



A Contribution to Sustainable Human Resource Development in the Era of the COVID-19 Pandemic

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Abstract

This examines the six drivers and twelve detailed practices of sustainable human resource development (S-HRD) before and during the COVID-19 pandemic across different organizations in Poland. The empirical strategy is based on explorative research conducted using surveys in Poland between 2020 and 2021. The results confirm that the surveyed organizations implemented S-HRD practices driven mainly by the expectations of external stakeholders. They neglected the areas of caring for employees' well-being and developing environmental awareness before the COVID-19 pandemic. During the pandemic, most companies maintained their approach to S-HRD. This research is unique because it adds to the body of literature advocating the significance of S-HRD for organizational resilience before, during, and after extreme events. Generalizing the results is challenging because the snowball sample has significant restrictions. However, future research may overcome these shortcomings by using larger samples based on probability or random sampling techniques.

Keywords Sustainable HRD · Human resources · Stakeholders · COVID-19

Introduction

In business ethics, there are four strands of literature that explain ethical issues with human resource management (HRM). The first strand is the economic theory that suggests employees as a commodity that must be carefully managed like other resources, most notably like technology and other organizational assets (Karnes, 2009; Paillé et al., 2014; Ryan, 2006). This implies that a human being is employed to perform a specific function in an organization and should be treated as means only. In this strand, employees are subject to a strict managerial rationale of cost and efficiency of resources, which raises a critical problem from an ethical perspective. The second strand is the ethic of duty coined from Kantian theory that requires HRM to treat humanity always as an end and never as means only (de Gama et al., 2012; Leicht-Deobald et al., 2019). In the spirit of Kantian, it is human dignity that forbids treating an employee as a means only. The third strand is the ethic of right and justice, which suggests that employees are not only resources but human beings who deserve some respect and are entitled to basic rights. The fourth strand is the contemporary research that framed ethical issues between HRM based on the issue of rights and duties of employees (Gond et al., 2011; Gross-Schaefer et al., 2000). This suggests that employees have

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rights, including the right to freedom (e.g., equal opportunities and affirmation action), the right to participation (e.g., work-life balance and privacy), as well as the right to healthy and safe working conditions (working condition and occupation health and safety), among others (Braga et al., 2019; Chen et al., 2022). Similarly, the employee has duties like complying with labor contracts (e.g., an acceptable level of performance, work quality and loyalty) to the organization. To resolve the conflict between the principle of treating humans with respect and dignity and treating individuals as means, all members of the organization must work together. By implementing ethical practices and processes, organizations can improve employee engagement and productivity, as well as promote a positive reputation for the organization in the community. Furthermore, fostering a culture of ethics and accountability can help create a more supportive work environment where individuals feel valued and empowered to speak up about unethical behavior (Greenwood, 2013).

Since modern business is required to undertake activities related to sustainable development to balance economic, environmental and social priorities, new concepts of managing human resources in a sustainability-oriented manner have emerged. The most popular concept is sustainable HRM (S-HRM) which emerged 35 years ago. S-HRM includes HRM practices securing the transfer of knowledge and skills to the future generation (economic sustainability), supporting environmental management (environmental sustainability) and enhancing (...) workers' self-esteem and well-being (social sustainability) (Aust et al., 2019).

Human Resource Development (HRD) has been treated as the main fundament of sustainable development for years (Zarestky & Collins, 2017) and an element of S-HRM (Stankevičiute & Savanevičiene, 2018). However, the enrichment of this concept—in line with the Triple Bottom Line (Elkington, 2004)—is dated for 2021 (Piwowar-Sulej, 2021).

Since—as above-presented—a broader concept of sustainability prioritizes the integrity of economic, social, and environmental quality, sustainable HRD (S-HRD) integrates environmental, social, and economic initiatives with human development for the purpose of mutual benefit for all company stakeholders (Piwowar-Sulej, 2021). Literature shows that it promotes job security, safety, work-life balance, and inclusive participation among workers. Moreover, it encourages collaboration between employees and with the company's external stakeholders, increases environmental awareness, and contributes to the firm's financial results (Piwowar-Sulej, 2021).

As Garavan and McGuire (2010) stated, HRD has been increasingly expected to play a facilitative role in sustainability and ethics in organizations. HRD has the potential to create ethical organizational culture by focusing on positive values. HRD companies may shape employees'

moral responsibility (the individual's beliefs about the right thing to do) and make employees act as proponents for sustainability (Sendlhofer, 2020). Moreover, HRD—with its roots in learning—may contribute toward the progress of society. It establishes foundations for expanding mental horizons and increasing individual employability (Ybema et al., 2020). It shows not only solutions but also gaps and ways in which knowledge can be further developed for the benefit of individuals, communities, or society (Garavan & McGuire, 2010). However, the drivers and practices of S-HRD remain unexplored—in general (Jang & Ardichvili, 2020) and in the context of global crises. The strongest factor impacting HRM practices in 2020 was undoubtedly the COVID-19 pandemic which fits into the definition of a crisis (Quarantelli, 1988).

The aim of this study is to evaluate the drives and practices of (S-HRD) before and during the COVID-19 pandemic period and provide organizations with a strategy for ensuring sustainable practices in future events. Specifically, this study addresses three main questions in the empirical literature, which are discussed as follows:

RQ₁ What drivers impacted the implementation of S-HRD in companies before the pandemic?

RQ₂ To what extent did employers implement the practices of S-HRD before the pandemic?

RQ₃ Has the COVID-19 pandemic made HRD more sustainable in its practice?

Many previous studies emphasized that company size matters when it comes to the propensity to use different HR practices (de Kok et al., 2003; Wiesner & McDonald, 2001). As far as HRD is concerned, Wagner (2011) and Piwowar-Sulej (2021) provided evidence that large companies used pro-environmental training more often than smaller companies. Moreover, Eurostat (2016) shows that larger organizations are more likely to offer continuous vocational training. Smaller companies typically have limited access to resources, and many of the positions in these organizations are cross-functional (Sendlhofer, 2020), which implies a lack of HRD experts. In turn, large organizations are considered to be more vulnerable to public pressure that stimulates them to introduce sustainability-oriented practices (Hörisch et al., 2017). Therefore this study also addresses the following question:

RQ₄ What are the differences in S-HRD drivers (RQ4a), practices before (RQ4b) and during the pandemic (RQ4c) between companies of various sizes?

