






# The Role of Personnel Training in Higher Education and HRM to Reduce the Sustainable Development Risks

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## Abstract

The goal of this paper is to identify the main aspects of the impact of training of human resources in the sphere of higher education and HRM on the reduction of sustainable development risks. For this, the trend method, statistical analysis and the method of deduction are used.

The novel approach of this research is due to the theoretical elaboration of the characteristics and the list of directions of the impact of higher education and the system of personnel management on the reduction of the level of sustainable development risks.

In this paper, we consider the experience and directions of transformations in the sphere of higher education and HRM under the modern conditions of implementing strategies for the reduction of sustainable development risks. We substantiate the positive influence of the adaptation to the changes in the external environment of the given spheres on the state of sustainable development of institutions (companies) of the selected countries. The distinguished aspects of the functioning of universities, business schools and companies within the creation of effective training and personnel management demonstrated that they move these systems toward the conceptual basics of the sustainable development of all spheres.

## Keywords

Sustainable development risks · Universities · HRM · Higher education · Labour · Sustainable Development Goals

## JEL Codes

M12 · M14 · P36 · P46 · Q01 · Q56

## 1 Introduction

In the modern globalising world, higher education and the implementation of new innovative methods of personnel management became a decisive factor in the social component of sustainable development. Only a country in which intellectual professions became widespread and investments in human potential development became important and effective can be a full member of the global economy. Adoption— at the level of economic subjects and country on the whole— of a course toward stimulation of personnel training for possible changes in technologies and requirements to work is a sign of social responsibility before society. Development of conditions, which imply high social standards (high level of higher education, decent wages) allows a state to ensure attractive opportunities for life and development of wide groups of the population. Provision of the quality of higher education and personnel training is necessary for effective HRM at the level of economic subjects of all spheres, which are sources of national GDP and innovative development of the economy. Accordingly, higher education is an element of reduction of sustainable development risks, and a flexible system of HRM at the level of companies is a component of protection from economic and social risks. HRM, which is oriented toward the involvement of personnel in ecologisation of production and technologies, may facilitate

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the reduction of environmental risks. Given the importance of the spheres of higher education and HRM in the provision of reduction of sustainable development risks, the research of the specifics of this problematics is very important for modern science.

The goal of this paper is to identify the main aspects of the influence of training of human resources in the sphere of higher education and HRM on the reduction of sustainable development risks. The following tasks are solved in this paper: revealing the connection between the impact of the level of higher education and HRM on the reduction of sustainable development risks; classifying the specific features of the influence of higher education and HRM on the reduction of these risks.

## 2 Materials and Methods

The issues of the impact of higher education and its affordability, innovative directions of HRM and their impact on the Sustainable Development Goals, and reduction of risks in this sphere at the level of communities and countries have been studied in (Aaltonen & Siltaoja, 2022; Diaz-Carrion et al., 2018; Dalipi et al., 2022; Hietanen & Svedholm-Häkkinen, 2022; Hueske et al., 2022; Palm et al., 2020; Salo et al., 2022; Vestola et al., 2021; Zawacki-Richter, 2021).

The researchers' approaches to the analysis of the given problems are not comprehensive, since there is no complex systematisation of the specifics of the impact of higher education and HRM on the reduction of sustainable development risks, which predetermines the necessity for the assessment in this direction.

In this research, we use the following range of methods. The study of the specifics of the impact of the given elements on sustainable development risks is performed based on the trend method, which allows distinguishing and characterising the features of the impact of higher education and HRM on sustainable development at the level of companies and countries. Statistical analysis allows designating the ranks of countries by the level of personnel training in higher education and the level of implementation of the HRM methods. Based on the study of analytical and statistical data, we use the deduction method, which is a necessity for determining the specifics of the impact of the elements of higher education and HRM on the reduction of sustainable development risks under the conditions of development of resident companies (higher educational establishments) of the studied countries.

## 3 Results

Let us analyse the connection between the level of personnel training in higher education and HRM and the reduction of sustainable development risks.

Table 1 presents the dynamics of the indices of personnel training in higher education, HRM and sustainable development of countries that are leaders in the sphere of managing the sustainable development risks for 2019–2021 (up to 20th position).

The level of personnel training in higher education is assessed through the indicator “Higher education achievement” and HRM—the indicator “Employee training”. The values of these indicators are given in the IMD World Digital Competitiveness Ranking (IMD, 2022).

