

Article

Mining Industry Corporate Social Responsibility to Education Development

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Abstract: The impact of mining industries' operations on different areas is easy to be noticed. Thus, nowadays different research considering ecology, economy, society, or engineering is performed in light of mining industries. However, the impact on education development is not the first choice. Thus, the aim of this paper is the verification of possibility to indicate the main key factors (activities) in the mining industry, that are in accordance with the CSR doctrine and are capable of ensuring education development. To reach this purpose, KGHM Polska Miedź SA was selected for the research, as an example of a mining company operating on a global scale. Then, the appropriate CSR standard "Principles for Global Corporate Responsibility, Bench Marks for Measuring Business Performance" was a basis for the operationalization process to assure the research tool, that defines the list of the activities in accordance with CSR doctrine. The obtained research tool was used to perform the survey, which indicated the key factors that assure education development. As a result, over 65 key factors were indicated. Generally, the factors considered, e.g., free access to education for workers, suppliers, and vendors, do not affect the education of children and young workers, as does preparing company documents in language adequate to the operating area.



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Keywords: corporate social responsibility (CSR); standard operationalization; education development; mining industry; leader and surrounding

1. Introduction

In recent years, the topic of corporate social responsibility (CSR) has become popular. Many approaches to CSR development and assessment have been created and developed. When analyzing various branches of industry, it can be observed that extractive companies represent the group of companies with significant impacts on the surroundings; thus, assessing their CSR activities is desirable. Mining industry development in any area causes the reciprocal impact on the company and its surroundings. The range of the indicated phenomenon depends on company size and significance. A strong impact was observed for large companies and a flimsy one for smaller businesses due to the capital amount or geopolitical importance. The range depends on the phenomenon of synergy or geographical clusters of interrelated units, which mutually compete and cooperate to increase the prosperity of the region in its formation and functioning [1,2]. Thus, to analyze the significant impact, this article aims to analyze the biggest mining industry in Poland—KGHM Polska Miedź S.A. It will enable smaller, but also significant players such as JSW, to apply the good practices to their strategy and also obtain the positive results in context of education.

1.1. Literature State of the Art of CSR of Mining Industries

The recent literature extensively discusses the CSR contexts of mining industries. The investigation of the role of China's mining industries in CSR in the context of their

involvement in Zambia was presented in [3]. The aim of the paper [3] was to check whether CSR practices are a corporate ethics strategy to promote social good. Additionally, the paper presents how to achieve the noticeable beyond the firm or companies' interests. Moreover, in [3], it is checked if the aim is realized in accordance with Zambia law. Then, in [4] the investigation of frameworks that have affected CSR disclosures is based on reports from South African mining industries, which are indicated on the Johannesburg Stock Exchange. The results presented that the framework had a limited impact on CSR disclosures in the companies investigated. The article [5] considers the extent of shareholder participation and satisfaction with the CSR reports of mining industries in China and Australia. The indicated article analyzes the results of China-owned companies in negative social attitudes and the credibility of the report. CSR community development and empowerment programs of mining companies in Indonesia were discussed in [6]. The indicated paper presents the identification of criticisms of their application. Additionally, in [7], the CSR issues in Indonesia are discussed, but in the context of the resilience model of the local farming, community resilience assures the development of sustainable agriculture.

The application of stakeholder and CSR practices to include Aboriginal and Torres Strait Islander peoples for performing mined land rehabilitation and closure was presented in [8]. It indicated that those activities are essential now and mining industries now allow omitting it. The mining multinational enterprise is examined in points of success and failure in pursuing sustainable development goals in [9]. The case study performed is based on the Tanzanian mining industry. Paper [10] presents the approach to identifying the main topics of CSR for the mining industries using Twitter. The results presented indicated that the CSR debates are growing more and more in developing countries. The indicated debates are mainly centered on the influence of mining companies on the land. Article [11] discusses the concept of responsible mining and geoethics (professional ethics in geosciences). The paper also reviews organizational characteristics and the role of professionals in implementing ethics within mining industries. The conceptualization of triggers, processes, and consequences of the institutional building by a social movement based on mining industries in Argentina was presented in [12]. The results indicated the development of regulated CSR for the former and a legal ban on mining operations. The transformation, as well as the status quo produced by political CSR initiatives, was indicated in [13]. It was highlighted that the extensions of transformation are a function of the degree of inclusiveness, or conversely of exclusion, of them. A review of current practices in the assessment of sustainability to the characteristics of the mining industries and the notion of trust as central to efficient developments was presented in [14]. It was indicated that because the social interface of mining activities is complex, dynamic, and nonlinear in nature, it is essential to implement CSR at the core of strategic mining planning, not only to obtain a social license to operate. The selected aspects of CSR considering the process of energy production and distribution, where mining industries are involved as deliverables, were presented in [15]. The investigation considers society, environment, and corporate issues. Article [16] proposes the integrated multiobjective optimization model to solve the capacitated sustainable transportation problem. It considers the application of both techniques, the analytic hierarchy process, and data envelopment analysis. The case study was carried out on the basis of data flow from the mining industry in India.