There are several reasons that justify the need to investigate the drivers and practices of S-HRD before, during, and after the COVID-19 pandemic. *First*, it is important to understand the motives which lead companies to integrate the principles and values of sustainability into HRD activities before the pandemic. *Second*, during the pandemic, many companies had difficulties surviving on the market and were forced to reduce investments in staff (McDonnell & Burgess, 2013). Organizations started working remotely—often without prior preparation—which caused huge stress for employees. This work influenced also negatively employees' work-life balance. Therefore, new challenges for HRD related to increasing employees' employability as well as the development of awareness in the area of mental and psychological health emerged. *Third*, the majority of newly hired employees during the pandemic have not been integrated into the organizational culture because they embraced work remotely and never met their boss and co-workers. Thus, HRD needed to possess a broad understanding of S-HRD to unify employees hired before and throughout the pandemic. *Fourth*, the employees in a remote or hybrid work environment were unable to engage in one-on-one interaction, which was valued before the pandemic due to systemic issues. Consequently, the S-HRD concept must be applied to improve mentorship programs and employee engagement. *Fifth*, most HRD professionals who lacked experience in S-HRM found it challenging to inspire teamwork among their employees and boost productivity during the COVID-19 pandemic. *Sixth*, the COVID-19 pandemic influenced the way how people are developed. Many HRD specialists had to implement online training. However, the issue of the impact of the pandemic on S-HRD has never been studied before.

This study utilizes a survey method. The empirical research was carried out from December 2020—January 2021 in Poland. Our sampling strategy is motivated by three factors. *First*, it uses 208 research samples collected from people on supervisory positions across different industries (insurance, banking, manufacturing, education, and tourism, among others) to test the extent to which organizations followed S-HRD principles concerning the COVID-19 pandemic. The respondents are chosen based on their contribution to HRD practice and resource allocation (Bowen & Ostroff, 2004; Järlström et al., 2018). *Second*, the respondents in the research sample partake in strategic decision-making and are responsible for their subordinates' HRD. *Third*, the sample group also interacts daily with different company stakeholders (Jackson et al., 2014; Järlström et al., 2018).

The answers to the above research questions are important for several reasons. *First*, they help to identify the perception of Polish firms in relation to the principles of S-HRD. *Second*, they evaluate the adaptability of HRD practices used

before and during the COVID-19 pandemic and how the impact might have been mitigated if the S-HRD concept had been followed. In particular, the answers help in understanding the impact of training and development, and changes in the work environment (for example, e-learning, talking about emotions, and the mental health of employees).

This study extends the existing literature in several ways. *First*, this is the first study which investigates the drivers and practices of S-HRD before and during the COVID-19 pandemic period. *Second*, it provides a detailed account of the difficulties encountered by organizations that failed to implement S-HRD, as well as how this affected their capacity to manage their workforces successfully before, during, and after the pandemic. While previous research is input motivated, our analyses are output driven and represent a holistic perspective of HRD and sustainability before, during, and beyond the pandemic. This study also identifies the differences between companies of various sizes in terms of the S-HRD drivers and practices used. Finally, our research adds to the literature on sustainable HRM by showing the different ways that organizations may embrace sustainability and guarantee that their systems are robust to unanticipated crises.

The remainder of this study is as follows. "Literature Review" section presents the literature review and framework of the study. "Methodology" section contains the methodology and data collection, and "Results and Discussion" section discusses the results of the study. "Conclusion" section concludes the study with policy recommendations and suggestions for future studies.

Literature Review

Sustainable HRD: Scope and Characteristics

HRD refers to HR training (Mulang, 2015), career (Garavan et al., 2002) and performance management (Egan, 2011), and organizational development (Jang & Ardichvili, 2020). As Armstrong and Tylor (2015) emphasized, HRD means enabling employees to learn. HRD has been linked with sustainability issues for years due to the fact that learning lies at the heart of each organizational transformation.

Although in the HRD domain, there are numerous conceptual works which link HRD with sustainability, CSR and ethics (e.g., Anderson et al., 2014; Ardichvili, 2013; Sheehan et al., 2014)), studies in the HRD field lack empirical evidence on the linkage between HRD and sustainable development (Jang & Ardichvili, 2020). However, in the HRM domain, many studies revealed a strong impact of HRD practices on a company's sustainable performance. Most of them referred to environmental sustainability (Bhardwaj, 2016; Moraes et al., 2018; Yafi et al.,

2021). The cited authors focused mainly on training in the field of environmental protection. For example, Deshpande and Srivastava (2022) evaluated the relation between green training and sustainability in organizational performance through emotional intelligence and green work balance. They suggested that training is one of the key practices that support strong organizational performance that is driven by the basics of sustainable development.

There are also works devoted to the socially responsible implementation of the HRD process (Barrena-Martínez *in.*, 2019). It consists of three components, namely, legal compliance HRD, employee-oriented HRD, and general CSR facilitation HRD (GF-HRD). Legal compliance HRD means that HRD activities are performed according to legal requirements. Employee-oriented HRD practices build employee skills based on CSR principles such as objectivity, non-discrimination and transparency. The last component of socially responsible HRD encourages employees to participate in company CSR initiatives (Diaz-Carrion et al., 2019; López-Fernández et al., 2018).

Although in the HRD domain, the concept of green HRD (GHRD) (Zarestky & Collins, 2017) and socially responsible HRD (SR-HRD) (Bierema & D'Abundo, 2004) have been introduced, when talking about sustainable development, one should remember that sustainability integrates three aspects of company's functioning: economic, environmental and social. Ardichvili (2013) explored the limited growth and expansion to a new sustainability paradigm in HRD. In turn, Haugh and Talwar (2010) considered the complex meaning of sustainability and claimed integrating sustainability into every aspect of business operations.

Considering the basic principles of sustainability (Ehnert, 2009) and S-HRM (Stankevičiute & Savanevičiene, 2018), Piwowar-Sulej, (2021) introduced the multidimensional concept of S-HRD. She emphasized that S-HRD should not only promote sustainability in training content (sustainability thanks to HRD) but also in HRD practices (sustainability in HRD practices). The latter is in line with the above-presented postulate by Haugh and Talwar (2010). It means that it is not enough to explain to people during training courses that they should be environmentally responsible. HRD practices should be internally sustainability-oriented (in the analyzed case: shaped in environmentally friendly manner). S-HRD is based on the following dimensions: (1) putting focus on a long-term perspective; (2) being flexible and develop HR flexibility; (3) taking care of employees' well-being; (4) encouraging collaboration in a company; (5) developing environmental awareness; (6) ensuring employee participation; (7) offering fair and equal developmental opportunities; (8) collaboration with external stakeholders; and (9) ensuring profitability. Characteristics of these dimensions are presented in Table 1.

The mission of a sustainability-oriented company is not to offer long-life employment in this company but to increase employee employability (Ybema et al., 2020). Employees should be provided with skills that are necessary to deliver good work results, change a position in the company, and increase their positive psychological capital (e.g., self-confidence when executing tasks). As a result, HRD practices are one of the important factors in employee retention (Kashyap & Rangnekar, 2014). Having stable and qualified staff means having opportunities for business development in the long period.