Analysis of the statistical materials (Table 1) has shown that the largest connection between the improvement of the level of personnel in higher education and HRM and the reduction of sustainable development risks were observed in the following countries:

### 1) Finland

In 2019, Finland was ranked third by the sustainable development index, and first—in 2020 and 2021. This is due to the improvement of the management of the risks to the Sustainable Development Goals, connected with human resources (SDG 1, SDG 4 and SDG 8). These goals were implemented due to the adoption of social responsibility by companies and higher educational establishments.

In 2020, due to the pandemic, Finland reconsidered approaches to implementing the affordability and increase in quality of higher education for its citizens. Educational programmes were transformed in favour of a 100% educational process in the remote form. Based on cooperation and consultations with representatives of employers, approaches to training in various specialities were transformed (maximum adaptation to the conditions of resolution of practical tasks) (Hueske et al., 2022). This allowed raising the level of higher education in the country in 2020 (33rd position compared to 34th position in 2019). Analysis of the materials on the activities of the five leading universities of Finland (University of Helsinki, University of Turku, Aalto University, University of Oulu, University of Tampere) showed that the following optimisation measures were implemented in 2020 (Hueske et al., 2022):

- Introduction of an electronic platform of training, which imply two options: mixed training (on the territory of a

**Table 1** Dynamics of the indices of higher education achievement, employee training and sustainable development of selected countries in 2019–2021

Country/indicator	Rank			Change of rank, +/-	
	2019	2020	2021	2019–2020	2020–2021
<b>1. Higher education achievement</b>					
Denmark	23	27	25	4	–2
Sweden	21	22	22	1	0
Finland	34	33	35	–1	2
Austria	36	35	36	–1	1
Germany	46	49	46	3	–3
Netherlands	22	21	20	–1	–1
<b>2. Employee training</b>					
Denmark	2	1	2	–1	1
Sweden	10	11	3	1	–8
Finland	9	8	7	–1	–1
Austria	1	2	1	1	–1
Germany	3	3	6	0	3
Netherlands	8	7	9	–1	2
<b>3. Sustainable development</b>					
Denmark	1	2	3	1	1
Sweden	2	3	2	1	–1
Finland	3	1	1	–2	0
Austria	5	5	6	0	1
Germany	6	6	4	0	–2
Netherlands	9	8	11	–1	3

Source: Compiled by the authors based on (Cambridge University Press, 2022; IMD, 2022)

- university, remote education with the factual presence at all courses and lectures; online education with the possibility to take an educational programme based on open access to educational and practical materials). A quick transition from stationary education to online education was not very difficult for Finnish universities, since, as of 2020, there already existed the corresponding regulatory, organisational, HR and technological basis for this;
- Transformation of educational programmes in universities with the focus on a high level of graduates' readiness for work in companies and organisations of various sectors of the economy. The formation of programmes, lectures and practical courses was performed together with the representatives of companies and organisations interested in skilled personnel.

A large influence on the reduction of risks to the SDGs was made by effective directions of HRM, developed at the level of science and business in main business schools of Finland. In Finland, all business schools have EU accreditation, which envisages a mandatory course in the sphere of sustainable development management. Many large companies in Finland have a practice of training (advanced training) of personnel in

specific programmes of business schools, which also include a course on sustainable development (Aaltonen & Siltaoja, 2022). The key direction of the development of HRM in the context of the achievement of the SDGs is a strategy of small goals. This concept implies the management of personnel within the main spheres and processes given the production and economic effectiveness for the implementation of the specific direction, adopted by the company as an obligation in reducing the risks to the SDGs. The focus on small goals (specific, local) is the key to the strategy of managing sustainable development risks at the level of a country (Salo et al., 2022). Given this, Finnish enterprises adapt the approach of the national governance system in this sphere.

## 2) Sweden

In 2019, Sweden was ranked second by the sustainable development index, in 2020—third, and in 2021—second. Swedish higher education has solid positions in the world ranking (2019—21st, 2020 and 2021—22nd). A certain decrease in the level of higher education, which took place in 2020 due to the impact of the pandemic, was caused by the insufficient transition of the country's universities to the remote form of learning (Dalipi et al., 2022; Hietanen & Svedholm-Häkkinen, 2022).