The perceptions of the host communities about the trust funds of the mining industries in Ghana were discussed in [17]. The results indicated that the community members considered some elements of the trust funds in a positive way. However, the general goals of the trusts found to promote significant engagement of local community members and contribute to local development have not been achieved. Additionally, in [18], the mining industries in Ghana are considered but from a point of exploration of the positive and negative social impact of business relationships. The results identified and mapped the evolution of CSR behavior through the theory of planned behavior. The possibilities of delivering more sustainable outcomes than those offered by traditional engagement and CSR strategies in a situation where mining industries seek to solve problems shared by

both the company and the community were presented in [17]. The case study performed considered Arequipa, Peru, a mining region. Article [19] aims to define the congruence relation between mining industries and their CSR activities in order to describe a CSR fit typology. Additionally, the paper discusses how CSR fit helps to earn a social license to operate by means of pragmatic legitimacy and moral legitimacy. Additionally, [19] similar research was also carried out in the basic three mining industries in Peru.

1.2. Article Contribution and Organization

As can be indicated, there are different areas of recent research related to CSR and mining industries. However, there is a lack of direct research connecting the CSR mining industries and education. Thus, the aim of this paper is the verification of possibility to indicate the main key factors (activities) in the mining industry, that are in accordance with the CSR doctrine and are capable of ensuring education development. To obtain the indicated goal, the following steps were performed:

- KGHM Polska Miedź S.A. was selected as the object of direct research—a global company located in Lower Silesia in Poland.
- Based on the company (a large mining company) selection, the appropriate CSR standard was selected: Principles For Global Corporate Responsibility, Bench Marks For Measuring Business Performance Third Edition [20].
- The standard was operationalized to allow the use of the standard in research.
- The evaluation was conducted on the basis of a prepared questionnaire supplemented by a representative group of people from the immediate surroundings of the mining leader.
- The key factors based on the CSR doctrine were identified, which should be used by managers for the conscious and targeted actions of the company for its surroundings to ensure the development of education.

2. CSR Models in the World and Poland

In recent literature, the different definitions of CSR could be found [21], proposed by, e.g., Bowen [22] or Carroll [23]. Thus, it is essential to define CSR in the context of research [24]. A very interesting definition was also given in [25] and [26] “Corporate social responsibility is about the core behavior of companies and responsibility for their total impact on the societies in which they operate. CSR is not an optional add-on nor is it an act of philanthropy. A socially responsible corporation is one that runs a profitable business that takes account of all the positive and negative environmental, social and economic effects it has on society”.

To build corporate social responsibility systems, appropriate models of social responsibility are needed. The systems are treated as a simplified representation of a selected fragment of reality in order to better understand it (besides instruments, tools such as good practices codes, ethics codes, etc.). The subjective scope of the system at the mentioned objective approach should also include commissions, tasks, implementation, validation, and verification teams. However, the tools designed and included in the system should be supplemented with consultation programs within experts to assure that the system building is based primarily on the opinion of an independent auditor [27].

The literature indicates that the CSR system should be based on four basic components, which are [27]:

- Designing the policy of social responsibility (by dividing task activities, duties, resource allocation, education, and training of employees);
- Implementation of CSR policy;
- Monitoring of activities through an active and systematic audit;
- Improving and correcting the activities system.

An important issue of the applied instruments and tools of CSR systems expresses their twofold character:

- These tools of CSR patterns ultimately form a diagnostic space. The space in its measurement nature assures information about the level of current involvement in CSR or the degree of implementation of task activities and actions in CSR (according to the extent to which the set of requirements is called quality in literature [28,29]. On the other hand, it provides information on the current state of CSR of various business entities.
- These tools, as CSR patterns, ultimately form the forecasting space. The space provides in its pragmatic nature an indication for shaping the expected and desired state of CSR. On the other, it allows the development of a doctrine emphasizing two aspects of corporate social responsibility) [27,30,31]:
 - a. Protective features—emphasizing that entities refrain from socially harmful activities;
 - b. Multipliers feature—emphasizing the creative role of business in creating social well-being and the resulting niche development of the surroundings.

The discussion, in this outline of the system for social responsibility, is a tool that aims to create, implement, and evaluate activities or impacts for social benefits in the process of managing the company [27,32–34]. CSR standards occurring in this system were an integral part of the structure or a tool for the comparative analysis of CSR activities. That leads to the protective and multiplying ideas necessary in the development of CSR doctrine adopted by individual economic subjects.

The literature indicates different comparative tools for defining the state of CSR [35], which can be directly or after modified according to the need to introduce the CSR system as a strategic model.

Nevertheless, their diversity often resulted from, among others:

- A historical determinant (when standard lists were evolved in parallel with the doctrine of the CSR concept),
- A global, national determinant, when many international, national, nongovernmental, secular, and religious institutions conducted research for the needs of CSR standardization and assessment systems (models with accepted criteria included in the theoretical and empirical research);
- A determinant of the areas and content ranges included structurally in the form of standards or a set of rules, a list of standards, profiles, patterns, models;
- The determinant resulting from standards, CSR certification standards, and mandatory or standards that can be understandable and useful to all, not just social responsibility experts.

Most of the CSR assessment models were based on universal criteria. [36] The criteria consider the common good understood not as a sum of benefits for individual people, but as an advantage requiring proper assessment and support for a fair hierarchy of values and a proper understanding of the dignity and rights of the person [37–39]. One of the most known models is Carrol's CSR model [23]. It is represented by a four-step pyramid that includes economic, legal, ethical, and philanthropic responsibility. The other three models were described by Redman in [40]. The first model is based on the traditional approach in which trade-offs between social and environmental goals and profits are inevitable. The second model is connected with CSR cash intake because integrity and healthy communities mean achieving greater profits for the company. The third model is based on multiple firm goals, all created equal. It establishes that the commitments to environmental and social goals without assurance lead to tangible financial profits. Another model was proposed by Claydon in [41]. This model is known as "consumer-driven corporate responsibility" (CDCR). It is based on the statement that consumer demands for corporate social responsibility are the most likely and effective way to ensure CSR implementation in a company. Another known model in the literature is called the proposed concentric circle (CON) model. This model was primarily developed by the Committee for Economic Development (CED), and reformulated to adjust to recent developments in CSR thought in [42]. The elements in this model are the same as in Carrol's model but with

the relation like in the intersecting circles (IC) model. Although, the CON model outlines the noneconomic social responsibilities as embracing and permeating the core economic responsibilities, which still play the main role.