Table 1 S-HRD dimensions

S-HRD dimension	Examples of practices
(1) Putting focus on a long-term perspective	Development of competencies of the future (e.g. digital skills). Planning HRD in the long-time perspective
(2) Being flexible and developing HR flexibility	Increasing individual flexibility (task and mental) through HRD Adjusting the methods of HR training, planning, and performing according to the new requirements that can result from stakeholders' needs
(3) Taking care of employees' well-being	Increasing awareness in the area of mental and psychical health
(4) Encouraging collaboration in a company	Improving teamwork and knowledge sharing via HRD
(5) Developing environmental awareness	Providing employees with knowledge and skills related to environmental protection. Being organized in environmentally friendly manner
(6) Ensuring employee participation	Listening to employees' suggestions and considering them in the decision-making process related to HRD
(7) Offering fair and equal developmental opportunities	Providing HRD for all staff members according to clear, non-discriminating rules
(8) Collaboration with external stakeholders	Collaboration with universities and business partners when developing HR. Not only buying external educational services but also creating common training offer
(9) Ensuring profitability	Treating HRD as an investment. Considering costs as well as long-term profits when deciding on HRD forms

Source Based on (Piwowar-Sulej, 2021)

Employees should also be provided with knowledge on how to stay in health. Competent and healthy employees contribute to company development and thus increase their chances for both long-term employment in the current workplace and finding a new job in the case of redundancy programs.

Companies that use team structures and knowledge shaping notice many positive outcomes, such as higher employee productivity and reduced employee turnover (Glassop, 2002). Therefore, HRD should be collaboration-oriented. The inter-organizational collaboration also depends on the level of employees' participation and non-discriminating HRM practices. Therefore, within HRD, a company should listen to employees' suggestions and consider them in the decision-making process. Training should be provided for all staff members according to clear and non-discriminating rules. The latter contributes to organizational justice, and perceived organizational justice helps organizations successfully implement changes, including those related to sustainability (Singh & Singh, 2019).

Inter-organizational knowledge transfer may not be sufficient, especially in the context of developing competencies required in future. Therefore, business-university collaboration in the field of education is needed. This means that companies not only buy educational programs but also actively participate in the creation of such programs, contributing to the development of society (Gedro et al., 2020). They should also collaborate with business partners and enable inter-organizational knowledge sharing.

The above-presented S-HRD dimensions are directly socially and indirectly economically oriented. Table 1 also shows dimensions strictly connected with environmental and economic sustainability. Dimension no. 5 includes enhancing the environmental awareness of employees, whereas dimension no. 9 means bearing in mind the company's profitability. However, it should be emphasized that mutual relationships exist between the listed dimensions. For example, the outcome of increasing employees' environmental knowledge can be an innovation in the area of energy use which leads to the reduction of the cost of energy (Aliyu et al., 2015). This example justifies considering HRD first as an investment.

General Drivers of S-HRD

Drivers in this study are associated with extra-organizational and intra-organizational factors (phenomena, "game players") that cause the implementation of S-HRD in companies. Extant literature provided many different classifications of such understood drivers of applying HRM/HRD concepts and related practices [e.g., Genc, 2014; Jamka, 2014; Kumar et al., 2020; Parzonko, 2015; Poczowski, 2016].

The first extra-organizational driver is global changes that cover: global problems, demographics, and technological changes (Poczowski, 2016). Global problems (e.g., greater consumption, growing affluence and persistent poverty, biodegradation, pandemic) affect a transition to sustainability (Kates & Parris, 2003) and thus the implementation of S-HRD.

The ongoing demographic changes (aging society) imply an extension of the labor activity period. HRD policies should increase employee awareness of the need for lifelong learning. In turn, changes in technology affect how people carry out their tasks. They also have an impact on job requirements and the way how people are taught. These changes are related to the idea of the fourth industrial revolution, which consists of simplifying and digitizing all processes in the company (Deloitte, 2015). Ongoing progress in technology makes employers develop their employees' cyber competencies (Tomanna i in., 2018). "HRM 4.0" emerges, which covers the digitization of all HRM processes, including HRD (Liboni i in., 2019). The most popular notions which are associated with technological changes in HRD are e-learning and gamification (Palmer et al., 2012).

The second extra-organizational S-HRD driver is of societal nature. HRD practices are not the same in all countries because national culture is a critical factor influencing economic development, demographic behavior and corporate policies (Vaiman & Brewster, 2015). As part of cultural change, stakeholders pressure organizations to be more socially responsible (Fick, 2014). Extant literature emphasizes the requirements of young generations, such as Y and Z, toward employers to act in a socially responsible manner and be pro-environmental (Howe & Strauss, 1991). Representatives of the young generations believe that if an organization wants to invest and care for the natural environment (when it does not result directly from the nature of the organization's activities), it is even more likely that it will respect its employees (Chaudhary, 2018).

Changes in legal regulations—as the third extra-organizational driver of S-HRD—have been found to be a crucial stimulator of companies' and their employees' training needs in Poland (Piwosar-Sulej, 2019). They accompany cultural changes, which can be seen, for example, in the approach to environmental protection (Pogutz i in., 2011). Therefore, social responsibility and environmental responsibility are becoming areas of knowledge that should be developed in organizations. Moreover, labor law may guarantee employees' participation in planning their professional development and the right to approve the annual individual training plan (Livitchi i in., 2015).

Finally, the fourth extra-organizational external driver influencing the implementation of S-HRD in organizations is the activity of their competitors. Competitors may offer better HRD programs and conditions for the practical use

of the knowledge and creativity of employees. Therefore, S-HRD opportunities—like other elements of HR policy—should be the subject of employer branding, understood as the process of shaping a unique and identifiable image of the employer (Backhaus & Tikoo, 2004).

Considering intra-organizational drivers influencing the implementation of S-HRD practices, one should mainly focus on the organizational strategy, policies and culture. The overall corporate strategy reflects, first of all, the mindset of top management. Therefore, the latter can be treated as a driver of S-HRD. Top managers give the organization meaning and serve as role models of leadership to follow. They establish the basic criteria that line managers (including HRD managers) should take into account when making everyday decisions (König in., 2017). The above-indicated global movement toward solving problems of sustainable development requires companies to formulate environmental strategies (Dragomir, 2020). The implementation of this strategy would not be possible without developing employees' green competencies (Teixeira et al., 2016) and green organizational culture (Piwowar-Sulej, 2020).

Line managers and employees, as important internal company stakeholders, also have an impact on the employer's S-HRD activities. Therefore, they can be treated as drivers of S-HRD. Several authors have emphasized the role of line management and leadership characteristics (such as open-mindedness, open communication, and integrity) as key drivers of sustainable organizational practices (Fei & Wang, 2022; Yang & Arthur, 2021). When talking about the role of employees, it is not only about the participation of trade unions and negotiating with the employer, for example, the financing conditions of HRD programs. However, the involvement of employees in creating and participating in S-HRD depends not only on the activities of the employer but also on employees' individual characteristics. For example, the *Future of Jobs* report shows that only 42% of employees express a willingness to change their position or increase their qualifications (Schwab & Zahidi, 2020).

