1–6) analysed. The dependent variables (Strategic 1–6) are influenced by 11 independent ones. Ten of them explain well how only one aspect is developing. On the other hand, Social 1 explains well the shaping of two aspects (strategic 2 and 5). Moreover, the Psychological 4 aspect explains well the shaping of Strategic 4 and 6 aspects.

## 4. Conclusions and Discussion

The research model adopted in this research has been positively verified, indicating the dual role of the HR department in taking actions in the field of diversity management and developing a sustainable career as well as introducing those actions into the organization's strategy.

On the basis of the conducted analysis, it can be concluded that in the surveyed companies, there are moderate and strong correlations between taking actions for various groups of employees and sustainable career development and their introduction to the company's strategy. Additionally, on the basis of the constructed regression models, it was determined which of the analysed aspects (variables creating the social, psychological, and ecological aspect) significantly affect the strategic aspect. Thus, the adopted research model turned out to be useful in relation to the study of the relationship between the social, psychological, and ecological aspect and the strategic aspect, pointing to the dual role of HR departments. The adopted research model also allowed us to indicate which activities, to the greatest extent, contribute to increasing the effectiveness of HR departments in realizing Sustainable HRM endeavours.

When analysing the results obtained in terms of particular aspects of HRM, it can be noticed that they often relate to activities resulting from the existing legal solutions. This applies, inter alia, to activities undertaken for the benefit of various employee groups. By law, elderly, adolescent, disabled, and women employees are entitled to special protection.

In terms of solutions related to the development of a sustainable professional career of employees, attention should be paid to the economic interest of the organization and certain customary solutions. In recent years, the labour market in Poland has taken on the character of an employee's market. Due to the difficulty of obtaining qualified employees, employers were forced to incur greater expenditure on employee training.

Podlasie is a relatively poor region. This also applies to companies operating there. This is the most likely explanation for the lack of results indicating the undertaking of pro-ecological activities included in the study. The purchase of green cars or subsidies for employees using public transport are additional costs, which may comprise an impossible barrier for many companies. An additional problem arises in the use of public transport by employees. Some of the smaller towns have rather poor infrastructure and transportation connection, and using their own means of transport is often the only possible means to travel to work. Regarding the statement about organic food offered in canteens, two factors may have influenced the distribution of the response value. Some enterprises, especially smaller ones, may not have their own canteens. Secondly, certified organic food is more expensive than non-organic, which can also be a barrier for companies.

The results of this part of the research are not unique, as research conducted among Finnish top managers showed that, contrary to the prior green HRM literature, ecological responsibility was largely ignored [34]. Finland, like Poland, has a restrictive legal system with regard to environmental protection, and this may mean that the environmental aspect has automatically become part of the mentality of Finnish companies. Podlaskie is a region whose land is mostly categorized as Natura 2000 areas. This means that entrepreneurs are obliged now to respect strict environmental protection standards. Consequently, it is likely that they are convinced that their compliance with applicable legal norms meets their environmental obligations. However, this is a hypothesis that should be verified in further research.

On the other hand, another possible explanation for the low environmental aspect correlation can be attributed to the historic disregard for environmental matters. There is a limited amount of

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research conducted so far covering the environmental problems in Central Europe. Š. Waisova [68] considered environmental governance in the Visegard Group (V4). The group includes four Central European countries: Poland, Slovakia, Hungary, and The Czech Republic. The Visegrad countries have a common communist heritage. All were previously regimes with an economic emphasis on the metallurgic industry, mining, and intensive centralized agriculture. Environmental protection and the interest in environmental changes and threats were very low on the priority list for many years in those countries. Because of their geopolitical situation, history, and physical geography, Poland and Hungary in particular are linked to environmental issues that go beyond Central Europe and call for far wider environmental action. Perhaps partially due to the historical footprint, Polish organizations might correlate the lowest with the environmental aspect. However, this hypothesis should be verified in further research.

Existing research on Sustainable HRM includes research by K. Piwowar-Sulej [69] on the development of future competencies of industrial engineers in Poland. This group is responsible for the implementation of Industry 4.0 concept and cleaner production in the country. As K. Piwowar-Sulej's research suggests, industrial companies in Poland tend to be short-sighted when developing the potential of their engineers. The author concludes that the HR development practices focus mainly on current and ongoing needs, there is a lack of employee participation in the process of making training-related decisions, and the environmental sustainability remains a neglected area of knowledge in terms of training. This also could be one of the factors contributing to the low correlation to the environmental aspect in this research.

Other existing research relates to the role of HR department managers and was done by K. Drela [32]. The results of her research confirmed that HR managers of enterprises operating in the area of the West Pomeranian Voivodeship play a very active role in managing the initiatives related to sustainable development, and in introducing sustainability measures into corporate strategies. The results obtained by K. Drela further confirm and strengthen the role of HR in Corporate Sustainability.

As existing research results are not coherent, it seems worth consulting a wider-group research, encompassing varied employee groups and industry sectors to obtain a more comprehensive view on a national scale.

The limitations of the research group were also a limitation for this research. The research group represented only a part of the organizations operating in Podlasie. Furthermore, the research group was comprised of MBA students only. Hence, it encompassed only some members of the HR departments of the researched organizations. Therefore, one of the further research ideas include conducting the research with a bigger research group of Podlasie companies, and thus creating a more complete database for the country.

Moreover, further research could also focus on other regions within the country to contribute to a wider data collection. The research model created in this research has wide applications, as it can be used in research without geographical limitations. It can also be utilized in varied sectors (public or business) and branches of the economy. What is more, the research in particular regions could be repeated on a regular basis. The results thereof could serve as the basis for following the process of Corporate Sustainability implementation.

**Author Contributions:** B.M. and A.W. confirm that their contribution in each stage of the preparation of this article was equal. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

**Conflicts of Interest:** The authors declare no conflict of interest.

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