Internationally and internally for individual countries, the development of methodologies, implementation evaluation, and the state of corporate social responsibility were introduced. Many simple or more complex universal models have been constructed, including guidelines and collections of international and/or national CSR standards. Table 1 presents the standards criteria for comparative analysis contained in the structure of universal and diverse CSR standards used in the world and especially in Poland [43–46]. The presented standards and criteria represent different groups as follows: ISO standards (ISO 26000, ISO 14001, and ISO 9001), principles defined by international organizations (United Nations, International Council on Mining & Metals, The Steering Group of the Global Principles Network, and Social Accountability International) and finally, the main CSR rules defined in Poland. Based on this, we show what the present CSR standards are and their main aims. This overview was used to justify the appropriate standard selection based on the methodology proposed in Section 3.

Table 1. CSR standards and principles.

ISO 26 000 Based on [47,48]
<p>Criteria: respect for human rights; protection of the natural environment; environmental revitalization; responsibility; counteracting corruption; clarity; sustainable development; ethical preservation; the well-being of society; respecting the needs of stakeholders; compliance with the law; respect for directives and resolutions; identification of stakeholders' interests; respect for international standards; fair market practices; environmental responsibility; respect for otherness; labor relations; organizational order; environmental responsibility; the use of environmentally friendly technologies; applying friendly practices to the environment; environmental risk; actions from the perspective of the life cycle; pollution prevention; adaptation to climate change; prevention of corruption; responsible political commitment; fair competition; respect for the law; respect for property; honest marketing; fair information; fair practices; protection of consumer health and safety; production of environmentally friendly products and services; relations with consumers; protection of consumer's privacy; availability of basic products; sustainable consumption; consumer awareness and consumer education; and social commitment.</p> <p>Comment: The CSR guide contains instructions for all types of organizations, regardless of their size or task, and a non-certified standard with a developed standard structure.</p>
ISO 14 001, ISO 9001 based on [49–52]
<p>Criteria: environment; clean production; working conditions; work safety; security in the product use; the perspective of life cycle products; and quality of CSR.</p> <p>Comment: CSR standards are a development of the idea of ISO standards.</p>
SA 8000 based on [48,53]
<p>Criteria: child labor; forced labor; health and safety; freedom of association and right to collective bargaining; discrimination; disciplinary practices; working hours; and remuneration.</p> <p>Comment: This is aimed towards the fair treatment of workers across industries and in any country.</p>
United Nations Sustainable Development Goals based on [54–56]
<p>Criteria: no poverty; zero hunger; good health and well-being; quality education; gender equality; clean water and sanitation; affordable and clean energy; decent work and economic growth; industry, innovation, and infrastructure; reduced inequalities; sustainable cities and communities; responsible consumption and production; climate action; life below water; life on land; peace, justice, and strong institution; and partnerships.</p> <p>Comment: Considering the indicated elements must go hand-in-hand with strategies that build economic growth and address a range of social needs, including education, health, social protection, and job opportunities, while tackling climate change and environmental protection.</p>

Table 1. Cont.

International Council on Mining & Metals 10 principles based on [57,58]
<p>Criteria: ethical business practices; CSR transparency sound systems; sustainable development in corporate strategy and decision-making process; sustainable development in decision-making process; human rights; interests, cultures, customs, and values of employees; interests, cultures, customs, and values of communities; effective risk management strategies and systems; improvement in health and safety performance; zero harm; environmental performance: water stewardship; energy use; climate change; conservation of biodiversity; land use planning; responsible design, use, reuse, recycling, and disposal; social, economic, and institutional development; engagement of key stakeholders in sustainable development challenges and opportunities; effective reporting; independent verification of progress and performance.</p> <p>Comment: The standard includes the main issue presented in the standards as follows: Rio Declaration; the Global Reporting Initiative; the Global Compact; OECD Guidelines on Multinational Enterprises; World Bank Operational Guidelines; OECD Convention on Combating Bribery; ILO Conventions 98, 169, 176; and the Voluntary Principles on Security and Human Rights.</p>
Principles for Global Corporate Responsibility, Bench Marks for Measuring Business Performance Third Edition based on [20]
<p>Criteria: ecosystems; national communities; local communities; indigenous communities; resource extraction; the employed—conditions; the employed—health and safety; the employed—persons; women in the workforce; minority groups; persons with disabilities; child labor; forced labor; suppliers; financial integrity; ethical integrity; corporate governance; shareholders; joint ventures/partnerships/subsidiaries; and customers and consumers.</p> <p>Comment: Based on the above criteria, it is possible to build a universal comparative assessment tool to help ensure companies' responsibility in accordance with the best standards set by the international conventions in the field of human and labor rights.</p>
CSR rules in Poland based on [27,59–63]
<p>Criteria: ecological undertakings; social ventures; compliance with environmental protection standards; greening of production processes; environmentalization of the use of devices impacting on the natural environment; impact on society; impact on contractors and subcontractors; monitoring impacts on the natural environment; monitoring impacts on society—working conditions; human resources; remuneration; employee benefits; occupational health and safety; contract of employment; ergonomics of workplaces (ergonometry); accident; enduring the nuisance of jobs; social investments; the level and structure of employment; organizational structure; information flow; infrastructure level; procedures; development and research; investment activity; and financial activity.</p> <p>Comment: Indicators allow for the diagnosis of the current CSR status and constitute a starting point for the forecasting of the desired results.</p>

The presented standards may not be ready-made diagnostic tools. The standards are the basis for using their criteria to construct appropriate tools, which often are modified for specific research needs to include the consideration of specific CSR characteristics for different regions of the world and the economic area of the organization.