It is worth emphasizing that the above-presented list of six drivers of S-HRD is not exhaustive. For example, as indicated in the Introduction, company size influences HRD practices (de Kok et al., 2003). Organizations that operate in a dynamic and competitive environment (e.g. in the IT industry) invest more in HR development (Pocztowski, 2016; Sahinidis & Bouris, 2008). Moreover, company ownership (foreign) has been presented as a driver for the implementation of modern HR practices because foreign companies from developed countries, using an ethnocentric approach to management, spread their more advanced practices to subsidiaries in emerging economies (Weinstein & Obloj, 2002). However, the strongest detailed factor impacting S-HRD practices in 2020 was undoubtedly the COVID-19 pandemic.

Sustainable HRD: Any Consequence During the COVID-19 Pandemic?

As indicated above, changes in the global scale have an influence on local S-HRD practices. Globally, the aftermath of the COVID-19 pandemic has created major health crises. At least 95 nations declared a national emergency, allowing their governments to take action to safeguard their citizens. The government took several measures to curb the pandemic, including media censorship, lockdowns, social isolation, and surveillance. The pandemic also causes unexpected tension, disrupts managerial operations, and changes the role of HRD in every organization. It also gives organizations a platform to recognize the significance of fusing HR practices with sustainability (economic, social, and environmental). Similarly, organizations are forced to do business differently as they move from working in offices to working remotely or at home. While the spread of the COVID-19 pandemic has reduced drastically, it is important to assess and understand some damaging consequences to those organizations that failed to integrate sustainable HRD into their business models. These pandemic consequences are concisely discussed as follows. The following is a brief discussion of the consequences of the COVID-19 pandemic.

Well-Being of Employees

The emergence of a pandemic outbreak has triggered a transition from working in an office to working at home, which has had an extraordinary impact on the health and wellness of employees (Ayoko et al., 2021). The ability to work from home increases flexibility and agility in scheduling. Employees who are no longer confined to an office may be better suited and more eager to work flexible hours, such as weekends. However, many employees who work from home experience isolation since they are unable to socialize with their colleagues in the office. Most employees who are isolated at home experience severe mental health issues. The adverse consequences of the COVID-19 pandemic, listed by Hamouche (2020), which affect the mental well-being of employees take the form of the following stressing agents: fear of infection, concerns about safety, overload vs unrevealed information, social blemish and isolation, separation and distancing, employment uncertainty and economic damage.

Countless people suffer the stress of having been dismissed or having to work in the presence of potential virus carriers because they feel obliged to perform their duty for the benefit of society (Lee, 2020; Paredes et al., 2021). Others find it unfair not to be able to perform their job online (e.g. manufacturing sector workers) (Lee, 2020). In addition, people are continuously fed with information about the inability to protect themselves against the omnipresent virus.

Human attention is invested in finding ways to stay safe and keep the virus away (Donthu & Gustafsson, 2020). Feitosa and Salas (2020) reported that the number of Americans working remotely part-time in early 2020 went up from 3.4% to 43% in the first week of April. Companies that adopted remote working noticed a rise in average working hours (Barrero et al., 2021). The changes in the form of work organization as far as closing schools and kindergartens have begun to exacerbate work-family conflict (Carnevale & Hatak, 2020). This phenomenon is “a form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect” (Greenhaus & Beutell, 1985) (p. 77). In turn, working from home for people who do not have flatmates (including family members) means social isolation (Gajendran & Harrison, 2007). This can result in psychological distress and depression (Tavares, 2017). This harmful health effect could have been prevented if organizations had supported S-HRD before the pandemic. In particular, the S-HRD dimension (3) reflects the ethical obligation for organizations to consider the welfare of their employees. However, this was not the case during the COVID-19 pandemic.

Digital Skills

In the lists of future competences which should be developed in line with S-HRD dimension no. 1, digital competences have been highlighted for a long time (Hecklau et al., 2017; Parry & Battista, 2019; The Gallup Organization, 2010). They cover information and data literacy, communication and collaboration, digital content creation, safety, and problem-solving (The European Commission’s Science & Knowledge Service, 2019).

Before the pandemic, technology-driven office workstations allowed for efficient business operations and a pleasant working environment for employees. However, the shift to remote work requires that the employee learn new software. For example, employees must have access to technology that enables effective data-driven communication and is well-secured to protect organizational assets. Working from home puts the organization’s assets at more risk and could result in information security issues. Similarly, employees who work from home may experience network fluctuations and high energy costs, which could delay the delivery of reports or organizational meetings.

Remote Team Management

During the pandemic, many managers experienced a situation completely new to them. For the first time, they had to manage remote work and a virtual team. The Conservative approach to leadership consisting of hierarchical and autocratic management is not enough to deal successfully with

the occurring threats and unstable circumstances. The role of a leader in a time of crisis is to be a sense-maker, technology enabler, and innovative communicator, as well as to ensure employee well-being and the company’s financial results (Dirani et al., 2020). Managerial competencies are reflected in employees’ motivation and behavior. Therefore, it is necessary to build skills on how to manage people properly in a new situation to be able to support subordinates. All managers must adopt S-HRD to promote collaboration and a more socially interactive virtual team management. On the other hand, their competencies in the area of remote team management are also the competencies of the future which should be developed in line with one of the S-HRD dimensions (no. 1).

Remote Learning

The effects of IT development have been present in the sphere of HRD for a long time. The notion immediately associated with using modern technologies in the area of training is e-learning. The subject literature presents such advantages of e-learning as standardization of the syllabus, the convenience of learners (any time, place, learning at their own pace), and the quality of training but, at the same time, the ease of changing the content and its swift distribution to employees, the possibility to supervise training effects and employees’ progress in learning, financial benefits for the employer related to avoiding the costs of trainer’s fee, renting hotel facilities, transport, accommodation and meals for participants (Kimiloglu et al., 2017). Thus, e-learning corresponds with the flexibility (S-HRD Dimension No. 2) and profitability (S-HRD Dimension No. 9). E-learning courses using only electronic materials and encouraging participants to take notes in a digitized form may, somewhat incidentally, contribute to developing skills facilitating environmental protection (S-HRD Dimension No. 5).

Financial Causes

The COVID-19 pandemic has had a significant impact on the financial market. However, the financial impact of COVID-19 on employers varied in different situations. For example, over 70% of companies in Poland planned to cancel HRD programs in previous financial crises (Delta Training, 2009). This indicates that during the pandemic, the dimension of S-HRD named “profitability” (Dimension No. 9) could be redefined and implemented in a way that is inconsistent with the idea of shaping future competencies and employees’ employability (S-HRD Dimension No. 1).

Finally, staff reduction is one of the strategies that may be implemented due to the economic and operational impacts of the COVID-19 emergency. Over 30 million American citizens applied for dismissal compensation at

the end of April 2020, which had never been recorded before (Feitosa & Salas, 2020). The role of an employer in the context of possible dismissals is to raise employees' employability (van der Klink et al., 2016), e.g., through training covering ways of looking for a job, writing a CV and acting during job interviews.