As for the impact of HRM in Swedish companies on risks to the SDGs, we can note the following:

- Implementation of the strategies of differentiation of personal and work time allowed raising productiveness of work and effectiveness of performance of work tasks (especially in the sphere of IT). Erasure of the limits of work schedule was especially vivid in the management of personnel and the work of the latter during the pandemic, though such tendency manifested itself much earlier when digitalisation influenced all spheres of the Swedish economy (Palm et al., 2020). Strategies of differentiation envisaged a focus on personnel's recording the start and end of the shift; this allowed raising innovativeness and creativity of personnel, as well as the speed of work (IT sphere and online sales);
- Use of the strategy of employment that implies hiring personnel with knowledge in the sphere of sustainable development at the general conceptual level and in the sphere of companies' activities. Employees independently study the given direction within universities' or business schools' programmes and receive the corresponding attestation (Diaz-Carrion et al., 2018). Unlike Denmark, Sweden uses the orientation toward the independent study of the basics of sustainable development by personnel. The requirements for knowledge in the sphere of managing the risks to the SDGs are set to personnel

- (middle and upper level) in large companies that work with foreign partners;
- Focus on the personnel’s independent creation of teams, which does not imply the top management’s interference with the HR policy (Vestola et al., 2021). Such an approach (delegation of HR policy in projects) is used in the case of the effective implementation of planned indicators of product manufacture (provision of services, etc.).

### 3) Germany

In 2019–2020, Germany was ranked sixth by the sustainable development index and in 2021—fourth. Though the sphere of personnel training in higher education in Germany was not characterised by high affordability for the population, the year 2021 saw certain changes in its system, which included the expansion of remote education (Zawacki-Richter, 2021). Many programmes and courses in German universities transferred to the 100% remote accelerated form. Despite the existence of problems in this direction, the implementation of digitalization in the system of higher education in Germany allowed expanding opportunities for education for the population, which influenced the management of risks to SDG 4 and SDG 8. It is necessary to note the influence of the development of methods and approaches to HRM in Germany on the reduction of risks to the SDGs. Most of the large companies in Germany that demonstrate high results in sustainable development within the main components (social, environmental and economic) strive toward the attraction of personnel to the implementation of the adopted corporate obligations. This is based on the principle of volunteering and partnership, while the acquaintance with the goals and tasks of each employee in this sphere is performed at the level of teams. Personnel’s participation in the management of risks to the SDGs of companies (participation in environmental and social projects) is implemented through the attraction to team volunteering. Accordingly, the key strategic direction of the influence of HRM on the sustainable development of German companies is the attraction and involvement of personnel in team volunteering (an example of the development of this direction in the insurance company Allianz).

## 4 Discussion

In the course of the research, we identified the modern specific features of the influence of higher education and HRM on the reduction of risks to the SDGs, which include the following:

- Implementation of online platforms of education, which allow expanding access to higher education under the conditions of possible limitations of stationary education in universities. This facilitates the management of the risks to SDG 4 and SDG 8. Most of the universities of the leading countries by managing the sustainable development risks reoriented their educational programmes after the 2020 pandemic, in the context of new challenges in this sphere;
- Focus of educational programmes on the training of university graduates for the maximum readiness for work at companies of the designated spheres. This direction implies the attraction of representatives of employers (companies) to the development of programmes, courses, lectures and practical workshops;
- Development and implementation of the strategies of HRM, which imply the resolution of tasks in the sphere of sustainable development, in partnership with scholars and consultants of the leading business schools. The interaction with scientific institutions stimulates the formation of scientifically substantiated approaches in this sphere, with possible adaptation to the specific conditions of experience of other companies and other sectoral directions;
- Use of the approach to personnel management that is based on a clear differentiation of work time and personal time, which facilitates the growth of productivity;
- Involvement of personnel in the reduction of risks to the SDGs with the help of mandatory requirements to knowledge in this sphere, as well as through partnership training and cooperation. Using this method, many large companies implement social and environmental projects that minimise the sustainable development risks;
- Delegation of HR authorities under the conditions of functioning of cyclic teams, which are created for temporary projects. This leads to better achievements of the projects’ goals and the development of new approaches to team management.

## 5 Conclusion

The considered features of the influence of higher education and HRM on the reduction of sustainable development risks demonstrate the modern characteristics of the problematics. This is confirmed by the tendencies of the change in approaches to the creation of the system of higher education and the system of human resources management under the influence of the pandemic and its consequences. Transformations in these spheres took place under the conditions of the management of reduction of the risks to the SDGs in countries that demonstrate the highest

achievements in sustainable development. Accordingly, the sphere of higher education and HRM depends on the influence of unpredictable factors, though they possess sufficient potential for quick adaptation to new challenges and conditions of functioning.

Implementation of the designated directions of the given spheres in countries that focus on the reduction of the risks to the SDGs requires their reconsideration according to the Sustainable Development Goals, given the specifics of human resources development at the national level. Implementation of transformations in the system of higher education and HRM may have higher effectiveness in the case of partnership interaction between subjects, institutions (scientific environment) and enterprises.

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