3. Research Methodology and Object

The main question of this investigation is “Is it possible to indicate the main key factors, that are in accordance with CSR doctrine, that can assure the development of the education”. The authors propose the methodology presented in Figure 1 to achieve the indicated aim. The methodology is based on the selection of the research object and CSR standards which must be adapted to the aim and object of the research. After the initial operation, the research group must be selected. Finally, the result is the list of the CSR activities which the company should take to improve the expected area. Additionally, Figure 1 presents the information about this article for each step of the methodology.

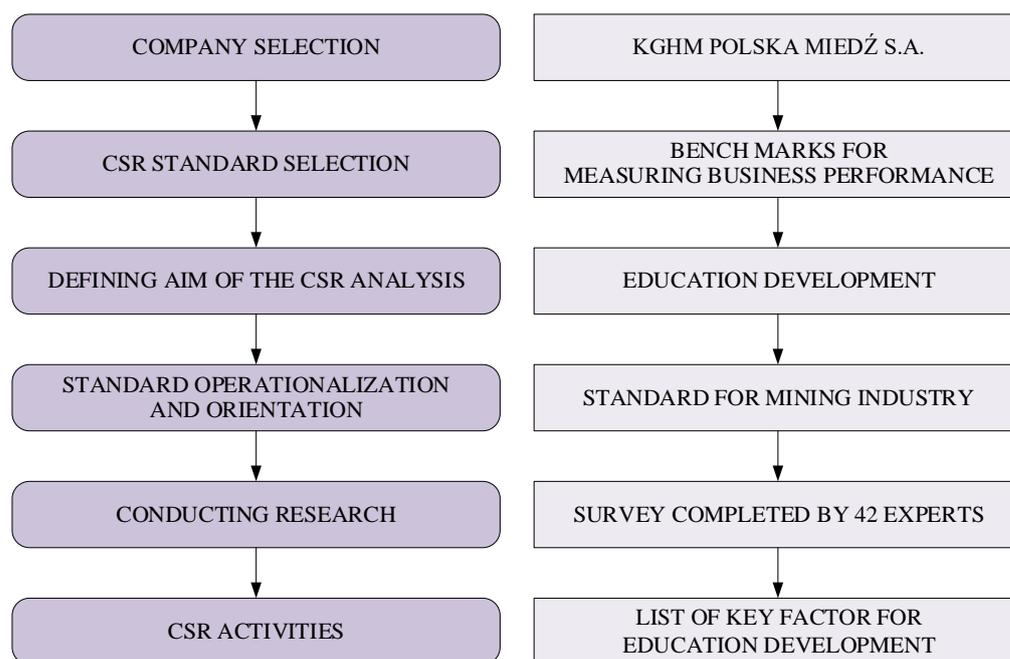


Figure 1. Research methodology and achieved results.

In this article, the world leader in the production of copper and silver—KGHM Polska Miedź S.A.—was selected as a research object. The leader was selected for research, in addition to the accepted selection criteria, primarily due to the high level (which can be seen without scientific investigation and justification due to the responsible activities over the years observed by Polish society) of the social responsibility of the subject (CSR) and due to the dominant and high level of its managerial impact on its business surroundings. The measurements of the mining industry’s influence on the surroundings were [64]:

- The copper and silver deposits due to territorial conditions;
- Leader’s proceeds to join the group of largest global copper industries;
- Optimal use of natural resources for the growth of the company’s value;
- Becoming a leader in employment in the region and beyond.

The company employs directly over 18 thousand people, and another 10,500 in KGHM Capital Group, constituting over 30 companies involved in diverse activities in a wide range of products and services. Additionally, the companies cooperating with their leader provide for the next 80 thousand employees [65]. By omitting the entities of the KGHM capital group, the company has ten branches. Due to the long life cycle of the mining division (over 50 years), the scope of sources and literature, which concerns KGHM Polska Miedź S.A., is huge (the name of the leader has changed over the years due to the then-legal decisions and restructuring processes) [66,67]. It is important to notice that this company is a large copper holding company that provides other empirical materials to carry out research activities which are an important extension of literature knowledge [66,68–70].

Therefore, for the needs of the mining company’s assessment, the authors selected the standard “Bench Marks for Measuring Business Performance” [20]. The choice was conditioned by the completeness of the requirements and the possibility of separating the assessment areas for meeting the individual requirements of the standard. However, for the needs of the research, slight modifications to operations were necessary. The modification based on the operationalization of the set consisted of changing the principle formed from the general form into one or more operational rules. In the described process, the principles were clarified, detailed, and concretized. This leads to creation and at the same time the possibility of free interpretation [71]. Additionally, as part of the research, these principles, criteria, and benchmarks were excluded, which were not directly related to the mining

division, but referred to as, e.g., GMO, tobacco, military, and financial institutions into universal recommendations.