Methodology

Context of the Study

As of 2021, Poland has a population of 37.9 million people, a Gross Domestic Product (GDP) of around 730.1 billion, and a current GDP per capita of almost USD 19,365.9 (Vavoura & Vavouras, 2022). It ranks 38th in the list of countries (and dependencies) by population, the sixth-largest economy in the European Union and the tenth-largest in all of Europe (Worldometer, 2020). According to GDP contributions by sectors, the service sector contributes the most, at around 57.4%, followed by other industries at 40.2%, and agriculture at roughly 2.4% (Sharma, 2017). Most of Poland's imports are capital goods needed for manufacturing processes and their retooling. Poland is a net exporter of fruit and vegetables, dairy products and meat (Trading Economics, 2022).

Although Poland can be associated with growing and emerging as one of the most powerful nations in Europe (Sharma, 2017), its scores related to infrastructure, business development, and innovation are lower than Europe as a whole (World Bank Group, 2018). Sustainable development is a relatively new concept in Poland. Companies in this country mainly report their contributions to the fourth sustainable development goal (SDG), i.e., ensuring inclusive and equitable quality education and promoting lifelong learning (Cierniak-Emerych et al., 2021). As far as environmental sustainability is concerned, Poland is included in the European Union's environmental plans. However, Eurostat's (2020) data have shown very little individual engagement in reaching climate neutrality goals. The use of organizational practices considered in the literature as being of the utmost importance for shaping employees' pro-environmental behaviors is in its early stage in Poland (Piwowar-Sulej & Kołodziej, 2022).

Poland COVID-19 confirmed the first case that was reported in Zielona Góra as of March 2020. To stop the virus from spreading, the government has implemented several measures, including the closure of schools and offices, as well as a reduction in mass gatherings and lockdown regulations (Orlewska et al., 2022). As it were, Poland's COVID-19 death rate per capita as of January 2022 places it among the highest in the world (Orlewska et al., 2022).

Data Collection

The study draws on data collected between December 2020 and January 2021 via snowball research design with a specific focus on drivers and practices of S-HRD before, during, and after in Poland. The study used a snowball sampling procedure, and a total of 204 valid samples were recovered.

The questions in the questionnaire directly pertained to the variables under study. For example, if researchers were interested in the drivers and frequency of using S-HRD practices before the pandemic, they asked respondents if these drivers/practices existed in their companies (with the possibility of answering: yes, or no). The changes in S-HRD practices in companies were reported with the use of statements such as reduction, maintenance, and intensification. The list of 6 drivers of S-HRD and the 12 practices presented in the questionnaire was developed by the authors based on the combination of the deductive approach (the content of the theoretical part of this paper) with experts' opinions. In particular, the list of drivers was prepared based on different literature sources presented in "General drivers of S-HRD" section, whereas the list of S-HRD practices was developed based on the work by Piwowar-Sulej (2021) (see: "Sustainable HRD: Scope and characteristics" section) in the context of the Covid-19 challenges ("Sustainable HRD: Any consequence during the COVID-19 pandemic?" section). The researchers engaged five academics who specialize in the HRD field to assess the usefulness of particular statements in the context of the aim of this study. They applied the sum-score rule (Hardesty & Bearden, 2004) and left only these statements which obtained the maximum scores. Moreover, preliminary research was conducted among 21 respondents to verify if they understood all the statements used in the questionnaire.

Table 2 displays the demographic data of the respondents for the research sample, and Table 3 reports the distribution of the sample across sectors.

Male respondents made up 49.5% of the sample, female respondents 41.5%, and other respondents 8.8%. The respondent age distribution is from 18–29 (45) 23.3%, 30–39 (68) 33.4%, 40–49 (52) 24.3%, and above 50 (39) 19.1%. The data reveal that the respondents have solid academic backgrounds, with university degrees having the highest distribution, followed by master's degrees, and doctoral degrees having the lowest distribution. The research sample consists of 86 senior managers, 80 managers, and 38-line supervisory employees.

Table 3 indicates that the sample is distributed across the different sectors, including finance, insurance, and banking (50), services (50), manufacturing (32), entertainment and tourism (28), sales (16), and education (10). The diversity of the sample group was achieved as a necessary

Table 2 Demographic data of the respondent

Criterion	Factors	Frequency	Percentage (%)
Gender	Male	101	49.5
	Female	85	41.5
	Others	18	8.8
Age	18—29	45	23.2
	30—39	68	33.4
	40—49	52	24.3
	50 above	39	19.1
Education	Bachelors	95	46.5
	MBA/MSc	71	34.8
	PhD	38	18.6
Designation	Senior manager	86	42.1
	Manager	80	39.3
	Line supervisory employees	38	18.7

Source Main author's estimates from the primary survey

Table 3 Sample distribution per industry (sector)

Industry sectors	Factors	Distribution (%)
Finance, insurance, real estate	50	26.8
Service	50	26.8
Manufacturing	32	17.2
Entertainment/tourism	28	15.1
Retail sales	16	8.6
Education	10	5.4

Source Main author's estimates from the primary survey

Table 4 Sample distribution per companies size

Size	Factors	Distribution (%)
Small (less than 50 employees)	34	16.67
Medium (50–249 employees)	46	22.55
Large (251–5000 employees)	86	42.16
Very large (more than 5000 employees)	38	18.63

Source Main author's estimates from the primary survey

condition through which the validity of the research is ensured (Kirchherr & Charles, 2018).

When analyzing the data, the authors additionally focused on the size of surveyed companies (Table 4) as a relevant factor (see "General drivers of S-HRD" section) to take into account in research on HR practices (Kotey & Sheridan, 2004).

To determine whether this factor is important in the context of implementing practices related to S-HRD and

changes in this area during the pandemic, the chi-square test was used, and Cramer's V indicator was calculated.

Results and Discussion

The section aims to attain two objectives. First, it presents an analysis of and discusses the findings; second, it offers theoretical and managerial implications of the findings. Table 5 displays the detailed results of the drivers of implementation of the S-HRD concept before the pandemic.

To provide the answer to RQ1 and RQ4a, one may state that the expectations of the external stakeholders was the most common driver of S-HRD, as it was observed in 50.49% of the companies surveyed. In this case, there was no statistically significant difference between companies of various sizes. This driver was followed by the sustainability/HRD-oriented mindset of the leaders, which drove S-HRD related changes in 48.53% of the companies in the sample and, in particular, in large companies. Changes in legal regulations emerged as the third crucial factor, as it drove S-HRD in 34.31% of the companies, with the majority of large and very large organizations. These findings are in line with the main drivers of the adoption of socially responsible practices, such as the sensitivity to local stakeholders and to public perceptions (Guerci & Shani, 2013; Laudal, 2011). As Kumar et al. (2020) emphasized, the adoption of sustainability assumptions leads to the improvement of a company's reputation, increases its visibility, and establishes public trust. Moreover, our findings support the results obtained by Jones et al. (2014) related to the importance of environmental legal regulations in companies' transition toward sustainability. However, the current findings are in contradiction to previous research, which found that the owner-top manager attitudes were the major factors influencing the adoption of environmental practices (Gedam et al., 2021; Satchapappichit et al., 2020) and even more important than the customers' requirements (Satchapappichit et al., 2020).

Internal stakeholders' expectations was the least observed driver of S-HRD in the sample. The surprising result is that none of the respondents working in small and medium companies indicated this driver. Although there are significant differences between companies with different size, employees' voice is also rarely taken into account in larger companies. The latter provides evidence that larger companies are more socially responsible for gaining great recognition from external stakeholders, which is emphasized in the literature (Cassely et al., 2020). At this point, it is worth emphasizing that the lack of employee acceptance is one of the most crucial barriers to sustainable HRM adoption (Kumar et al., 2020). However, the reason for not involving employees in creating the HRD processes may be not only the attitude of the employer but also the lack of employees' interest

Table 5 Information on the frequency of general drivers of S-HRD and the results of chi-square test regarding companies' size variable

Driver	% of companies which observed a given driver	Small	Medium	Large	Very large	χ^2 (df)	<i>p</i> value	<i>V</i>
Global changes	26.47	2 (5.9%)	6 (13%)	29 (33.7%)	17 (44.7%)	20.5 (3)	0.000	0.32
Changes in legal regulations	34.31	2 (5.9%)	15 (32.6%)	38 (44.2%)	15 (39.5%)	16.42 (3)	0.001	0.28
Activities undertaken by competitors	29.90	5 (14.7%)	12 (26.1%)	30 (34.9%)	14 (36.8%)	5.96 (3)	0.114	0.17
External stakeholders' (e.g., customers, contractors, local community) expectations	50.49	18 (52.9%)	19 (41.3%)	44 (51.2%)	22 (57.9%)	2.48 (3)	0.478	0.11
The sustainability/HRD-oriented mindset of top management	48.53	13 (38.2%)	13 (28.3%)	54 (62.8%)	19 (50%)	16.04 (3)	0.001	0.28
Internal stakeholders' (line managers and employees) expectations	9.31	0 (0%)	0 (0%)	12 (14%)	7 (18.4%)	14.14 (3)	0.003	0.26

Source Main author's estimates from the primary survey

in participation which has been revealed in other studies conducted in Poland (Cierniak-Emerych & Piwowar-Sulej, 2017). At this point, it is worth mentioning that Barrena-Martinez et al. (2018) found that fulfilling employees' needs is the prevailing driver for the implementation of socially responsible HR activities in Spain. However, they collected opinions from HR managers. Thus, the results could be biased (they show intended rather than implemented HRM practices).

Table 6 shows practices related to S-HRD carried out before the pandemic. They were assigned to the S-HRD dimensions presented in "Sustainable HRD: Scope and Characteristics" section.

The evidence from Table 6 provides the answer to RQ2 and RQ4b by confirming that 7 out of 12 S-HRD practices were used before the pandemic in more than 50% of companies. It also shows the statistically significant differences between companies of various sizes. The practices were generally more often used in larger companies. These findings are partially in line with the extant literature. For example, our study shows that in large companies, more often than in SMEs, employees have fair and equal access to S-HRD programs. In fact, the previous research emphasized that larger enterprises are more objective and fair in their policies, as they have specialized units and unified operating procedures (Baert & Omey, 2015; Maurer-Fazio, 2012). Trade unions, which have an essential role in the struggle for employees' equality, are also more common in large companies (Goerke & Pannenberg, 2011). However, the literature also shows that smaller companies are usually more flexible (Dzera-viaha, 2022). Our study provided evidence for higher flexibility of HRD policies in large companies.

Nevertheless—as the collected data show—there were shortcomings before the pandemic, mainly in the areas of caring for employees' well-being and developing environmental awareness. Most employers did not organize HRD activities in developing self-care skills in terms of health

(physical—over 70% of indications, mental—over 60% of indications). Previous research conducted in Poland revealed that only 1.3% of 1,000 surveyed companies provided physical health education, whereas only 3.7% of the companies organized stress-coping training (Puchalski & Korzenio-wska, 2016).

At this point, it is worth indicating that the literature shows six phases of coping with the burden of the lockdown, i.e., the orientation phase with load interpretations, acute and chronic phases of negative load consequences and phases with positive consequences. To facilitate the feeling of positive consequences, the S-HRD should provide employees with affective communication, the maintenance of lively corporeality, construction of life sense, inner-oriented self-reflection together with others, perception of the wholeness, as well as the development of sustainable lifestyles (Stueck, 2021).

When it comes to training addressing environmental protection, the research findings presented here are consistent with other studies carried out in Poland (Bombiak & Marciniuk-Kluska, 2018; Piwowar-Sulej & Kołodziej, 2022). The report by the Polish Agency of Entrepreneurship Development also shows that SMEs rarely organized environmental training despite the possibility of subsidizing it from the European Union's funds (Anuszevska et al., 2011). Green HRD practices are undervalued in Poland. The current results affirmed that only 28.43% of the companies used this practice.

Employers rarely developed the skills of working in a virtual team and managing a virtual team (8.82%), which can be explained by the fact that work before the pandemic was performed mainly at the employer's premises (Table 7), with no prospects for any change in this regard.

Surprisingly, the results indicate that before the pandemic, only about 64% of the organizations supported the policy of equal access to training (Table 6). The results consist not only of S-HRD practice but also of

Table 6 Information on the frequency of using S-HRD practices before the pandemic and the results of chi-square test regarding companies' size variable

S-HRD practice	% of companies which used a given practice	Small	Medium	Large	Very large	χ^2 (df)	p value	V
Developing skills related to maintaining physical health (dimension 1, 3)	29.41	0 (0%)	6 (13%)	34 (39.5%)	20 (52.6%)	34.22 (3)	0.000	0.41
Developing skills related to maintaining mental health (dimension 1, 3)	36.27	2 (5.9%)	12 (26.1%)	40 (46.5%)	20 (52.6%)	23.95 (3)	0.000	0.34
Developing employees' environmental awareness (dimension 5)	28.43	6 (17.6%)	8 (17.4%)	28 (32.6%)	16 (42.1%)	8.91 (3)	0.030	0.21
Developing employees' digital skills (dimension 1)	53.92	12 (35.3%)	22 (47.8%)	48 (55.8%)	28 (73.7%)	11.53 (3)	0.009	0.24
Developing skills related to working in a virtual team/managing a virtual team (dimension 1)	8.82	0 (0%)	0 (0%)	12 (14%)	6 (15.8%)	12.85 (3)	0.005	0.25
Flexibility of HRD policy (adapting the planning, organization and implementation HRD to the new requirements resulting from the needs of company's stakeholders) (dimension 2)	55.88	16 (47.1%)	20 (43.5%)	54 (62.8%)	24 (63.2%)	6.43 (3)	0.093	0.18
Implementing employees' participation in the area of S-HRD (dimension 6)	62.74	20 (58.8%)	24 (52.2%)	56 (65.1%)	28 (73.7%)	4.57 (3)	0.206	0.15
Implementing fair and equal access to S-HRD programs (dimension 7)	63.83	16 (47.1%)	26 (56.5%)	58 (67.4%)	30 (78.9%)	9.44 (3)	0.024	0.22
Training for the dismissed (facilitating job search) (dimension 1, 2, 3)	3.92	0 (0%)	4 (8.7%)	4 (4.7%)	0 (0%)	5.84 (3)	0.120	0.17
Developing intra-organizational collaboration during HRD programs (dimension 4)	54.90	12 (35.3%)	20 (43.5%)	54 (62.8%)	26 (68.4%)	12.67 (3)	0.005	0.25
Developing inter-organizational collaboration during HRD programs (dimension 8)	67.65	16 (47.1%)	32 (69.6%)	56 (65.1%)	34 (89.5%)	15.19 (3)	0.002	0.27
Using e-learning (dimension 2, 5, 9)	56.86	8 (23.5%)	22 (47.8%)	58 (67.4%)	28 (73.7%)	25.24 (3)	0.000	0.35