An example of operationalization based on benchmark 1.4.B.5 [20]:

- 1.4.B.5 “The company’s business plans, and its employment policies and practices are communicated clearly and are available in indigenous languages in both written and oral form”.

Standard after the operationalization process:

- 1.4.B.5a: The company’s business plans are available in indigenous languages.
- 1.4.B.5b: The company’s business plans are communicated clearly in indigenous languages.
- 1.4.B.5c: The company’s business plans are communicated in indigenous languages.
- 1.4.B.5d: The company’s business plans are communicated in indigenous languages in written form.
- 1.4.B.5e: The company’s business plans are communicated in indigenous languages in oral form.
- 1.4.B.5f: The company’s employment policies are available in indigenous languages.
- 1.4.B.5g: The company’s employment policies are communicated clearly in indigenous languages.
- 1.4.B.5h: The company’s employment policies are communicated in indigenous languages.
- 1.4.B.5i: The company’s employment policies are communicated in indigenous languages in written form.
- 1.4.B.5j: The company’s employment policies are communicated in indigenous languages in oral form.
- 1.4.B.5k: The company’s practices are available in indigenous languages.
- 1.4.B.5l: The company’s practices are communicated clearly in indigenous languages.
- 1.4.B.5m: The company’s practices are communicated in indigenous languages.
- 1.4.B.5n: The company’s practices are communicated in indigenous languages in written form.
- 1.4.B.5o: The company’s practices are communicated in indigenous languages in oral form.

An important and difficult stage in the organization of research was the selection of a research sample. It was necessary to consider all the elements and features of the general population. The basic principle in determining a representative group was the acceptance of the sample as a subset of the general population with the expected representative level enabling the formulation of generalizations referring to the population. Considering the problems of the research during the design, the targeted selection was adopted. This is the case when the selection concerns objects constituting the company, in which managers affect the environment. This choice cannot be random. The general population was all entities and organizational units of the copper holding KGHM Polska Miedź S.A. structure operating not only in Poland.

Due to the fact that the research object directly and indirectly contributes to employment in the surroundings and contributes to the development of many subjects and entities, it gathers recipients of managerial impacts. The criteria for the selection of the expert sample are four main determinants, including the expert’s indication criterion:

- Experts advised participation directly by the respondent in the research;
- Experts advised participation indirectly by the respondent in the research;
- Experts selected participants in the research from the audiences (selection of the author of the dissertation according to additional criteria for the selection of the expert sample and indications of other competent experts);
- Experts remaining as recipients of managerial impact forces and generated benefits of the studied facility (selection of the author of the dissertation according to other additional criteria for the selection of the expert sample).

An important decision in the selection of experts is the fact that the adopted general population of experts (42 people) for research purposes does not constitute isolated research units and strictly belongs to one category, i.e., the selection criteria permeate individual experts who are counted simultaneously in many categories.

In addition to the criteria for selecting experts of a selected population for the research problem, the age of the expert respondents was the same for many respondents and consultants (in the context of the life cycle of the mining division, i.e., embryonic phase, growth, and maturity), their professional experience in general, and expert experience at KGHM Polska Miedź S.A. The work experience of the research population is presented in Figure 2 and its age in Figure 3. The details about the way of performing the survey and about the experts were deeply discussed in the PhD dissertation available in [66].

EXPERTS WORK EXPERIENCE IN KGHM

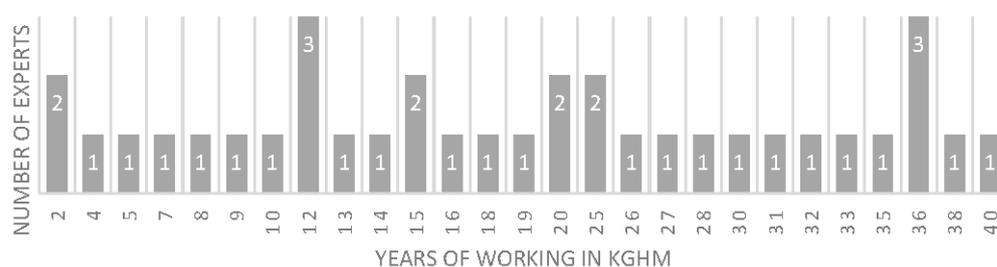


Figure 2. The experts' work experience in KGHM Polska Miedź S.A.

EXPERTS AGE

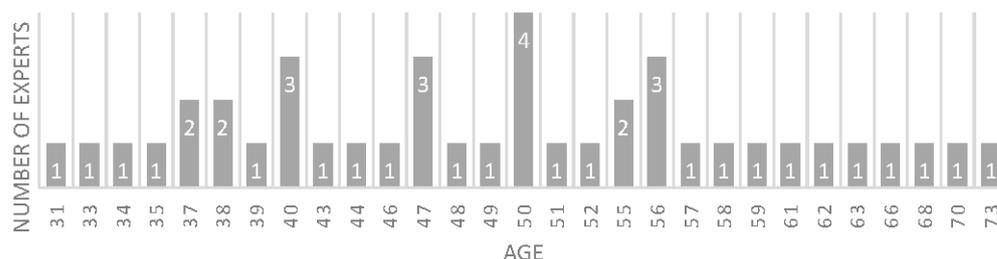


Figure 3. The research experts' age.

4. Analysis of the Factors' Ranking—Searching for the Educational Genes

The preliminary surveys of the respondent allowed establishing areas of profit for the regional surroundings of the leader without deeper scientific decisions. The indicated profits are education, culture, a higher level of infrastructure in the region, or the level of innovation. In this research, education was selected as an aim. For the need of developing education as a prediagnosed potential of KGHM Polska Miedź S.A., the CSR standard [20] was adopted as the basis for creating an assessment tool. The selected standard was operationalized in the way described in Section 3. The concept of the pattern resulted from the CSR standard structure in which direct development genes (gene—the name defined by authors; the gene is connected with the determination of some characteristic of the element) for various areas were included. The genes analyzed in this article concern education. The direct genes of education were indicated when the selected part of the standard contained education, course, or research. Additionally, during the survey, the experts indicated the indirect genes. The indirect genes were not directed toward education, but according to the experts, may affect the development of education.

A detailed analysis of the accepted (operationalized) elements of the CSR standard as factors important for the development of education, in the opinion of the expert group, gives a list of such key factors (key factors—the most important elements of the CSR

standard, which after application (or realization), assures the development of the research aim) in which the educational gene and its potential are located.

The simplified scheme for the proposed approach is showed in Figure 4.

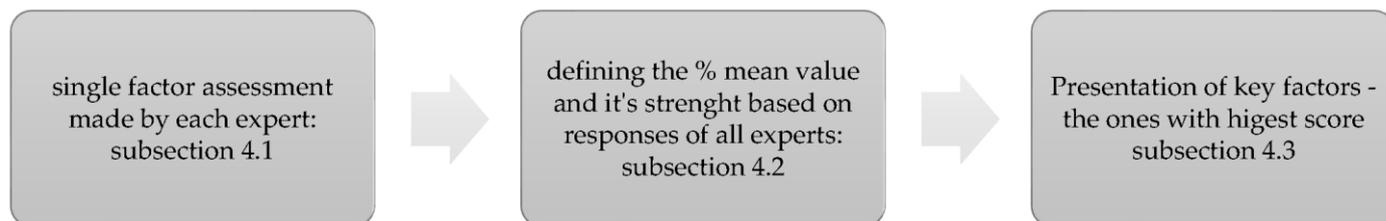


Figure 4. Simplified scheme for finding education genes.

4.1. Single-Factor Assessment Made by Single Expert

The assessment of a single factor was made by criteria analyzed by the experts in the survey:

- The factor mentioned for the development of education in the region is:
 - a. Important,
 - b. Not valid,
 - c. I do not know,
- The mentioned factor is important in the managerial impacts of the institutional leader on the regional surroundings from the development perspective and for the benefits coming from its surrounding.

Then, the factor of importance was determined as the least, medium, and very important, in the context of allowing it to determine the range of the leader's managerial influence on the development of education in the region. All following calculations were realized using MS Excel software.

The experts' assessment was realized using the scale: very weak, weak, medium, strong, and very strong as the factor's influences on educational development (the questionnaire described as an attachment at work was helpful in determining the list of success factors). The factor weight value was calculated according to the rule (formula).

$$V_f = W_f \times A_f \quad (1)$$

V_f —the final value of the success factor for the education factor.

W_f —the weight of the factor for education development in the region. The scale 1–3 denotes: 1—less important, 2—medium important, and 3—very important.

A_f —the factor assessment for education development in the region. The scale 1–5 denotes: 1—very weakly, 2—weak, 3—medium, 4—strong, and 5—very strong.

4.2. Defining the Mean Value of All Responses for Each Factor

After obtaining a set of potential factors that have influenced or will affect the regional surroundings for the development of education, a ranking of these factors should be determined. So, it is necessary to specify the mean final value of each factor:

$$V_{\%} = \frac{\sum V_f}{en * V_{fmax}} \quad (2)$$

$V_{\%}$ —the mean of the final value of the success factor for the education factor;

$\sum V_f$ —the sum of the final value for each expert;

en —the number of experts;

V_{fmax} —the maximal value of the factor according to the experts;

The next step was to determine the strength of the factor's impact on the surroundings of the development of education in the region. The impact strength of $V_{\%}$ was described as:

- VW—very weak strength 0–20%;
- W—weak strength 21–40%;
- M—medium strength 41–60%;
- S—strong strength 61–80%;
- VS—very strong strength 81–100%.

Finally, the survey and its analysis ensured the list of the factors which have been ordered by importance. Thus, to summarize the procedure, the following steps were carried out:

- Calculate factor weight (Equation (1)) value V_f of each factor based on separate responses from experts;
- Calculate the mean final (Equation (2)) value $V_{\%}$ of each factor as a mean percentage value of all responses of the experts;
- Select only those whose strength indicated by Equation (2) is higher than 80% ($V_{\%} > 80\%$).

4.3. Presentation of the Key Factors

The results for principles, criteria, and benchmarking are presented only for the very strong ($V_{\%} > 80\%$) category and are presented in Table 2. The presented tables indicate the CSR standard factor and information if it is a direct or indirect gene. The order of the factor is taken as it is in the standard (C—criteria, P—principle, and B—benchmark). All other results with the final value $V_{\%} < 80\%$ are available in [66].

Table 2. CSR key factors for education issues based on operationalized standard [20].