Source Main author's estimates from the primary survey

Table 7 Changes in the place of working

Situation	Office	Remote working	Combined
Before the pandemic	168 (82.35%)	0 (0%)	36 (17.65%)
During the pandemic	36 (17.65%)	66 (32.35%)	102 (50%)
After pandemic plans	96 (47.06%)	6 (2.94%)	102 (50%)

Source Main author's estimates from the primary survey

the fundamental employee rights that are governed by legal provisions. Additionally, about 63% of enterprises included employee responses in their decisions regarding HRD. The latter provides an interesting finding. Although companies had not taken into account the voice of the employees when implementing S-HRD before the pandemic (Table 4), they listened to their employees within S-HRD. This may be the evidence that employees are listened to when performing daily operations rather than when making strategic decisions.

Table 8 reports information on positive and negative changes in the application of practices related to S-HRD during the pandemic and the results of the chi-square test regarding the variable. Due to the limited length of the text, the article does not present detailed results concerning the frequency of changes in various groups of enterprises. They are briefly discussed below in the table.

Considering the impact of the COVID-19 pandemic on S-HRD practices and dimensions, one can state that in most enterprises, the approach to S-HRD has not changed (column b in Table 8), which provides the answer to RQ3. The pandemic did not make the HRD more sustainable in general. However, the results indicate that in the case of 6 out of 12 practices, the enterprise size was the factor differentiating the scope of changes in the frequency of using the analyzed practices, which provides the answer to RQ4c. Although many studies emphasize that SMEs are the enterprises the most affected by crises (Nawal Abdalla & Ghadah, 2021), in the current study, the most extensive

Table 8 Positive and negative changes in the application of practices related to sustainable HRD during the pandemic and the results of chi-square test regarding companies' size variable

	% of companies which reduced the use of a given practice in the time of pandemic (a)	% of companies which used practices to the same extent as before the pandemic (b)	% of companies which intensified the use of a given practice in the time of pandemic (c)	Change** (c - a)	χ^2 (df)	<i>p</i>	<i>V</i>
Developing skills related to maintaining physical health (dimension 1, 3)	26.47	57.85	15.68	-	22.84 (6)	0.001	0.24
Developing skills related to maintaining mental health (dimension 1, 3)	11.76	71.57	16.67	+	17.66 (6)	0.007	0.21
Developing employees' environmental awareness (dimension 5)	16.67	78.43	4.9	-	3.77 (6)	0.707	0.10
Developing employees' digital skills (dimension 1)	15.69	60.78	23.53	+	8.34 (6)	0.214	0.14
Developing skills related to working in a virtual team/managing a virtual team (dimension 1)	13.73	66.66	19.61	+	17.54 (6)	0.007	0.21
Flexibility of HRD policy (adapting the planning, organization and implementation HRD to the new requirements resulting from the needs of company's stakeholders) (dimension 2)	22.55	58.82	18.63	-	17.66 (6)	0.007	0.21
Implementing employees' participation in the area of S-HRD (dimension 6)	17.65	69.6	12.75	-	8.57 (6)	0.199	0.15
Implementing fair and equal access to S-HRD programs (dimension 7)	13.73	80.39	5.88	-	16.55 (6)	0.011	0.20
Training for the dismissed (facilitating job search) (dimension 1, 2, 3)	15.69	80.37	2.94	-	5.40 (6)	0.493	0.12
Developing intra-organizational collaboration during HRD programs (dimension 4)	29.41	65.69	4.9	-	11.13 (6)	0.084	0.17
Developing inter-organizational collaboration during HRD programs (dimension 8)	43.14	50	6.86	-	15.55 (6)	0.016	0.20
Using e-learning (dimension 2, 5, 9)	12.75	49.01	38.24	+	3.56 (6)	0.736	0.09

χ^2 —result of chi-squared test; *V*—Cramer's V indicator; ** + positive character, - negative character

Source Main author's estimates from the primary survey

changes, both positive and negative, were recorded in larger enterprises. The exception is applying the practice of equal access to S-HRD programs ($\chi^2 = 16.55$, $df = 6$, $p = 0.011$), which during the pandemic increased the most in small enterprises. The results suggest approximately 4% of enterprises had S-HRD programs in place prior to the pandemic that helped employees adapt during the outbreak in the form of facilitating job search. During the pandemic, approximately 16% of enterprises reduced the number of such programs. Unfortunately, the survey did not allow identifying the circumstances of organizing these HRD activities. Their reduced number may be related to two issues: this may result from dismissing fewer people than before the pandemic, or the number of people made redundant during the pandemic may have increased, but the employers did not provide them with the training courses that could help them find new jobs.

The experiences related to the COVID-19 pandemic have resulted in the fact that more and more employers have decided to implement hybrid development models, combining traditional forms of learning with online education (Czahajda, 2021). Considering the companies where some positive changes have taken place (column c in Table 8), it should be stated that an increase in flexible e-learning programs, as well as training and development of the competencies of the future, was observed during the pandemic. It is particularly important that among the employers who introduced changes in the area of HRD on work and management in a virtual team, the majority intensified this activity. The future of work in 50% of the surveyed companies will be based on combining remote and traditional work.

Unfortunately, in the areas where shortages were recorded before the pandemic—such as training in environmental aspects and taking care of health (especially mental well-being)—the pandemic has made matters worse (column c in Table 8). It is also worrying that during the pandemic, in most of the enterprises that recorded changes related to participation and equality in access to training, these changes were negative. Meanwhile, it was Reilly (1998) who already emphasized that people in crises need the opportunity to voice their concerns and be heard. This, however, needs further examination in terms of the negative attitudes of Poles toward employees' participation (Cierniak-Emerych & Piwowar-Sulej, 2017).

The sustainable development of an organization depends mainly on the competencies of employees and their continuous professional training. Moreover, in a crisis, traditional HRM is focused on taking productivity and efficiency measures, whereas in modern HRM development of employees' competencies builds their loyalty and stimulates organizational performance (Vardarlier, 2016). The research presented here shows that employers were mainly externally motivated when implementing S-HRD before the pandemic.

Moreover, their practice in S-HRD during the pandemic has remained, in most cases, as it was before the pandemic.

Theoretical Contributions

This study significantly advances the concept of S-HRD, which enables managers to support environmental quality and enhance organizational performance by shaping sustainability-oriented employees' mindsets. It adds to the discussion of the critical role of HRD in crisis which should cover building cohesive teams, sharing knowledge and increasing flexibility (Garavan & McGuire, 2010). It also discusses the drivers of the implementations of the S-HRD concept as well as the set of practices which should be used in companies—not only in times of crises. The presented complex approach to S-HRD and the “S-HRD—pandemic” considerations are unique in comparison to previous, fragmented studies. The analysis shed light on the implications of ignoring the sustainable practice on the organization's ability to cope with challenges. This study demonstrates the dynamic role of business in shaping ethical HR practices, as suggested by Heikkinen et al. (2021). It promotes S-HRD as an approach to a long-term managerial framework that prioritizes talent retention and motivation while ensuring that the organization's strategy conforms to the economic, social, and environmental realities. It helps create a sustainable workforce that “is able to keep on working while retaining their health and well-being or in terms of adaptability to a multitude of work-related changes” (Leesakul et al., 2022, p. 3).

Practical Contributions

In addition to the theoretical insights mentioned in the previous section, this research offers practical measures that guarantee organizations fulfill their economic, social, and environmental responsibilities.

The findings should motivate HR policy makers to provide employees with timely training and development, which is useful for the efficient use of organizational resources. For example, organizations that promote energy savings, paper recycling, and the use of reusable binders and folders are likely to maximize resource utilization and reduce costs. However, organizations providing opportunities for employees to learn about sustainability increase not just knowledge but a commitment to promoting environmental quality, ethics, and CSR.

The experiences related to the pandemic should be a driving force for ensuring employees' competencies required now and in future. As Valero et al. (2022) stated, COVID-19 has increased technology adoption, which is still affecting the workforce. This highlights the importance of HR development policies for innovation in businesses, as well as building workers' resilience to changes not only induced by

COVID-19. The new employee must be trained, and existing managers must undergo development programs needed to improve their performance. This can be accomplished with the use of courses geared to improve digital proficiency and lead virtual teams.

This study also stresses the important of providing equal opportunities for workers during and after the pandemic. This can be achieved by designing programs and establishing policies that ensure the inclusive participation of managers and workers. The equal opportunity program is mainly affirmative action or conservative strategy that embraces employee legitimacy in the organization.

Moreover, HR is responsible for ensuring that all employees are treated fairly by the work requirements. This can be achieved by taking affirmative action measures that promote the employment of a more diverse workforce through equal opportunity.

There is also an urgent need to increase employee participation through delegation, information, and consultation. This will enable employees to participate in the decision-making processes that are relevant to their work. Employees would be able to get information that will help them develop their abilities, which will increase their performance.

S-HRD may support talent development, teamwork, work-life balance, and employee well-being. Integrating HRD and sustainability is a moral necessity that offers the opportunity to involve and improve relationships among stakeholders. Therefore, integrating learning about HRD organization is necessary but should not be restricted to managers.

Finally, this paper—through the integration of topics such as HRD, sustainability and pandemic—provides valuable material which should be included not only in HRM/HRD training courses but also in training on sustainability and crisis management. Education for sustainable development should combine ethics with responsibility, emphasize the need to respect human dignity, tolerate diversity, and protect the resources of our planet (Avelar i in., 2019).

Conclusion

We analyzed the factors that influenced S-HRD adoption before and during the COVID-19 pandemic and identified the areas of responsibility that organizations should prioritize to ensure managers' and employees' adaptability to unanticipated health-related crises. The empirical data were collected across the different organizations using the snowball sampling strategy.

This study shows that the most common drivers of S-HRD—regardless of the company size—were the expectations of the external stakeholders. In more than 50% of surveyed companies, 7 out of 12 S-HRD practices were used

before the COVID-19 pandemic. However, most S-HRD practices were more often used in larger companies. Most companies did not change their approach to practicing S-HRD during the pandemic. However, the pandemic made the situation worse in terms of the HR developmental areas where shortages were noticed before the pandemic.

This study provides empirical evidence to support the linkage between HRD and sustainability (Jang & Ardichvili, 2020). Its findings revealed various dimensions in which S-HRD could be beneficial to HR practice, productivity, and well-being of employees across the organizations. They are significant not only because they provide a practical managerial framework to assist organizations in the COVID-19 pandemic but also because they incorporate substantial parts of HRD that promote social, environmental, and ethical concepts across organizations' practice.

From the company's point of view, it is essential to have high-quality and motivated employees for a long time. Business ethics addresses the obligations of companies to their multiple stakeholders, including employees and society. Only stakeholder-oriented HRD is able to foster innovative approaches to value creation (Anderson et al., 2014). This research underscores some significant ethics issues (such as fair and equal treatment of employees; care for employees' physical and mental health) with respect to the future of S-HRD, managers and employees' relationships. Moreover, this study further supports the principle of various stakeholder salience, which places a high priority on S-HRD. Organizations need to have a clear understanding of the principle that humans should never be treated as a means only but with respect and dignity. This requires education and training for all members of the organization so that they can recognize the ethical implications of their actions. Companies should also consider the ethical implications of decisions, assess the risks and benefits of different options, and engage stakeholders in the decision-making process. They also need to foster a culture of ethics and accountability, where all members of the organization are held responsible for upholding the principle of treating humans with respect and dignity. This includes establishing mechanisms for reporting unethical behavior and addressing violations of ethical standards.

Limitations and Directions for Future Studies

The present study has some limitations. These limitations may serve as a basis for further research. *First*, empirical research was conducted on firms in Poland; as such, evidence only reflects this developed economy. However, Poland gained the status of a developed country in 2019. Therefore, future research may concentrate on emerging countries or more developed economies with large conglomerates and multinational operations. *Second*, the presented

research is explorative in its nature, and it is challenging to generalize the results because snowball sampling has significant restrictions. However, future research may overcome these shortcomings by using larger samples based on probability or random sampling techniques as well as a mixed-methods approach. Researchers are also encouraged to further develop the construct of S-HRD, build empirical models and test the relationships between independent (S-HRD) and dependent (e.g., sustainable performance) variables using mediators such as employee commitment. Finally, all company processes—including HR-oriented developmental processes—need to be continuously improved. The issues of S-HRD require further and in-depth research. Future studies may analyze differences between industries and take into account the variable in the form of the origin of a company capital which has been found to be a significant factor in differentiating the use of green HR practices in Poland (Piwowar-Sulej & Kołodziej, 2022).

Declarations

Conflict of interest There is no potential conflict of interest of any author with any party.

Research Involving Human Participants and/or Animals Not Applicable.

Informed Consent Not Applicable.

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