Factor	Type	Content	Gene *
1.1.C.12a	C	Prior to the introduction of products, the company initiates and makes public a study that takes into account the impact on land.	D
1.1.C.12b	C	Prior to the introduction of products, the company initiates and makes public a study that takes into account the impact on soil	D
1.1.C.12c	C	Prior to the introduction of products, the company initiates and makes public a study that takes into account the impact on forest management	D
1.1.C.12d	C	Prior to the introduction of products, the company initiates and makes public a study that takes into account the impact on water	D
1.1.C.12e	C	Prior to the introduction of products, the company initiates and makes public a study that takes into account the impact on air	D
1.1.C.12f	C	Prior to the introduction of products, the company initiates and makes public a study that takes into account the impact on local surrounding	D
1.1.P.5a	P	The company affirms the precautionary principle that must be invoked prior to the development of their product	D
1.1.P.8a	P	The company affirms the right of communities to be involved in any proposals regarding the development of their products.	ID
1.2.C.1a	C	The company has a human rights policy	ID
1.2.C.1c	C	The company realize a comprehensive and verifiable human rights policy which includes an explicit commitment to secure the principles and values contained in the Universal Declaration of Human Rights and its two covenants and the International Labour Organisation standards	ID
1.4.B.5c	B	The company's business plans are communicated clearly in indigenous language	D

Table 2. Cont.

Factor	Type	Content	Gene *
1.4.B.5d	B	The company's business plans are communicated clearly in indigenous languages in written form.	D
1.4.B.5e	B	The company's business plans are communicated clearly in indigenous languages in oral form.	D
1.4.B.5f	B	The company's employment policies are available in indigenous language	D
1.4.B.5h	B	The company's employment policies are communicated clearly in indigenous language	D
1.4.B.5j	B	The company's employment policies are communicated clearly in indigenous languages in written form.	D
1.4.B.5l	B	The company's practices are communicated clearly in indigenous language	D
1.4.C.8b	C	The company provides training opportunities for, and actively recruits from, indigenous communities for all levels of employment.	D
2.1.B.7a	B	The company has training and education of workers	D
2.1.B.7b	B	The company contains in training and education of workers on their rights and responsibilities in line with best practice and industry developments.	D
2.1.B.7c	B	The company has training and education of workers at the highest level	D
2.1.B.7d	B	The company provides a program to develop employee competencies that will enable appropriate and the implementation of professional activities at the highest level	D
2.1.B.7e	B	The company assures that such training is free	D
2.1.B.7f	B	The company assures that such education is free	D
2.1.B.7g	B	The company assures that such training is compensated	D
2.1.B.7h	B	The company assures that such training is compensated	D
2.1.B.8a	B	The company does not adopt the quota system for limit the training and education access	D
2.1.B.8b	B	The company does not adopt any forms of penalty for workers who deviate education	D
2.1.C.6a	C	Training opportunities within the company are available	D
2.1.C.6d	C	Training opportunities within the company are available to all employees of the company, regardless of status, whether full-time, part-time, short-term, permanent, or with any other contracts of employment	D
2.1.C.7l	C	This information about health and safety at work is provided in the languages of the workers.	D
2.2.C.2a	C	The company ensures participation by workers from all levels of employment, in education, on issues of occupational health.	D
2.2.C.2b	C	The company ensures participation by workers from all levels of employment, in education, on issues of occupational safety.	D
2.3.a.B.3a	B	The company provides adequate technical training to all workers, especially women	D
2.3.a.B.3b	B	The company provides adequate technical training, which contributes to the advancement of all workers, especially women	D
2.3.c.B.2e	B	The company provide trainings for persons with physical and/or mental disabilities	D

Table 2. Cont.

Factor	Type	Content	Gene *
2.3.c.C.2f	C	The company has a policy of employing people with disabilities and of providing the resources and facilities, which enable them to receive training.	D
2.3.c.C.2g	C	The company has a policy of employing people with disabilities and of providing the resources and facilities, which enable them to receive training without discrimination.	D
2.3.c.C.4a	C	The company provides education for persons with physical disabilities.	D
2.3.c.C.4b	C	The company provides education for persons with mental disabilities.	D
2.3.c.C.4c	C	The company provides training for all its employees about hiring and accommodating persons with physical disabilities.	D
2.3.c.C.4d	C	The company provides training for all its employees about hiring and accommodating persons with mental disabilities.	D
2.3.c.C.6a	C	The company offers disability awareness training to all employees working with people with disabilities.	D
2.3.c.C.6b	C	The company offers disability awareness training to all employees supervising people with disabilities.	D
2.3.d.B.4a	B	The company regularly consults with country-specific knowledgeable organizations regarding practices to remove children from work sites and re-integrate them into home, school and community.	D
2.3.d.B.4b	B	The company regularly consults with country-specific knowledgeable organizations regarding practices to remove young workers from work sites and re-integrate them into home, school and community.	D
2.3.d.C.1a	C	The company does not employ, in a full-time capacity, in its own workplaces any child under the age of completion of compulsory schooling.	D
2.3.d.C.1c	C	The company does not employ, in a full-time capacity in that of its subsidiaries any child under the age of completion of compulsory schooling.	D
2.3.d.C.1e	C	The company does not employ, in a full-time capacity in that of its suppliers, any child under the age of completion of compulsory schooling.	D
2.3.d.P.3a	P	The company does not interfere with the right of a child to an education	D
2.3.d.P.3b	P	The company does not interfere with the right of a young workers to an education	D
2.4.B.10a	B	The company provides on-going education for workers.	D
2.4.B.10b	B	The company provides free education for workers.	D
2.4.B.10c	B	The company provides compensated education for workers.	D
2.4.B.4a	B	The company has an effective internal compliance process of training of suppliers and vendors.	D
2.4.C.5a	C	The company works with its suppliers to put in place on-going education for workers on workers' rights and how to achieve and sustain compliance with labour standards.	D
2.4.C.5b	C	The company works with its suppliers to put in place on-going education for workers on workers' rights and how to achieve and sustain compliance with social standards.	D

Table 2. Cont.

Factor	Type	Content	Gene *
2.4.C.5c	C	The company works with its suppliers to put in place on-going education for workers on workers' rights and how to achieve and sustain compliance with environmental standards..	D
2.4.C.5d	C	The company works with its suppliers to put in place on-going training programmes for workers on workers' rights and how to achieve and sustain compliance with labour standards.	D
2.4.C.5e	C	The company works with its suppliers to put in place on-going training programmes for workers on workers' rights and how to achieve and sustain compliance with social standards.	D
2.4.C.5f	C	The company works with its suppliers to put in place on-going training programmes for workers on workers' rights and how to achieve and sustain compliance with environmental standards.	D
2.6.C.1a	C	The company provides training for its directors regarding ethical issues.	D
2.6.C.1b	C	The company provides training for its directors regarding corporate social responsibility issues.	D
2.6.C.1c	C	The company provides training for its directors regarding codes of conduct.	D
2.6.C.1d	C	The company provides training for its employees regarding ethical issues.	D
2.6.C.1e	C	The company provides training for its employees regarding corporate social responsibility issues.	D
2.6.C.1f	C	The company provides training for its employees regarding codes of conduct.	D

* D—direct, ID—indirect. The direct genes of education were indicated when the selected part of standard contained education, course, or research. The indirect genes were not directed toward education but according to the experts may affect the development of education.

5. Discussion

One of the main elements of the research is to select an adequate base document with CSR recommendations such as ISO 26000 [47], SA 8000 based on [53], UN SDGs [54] International Council on Mining & Metals 10 principles based on [57] or Principles for Global Corporate Responsibility, Bench Marks for Measuring Business Performance Third Edition [20]. During the investigation, the Principles for Global Corporate Responsibility [20] were used as a representant of tools to measure business performance. However, by the application of the proposed methodology in Section 2, it was also possible to apply it to assure the development of education. The investigation was aimed towards defining the key factors that assure obtaining the indicated results.

The indicated key factors are a direction for the leading managers, and what elements are important to assure the development of education. The analysis of the results presents different areas that enable obtaining the indicated aim.

The first group of factors concerns the education of workers. There are obvious elements such as benchmark 2.4.B.10a "The company provides on-going education for workers". However, on the other hand, the aspect of the cost of the education such as in benchmark 2.4.B.10b "The company provides free education for workers." is an important extension to achieve a greater result. Another result is that access to education should be assured not only for workers but also for suppliers and vendors (2.4.B.4a).

Another group is connected with children and young workers. The example may be the indicated factor 2.3. d.C.1a which is criteria (C) "The company does not employ, in a full-time capacity, in its own workplaces any child under the age of completion of

compulsory schooling". The important element is not to include children and young people in a company's functioning if it may negatively affect their ability to learn.

The next group is connected with conducting and publishing research about the company's influence on, e.g., the environment. The example may be by the criteria 1.1.C.12a "Prior to the introduction of products, the company initiates and makes public a study that takes into account the impact on land".

Another indicated element is that the company documents such as policy or business plans are available in an adequate language to enable all groups to understand it (e.g., 1.4.B.5c).

The indicated groups are so far connected with direct genes and education is obviously observed. Although, it is important to highlight that the survey indicated indirect genes. They are connected with respect for human rights (1.1.P.8a, 1.2.C.1a, and 1.2.C.1c). The presentation of these factors shows that the conscious respondents know that education is an important element of respecting human rights but are not obviously connected with education.

The resulting list of factors is a tool ready to support the work of managers who consciously may enable the development of education in the region. It is worth highlighting that the development of the education of present and future employee is essential to assure a company's competitiveness in the global area.

6. Conclusions

This paper confirmed the possibility of indicating the main key factors (activities) in the mining industry that are in accordance with the CSR doctrine and are capable of ensuring education development. Based on the performed research, the list of over 65 key factors were indicated and are presented in Table 2.

To generalize the results, it was indicated that the key factors concern:

- Free access to education for workers, as well as suppliers and vendors;
- Not affecting the education of children and young workers;
- Conducting and publishing research about the company activities and its influence;
- Preparing company documents in a language adequate to the operating area;
- Assuring the respect of human rights.

In light of the result, the following positives can be indicated for:

- Practitioners—the indicated key factor is a list of ready activities that can be carried out to assure education development in the surroundings of the company to assure highly qualified future employees and a high level of competitiveness.
- Scientists—the proposed methodology of this article (presented in Figure 1) can be applied to different research aims to achieve a ranking for important CSR activities for the development of, e.g., culture, environment, and technical level.
- Society—In the case of cooperation activities of the mining industry for education development, access to education would increase, and the strategy would not affect children and young workers.

The main limitation of this research is the application in the case of a company that is not large-scale, which has no significant impact on the surroundings and has no local competitor in Poland or abroad. This is because such activities could not be easily observable. In future research directions, the authors propose the extension of the research to achieve a ranking for important CSR activities for the development of culture. Experts also participated in the questionnaire, but the indicated results are out of the scope of this paper but will be the basis for future research. The authors also believe that the proposed methodology will be applied in the future by other university groups with different CSR standards for different types of industries, that are also specific as well as significant to the surroundings on a local and global scale.

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